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Assessment of the 2013 national reform programme and stability programme for FINLAND

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

on Finland's 2013 national reform programme and delivering a Council Opinion on Finland's 2013 stability programme for 2012-2017

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Economic Outlook

The Finnish economy recovered rapidly after the crisis of 2009, but contracted by 0.2 % again in 2012. According to the Commission's 2013 spring forecast, growth will remain sluggish also in 2013, at 0.3%, but increase to 1% in 2014. The labour market is generally healthy, with unemployment at 7.7 % in 2012, though this is forecast to rise above 8% in 2013 and 2014. Being a small open economy with exports accounting for about 40% of GDP, Finland is very sensitive to developments in world markets. Unit labour cost growth reached 3.6% in 2012, and while it is expected to be more moderate in 2013 and 2014 according to current trends it will still outpace productivity growth.

The headline budget deficit was 1.9% of GDP in 2012, and is projected to improve steadily to 1.8% in 2013 and to 1.5% 2014. Finland's structural deficit (excluding one-off and temporary measures) was -0.7 % in 2012, and is projected to improve to -0.6% in 2013 and -0.5% in 2014. Finland's medium-term objective (MTO), as set in the stability programme 2013, is a structural deficit of 0.5% of GDP. In 2012, the MTO was a structural surplus of 0.5%, which it failed to meet. According to the assessment, the new MTO is expected to be met by 2014.

Key Issues

Finland has made substantial progress on measures taken to address the 2012 CSRs, including by implementing the planned fiscal consolidation measures. Comprehensive reforms of the municipal structure, healthcare and social services have been prepared, the youth guarantee has been extended, access to early retirement has been reduced, the national competition authority has been reformed and temporary tax incentives have been offered to support research and investments. All of these reforms must now be effectively implemented.

One of Finland's main policy challenges is the loss in competitiveness over the course of the last decade, during which its current account went from a surplus into a deficit. Over the past five years it lost 23% of its share in world exports. In April 2013 the Commission's in-depth review of Finland found that the country was experiencing macroeconomic imbalances.

In the short term, the main challenge is to attract new investments to the Finnish economy, in order to improve employment and productivity and to replace the industries that have declined over recent years. The economy should take more advantage of the country's excellent research system to create innovative products and services and diversify towards less energy intensive sectors. Agreement between social partners on wage developments should also take due account of recent and prospective competitiveness developments.

A longer term challenge is presented by Finland's ageing population. To address this it will be important to improve labour market participation (particularly of older workers, long-term unemployed and the young) and the sustainability of pension and healthcare systems. In the case of healthcare systems, efficiency could be strengthened by continuing to pursue the restructuring of the municipal system.

- **Public finances**: Although Finland has strong public finances, age-related costs have forced expenditure upwards (the Commission forecasts healthcare spending will grow by 1% of GDP and spending on long-term care will double by 2060). The challenge is to limit the growth of pension, long-term care and healthcare spending without undermining the adequacy of pensions or the quality of healthcare and long-term care. Reforms to the municipal authorities and social and healthcare service should help to improve productivity and efficiency of spending in these areas.

- **Labour market**: Finland's ageing population poses important challenges and remedial action is required sooner rather than later, especially as the effects of structural reforms take time to materialise. Finland should take steps to improve the employability of older workers, reduce early exit pathways and align the statutory retirement age with life expectancy. Youth unemployment (18.8 %) and long-term unemployment (a quarter of all unemployed) are not particularly high in Finland compared with other Member States, but are significant because of the shrinking working-age population. The mismatch between the skills of workers leaving shrinking sectors and the skills required in expanding ones is likely to induce longer periods of unemployment.

- **Competition in product and service markets:** Regulatory barriers in Finland's product and service markets are limiting competition in some sectors and keeping prices high. The Finnish Government has made some positive changes to competition legislation and institutions in the past year, but to improve the situation for businesses and consumers, more action is still needed, particularly to strengthen competition law fines.

- **Competitiveness and innovation**: While Finland invests a high proportion of its GDP in research and development (3.78 % of GDP in 2011), it results in fewer than expected marketable products, while corporate R&D expenditure is concentrated in a few sectors and companies, leaving the country vulnerable to shocks in these sectors. The system as a whole lacks does not support research in new or emerging technologies, or in areas beyond the scope of current strategies and support schemes.

- **Wages and energy represent significant costs for businesses and have impact on their competitiveness.** Real wage increases have exceeded productivity growth and are projected to also outstrip productivity growth in 2013 and 2014. Finland's energy intensity in industry is high compared to its Nordic neighbours and other euro area Member States. Improving energy efficiency could enhance the competitive position of these industries.

1. INTRODUCTION

In May 2012, 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 2012. These CSRs concerned public finances, administrative reform, labour market, competition and competitiveness. This Staff Working Document assesses the state of implementation of these recommendations in Finland.

The document assesses policy measures in light of the findings of the Commission's Annual Growth Survey 2013 (AGS)[1] and the second annual Alert Mechanism Report (AMR),[2] which were published in November 2012. 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 2013. 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 13 other Member States were selected for a review of developments in the accumulation and unwinding of imbalances.[3]

Against the background of the 2012 Council Recommendation, the AGS and the AMR, Finland presented updates of its national reform programme (NRP) and of its stability programme on 18 April 2013. These programmes provide detailed information on progress made since July 2012 and on the future plans of the government. The information contained in these programmes provides the basis for the assessment made in this Staff Working Document.

The programmes submitted went through a consultation process involving the national parliament's Grand Committee and presentation to the social partners.

Overall assessment

The analysis in the Staff Working Document leads to the conclusion that Finland has made substantial progress on measures taken to address the Council's CSRs.

Finland has implemented the planned fiscal consolidation measures. Nevertheless, the worsening economic climate made it difficult to achieve the expected results in terms of moving towards Finland's medium-term budgetary objective (MTO).

Comprehensive reforms of the municipal structure, healthcare and social services have been prepared, the youth guarantee[4] has been extended, early exit pathways from the labour market

[1] COM(2012) 750 final.
[2] COM(2012) 751 final.
[3] 13 in-depth reviews were published on 10 April 2013. While selected for an in-depth review in the AMR, Cyprus was ultimately not reviewed under the Macroeconomic Imbalance Procedure in view of the advanced preparations for a financial assistance programme.
[4] See labour market section for details on the guarantee.

have been reduced, the national competition authority has been reformed and tax incentives have been temporarily offered to support R&D and investments.

Challenges identified in July 2012 and reflected in the AGS remain valid. In the short term, the main challenge is to attract new investments to the Finnish economy, in order to improve employment and productivity and to replace the industries that have declined over recent years. The economy should take more advantage of the country's excellent R&D system to create innovative products and services.

Considering the ageing population, it is important to take steps soon to improve the supply of labour and the sustainability of pension and healthcare systems. Agreement between social partners on wage developments should take due account of recent and prospective competitiveness developments.

The policy plans submitted by Finland address most of the challenges identified in last year's Staff Working Document, and broad coherence between the two programmes has been ensured. The national reform programme confirms Finland's commitment to address challenges in competitiveness, the labour market and product markets. The stability programme demonstrates Finland's commitment to improve the budgetary position towards the medium-term objective and ensure the long-term sustainability of public finances in line with the Stability and Growth Pact.

2. ECONOMIC DEVELOPMENTS AND CHALLENGES

2.1. Recent economic developments and outlook

Recent economic developments

In 2012 and early 2013, growth and employment in Finland were strongly affected by the general weakening of the European economy and the ongoing restructuring of the main Finnish export industries. The government has pressed ahead with budgetary consolidation, increasing taxes from 2013 onwards and announcing additional tax measures from 2014.

The Finnish economy recovered rapidly after the crises of 2009, but contracted by 0.2 % again in 2012. While private consumption, supported by a healthy labour market, remained strong, public consumption and exports were slightly down. Gross fixed capital formation contracted due to a decline in construction and investment in equipment. Being a small open economy with exports accounting for about 40 % of GDP, Finland is very sensitive to developments in world markets.

While the labour market remained generally strong in 2012, sluggish growth caused unemployment to increase slightly during the second half of the year. Employers have made less use of the temporary layoff support schemes and permanent payroll cuts are more common. The unemployment rate was 7.7 % in 2012. The labour force will remain stable overall, with a small ageing-related decline in the working age population being offset by an increase in the activity rate. While the collective wage agreement for 2012 and 2013 provides for moderate real wage growth, unit labour costs still appear to increase faster than in competing countries with a similar product mix on the same export markets.

Economic outlook

According to the Commission's 2013 spring forecast, Finnish economic growth will remain sluggish also in the first half of 2013, followed by a gradual upturn in 2014.

Consumption suffers from rising unemployment, slow real wage increases and increased taxation. While investment is expected to improve compared to the low level recorded in 2012, it will nevertheless remain weak, particularly in construction. Along with the improving European economic situation, Finnish exports are forecast to increase during the second half of 2013 and 2014. The current collective wage agreement lasts until the end of 2013. While unit labour cost growth reached 3.6 % in 2012, it is expected to be more moderate in 2013 and 2014.

The macroeconomic scenarios presented in the stability programme and in the national reform programme are broadly similar to the Commission's spring forecast. For 2014, the national macroeconomic scenario forecasts 0.6 pps higher real GDP growth than the Commission's forecast, which generally reflects expectations of a faster recovery in exports and gross fixed capital formation. Reforms to extend the effective retirement age and the municipal, social and healthcare reforms can be expected to have a macroeconomic impact. Similarly, reforms to the taxation of corporate income and dividends are expected to result in significant macroeconomic impact. However, the programmes do not quantify the impact of these measures.

2.2. Challenges

Finland faces important challenges as regards its ageing population. While being mainly long-term in nature, remedial action is required sooner rather than later especially as the effects of structural reforms take time to materialise. As the current duration of working careers is insufficient to cope with the growing demographic burden, it would be important to speed up entry to the labour market and to prevent early exit. At the same time, the structural change causes increased skill mismatches and increases the risk of unemployment becoming more long-term in nature. While youth unemployment and long-term unemployment are not particularly high in Finland compared with the other Member States, the challenges are of particular significance owing to the shrinking working-age population. The long-term unemployed represent one quarter of all unemployed persons and of these, over 40 % have only basic education. The mismatch between the skills of workers leaving shrinking sectors and the skills required in expanding ones is likely to induce longer periods of unemployment. While the overall unemployment rate was 7.7 % in 2012, youth unemployment was 18.8 %.[5]

Although Finland has had strong public finances, ageing-related costs have forced expenditure upwards. Commission analysis and national studies have identified a substantial sustainability gap, although their conclusions on the exact size differ due to different assessments of the impact of ageing-related expenditure — pensions, long-term care and healthcare. The challenge facing the society is to limit the growth of expenditure in these areas without undermining the adequacy of pensions or the service level in healthcare and long-term care.

Productivity growth has not returned to its previous growth path following the economic crisis. Possible reasons for this include the lack of investment into the commercialisation of new technologies but also low competition in product and service markets. While reforms are currently being planned for municipal governance and social and healthcare sectors, efficiency gains in public services such as healthcare, education and public administration

[5] According to the Labour Force Survey, only 9.5 % of the 15-24 age group were unemployed. In Finland full-time students can be classified as unemployed and thus the difference between figures.

have been limited. The Finnish higher education and public research system is somewhat fragmented, which makes it more difficult to focus resources.

While Finland invests a high proportion of its GDP in R&D, the R&D effort results in fewer than expected marketable products. As also discussed in the in-depth review (see Box 1), corporate R&D expenditure is concentrated in a few sectors and companies, which makes the country vulnerable to shocks in these sectors. In an otherwise excellent business environment, it appears that it is relatively time-consuming to establish a business in Finland.[6] The efficiency of R&D investments and the ability of the system to produce new innovative breakthroughs contributing to growth and jobs have not been evident. This is reflected in the Innovation Union Scorecard where, of all sub-dimensions, Finland's score is lowest (in 15th place, just above the EU27 average) on 'innovators', which encompasses SMEs introducing product or process innovations and SMEs introducing marketing or organisational innovations[7] The research and innovation system has relied mostly on the supply of various support schemes and programmes, lacking the necessary dynamism to support research and innovation in areas that are new, emerging or beyond the scope of current strategies. While large firms and leading research and innovation institutions are highly internationalised, the overall level of internationalisation of the research and innovation system is quite low and the system could gain from attracting foreign talent.

Over the last decade, Finland's current account went from a surplus to a deficit, as the country has lost 23 % of its share in world exports over the past five years. According to the in-depth review, the loss of export market shares can partly be attributed to the restructuring of the electronics and forestry industries, but also coincided with strong unit labour cost increases in 2008 and 2009. Real wage increases have exceeded productivity growth also in subsequent years and are projected to also outstrip productivity growth in 2013 and 2014 according to the Commission's spring forecast. This would have a potentially negative impact on Finland's external competitiveness. The non-tradable sectors, whose goods and services are partly used as inputs for the tradable sector, experienced lower productivity growth than the tradable sectors. An important factor in trade developments is also energy dependence. Finland is characterised by the dominance of energy-intensive industries which produces an overall high energy intensity.

Box 1 — Summary of the 2013 in-depth review (IDR) under the Macroeconomic Imbalance Procedure (MIP)

The main observations and findings from the analysis published on 10 April 2013 are:

- **The loss in competitiveness is one of Finland's main policy challenges**. Over the course of a decade Finland's current account went from a surplus into a deficit. The country lost 23% in world export market shares over the past five years, and saw its unit labour cost increase significantly in 2008 and 2009 and more moderately in the following years.
- **The loss of export market shares is partly due to the ongoing restructuring of the electronics and forestry industries.** In electronics, Nokia lost its dominant position and closed down all assembly factories in Finland, which affected both its own employees and its subcontractors. The forest industry is relocating its paper and pulp manufacturing business to Asia and Latin America, where demand is growing and resources are available. The other main industries – metals,

[6] Doing Business 2013, The World Bank, International Bank for the Reconstruction and Development.
[7] Innovation Union Scoreboard 2011, European Commission.

machinery and minerals – were not able to make up for the loss in exports from these two important industries.

- **Energy dependence** will continue to affect Finland's external balance through oil and gas price movements. Energy imports, mostly crude oil, accounted for as much as 20% of Finland's total imports in 2011, partly due to the increased oil price. The overall high energy intensity stems from the dominance of energy-intensive industries in Finland, which would benefit from a reduction in energy usage.
- Finland's declining competitiveness is also related to a **relatively low translation of R&D into marketable products.** Despite high R&D spending and a well-educated workforce, the forestry and electronics industry still account for a large part of the business structure and the number of high-growth companies remains low.
- The loss in cost competitiveness is another factor at play. **The wage increases of the past five years exceed productivity growth and have damaged Finland's competitive position,** especially compared to major competitors such as Germany and Sweden.
- **Debt levels have increased over the last decade.** The private sector, excluding the financial sector, accumulated debt of up to 179% of GDP in 2011 (non-consolidated). Public debt remains modest despite having increased over the last decade and is expected to stay below the 60% ceiling, at least until 2014.
- The level of **household debt** is a cause for concern, although no sudden deleveraging or instability of the financial sector is in sight. Based on the current health of the financial sector and on the still rather low housing cost overburden rates for households, no sudden deleveraging is expected in the near future.
- The year-on-year **growth of the non-consolidated financial liabilities** of the financial sector stood at 30.8% in 2011, the most rapid in the EU. The changes appear to have largely technical causes but close monitoring is warranted going forward. Other potential risks for the Finnish financial sector stem from the high concentration within the sector and the funding structure.

3. ASSESSMENT OF POLICY AGENDA

3.1. Fiscal policy and taxation

Budgetary developments and debt dynamics

The stability programme objectives are to balance central government finances and bring the central government debt-to-GDP ratio on a declining path by the end of this parliamentary term. The stability programme sets a medium-term objective (MTO) of -0.5 % of GDP for the general government structural balance, which reflects the objectives of the Stability and Growth Pact. In the 2012 stability programme, the MTO was set at +0.5 % of GDP, which was more ambitious than required by the Stability and Growth Pact. According to the forecast presented in this stability programme, the general government financial position will strengthen but remain in deficit in the programme period. Central government and general government debt relative to GDP will, however, start to decline at the end of the programme period. The deficit target set for central government finances will not be achieved.

The target year for achieving the MTO in the stability programme, 2014, does not correspond to the target year set in the previous stability programme. Last year, the then-applicable MTO of +0.5 % of GDP was projected to be reached in 2013 but this will not happen. The Finnish government's medium-term budgetary strategy intends to improve the structural balance[8] from -0.9% of GDP in 2013 to -0.6% of GDP in 2014, -0.6% of GDP in 2015, -0.7% of GDP in 2016 and -0.6% of GDP in 2017. Given that the deviation from the MTO is just 0.1% of GDP and that the Commission's spring forecast estimates that Finland should achieve a structural deficit of -0.5%, it is indeed likely that the MTO will be reached by 2014.

The main reason for missing the 2012 stability programme targets was lower-than-expected economic growth. The 2012 stability programme predicted a deficit of -1.1% of GDP in 2012 and of -0.5% of GDP in 2013. This was reliant on achieving 0.8% GDP growth in 2012 and 1.5% GDP growth in 2013. The year 2012 resulted in a deficit of -1.9% of GDP, as real GDP declined by 0.2%. Consequently, tax revenues turned out lower than forecast while expenditures occurred as foreseen. The 2013 stability programme fiscal scenario is in line with the Commission's spring forecast. For 2014, the spring forecast projects somewhat higher expenditure, mainly in the areas of employee compensation and social payments. The Finnish programme does not rely on temporary or one-off measures to generate revenue or cut expenditure.

The general government headline balance is projected to improve steadily over the forecast period. The biggest improvement, 0.6% of GDP, will occur between 2013 and 2014, after which it will continue at a slower pace. Finland's primary balance was -0.8% in 2012, and is projected to decline to -0.9% in 2013 before gradually improving over the programme horizon. Primary surplus will be achieved in 2015 and the programme aims at a 0.8% primary surplus in 2017. Improvement in the general government balance will be achieved by means of general expenditure controls through a system of central government expenditure ceilings and specific tax measures announced in March 2013. Central government is the main driving force in efforts to improve the general government balance. Local government shows a relatively stable deficit (fluctuating between -1.0% of GDP and -1.2% of GDP over the forecast horizon) and social security funds are in surplus. The surplus will decline from 2.1% of GDP in 2013 to 1.8% of GDP in 2017 as outflows from the funds increase over the forecast period.

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

Box 2. Main measures

Main budgetary measures

Revenue	**Expenditure**
2012	
•	•
2013	
• Increase in VAT rate by 1pp (+) • Effective increase in income tax rates (+) • Introduction of YLE tax (=) • Introduction of a bank tax (+) Total +0.75 % of GDP	• Use of expenditure ceilings to ensure that the central government expenditure does not grow in real terms
2014	
• Decrease in corporate income tax rate (-) • Increased taxation of dividends (+) • Increased excise taxes on alcohol, tobacco and sweets (+) • Total +0.5 % of GDP	• Use of expenditure ceilings to ensure that the central government expenditure does not grow in real terms
2015	
•	• Early withdrawal of tax deductions on R&D and increased depreciation rates, anticipated to last until 2016 (-)
2016	
•	•

Note: The budgetary impact in this table is the impact reported in the programme, i.e. by the national authorities. A plus sign indicates that revenue/expenditure increases as a consequence of the measure. The degree of detail reflects the information made available in the stability programme and, where available, in a multiannual budget.

Risks to the scenario stem mainly from risks to the growth forecast. As the economy is in the process of being restructured and ICT and forestry sectors, which are suffering diminished exports, are being replaced by other sectors, developments in industrial production and exports over the coming years are difficult to forecast. The government has announced a reduction in the corporate income tax rate from 2014, which is expected to lead to stronger investment and wage growth, partially offsetting the loss in tax revenues through the dynamic effects. The extent and timing of these effects is similarly difficult to forecast. If the economy takes longer than anticipated to respond to the tax cut, revenues might fall short of the 2014-2015 expectations.

The ex-post assessment shows that the (recalculated) structural balance deteriorated from 2011 to 2012. Regarding the expenditure benchmark, since Finland did not reach its MTO in 2011, net expenditure growth in 2012 needs to be at or below the lower reference rate of 0.5 %for 2012. Finland's net expenditure increased by 0.4 %, which remains below the lower reference rate. Considering that Finland posted negative real GDP growth in 2012, it can be considered to be overall compliant with the provisions of the preventive arm of the SGP.

In 2013, Finland's (recalculated) structural balance is forecast to improve by 0.1pps from -1 % to -0.9 %. In light of Finland's large negative output gap, this small improvement is deemed adequate. Because Finland is not predicted to reach its MTO in 2012, net expenditure growth from 2012 to 2013 needs to be at or below the lower reference rate of 0.5 % for 2013. Finland's net expenditure is projected to increase by 0.6 %, corresponding to a deviation of the expenditure benchmark of only 0.1 % of GDP. Overall for 2013, the programme anticipates compliance with the preventive arm of the Stability and Growth Pact, as the structural balance is forecast to improve.

In 2014, Finland's (recalculated) structural balance is forecast to move from -0.9 % of GDP in 2013 to -0.6 % of GDP in 2014. According to the information provided in the programme, the growth rate of government expenditure, net of discretionary measures, deviates by 0.3 % of GDP from the lower reference rate under the expenditure benchmark. Taking into account that the deviation from the MTO is just 0.1 % of GDP and that the Commission's spring forecast estimates that Finland should achieve a structural deficit of 0.5 %, it is likely that the MTO will be reached by 2014.

In 2015 and 2016, Finland's (recalculated) structural balance is projected to remain close to Finland's medium-term objective for the structural balance of -0.5 % of GDP. The overall assessment of Finland's budgetary developments, with the structural balance as a reference, including an analysis of expenditure net of discretionary revenue measures, shows that Finland complies with the required adjustment towards the MTO over the programme period.

The general government gross consolidated debt will continue to grow over the coming years and, consequently, government debt is expected to reach 57.5 % of GDP by 2015 according to the programme, which is close to the 60 % reference value. According to the Commission's forecast, general government debt will be slightly higher in 2013 and 2014 compared with the programme, but the difference is small (0.4 % of GDP in 2014). The programme anticipates subsequent reductions in the relative debt level — of 0.5 % of GDP in 2016 and 2017. Since the debt-to-GDP ratio is below the reference rate, the debt reduction benchmark does not apply. Medium-term debt projections (see Graph below Table V in annex) indicate that full implementation of the programme debt would first lead to decreasing, then increasing debt, remaining however below the 60% reference value by 2020.

Long-term sustainability

Finland is at medium sustainability risk in the medium term and at high risk in the long term due to the budgetary impact of the cost of ageing, but appears not to be at risk of fiscal stress in the short term. Risks would be lower if the structural primary balance were to revert to the higher values of the past, such as the average for the period 1998-2012. The focus, therefore, should be on containing age-related expenditure growth further so as to contribute to the sustainability of public finances in the medium and long term.

An independent study of the Finnish pension system[9] concludes that if the present system remains unchanged, either pension benefits will become inadequate or the system will become unsustainable. Problems in the pension system include making inadequate adjustment for a delayed start to drawing a pension and taking inadequate account of changes in family structure. Improving life expectancy should translate into longer working careers,

[9] Barr, N, The pension system in Finland: Adequacy, sustainability and system design, 2013.

but although the current system provides incentives to work longer, the majority of workers choose not to use them. Proposed policies include reducing pensions at the earliest eligibility age, gradually increasing the earliest eligibility age and possibly indexing the eligibility age to life expectancy.

According to the 2012 Ageing Report 2012 reference scenario, Finland's public healthcare expenditure is set to increase significantly from 6.0% of GDP to 7.0%[10] of GDP by 2060. Among the many measures being proposed is the consolidation of reform efforts already being made by, for example, increasing hospital efficiency, enhancing the supply of follow-up care for long-term care patients so as to reduce the unnecessary use of acute care settings for these patients, improving the organisation and management of health care or introducing medical best practices systematically.[11]

Long-term care accounted for 2.5 % of GDP in 2010.[12] Based on the 2012 Ageing Report reference scenario, the expenditure could increase to 5.1%[13] by 2060. The current and projected levels of spending can be explained by the focus on relatively costly institutional care, high coverage rates in terms of population and relatively high unit costs in institutional care. A stronger focus on independent living and cost-control would help reduce the need for institutional care and help continue to alleviate future spending pressures in long-term care.

Fiscal framework

Finland ratified the Fiscal Compact at the end of 2012 and has adopted the structural budget balance rule in its legislation. Finland's fiscal framework is currently tied to multiannual expenditure ceilings. The system is linked to parliamentary terms, and experience with the framework suggests that governments abide by the rules. Every year the government decides on central-government spending limits for the remaining years of its term, defining the multiannual financial framework. Subsequent yearly decisions on annual ceilings are taken on the basis of this framework.

Spending limit decisions are taken in late March each year.[14] The fiscal rule sets annual limits to government expenditure for the remainder of the parliamentary period. However, neither balanced budget requirements nor limits to annual deficits are set by the rule. According to the decision, central government expenditure included in the spending limits should decrease in real terms in 2014 and 2015. This policy undertaken by the government is in line with the growth-friendly fiscal consolidation recommendation of the Annual Growth Survey. It provides an ambitious target to control the costs of the budget while maintaining enough flexibility to respond to changes in the economic environment. The framework includes built-in automatic stabilisers, as some expenditure falls outside the scope of the limits.

[10] If the non-demographic drivers are considered i.e. Ageing Working Group (AWG) risk scenario is considered, then public expenditure on healthcare is projected to increase to 7.5% of GDP

[11] ASISP (2012), Annual National Report 2012 —– Pensions, Health Care and Long-term Care —– Finland.

[12] Lipszyc, B;, Etienne, S;, Xavier, A., ''Long-term care: need, use and expenditure in the EU-27'', Economic Papers 469, 2012.

[13] If the AWG risk scenario is considered, then public expenditure on long-term care is projected to increase to 5.4% of GDP

[14] The most recent decision is from 27 March 2013.
http://www.vm.fi/vm/fi/04_julkaisut_ja_asiakirjat/03_muut_asiakirjat/20130327Valtio/name.jsp

Social security funds and municipalities currently operate outside the system of expenditure limits, except for the fact that government transfers to the municipalities are subject to central government expenditure limits. Municipalities are subject to a rule that requires a balanced budget over a four-year period but are free to decide on expenditure growth that can be financed by increasing local taxes. However, municipalities are the most affected by the increasing ageing-related expenditure, as the majority of medical and social services are provided by them. Thus it appears necessary to encourage better integration of all expenditure (including local expenditure) to ensure coherence between the plans of all sub-levels of government and their compatibility with the medium-term objectives. A civil service working group has been established to analyse ways of improving the macroeconomic steering of local government, including setting the spending limits of local government finances.

Tax system

In 2011, the overall tax burden in Finland was 43.4 % of GDP, the 5th highest in the EU after Denmark, Sweden, Belgium, and France. Direct taxes, in particular on personal income, represent the most significant category of revenue. As of 2013, VAT rates were increased across the board by one percentage point without changing the structure of the system (standard rate and two reduced rates).[15] The expected additional annual tax revenue from the rate increases is EUR 750 million. Further increases of excise taxes will be introduced in the beginning of 2014.

The prevailing trend in labour taxation in relation to GDP has been modestly downward for over a decade until 2011. The drop in the implicit tax rate on labour has indeed been quite significant, from 44.1 % in 2001 to 39.6 % in 2011. Yet, the proportion of labour taxes of GDP remains among the six highest in the EU. In 2012, however, the government decided to forego the index adjustments to the progressive state income tax scales in 2013 and 2014. It also introduced a new top income class to the scale, thus raising the highest marginal tax rate from 29.75 % to 31.75 % applicable from 2013. At the same time, there have been increases in a number of social contributions and the municipal income tax rates have continued to increase, bringing the average rate to 19.38 % in 2013 (up from 19.25 % in 2012). Thus, although the government has taken measures to ease the labour tax burden of low-income earners by increasing allowances, the declining trend of labour taxation seems to have come to an end as the effective tax rate on labour is increasing.

From the beginning of 2014, corporate income tax will be lowered from 24.5 % to 20 %. At the same time, taxation of dividends will be tightened. It is expected that the reform will provide additional incentives for investment, as the reduction in tax rate is significant.

The taxable values of real estate are out-dated and disconnected from real prices. In 2012 the government decided to increase asset transfer taxation of real estate from 1.6 % to 2.0 % as of March 2013. Although this measure will contribute to consolidation needs, the asset transfer tax has drawbacks in that it is deemed to be quite distortive and raises the cost of labour mobility. A recurrent tax on property is considered to be less detrimental to growth and preferable to transaction taxes on immovable property. The recurring property tax revenues, in relation to GDP are currently low in Finland. In March 2013 the government announced its intention to bring the tax valuations of real estate better in line with real prices,

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[15] The standard VAT rate is 24 % since 1 January 2013. A reduced rate of 14 % is applied to food and restaurant services. A reduced rate of 10 % applies to hotels, medicines, books, newspapers and tickets to cultural events.

thus increasing property taxation in the coming years. The impact and details of this measure remain to be seen.

In 2011, environmental taxes accounted for 7.2 % of all taxes. In GDP terms, revenues are higher than the EU average (FI: 3.1 %, EU: 2.4 % in 2011). There could be further opportunities to increase the environmental benefits of these taxes and to phase out environmentally harmful subsidies still in existence.

3.2. Financial sector

The financial sector remains resilient relative to many other national financial sectors in the euro area. The banking sector did not need government support during the crisis and has been seen as stable (the 'safe haven' phenomenon). Exposure to risks in countries undergoing the crisis is limited, as are non-performing loans. 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 %. Since the mid-1990s, housing has become significantly more expensive in inflation-adjusted terms. Analysis suggests[16] that house prices for Finland are close to, but above, the long-term average. However, house price increases seem to be levelling off. Although still rising in 2010, deflated house prices fell slightly in 2011 and remained stable in the first half of 2012. Led by the increases in housing loans, the private sector accumulated gross debt of 179 % of GDP (non-consolidated) in 2011. The year-on-year growth of the non-consolidated financial liabilities of the financial sector amounted to 30.8 %, by far the highest growth rate among EU Member States. The high growth resulted mainly from the safe-haven effect leading to inflows of foreign banks' deposits, re-deposited with the Bank of Finland.

In 2012, the Council Recommendation for Finland did not contain a CSR as regards the financial sector policies. As the sector is healthy, no substantial reforms have been undertaken.

The Finnish government has decided to reduce gradually the incentives encouraging debt-financed house purchases by lowering the share of mortgage interest payments that can be deducted from taxable income. This should help to reduce upward pressures on housing prices. A working group considered macro-prudential measures to limit the growing indebtedness and ensure a high quality of lending, and proposed binding loan-to-value ratios for the banks. However, the proposal has been disregarded and will not be implemented by the government. Potential issues that could warrant analysis and measures that have not yet been addressed include the structural features of the Finnish banking sector (dominant position of one foreign-owned bank; a relatively large derivative portfolio) and the trends observed recently (important inflows of foreign bank deposits).

Access to finance

The Finnish government has taken steps to improve the access to finance for small and medium-sized enterprises (SMEs) and high growth companies. This has been done through the injection of additional funds into Finnvera.[17] For high-growth firms, public sector involvement in the venture capital markets is again being reorganised, with all public venture

[16] European Commission (2012a), '*Assessing the dynamics of house prices in the euro area*', in Quarterly report on the euro area, vol. 11, No 4.

[17] Finnvera is the state-owned financial institution for SMEs, providing loans, loan guarantees, equity investments and export-credit guarantees.

capital financing being channelled through the Finnish Funding Agency for Technology and Innovation (Tekes). Finland has also introduced the accelerator programme (Vigo) to provide funding and other support for high-growth firms. This programme has been able to direct EUR 60 million of private risk capital to new enterprises.[18] In 2013, the government also introduced a tax-credit scheme for business angel investors that invest in start-up enterprises. The measure is expected to have a positive impact on the formation of new enterprises.

3.3. Labour market, education and social policies

The labour market generally performs well in Finland and the most pressing challenges relate to the ageing of the population. The number of people leaving the labour force annually exceeds the number of people entering the labour market. To maintain the supply of labour, it is important to speed up entry[19] and to prevent early exit of workers. The policy agenda is now focused on retirement issues, and on long-term and youth unemployment.

The 2012 Council recommendations to Finland contained a CSR to improve the employment rate of older workers, including by reducing early exit pathways, and to increase the effective retirement age taking into account the improved life expectancy. The Commission concludes that Finland has made some progress on measures taken to address this. Steps taken in 2012 are in the right direction overall, but no breakthrough has been achieved. In the period 2013-15 Finland will take relevant measures to reduce early exit pathways. However, some pathways such as the 'unemployment pathway[20]' to retirement still remain. The employment rate of the 60–64 age group was a mere 41.8 % in 2011.[21] Moreover, despite the flexible retirement age of 63–68 years introduced in the 2005 pension reform, the number of people retiring in 2011 on a statutory earnings-related pension at 63 was almost twice as high as those who retired at 64 or 65 combined. Recent report by the Prime Minister's Office concludes that the objectives of the 2005 reform were not met in terms of the increased expected retirement age[22]. The life-expectancy coefficient in pension calculations is a strong economic incentive to work longer to earn a higher pension. However, since life expectancy is increasing faster than was anticipated in 2005, the coefficient also has a strong impact on the adequacy of pensions. Linking the pensionable age to life expectancy would cover both the adequacy and sustainability side of the pension equation.

Discussions are on-going in relation to the pension reform planned for 2017. They cover survivor's pensions, the starting age for pension accrual, early retirement schemes and retirement ages. In addition, the government has set up a high-level group to assess the results of the 2005 reform to serve as a basis for the discussions. Initiating the discussions on new pension reform is a relevant measure, but its anticipated implementation by 2017 seems insufficiently ambitious, as this deadline extends beyond the current parliamentary term and thus the proposals by the outgoing government could be subject to review or reversal.

Disability is still the most important factor shortening working careers in Finland. In order to tackle the issue and to extend working careers by improving the quality of working life, Finland introduced a new National Working Life Development Strategy at the beginning

[18] http://www.tem.fi/files/35626/TEMrap_4_2013.pdf .
[19] Entry into the labour market is delayed by the long duration of studies.
[20] Under certain conditions, older unemployed persons will receive unemployment allowances beyond the normal 500 day period, until retirement.
[21] The employment rate of people aged 55–64 rose by 15 pps, from 42 % to 57 % between 2000 and 2011.
[22] Uusitalo, R; Nivalainen, S 'Vuoden 2005 eläkeuudistuksen vaikutus eläkkeellesiirtymisikään' Valtioneuvoston Kanslian raporttisarja 5/2013

of 2013. Although the strategy is relevant and ambitious, underpinning it with implementing measures in work places and labour markets remains a challenge. This is also an issue for the employment of older workers: unemployment is again increasing in the over-50s age group, after having fallen for many years.

The 2012 Council recommendations for Finland also contained a CSR to implement the on-going measures to improve the labour market position of young people and the long-term unemployed, with a particular focus on skills development. The Commission comes to the conclusion that Finland has made substantial progress on measures taken to address this CSR. However, the underlying policy challenges remain. A pilot programme to address long-term unemployment was launched in September 2012. Primary responsibility for managing an individual's employment support will be transferred to the municipality once a person has been unemployed for 12 months. Their chances of employment will be assessed, their progress monitored, and participation in wage-subsidised work and training increased. In addition, Finland introduced a strategy on structural change and the functionality of the labour market to ensure that, as major structural changes continue, employees will be able to transfer quickly from one job to another.

In 2013 Finland introduced a stronger youth guarantee: all young people under 25 and all recent graduates under 30 would be provided with a job or training, study place, workshop placement or rehabilitation within three months of unemployment. In 2012 and 2013, 1 700 study places are being introduced in vocational training in regions where there have been fewer study places for this age group. The guarantee is complemented by a skills programme in 2013-16, which creates additional study places for those 20-29 year olds who have only the basic school education, and are very often not in employment, education or training. The guarantee is an ambitious partnership with shared responsibility between the authorities, labour market partners and young people.

The measures on long-term and youth unemployment conform to the priorities of the 2013 Annual Growth Survey and are reaffirmed in the 2013 national reform programme. They are relevant and ambitious. As regards credibility, it remains to be seen whether the budget of the youth guarantee is indeed sufficient in relation with the measures that are planned. In addition, the key actors responsible for implementing the two measures — Public Employment Services and municipalities — are going through a major reform that could affect the implementation. Permanent improvement in job-relevant skills and labour market position of the target groups will be achieved only if both measures are rigorously implemented.

The 2012 Council recommendations for Finland also contained a CSR to continue to align wage and productivity developments, whilst fully respecting the role of social partners and being in line with national practices. The Commission comes to the conclusion that Finland has made limited progress on measures taken to address this CSR. The current labour market agreement comes to an end in 2013 but the labour market partners have not yet reached an agreement on its follow-up. If the new agreement continues along the same lines as the current one, wage growth will still exceed productivity growth. Without measures to trigger productivity growth or wage moderation, compensation per employee is forecast to continue outpacing productivity growth in 2013 and 2014. In conclusion, thus far the response to the recommendation has not been ambitious, relevant or credible, but it should be recognised that the key to finding a solution rests with the employer and employee organisations in Finland.

Social exclusion

In-work poverty in Finland is the lowest in the EU. The government's overall policy objective is to reduce social exclusion through labour market integration. There are however people at risk of social exclusion, such as elderly women with low pension earnings and those on disability pensions, for whom labour market inclusion is not an option to reduce the risk of poverty. The risk is also higher among young people and people with migrant background — groups for which labour market integration is an option. In this context, the persistent gender pay gap (at 19.4% above the EU average of 16.4%) has a negative impact on the income of female pensioners. Long-term unemployment also increases the risk of exclusion. The government has announced a programme to prevent exclusion, poverty and health problems.

Education and training

Finland has less early school leavers than the EU on average. Nevertheless, Finland is above its Europe2020 target and no improvement has been achieved for over a decade. Early school leaving increases the risk of labour market exclusion, which can further translate into social exclusion, in particular for disadvantaged people, such as those with a migrant background.

Participation in lifelong learning in Finland was 23.8% in 2011, the 3rd highest in the EU. However, for 55-64 year olds it was only 13.5% and for the low-skilled, only 10.7%. Given the demographic challenges, older and low-skilled workers would benefit from targeted measures aimed at keeping them active longer on the labour market. Moreover, retraining policies in traditional industries may need to pay special attention to older incumbent workers, also so as to prevent skills shortages in a climate of changing production processes. As regards the **tertiary attainment rate,** Finland has reached both its national and the EU headline target for 2020, with 45.4% in Finland as against an EU average of 35.5% in 2012.

3.4. Structural measures promoting growth and competitiveness

Finland has continued to lose export market share, indicating potential problems in competitiveness. The situation is puzzling, as the business environment in Finland is reputed to be among the best in the world[23] and R&D expenditure (3.78% of GDP in 2011) is still the highest in the EU and remains close to Finland's national 4% target for 2020. With regard to the business environment, there may be room for further improvement in specific areas, for instance by reducing the length of start-up procedures. According to the 'Doing Business 2013[24]' report, Finland ranks 49th regarding the ease of starting a business while it is 11th in the overall ranking. The efficiency of the Finnish research and innovation system in turning investments in R&D into scientific and technological excellence is a critical issue as is the system's ability to convert R&D investment into new innovative products and services. Although Finland is an innovation leader showing an above average innovation performance in the EU,[25] its capacity to generate high-growth innovative enterprises is weaker than the majority of other EU Member States.

The 2012 Council Recommendations for Finland contained CSRs to continue the efforts to diversify the business structure, broaden the innovation base and to continue to

[23] IMD World Competitiveness Yearbook 2012, World Economic Forum, Global competitiveness report 2012.
[24] Doing Business 2013 —– Smarter Regulation for Small and Medium Sized Enterprises. A co-publication of the World Bank and the International Finance Corporation.
[25] Innovation Union Scoreboard 2012.

improve competition in product and service markets in the retail sector, as well as increasing the competition neutrality between private and public undertakings. Finland was recommended to take further steps to ensure that competition law fines have a sufficiently deterrent effect. Finland received no CSRs on environment protection, transport or in relation to energy.

The Commission concludes that Finland has made substantial progress on measures taken to address this CSR. Finland has undertaken ambitious measures in these areas, but taking into account the scope of the measures and their slow effect, efforts need to be continued. The 2013 budget includes a new temporary initiative for tax incentives for R&D investment and a new temporary initiative for investors in start-up enterprises. Industrial enterprises can increase the depreciation rates of their investments for tax purposes until 2015. However, the tax incentives will be withdrawn already from 2015 and replaced with a generally lower corporate income tax rate. Such rapid shifts in tax policy can undermine the credibility of the policy. Additional resources have been made available for Finnvera. In the area of competition, the government has proposed an amendment to the Competition Act regarding the dominant market position in the food retail trade (if the market share exceeds 30 %). Other objectives are to maintain a level-playing field between the public and private sector, and reduce legislative obstacles to competition in various fronts. Efforts should now be directed towards fully implementing the agreed programme for healthy competition. The sooner the new Competition and Consumer Authority becomes integrated and fully operational the better. The Commission will continue to monitor these reforms and their implementation.

Research and innovation

The structural competitiveness problems of the Finnish economy have been widely recognised and in 2012 the Council recommended that Finland continue its efforts to diversify its business structure, and to strengthen productivity growth and external competitiveness. The policy response has been relevant, as it seeks to benefit more from high-value-added parts of the value chains, in particular services and ICT. Besides making the most of the extensive ICT know-how throughout the economy, the renewal of the industrial landscape can be speeded up through policy measures designed to attract more foreign direct investment. The government has undertaken several actions to achieve the goals outlined, but it is too early to say whether these are sufficient to turn the economy around. A temporary R&D tax incentive for SMEs and cooperatives aimed at improving the leverage effect of public investment is the most significant measure taken in financial terms.

The *Team Finland network* promotes Finland and its interests abroad: Finland's external economic relations, the internationalisation of Finnish businesses, the country's brand, and inward investments. At the heart of the *Team Finland network* are three Ministries (the Ministry of Employment and the Economy, the Ministry for Foreign Affairs and the Ministry of Education and Culture) together with publicly-funded bodies and Finnish offices abroad (including diplomatic missions, the offices of Finpro and Tekes, and national culture and science institutes), all operating under the ministries' guidance. A total of 72 teams have been set up in different countries and they bring together all Finnish authorities, publicly-funded organisations and other key parties with ties to Finland. Each team has its own work programme and coordinator with information on the network's local activities and services. An evaluation of the success of the effort has not been carried out.

Several policy objectives have been introduced to improve the research and innovation system, in line with the government's research and innovation guidelines for 2011-2015. At the end of 2012, the government published an action programme for research and innovation policy 'Growth through Expertise' that aims to enhance the quality and impact as well as the internationalisation of the Finnish research and innovation system. The need to increase the number of high-growth innovative firms was recognised. The digital service economy is expected to provide Finland with opportunities for growth: all renewal opportunities for structural change that the ICT sector offers have to be exploited. The extent to which service firms and the public sector will be capable of exploiting innovations from the ICT sector — and highly skilled human resources that are available due to layoffs — will determine their effectiveness and growth. In spring 2013 the government made a decision to launch a new research and innovation action programme. The Academy of Finland will fund the programme to the tune of EUR 10 million annually. The programme measures will for their part support the implementation of the European Research Area. On the whole, the short-term impact of the actions taken is very difficult to identify and to measure.

In 2012, a series of evaluations of the Finnish research and innovation system were carried out providing valuable information for further reforms.[26] The report on the Strategic Centres for Science, Technology and Innovation (SHOKs) concludes that the concept of these centres needs further improvement, e.g. the interests of small companies could be better taken into account and the centres should compete to maintain their status. The position of the centres in the innovation system needs to be better defined and the external peer review processes at project level should be extended across the SHOKs.[27] A report on long-term perspectives is also under preparation and is expected to be submitted to the Finnish parliament in 2013. The practical impact of the strategic programmes on clean technology, the bioeconomy, forestry sector and the welfare sector will need to be closely monitored and the necessary adjustments made, but the ambitions are significant. For example, the Finnish Strategic Programme for the Cleantech Business aims to create at least 40 000 new jobs by 2020 and to double the turnover of the sector.[28] Ultimately the policy measures can be deemed successful only if they result in a positive current account balance, improving terms of trade, growth and jobs.

The government has introduced a range of other measures to improve the performance of the system. It has recently made non-sensitive data gathered by public authorities freely available with the aim of promoting the emergence of innovative start-ups. Several measures have also been introduced to enhance the efficiency of the public research sector. According to a recent evaluation, the university reform that took effect in 2010 has had a positive impact especially on the strategic management of universities. The ongoing reforms of polytechnics and public research institutions as well as the revised funding model for universities should raise the quality and impact of the work of the public research performers. The reforms should also provide the actors with the necessary incentives to increase the internationalisation of the Finnish public research sector and to specialise in key research fields where the country can compete internationally. These reforms together with further efforts in areas such as research infrastructures and knowledge transfer between the public and private sector will be critical to

[26] The assessment of the Strategic Centres of Science, Technology and Innovation (SHOKs), the reform of the central government's research institutes as well as the evaluations of TEKES and Finnvera (Export Credit Agency of Finland).
[27] Licence to SHOK, p. 27, http://www.tekes.fi/u/Licence_to_SHOK.pdf.
[28] Europe 2020 Strategy — Finland's National Programme, Spring 2013, p. 36.

raising the quality, impact and the international profile of the Finnish public research system. In 2012 a research infrastructure policy was launch and additional funding was granted. The national road map of research infrastructures will be updated in 2013.

In 2012, the government introduced new measures that will enhance the role of large metropolitan regions in implementing the national innovation strategy. The measures should promote the coordinated use of private and public resources in the metropolitan regions. Research and innovation (R&I) continue to be the priorities for the next period of the EU Structural and Investment Funds (2014-20). Based on the preparatory documents, in the next period Finland intends to focus on improving R&I infrastructure and capacity, promoting business R&I investment and a range of innovative actions, through smart specialisation,[29] as well as on supporting technological and applied research, pilot lines and early product validation.

Overall, in order for Finland to maintain its strong research and innovation performance, a continuous policy commitment will be needed to carry out the reforms, monitor their impact, and make the necessary adjustments in a rapidly changing environment. Measures such as the government's 'ICT 2015 working group' report point in the right direction. The report identified four critical directions that should be followed to re-establish Finland's technological lead in ICT. These included the rapid development of a common architecture for all public services; a 10-year programme on ICT-related research, development and innovation; a funding programme for high-growth enterprises; and a governmental expert group to ensure long-term development. The government has established a steering group under the Prime Minister to ensure the implementation of these proposals, and concrete actions are already being taken on the national service architecture and financing of growing firms (EUR 55-70 million for 2014-2017).[30]

Competition policy

The retail grocery sector is particularly concentrated and its structure enables the largest players to further strengthen their position. The retail sector in Finland contributes 3.9 % to the GDP and employs 6.6 % of the workforce (over 160 000 people). Given the economic importance of the sector, the smooth functioning of its regulatory framework is essential. In September 2012, a new, broad-based programme on promoting healthy competition was launched. According to the programme, the supervision of the grocery sector, which is concentrated, should be sharpened so that practices in this sector can be assessed under the rules in the competition act which prohibit abuses of a dominant position. It is proposed that a new section, 7a, be added to the Competition Act (948/2011), according to which a grocery trade operator would be considered to occupy a dominant market position if its market share in Finland exceeded 30 %.The Finnish competition authority, while supporting measures to strengthen competition in the retail sector, has raised concerns about automatically finding an operator to have a dominant position once they exceed a specified threshold, a practice that differs substantially from the assessment of the other sectors. One interesting aspect in competition policy is the issue of the location of the stores of the state-owned retail alcohol monopoly, as their presence can increase retail turnover of supermarkets by 30 %. There have been some signs that the locations of the Alko outlets have tended to

[29] Smart specialisation means identifying the unique characteristics and assets of each country and region, highlighting each region's competitive advantages, and rallying regional stakeholders and resources around an excellence-driven vision of their future.

[30] NRP p. 33.

favour the retail grocery duopoly. The government has declared that it will influence, through its ownership position, the location decisions of sales outlets of Alko.

Concerns have been raised that the municipal zoning rules and procedures make it very difficult to open new large stores, in particular as the two dominant players have acquired most of the potential sites. The programme on healthy competition includes objectives for the removal of unnecessary and disproportionate restrictions on competition in legislation, but this should be achieved without undermining the environmental objectives. Legislation on city planning and construction and its practical application by authorities is a key area, in particular in the capital and other densely populated regions, given the importance of location for a number of activities such as the retail grocery trade combined with the scarcity of such locations in these regions. Measures to increase competition in this area include an action programme on construction and changes to the land use and construction act. Pharmacies and waste management are also targeted under the programme.

At the institutional level, the Competition Authority was merged with the Consumer Agency in January 2013. This measure should help increase the impact of competition and consumer policies in Finland. However, it could also bring benefits in terms of efficiency, although merging the different cultures could take some time and effort to complete.

In response to the recommendation to increase competition neutrality, an amendment to the competition act is under preparation to ensure greater neutrality of competition between private firms that compete with public undertakings in selling goods and providing services. According to the programme on healthy competition, the Competition and Consumer Authority’s scope of jurisdiction will be extended to cover the supervision of competition neutrality related to the supply of goods and services that can be considered economic activity within the public sector. The Authority should attempt, via negotiation in the first instance, to eliminate practices and structures that jeopardise competition neutrality. If results are not achieved through negotiation, the Authority should have the power to ban certain activities or impose obligations to ensure equitable operating preconditions in the market. The government will regularly assess the progress of the programme, deciding on additional measures as necessary. Quarterly progress reports will be submitted to the to the Cabinet Committee on Economic Policy The government announced that the Competition and Consumer Authority’s budget will be strengthened accordingly. In this context, an amendment of the local government act is also in preparation. It would require municipalities to incorporate their commercial activities to remove the privileges that these activities benefit from (tax exemption and protection from bankruptcy) to achieve greater competition neutrality between private and public undertakings. These initiatives are ambitious and credible and are likely to have a significant, positive impact over the coming years.

The general level of competition law fines in Finland is not sufficiently deterrent. This may influence the success of the Finnish leniency programme.[31] This is recognised by the government that has declared its intention to launch a survey in 2013 on means to strengthen the competition enforcement regime. This is a relevant, but not yet sufficiently ambitious response to the recommendation to take further steps to ensure that competition law fines are sufficiently deterrent.

[31] Under this, participants in a cartel may obtain immunity from or reduction fines provided that they reveal their participation in the cartel to the competition authority in a timely manner.

These measures seem to go some way to address the recommendations of 2012, even though it is still too early to assess the full impact of the reforms.

Environment

Under the Europe 2020 Strategy, Finland has committed itself to reduce its emissions not covered by the EU's Emission Trading System (ETS) by 16 % between 2005 and 2020. Based on the latest inventory data, in 2011 Finland reduced its (non-ETS) greenhouse gas emission by 9 % compared with 2005. The updated national energy and climate strategy concludes that Finland will meet its 2020 target with existing measures.

Finland has engaged upon a strategy consisting of increasing the taxation on environmental pollution and increasing the statutory requirements for energy efficiency. The country has put in place a number of greenhouse gas reduction measures, laid out in its long-term National Climate and Energy Strategy, and is continuously updating most of them through legislation, making them progressively more stringent. An update of the National Energy and Climate Strategy was submitted in late March 2013. The strategy focuses on improving energy efficiency and increasing the share of renewables to reduce greenhouse gas emissions by 80 % by 2050. Measures include the tightening of building energy efficiency requirements, support for renewable energy, increasing the energy efficiency of road transport and decreasing oil consumption by 20 % by horizon 2020, mainly from road transport and heating. In some areas additional measures could be foreseen: there is currently no disincentive for incineration, potentially leading to lost opportunities in recycling and the re-use of materials. The energy tax on peat is taxed at much lower rate (on a per-unit-of-energy basis) compared to coal or natural gas, thus favouring this fuel despite the negative impacts of burning and harvesting it,[32],[33.34] Environmental taxes are not indexed in Finland. The government is committed to phasing out environmentally harmful subsidies, but contrary to this objective, the refund system on energy tax payments for industry was extended in 2011 so that 85 % of energy taxes paid are refunded when the taxes paid exceed 0.5 % of the value added (previously 3.7 %) The subsidy could amount to EUR 120 million in 2012.[35]

Energy policy

Finnish energy policy is broadly in line with the main European policy guidelines and no recommendations were issued in 2012. Energy policy highlights the security of supply issues from a national perspective. The new Energy and Climate strategy aims to create a carbon-neutral country by 2050, building on energy efficiency and renewable energy but also nuclear energy.

The electricity market in Finland is integrated into the wholesale electricity market within the Nordic countries and also interconnected with the Russian Federation and Estonia. For gas, Finland is connected only to the Russian transmission system. Diversification of its natural gas supply options through an LNG terminal or a pipeline interconnection with the Baltic States could make Finland less dependent on gas imports from Russia. Electricity self-sufficiency is only expected to be achieved after the much-delayed Olkiluoto 3 nuclear reactor is completed.

[32] http://www.oecd.org/site/tadffss/FIN.pdf .
[33] For instance, see http://www.stat.fi/tup/khkinv/nir_2008_un_20080418.pdf, Table 3.2_6, p. 57-58.
[34] According to the Finnish River Basin Management Plans.
[35] Source: http://www.tem.fi/?s=2686&xmid=4787&C=97986.

Finland has committed to reaching a target of 38 % of renewable energy sources in its final energy consumption and a 20 % share of renewable energy in the transport sector by 2020. Due to the high reliance on biomass to achieve its targets, the country needs to give special attention to sustainable biomass mobilisation. Also, Finland should complete the legal obligations under the Renewable Energy Directive. 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 to wind power, hydro power, biogas, other biomass sources, and CHP (combined heat and power). However, Finland still lacks effective measures to increase the use of renewable energy in the heating sector such as a measure that obliges buildings to use renewable energy sources.

Finland's energy intensity is high compared to its Nordic neighbours and other euro area members. The industry accounts for almost half of the final energy consumption. Within the manufacturing sector, the forestry industry is by far the largest energy consumer, followed by the metal and the chemical industry. High energy intensity means that rising energy prices translate into increased production costs for Finnish industries. Although the overall high energy intensity stems from the dominance of energy-intensive industries in Finland, an improvement in the energy efficiency could enhance the competitive position of these industries by lowering the cost of inputs. Finland has set a national energy efficiency target to lower the consumption of energy from 323 TWh in 2010 to 310 TWh in 2020.

3.5. Modernisation of public administration

Finland has continued to make progress in developing its public administration. Building on the success of the central government's regional administration,[36] progress has been made in preparing the reform of the municipalities, social and healthcare services. While Finland scores well on the quality of public administration, the number of independent municipalities still appears large compared to the population, leading to possible inefficiencies in administration and service provision. Central government is implementing an efficiency and productivity programme and preparing to launch a network of citizen service points by 2014 in the framework of the 'Customer service 2014' project.

The 2012 Council Recommendations for Finland contained a CSR concerning taking measures to achieve productivity gains and cost savings in public service provision, including structural changes and efficiency-enhancing territorial administrative reforms, also in order to respond to the challenges arising from an ageing population. The Commission has concluded that Finland has made some progress on measures taken to address the CSR.

Ageing-related expenditure falls mainly under the auspices of the local municipalities.[37] It has been acknowledged that the municipalities should be large enough for services to be efficiently organised. The government has prepared a reform proposal on the municipal sector and also social and healthcare sectors. This is an ambitious and credible measure, as the draft law has already been submitted to the national parliament. The government has decided to improve the efficiency of municipal authorities by providing financial incentives for voluntary mergers, possibly resorting to forced mergers in the case of financially-troubled

[36] Assessment report provided by the government to the Parliament in February 2013, NRP p. 22.
[37] Municipalities are responsible for healthcare services and services provided to elderly persons, such as nursing homes and daycare.

municipalities. All municipalities not fulfilling certain criteria for a ‘healthy’ municipality have to assess the costs and benefits of the mergers by July 2014. The minimum size of the new emerging municipalities is set at 20 000 inhabitants with certain exceptions. The impact of the municipal reform on productivity and costs in public service provision will only be revealed over time. The goal is to have stronger and more efficient structures for public service provision in order to improve the productivity of these services. It remains to be seen whether the voluntary nature of the reforms is enough to bring about the change.

The preparatory work on the reform of the social and healthcare service structure has been completed by a special working group. This group recommended the creation on 20-30 social and health care districts. Municipalities with at least 20 000 inhabitants would be allowed to continue to independently organise their provision of basic services. However, municipalities with less than 20 000 inhabitants would lose this right. In order to guarantee equal level of services, some of the social and healthcare services currently provided by the municipalities would instead be provided by the social and healthcare districts responsible of providing all statutory services. Municipalities with a minimum of 50 000 inhabitants would guarantee these statutory services. In addition, every social and health care district belongs to one of the five special responsibility areas which aims to ensure an equal level of centralised services and an efficient use of resources. These recommendations are being turned into legislative proposals during 2015. The social and health care districts should be operational by 1 January 2017. Assessment of the ambitiousness of the reform can be delivered after draft legislation is published.

The Finnish government has implemented an action plan to reduce the administrative burden on businesses by 25 % by 2012, but an external evaluation[38] has indicated that not much progress beyond the starting point has been made (except in public procurement). The effect of the proposed municipal reorganisation on public procurement remains to be seen, but one danger is that the larger municipalities will put bigger lots out to tender, thus favouring bigger firms and disadvantaging SMEs. Furthermore, the complexity of the public procurement legislation can also lead to municipalities favouring as few lots as possible. There are no incentives for the municipalities to refer any observed collusive behaviour among tenderers to the Competition and Consumer Authority either. The public sector could benefit from more efficient investments in IT, as so far there have been few productivity improvements, indicating a need for increased efficiency in deployment and additional structural and managerial changes.

Overall, the progress in reforming the public administration has been limited and, taking into account the challenges of an ageing population and diminishing labour force, more ambitious measures might be needed.

[38] Deloitte 2012, https://www.tem.fi/files/32917/TEMrap_15_2012.pdf

4. OVERVIEW TABLE

2012 commitments	Summary assessment
Country-specific recommendations (CSRs)	
CSR 1: Preserve a sound fiscal position in 2012 and beyond by correcting any departure from the MTO that ensures the long-term sustainability of public finances. To this end, reinforce and rigorously implement the budgetary strategy, supported by sufficiently specified measures, for the year 2013 and beyond, including meeting the expenditure benchmark. Continue to carry out annual assessments of the size of the ageing-related sustainability gap and adjust public revenue and expenditure in accordance with the long- term objectives and needs. Integrate the local government sector better in the system of multi-annual fiscal framework including through measures to control expenditure.	The Commission comes to the conclusion that Finland has made some progress on measures taken to address the CSR. The general government deficit reached 1.9 % of GDP in 2012 and in its spring forecast the Commission predicts a 1.8 % deficit for 2013. The structural balance was -0.7 % in 2012 and is forecast to be -0.6 % in 2013 and -0.5 % in 2014. Finland did not meet its MTO (0.5 %) in 2012, but due to the negative growth, the improvement in structural balance was not achievable. Finland is carrying out an assessment of the sustainability gap. No measures to establish expenditure ceilings have been proposed at general government level, but local government expenditure is being adjusted through the adjustment of central government transfer payments to the municipalities which are subject to central government expenditure ceilings.
CSR 2: Take further measures to achieve productivity gains and cost savings in public service provision, including structural changes and efficiency-enhancing territorial administrative reforms, also in order to respond to the challenges arising from an ageing population.	The Commission comes to the conclusion that Finland has made some progress on measures taken to address the CSR. Reform on the number and structure of municipalities is progressing. Legislation currently being proposed for adoption in July 2013 establishes criteria for municipalities that should consider and analyse mergers. There will be financial incentives for mergers but no forced mergers are envisaged. Merging municipalities will have interim periods during which the number of staff will not be reduced, etc. The reform is not expected to produce immediate results. Furthermore, reform on health and social services being planned.
CSR 3: Implement the ongoing measures to improve the labour market position of young people and the long-term unemployed, with a particular focus on skills development.	The Commission comes to the conclusion that Finland has made substantial progress on measures taken to address the CSR. The measures to reduce long-term and youth unemployment (the latter undertaken under a fully-fledged Youth Guarantee) are relevant, ambitious and credible. However, the underlying policy challenges remain. As regards older workers, it is not clear what measures are being envisaged either in the National Working Life Development Strategy or outside it. Since no

	concrete initiatives or numbers have been set, it is difficult to assess relevance, ambition or credibility. Early exit pathways, such as the 'unemployment pathway', remain.
CSR 4: Continue enhancing competition in product and service markets, especially in the retail sector, by ensuring the effective implementation of the new Competition Act and the new programme on promoting healthy competition. Continue to further opening the municipal procurement of services to competitive bidding and by ensuring competition neutrality between private and public undertakings. Take further steps to ensure that competition law fines are sufficiently deterrent.	The Commission comes to the conclusion that Finland has made some progress on measures taken to address the CSR. To improve competition, a programme to promote healthy competition was set up, aimed at increasing competition on the domestic market. Furthermore, on 1 January 2013 the Finnish Competition and Consumer Authority came into operation. Furthermore, a legislative proposal on dominant market position has been under discussion at government level since September 2012.
CSR 5: In order to strengthen productivity growth and external competitiveness, continue efforts to diversify the business structure, in particular by hastening the introduction of planned measures to broaden the innovation base while continuing to align wage and productivity developments fully respecting the role of social partners and in line with national practices.	The Commission comes to the conclusion that Finland has made some progress on measures taken to address the CSR. The government's measures are in the right direction in relation to diversification of the business structure. The adequacy of the response can be measured and evaluated once there is more data available (e.g. on the impact on exports and export market share). The problem of competitiveness and the need to facilitate the restructuring in the ICT sector are ongoing issues in the public policy debate. The current wage agreement comes to an end in 2013, but the labour market partners have not yet reached an agreement on its follow-on. There has not been an ambitious, relevant or credible response to the recommendation as regards the wage component.
Europe 2020 (national targets and progress)	
Employment rate target: 78 %	73.8 % (2011) 74.0 % (2012) The average annual employment growth required to reach the target is 0.2 % in 2011-2020. This will depend on economic climate but will also require national efforts. The NRP provides a target until 2015: 74.5 %.
R&D target: 4.0%	3.87% (2010)

	3.78% (2011)
Greenhouse gas (GHG) emissions target: -16% (compared to 2005 emissions, ETS emissions not covered by this national target)	Change in non-ETS greenhouse gas emissions between 2005 and 2011: -9%. According to the latest national projections submitted to the Commission and when existing measures are taken into account, the target is expected to be achieved by a narrow margin: -16% in 2020 compared to 2005.
Renewable energy target: 38% Share of renewable energy in the transport sector: 10%	Share of total renewable energy in gross final energy consumption was 31.8 % in 2011 and 0.4 % in the transport sector.
Energy efficiency - reduction of energy consumption in Mtoe: 310 TWh in final energy consumption in 2020. This implies reaching the level of 35.86 Mtoe primary consumption and 26.66 Mtoe final energy consumption.	Finland has set a national energy efficiency target to lower the consumption of energy from 323 TWh in 2010 to 310 TWh in 2020. 2011 level was 320 TWh
Early school leaving target: 8%	Finland performs significantly better than the EU average for the early school-leaving rate. In Finland it was 8.9% v. an EU average of 12.8% in 2012. However, it tends to be significantly higher among people with migrant background and the trend is moving upwards. The overall rate of ESL has remained fairly stable for the last decade. For the period 2011-2012 the early school-leaving rate has decreased by 0.9 pps.
Tertiary education target: (42%, narrow national definition)	The same applies to the tertiary attainment rate, with 45.8% in Finland as against an EU average of 35.8% in 2012. Finland has reached both its national and the EU headline target for 2020. For the period 2011-12 the tertiary attainment rate has decreased by 0.2 pps.
Risk of poverty or social exclusion target: Reduction the number of persons at risk to 770 000	920 000 (2011) According to the NRP, achieving the target requires reducing the number of people at risk of poverty or social exclusion by around 150 000. The NRP 2013 acknowledges that this will be challenging as poverty is increasing, in particular in urban areas.

5. ANNEX

Table I. Macroeconomic indicators

	1995-1999	2000-2004	2005-2009	2010	2011	2012	2013	2014
Core indicators								
GDP growth rate	4.5	3.1	0.9	3.3	2.8	-0.2	0.3	1.0
Output gap [1]	0.0	0.7	1.1	-3.2	-1.2	-2.0	-2.2	-1.8
HICP (annual % change)	1.1	1.8	1.8	1.7	3.3	3.2	2.4	2.2
Domestic demand (annual % change) [2]	4.3	2.9	1.2	2.9	4.4	-1.7	0.3	0.9
Unemployment rate (% of labour force) [3]	12.9	9.2	7.5	8.4	7.8	7.7	8.1	8.0
Gross fixed capital formation (% of GDP)	18.6	19.4	20.5	18.9	19.6	19.4	19.2	19.4
Gross national saving (% of GDP)	23.4	27.2	24.9	20.1	19.7	17.9	17.5	17.6
General Government (% of GDP)								
Net lending (+) or net borrowing (-)	**-1.5**	**4.3**	**2.9**	**-2.5**	**-0.8**	**-1.9**	**-1.8**	**-1.5**
Gross debt	**52.3**	**43.3**	**38.8**	**48.6**	**49.0**	**53.0**	**56.2**	**57.7**
Net financial assets	**17.3**	**35.8**	**63.1**	**65.5**	**54.0**	**n.a**	**n.a**	**n.a**
Total revenue	55.1	53.4	53.2	53.0	53.9	53.7	54.5	55.2
Total expenditure	56.6	49.1	50.3	55.5	54.7	55.6	56.3	56.7
of which: Interest	3.8	2.2	1.4	1.1	1.1	1.0	1.0	1.0
Corporations (% of GDP)								
Net lending (+) or net borrowing (-)	**6.3**	**4.8**	**3.4**	**5.3**	**2.2**	**4.5**	**4.0**	**3.4**
Net financial assets; non-financial corporations	**-148.4**	**-166.3**	**-140.4**	**-130.5**	**-100.7**	**n.a**	**n.a**	**n.a**
Net financial assets; financial corporations	**2.5**	**3.2**	**1.5**	**3.7**	**5.4**	**n.a**	**n.a**	**n.a**
Gross capital formation	10.7	10.9	11.5	8.7	11.0	8.8	8.6	8.8
Gross operating surplus	25.1	26.4	24.6	21.9	21.9	21.4	20.7	19.9
Households and NPISH (% of GDP)								
Net lending (+) or net borrowing (-)	**-0.3**	**-1.8**	**-2.6**	**-0.8**	**-2.2**	**-3.0**	**-2.6**	**-2.3**
Net financial assets	**53.2**	**67.0**	**62.7**	**67.1**	**54.6**	**n.a**	**n.a**	**n.a**
Gross wages and salaries	38.5	38.3	39.8	42.0	41.4	41.7	41.9	42.1
Net property income	3.5	4.5	4.1	4.1	4.0	3.8	3.8	3.9
Current transfers received	23.3	20.1	20.1	22.7	22.2	22.7	23.2	23.4
Gross saving	5.2	4.7	4.8	6.5	5.3	4.5	4.8	5.2
Rest of the world (% of GDP)								
Net lending (+) or net borrowing (-)	**5.0**	**7.3**	**3.6**	**1.7**	**-1.2**	**-1.5**	**-1.4**	**-1.5**
Net financial assets	**76.1**	**60.7**	**13.8**	**-4.2**	**-11.6**	**n.a**	**n.a**	**n.a**
Net exports of goods and services	7.8	8.2	3.9	1.3	-0.7	-0.6	-0.9	-1.1
Net primary income from the rest of the world	-2.3	-0.1	0.7	1.5	0.5	-0.1	0.0	0.1
Net capital transactions	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Tradable sector	46.3	46.4	43.1	40.2	39.8	39.2	n.a	n.a
Non tradable sector	40.4	40.8	44.0	46.8	46.5	46.9	n.a	n.a
of which: Building and construction sector	4.9	5.3	6.1	5.9	5.9	5.9	n.a	n.a
Real effective exchange rate (index, 2000=100)	104.0	95.5	102.7	105.6	106.1	104.9	108.0	109.3
Terms of trade goods and services (index, 2000=100)	111.8	105.9	96.8	94.1	92.3	90.4	89.9	89.3
Market performance of exports (index, 2000=100)	95.4	103.2	103.1	95.9	93.3	91.0	89.9	88.4

Notes:

[1] The output gap constitutes the gap between the actual and potential gross domestic product at 2005 market prices.

[2] The indicator on domestic demand includes stocks.

[3] 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. The unemployment rate covers the age group 15-74.

Source:

Commission services' 2013 spring forecasts (COM); Stability programme (SP).

Table II. Comparison of macroeconomic developments and forecasts

	2012		2013		2014		2015	2016	2017
	COM	SP	COM	SP	COM	SP	SP	SP	SP
Real GDP (% change)	-0.2	-0.2	0.3	0.4	1.0	1.6	2.1	1.7	1.6
Private consumption (% change)	1.6	1.6	0.7	0.6	0.8	1.0	1.6	1.7	1.7
Gross fixed capital formation (% change)	-2.9	-2.9	-1.5	-2.5	1.8	2.8	3.0	1.9	1.9
Exports of goods and services (% change)	-1.4	-1.4	0.5	0.7	3.1	3.8	4.1	5.0	5.0
Imports of goods and services (% change)	-3.7	-3.7	0.6	0.5	2.9	3.3	3.5	4.6	4.6
Contributions to real GDP growth:									
- Final domestic demand	0.5	0.5	0.3	0.3	0.9	1.3	1.6	1.6	1.6
- Change in inventories	-2.2	-1.7	0.0	0.0	0.0	0.1	0.2	-0.1	-0.1
- Net exports	1.0	1.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2
Output gap[1]	-2.0	-1.8	-2.2	-1.9	-1.8	-1.3	-0.5	0.0	0.3
Employment (% change)	0.3	0.4	-0.4	-0.5	0.2	0.1	0.7	0.2	0.3
Unemployment rate (%)	7.7	7.7	8.1	8.2	8.0	8.1	7.9	7.7	7.6
Labour productivity (% change)	-0.5	-0.6	0.7	1.0	0.8	1.4	1.4	1.4	1.4
HICP inflation (%)	3.2	3.2	2.4	2.7	2.2	2.4	1.8	2.0	2.0
GDP deflator (% change)	2.8	2.8	1.9	2.5	1.9	2.3	2.2	2.2	2.2
Comp. of employees (per head, % change)	3.0	2.9	3.3	2.5	3.4	2.7	2.5	3.0	3.0
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-1.5	-1.5	-1.4	-1.0	-1.5	-0.6	-0.4	-0.3	-0.2

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 services' 2013 spring forecasts (COM); Stability programme (SP).

Table III. Composition of the budgetary adjustment

(% of GDP)	2012	2013		2014		2015	2016	2017	Change: 2012-2017
	COM	COM	SP	COM[1]	SP	SP	SP	SP	SP
Revenue	**53.7**	**54.5**	**54.4**	**55.2**	**54.8**	**54.7**	**54.9**	**54.9**	**1.2**
of which:									
- Taxes on production and imports	14.3	14.6	14.6	14.9	14.7	14.4	14.3	14.1	-0.2
- Current taxes on income, wealth, etc.	15.9	16.3	16.3	16.4	16.4	16.5	16.6	16.7	0.8
- Social contributions	13.0	13.0	12.9	13.1	13.0	13.0	13.0	13.0	0.0
- Other (residual)	10.5	10.6	10.6	10.8	10.7	10.8	11.0	11.1	0.6
Expenditure	**55.6**	**56.3**	**56.3**	**56.7**	**56.1**	**55.6**	**55.5**	**55.4**	**-0.2**
of which:									
- Primary expenditure	54.6	55.3	55.3	55.7	55.1	54.5	54.3	54.1	-0.5
of which:									
Compensation of employees	14.3	14.4	14.3	14.5	14.2	13.9	13.8	13.6	-0.7
Intermediate consumption	11.6	11.9	11.9	12.0	11.9	11.8	11.9	11.9	0.3
Social payments	21.3	21.8	21.8	22.1	21.9	21.9	22.0	22.2	0.9
Subsidies	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.2	-0.2
Gross fixed capital formation	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.3	-0.3
Other (residual)	3.3	3.2	3.3	3.3	3.2	3.1	3.1	3.0	-0.3
- Interest expenditure	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.3	0.3
General government balance (GGB)	**-1.9**	**-1.8**	**-1.9**	**-1.5**	**-1.3**	**-0.9**	**-0.7**	**-0.5**	**1.4**
Primary balance	**-0.8**	**-0.8**	**-0.9**	**-0.5**	**-0.3**	**0.2**	**0.5**	**0.8**	**1.6**
One-off and other temporary measures	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
GGB excl. one-offs	**-1.8**	**-1.8**	**-1.9**	**-1.5**	**-1.3**	**-0.9**	**-0.7**	**-0.5**	**1.3**
Output gap[2]	-2.0	-2.2	-1.9	-1.8	-1.3	-0.5	0.0	0.3	2.3
Cyclically-adjusted balance[2]	-0.8	-0.6	-0.9	-0.5	-0.6	-0.6	-0.7	-0.6	0.2
Structural balance (SB)[3]	**-0.7**	**-0.6**	**-0.9**	**-0.5**	**-0.6**	**-0.6**	**-0.7**	**-0.6**	**0.1**
Change in SB	*-0.7*	*0.1*	*-0.1*	*0.1*	*0.3*	*0.0*	*0.0*	*0.0*	-
Two year average change in SB	*0.0*	*-0.3*	*-0.4*	*0.1*	*0.1*	*0.1*	*0.0*	*0.0*	-
Structural primary balance[3]	0.3	0.4	0.1	0.5	0.4	0.5	0.5	0.7	0.4
Change in structural primary balance		*0.1*	*-0.2*	*0.1*	*0.3*	*0.1*	*0.1*	*0.1*	-
Expenditure benchmark									
Applicable reference rate[4]	0.51	1.45	0.51	0.78	-0.13	0.78	0.78	n.a.	-
Deviation[5] (% GDP)	-0.2	-0.4	0.1	0.4	0.3	0.1	0.4	n.a.	-
Two-year average deviation (% GDP)	0.2	-0.3	0.2	0.0	0.2	0.2	0.2	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 positive sign implies that expenditure growth exceeds the applicable reference rate.

Source :

Stability programme (SP); Commission services' 2013 spring forecasts (COM); Commission services' calculations.

Table IV. Debt dynamics

(% of GDP)	Average 2007-2011	2012	2013		2014		2015	2016	2017
			COM	SP	COM	SP	SP	SP	SP
Gross debt ratio[1]	**42.1**	**53.0**	**56.2**	**56.3**	**57.7**	**57.3**	**57.5**	**57.0**	**56.5**
Change in the ratio	1.9	4.0	3.1	3.3	1.5	1.0	0.2	-0.5	-0.5
Contributions[2] *:*									
1. Primary balance	**-2.0**	**0.8**	**0.8**	**0.9**	**0.5**	**0.3**	**-0.2**	**-0.5**	**-0.8**
2. "Snow-ball" effect	**0.1**	**-0.2**	**-0.1**	**-0.5**	**-0.6**	**-1.1**	**-1.2**	**-1.0**	**-0.8**
Of which:									
Interest expenditure	1.2	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.3
Growth effect	-0.3	0.1	-0.1	-0.2	-0.5	-0.9	-1.2	-0.9	-0.9
Inflation effect	-0.8	-1.4	-1.0	-1.3	-1.0	-1.2	-1.2	-1.3	-1.2
3. Stock-flow adjustment	**3.8**	**3.4**	**2.5**	**2.9**	**1.6**	**1.8**	**1.7**	**1.0**	**1.1**
Of which:									
Cash/accruals diff.				0.0		0.0	0.0	0.0	0.0
Acc. financial assets				2.1		2.1	2.1	2.1	1.9
Privatisation				-0.2		-0.2	-0.2	-0.2	-0.2
Val. effect & residual				-0.7		-2.4	-2.8	-3.2	-3.0

	2012	2013		2014		2015	2016	2017
		COM/ SP[3]	SP[4]	COM/ SP[3]	SP[4]	SP	SP	SP
Gap to the debt benchmark[5,6]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Structural adjustment[7]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
To be compared to:								
Required adjustment[8]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.

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 services' spring 2013 forecasts (COM); Commission services' calculations.

Table V. Sustainability indicators

	FI		EU27	
	No-policy change scenario	**Programme (SCP) scenario**	**No-policy change scenario**	**Programme (SCP) scenario**
S2	6.2	6.3	3.0	1.3
of which:				
Initial budgetary position (IBP)	1.3	2.1	0.8	-0.9
Long-term cost of ageing (CoA)	4.9	4.2	2.2	2.2
of which:				
Pensions	2.1	1.5	1.0	1.1
Health care	0.7	0.6	0.9	0.8
Long-term care	1.9	1.8	0.6	0.6
Others	0.3	0.3	-0.4	-0.3
S1 (required adjustment)*	2.1	2.6	2.2	0.5
of which:				
Initial budgetary position (IBP)	-0.3	-0.2	0.0	-1.8
Debt requirement (DR)	-0.2	-0.2	1.9	1.9
Long-term cost of ageing (CoA)	2.6	3.0	0.3	0.4
S0 (risk for fiscal stress)**	0.13		:	
Debt, % of GDP (2012)	53.0		87.0	
Age-related expenditure, % of GDP (2012)	28.0		25.8	

Note:
The 'No-policy change' scenario depicts the sustainability gap under the assumption that the budgetary position evolves according to the Commissions' spring 2013 forecast until 2014. The 'Programme (SCP)' scenario depicts the sustainability gap under the assumption that the budgetary plans in the programme are fully implemented.
* The required adjustment of the primary balance until 2020 to reach a public debt of 60% of GDP by 2030.
** The critical threshold for the S0 indicator is 0.44.

Source :
Commission services; 2013 stability programme.

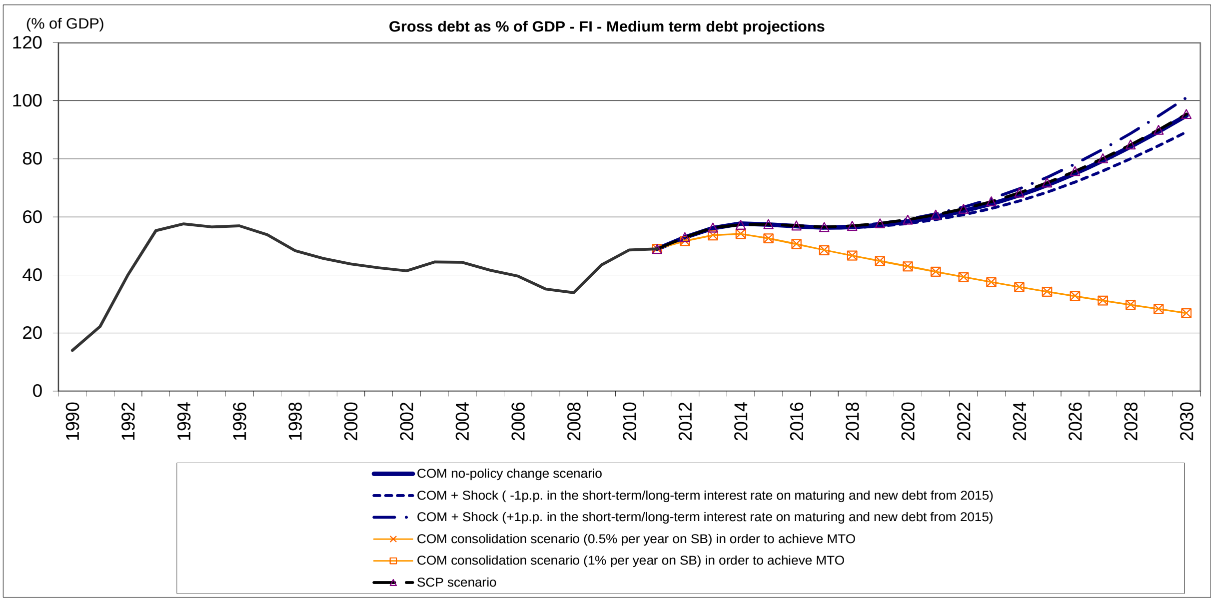

Table VI. Taxation indicators

	2002	2006	2008	2009	2010	2011
Total tax revenues (incl. actual compulsory social contributions, % of GDP)	44.7	43.8	42.9	42.8	42.5	43.4
Breakdown by economic function (% of GDP)[1]						
Consumption	13.4	13.5	12.8	13.3	13.2	14.0
of which:						
- VAT	8.1	8.7	8.4	8.7	8.5	8.9
- 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	1.8	2.1
- other (residual)	1.9	2.1	1.8	1.7	1.8	1.9
Labour employed	20.9	20.2	20.3	21.1	20.1	20.1
Labour non-employed	2.4	2.4	2.3	2.5	2.5	2.6
Capital and business income	6.7	6.3	6.2	4.6	5.2	5.3
Stocks of capital/wealth	1.3	1.3	1.3	1.3	1.4	1.4
p.m. Environmental taxes[2]	3.1	3.0	2.7	2.6	2.8	3.1
VAT efficiency[3]						
Actual VAT revenues as % of theoretical revenues at standard rate	58.2	60.6	57.9	55.5	52.0	54.8

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 (2013) 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. The VAT revenue ratio is defined as the ratio between the actual VAT revenue collected and the revenue that would theoretically be raised if VAT was applied at the standard rate to all final consumption. 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'). See European Commission (2012), Tax reforms in EU Member States, European Economy 6/2012 and Taxation Papers 34/2012 for a more detailed explanation.

Source: Commission

Table VII. Financial markets indicators

	2008	2009	2010	2011	2012
Total assets of the banking sector (% of GDP)	213.4	231.8	268.7	340.1	308.7
Share of assets of the five largest banks (% of total assets)	82.8	82.6	83.8	80.9	…
Foreign ownership of banking system (% of total assets)	69.5	67.1	…	…	…
Financial soundness indicators:					
- non-performing loans (% of total loans)[1)]	0.4	0.6	0.6	0.5	0.5
- capital adequacy ratio (%) [2)]	13.6	14.6	14.4	14.2	15.2
- return on equity (%) [2)]	12.2	10.0	9.2	10.1	11.5
Bank loans to the private sector (year-on-year % change)	11.6	0.9	5.6	8.5	7.1
Lending for house purchase (year-on-year % change)	8.8	6.4	6.8	6.6	5.6
Loan to deposit ratio	143.7	142.9	143.5	142.3	139.8
CB liquidity as % of liabilities	1.1	0.8	0.1	0.4	0.7
Banks' exposure to countries receiving official financial assistance (% of GDP)[3)]	0.0	0.0	1.1	0.8	0.4
Private debt (% of GDP)	93.5	104.0	105.2	106.9	114.2
Gross external debt (% of GDP)[4)]					
- Public	28.8	37.9	43.3	45.9	48.6
- Private	51.6	52.5	52.0	47.1	51.5
Long term interest rates spread versus Bund (basis points)*	0.3	0.5	0.3	0.4	0.4
Credit default swap spreads for sovereign securities (5-year)*	28.7	38.3	29.5	49.2	56.6

Notes:

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

[2)] Latest data (June 2012).

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

[4)] Latest data 2012Q3.

* 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	2007	2008	2009	2010	2011	2012
Employment rate (% of population aged 20-64)	74.8	75.8	73.5	73.0	73.8	74.0
Employment growth (% change from previous year)	2.2	2.6	-2.6	-0.1	1.1	0.3
Employment rate of women (% of female population aged 20-64)	72.5	73.1	72.4	71.5	71.9	72.5
Employment rate of men (% of male population aged 20-64)	77.2	78.4	74.7	74.5	75.6	75.5
Employment rate of older workers (% of population aged 55-64)	55.0	56.5	55.5	56.2	57.0	58.2
Part-time employment (% of total employment, 15 years and more)	14.1	13.3	14.0	14.6	14.9	15.1
Part-time employment of women (% of women employment, 15 years and more)	19.3	18.2	19.0	19.6	19.6	20.1
Part-time employment of men (% of men employment, 15 years and more)	9.3	8.9	9.2	10.0	10.6	10.3
Fixed term employment (% of employees with a fixed term contract, 15 years and more)	15.9	15.0	14.6	15.5	15.6	15.6
Transitions from temporary to permanent employment	0.4	1.4	2.3	1.9	5.0	:
Unemployment rate1 (% of labour force, age group 15-74)	6.9	6.4	8.2	8.4	7.8	7.7
Long-term unemployment rate2 (% of labour force)	1.6	1.2	1.4	2.0	1.7	1.7
Youth unemployment rate (% of youth labour force aged 15-24)	16.5	16.5	21.5	21.4	20.1	18.8
Youth NEET rate (% of population aged 15-24)	7.0	7.8	9.9	9.0	8.4	8.6
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	9.1	9.8	9.9	10.3	9.8	8.9
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	47.3	45.7	45.9	45.7	46.0	45.8
Formal childcare (from 1 to 29 hours; % over the population less than 3 years)	6.0	5.0	6.0	8.0	6.0	:
Formal childcare (30 hours or over; % over the population less than 3 year)	20.0	21.0	21.0	20.0	20.0	:
Labour productivity per person employed (annual % change)	3.1	-2.2	-6.1	3.4	1.7	-0.5
Hours worked per person employed (annual % change)	-0.1	-1.0	-0.9	0.3	0.2	-0.5
Labour productivity per hour worked (annual % change; constant prices)	3.2	-1.2	-5.2	3.1	1.5	0.0
Compensation per employee (annual % change; constant prices)	0.6	1.4	0.8	1.3	0.3	0.2
Nominal unit labour cost growth (annual % change)	0.5	6.7	9.0	-1.6	1.8	3.6
Real unit labour cost growth (annual % change)	-2.4	3.7	7.4	-2.0	-1.3	0.7

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)	2006	2007	2008	2009	2010
Sickness/Health care	6.70	6.48	6.79	7.56	7.50
Invalidity	3.24	3.10	3.20	3.62	3.59
Old age and survivors	9.67	9.45	9.63	11.40	11.65
Family/Children	2.96	2.86	2.94	3.33	3.30
Unemployment	2.19	1.91	1.80	2.41	2.45
Housing and Social exclusion n.e.c.	0.27	0.24	0.42	0.49	0.52
Total	25.58	24.58	25.36	29.54	29.74
of which: means tested benefits	1.22	1.10	1.06	1.27	1.31
Social inclusion indicators	**2007**	**2008**	**2009**	**2010**	**2011**
At-risk-of-poverty or social exclusion[1] (% of total population)	17.4	17.4	16.9	16.9	17.9
At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	15.1	15.1	14.0	14.2	16.1
At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	23.1	23.9	23.1	19.5	19.8
At-Risk-of-Poverty rate[2] (% of total population)	13.0	13.6	13.8	13.1	13.7
Severe Material Deprivation[3] (% of total population)	3.6	3.5	2.8	2.8	3.2
Share of people living in low work intensity households[4] (% of people aged 0-59)	8.7	7.3	8.2	9.1	9.8
In-work at-risk-of poverty rate (% of persons employed)	5.0	5.1	3.7	3.7	3.9
Impact of social transfers (excluding pensions) on reducing poverty	55.0	50.2	47.3	51.5	50.0
Poverty thresholds, expressed in national currency at constant prices[5]	11222	11691	11915	11939	12004
Gross disposable income (households)	97668	103509	106576	111065	115039
Relative median poverty risk gap (60% of median equivalised income, age: total)	14.1	15.7	15.1	13.8	13.5

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 markets performance and policy indicators

Performance indicators	2003-2007	2008	2009	2010	2011	2012
Labour productivity[1] total economy (annual growth in %)	2.7	-2.2	-6.1	3.4	1.7	-0.5
Labour productivity[1] in manufacturing (annual growth in %)	8.3	-6.6	-19.9	13.5	2.7	-0.5
Labour productivity[1] in electricity, gas, steam and air conditioning supply (annual growth in %)	2.3	-8.2	0.3	9.7	-2.2	n.a.
Labour productivity[1] in the construction sector (annual growth in %)	0.1	-6.0	-3.2	6.8	2.0	-2.6
Total number of patent[2] applications per million of labour force	499.8	457.5	451.1	436.8	n.a.	n.a.
Policy indicators	**2003-2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Enforcing contracts[3] (days)	243	235	375	375	375	375
Time to start a business[3] (days)	17	14	14	14	14	14
R&D expenditure (% of GDP)	3.5	3.7	3.9	3.9	3.8	n.a.
Tertiary educational attainment (% of 30-34 years old population)	44.5	45.7	45.9	45.7	46.0	45.4
Total public expenditure on education (% of GDP)	6.25	6.10	6.81	6.84	n.a.	n.a.
	2007	**2008**	**2009**	**2010**	**2011**	**2012**
Product market regulation[4], Overall (Index; 0=not regulated; 6=most regulated)	n.a.	1.2	n.a.	n.a.	n.a.	n.a.
Product market regulation[4], Retail (Index; 0=not regulated; 6=most regulated)	n.a.	3.1	n.a.	n.a.	n.a.	n.a.
Product market regulation[4], Network Industries[5] (Index; 0=not regulated; 6=most regulated)	2.2	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

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

[2] Total number of patent applications to the European Patent Office (EPO) per million of labour force

[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. The latest available product market regulation indicators refer to 2003 and 2008, except for Network Industries.

[5] Aggregate Energy, Transport and Communications Regulation (ETCR).

*figure for 2007.

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

		2002-2006	2007	2008	2009	2010	2011
Green Growth performance							
Macroeconomic							
Energy intensity	kgoe / €	0.25	0.23	0.22	0.23	0.24	0.22
Carbon intensity	kg / €	0.53	0.47	0.42	0.44	0.48	n.a.
Resource intensity (reciprocal of resource productivity)	kg / €	1.38	1.33	1.32	1.21	n.a.	n.a.
Waste intensity	kg / €	n.a.	n.a.	0.49	n.a.	0.66	n.a.
Energy balance of trade	% GDP	-2.1%	-2.6%	-3.5%	-2.5%	-3.0%	-3.9%
Energy weight in HICP	%	n.a.	7	8	7	8	8
Difference between change energy price and inflation	%	n.a.	2.1	13.6	-4.6	8.6	17.2
Environmental taxes over labour taxes	ratio	13.7%	12.3%	11.9%	11.1%	12.4%	n.a.
Environmental taxes over total taxes	ratio	7.1%	6.3%	6.3%	6.1%	6.7%	n.a.
Sectoral							
Industry energy intensity	kgoe / €	0.37	0.30	0.29	0.29	0.31	n.a.
Share of energy-intensive industries in the economy	% GDP	12.6	12.6	11.7	10.6	n.a.	n.a.
Electricity prices for medium-sized industrial users**	€ / kWh	n.a.	0.06	0.07	0.07	0.07	0.08
Gas prices for medium-sized industrial users***	€ / kWh	n.a.	0.02	0.03	0.03	0.03	0.04
Public R&D for energy	% GDP	n.a.	0.08%	0.09%	0.11%	0.09%	0.12%
Public R&D for the environment	% GDP	n.a.	0.02%	0.01%	0.02%	0.02%	0.02%
Recycling rate of municipal waste	ratio	41.3%	44.4%	46.8%	49.5%	50.3%	n.a.
Share of GHG emissions covered by ETS*	%	n.a.	54.3%	51.5%	52.0%	55.4%	52.4%
Transport energy intensity	kgoe / €	n.a.	0.41	0.39	0.41	n.a.	n.a.
Transport carbon intensity	kg / €	n.a.	1.15	1.08	1.11	n.a.	n.a.
Security of energy supply							
Energy import dependency	%	n.a.	53.0%	54.2%	54.0%	48.3%	53.8%
Diversification of oil import sources	HHI	n.a.	0.51	0.54	0.61	0.67	n.a.
Diversification of energy mix	HHI	n.a.	0.21	0.21	0.21	0.21	0.21
Share renewable energy in energy mix	%	n.a.	22.9%	25.0%	23.3%	24.8%	25.4%

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
*Provisional data (15 April 213). Commission Services and EEA.
** For 2007 average of S1 & S2 for DE, LU, NL, FI, SE & UK. Other countries only have S2.
*** For 2007 average of S1 & S2 for IT, NL, FI, SE & UK. Other countries only have S2.