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**COMMISSION STAFF WORKING DOCUMENT**

**Assessment of the 2014 national reform programme and convergence programme for  
DENMARK**

*Accompanying the document*

**Recommendation for a COUNCIL RECOMMENDATION**

**on Denmark's 2014 national reform programme and delivering a Council opinion on  
Denmark's 2014 convergence programme**

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## EXECUTIVE SUMMARY

**Denmark's recovery from recession has been slow.** However, after three years of economic standstill, there are signs of improvement. GDP grew by 0.4% in 2013 and GDP growth is expected to reach 1.5% in 2014 and 1.9% in 2015. Thus, the economy seems to be moving out of stagnation, with unemployment falling slightly, confidence indicators remaining at relatively high levels and the housing market showing signs of improvement. However, Denmark's recovery is to a large extent dependent on economic improvements in its main trading partners and the consequent positive effect on Danish exports.

**Denmark has made some progress in addressing the country-specific recommendations that it received in 2013.** Denmark is pursuing prudent fiscal policies. The Commission 2014 spring forecast projects that the budget deficit will stay below 3% over the period 2013-15 and that Denmark will continue to meet its medium-term budgetary objective. Some progress has been made towards improving the situation of groups at the margins of the labour market and advancing the cost-effectiveness of the education system. The 2012 reform of disability pensions and of the subsidised 'flexi-job' scheme has begun to show results, the cash benefit reform took effect from 1 January 2014, a sickness benefit reform was agreed in December 2013 and based on the recommendations of an expert group, the Government presented a reform proposal on active labour market policies in April 2014. Regarding vocational education and training, a wide range of initiatives aimed at improving their quality are expected to come into force in mid-2015. Progress on competition issues, however, has been limited. The ongoing implementation of the 2012 competition package — including the strengthening of the competition law, which came into force in March last year — has been followed-up by new reform proposals in the Government's new Growth Plan from May this year. These proposals follow-up the findings of the Productivity Commission, which finished its work in March 2014. The Danish national reform programme, and the 2014 convergence programme, both submitted on 15 April 2014, provide detailed information on progress made since last year and on the plans of the government. Both the reform proposal on active labour market policies and the Growth Plan were made public after the submission of the National Reform Program and the Convergence Programme and are therefore not included in this assessment. The national reform programme went through an extensive consultation process, also at the local and regional level.

**The overarching challenge with a view to securing Denmark's future relative welfare level is boosting productivity.** The challenges related to the labour market and education system that were identified in 2013 also remain valid for 2014, as reforms are still at an early stage and have yet to bear fruit. The most important challenges in Denmark therefore relate to:

- **Productivity and competition:** Danish productivity growth has been weak over the past two decades and average prices are higher in Denmark than in comparable countries. As documented by the Productivity Commission, this development is partly related to weak competition, notably in domestic service sectors. This may be caused by many factors

such as regulation restricting entry of firms into the marketplace, ownership rules and national standards.

- **Labour market:** The key labour market challenge continues to be long-term labour supply, given the forecast for demographic ageing combined with a high share of persons on social transfers. This challenge could be tackled by better integrating into the labour market groups such as immigrants, the long-term unemployed, young persons neither in employment, education or training, and people with reduced work capacity or disabilities.
- **Education:** Education outcomes in Denmark have been meagre considering the generous amount allocated under the budget. Denmark has difficulties with relatively high drop-out rates from upper secondary vocational training and education. Moreover, basic skills attainment levels in primary and lower secondary education are no better than average compared to other EU countries. The insufficient number of apprenticeship places also remains a source of concern. These challenges need to be tackled because a well-performing education system is essential to boost long-run productivity growth and to ensure that future demand for skills is met.

## 1. INTRODUCTION

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

The SWD assesses policy measures in light of the findings of the Commission's Annual Growth Survey 2014 (AGS)<sup>1</sup> and the third annual Alert Mechanism Report (AMR)<sup>2</sup>, which were both published in November 2013. The AGS sets out priorities for action both at the national as well as the EU level in 2014: 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 ascertain whether macroeconomic imbalances exist or if there are risks emerging in Member States. The AMR found positive signs that macroeconomic imbalances in Europe are being corrected. To ensure that a complete and sustainable rebalancing is achieved, Denmark and 15 other Member States were selected for a review of developments in the accumulation and unwinding of such imbalances. These in-depth reviews were published on 5 March 2014 along with a Commission communication<sup>3</sup>.

Against the background of the 2013 Council Recommendations, the AGS, the AMR and the in-depth review, Denmark presented a national reform programme (NRP) as well as a convergence programme on 15 April 2014. These programmes provide detailed information on progress made since July 2013 and also lay out the government's plans going forward. The information contained in these programmes provides the basis for the assessment made in this staff working document.

The national reform programme went through a stakeholder consultation involving the national parliament, regional and local authorities as well as interest organisations.

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<sup>1</sup> COM(2013) 800 final

<sup>2</sup> COM(2013) 790 final

<sup>3</sup> Aside from the 16 Member States identified in the AMR, Ireland was also covered by an in-depth review, following the conclusion by the Council that it should be fully integrated into the normal surveillance framework after the successful completion of its financial assistance programme.

## 2. ECONOMIC SITUATION AND OUTLOOK

### Economic situation

**After three years of economic standstill, an improvement in the Danish economy is now underway.** The economy seems to be moving out of stagnation, with unemployment falling slightly, confidence indicators improving, stabilisation of house prices (with increases in the largest cities) and interest rates remaining low.

**GDP grew by a modest 0.4% in 2013 driven by increases in exports, public consumption and business investments.** Private consumption has been flat since 2010 as income growth has been low, uncertainty widespread and Danish households have been consolidating their finances after the housing bubble burst.

**Unemployment has been on a downward trend since spring 2012 and stood at 6.5% in March 2014, significantly lower than the EU average.** The Danish labour market has been relatively resilient despite the weak economic recovery since 2009. Part of the explanation for this is that GDP growth has been strongly influenced by an ongoing decline in drilling activities in the North Sea. This has a significant effect on GDP, while the impact on employment is relatively small as the labour intensity in the oil sector is low.

**Consumer price inflation has decreased significantly since late 2012 and stood at 0.5% in April 2014.** In 2013, headline inflation was reduced by low food prices as a result of excise tax cuts at the beginning of the year, as well as low price growth for energy and the cost of insurance.

### Economic outlook

**The recovery of the Danish economy is expected to strengthen in 2014 and 2015.** According to the Commission 2014 spring forecast, GDP is expected to increase by 1.5% in 2014 and 1.9% in 2015. Economic growth is projected to be driven by an increase in private consumption and investment in both 2014 and 2015. The expectation of a pick-up in private consumption is based on significantly improved consumer confidence, stable house prices, low interest rates and a recent improvement in the labour market. The potential for an increase in investment comes from continuing low interest rates, historically high business savings and a further recovery of demand. Economic growth in Denmark to a large extent depends on general economic conditions improving, especially in countries with which Denmark has close economic ties, resulting in improved external demand.

**Inflation is expected to pick-up slowly over the next two years as the recovery gains a firmer hold in the economy.** According to the Commission 2014 spring forecast, HICP inflation is expected at 1.0% in 2014 and 1.6% in 2015.

**The economic scenario underlying the national reform programme and the convergence programme seems realistic.** It projects real GDP to grow by 1.6% in 2014 and 1.9 % in 2015, which is broadly in line with the Commission 2014 spring forecast.

**The Convergence Programme presents the three reform tracks of the Danish Government.** The two first tracks, aiming at improving conditions for private companies and increasing the educational attainment and employment, are designed to increase growth towards 2020 with 40 bn DKK (2% of GDP). Currently, 22.5 bn of this target has been implemented. The third reform track aims to free up 12 bn DKK via reforms of the public sector and fiscal sustainability. The resources will be used for further development and modernisation of the public sector.

### **3. CHALLENGES AND ASSESSMENT OF POLICY AGENDA**

#### **3.1. Fiscal policy and taxation**

**According to the 2014 Convergence Programme, the Danish authorities aim to achieve a balanced budget in structural terms by 2020, in compliance with the Danish Budget Law and the rules of the Stability and Growth Pact.** Denmark has chosen a Medium Term Objective (MTO) of -0.5% of GDP, reflecting the objectives of the Pact. The MTO is unchanged compared to last year.

**The general government deficit amounted to 0.8% of GDP in 2013, significantly lower than the projected deficit of 1.6% in last year's programme.** The deficit in 2013 is affected by extraordinary revenues from the restructuring of capital pensions, giving the opportunity to pay off tax liability of future capital pensions at favourable conditions in 2013 and 2014. This measure has generated one-off revenues corresponding to 1.5% of GDP. The revenues stemming from this measure were higher than expected in the 2013 Convergence Programme. Compared to the estimates in last years' programme, revenues from corporate taxes also surprised on the upside.

**The programme foresees a deficit of 1.3% of GDP in 2014, which would be an improvement compared to last years estimate of 1.7% of GDP and in line with the Commission 2014 spring forecast projection of 1.2%.** The headline deficit will continue to be positively affected by the restructuring of capital pensions in 2014, with one-off revenues expected to be in line with the revenues in 2013, i.e. 1.5% of GDP.

**The Convergence Programme foresees a deterioration in the general government balance in 2015 to 2.9%, which is slightly more pessimistic than the Commission's latest projection of 2.7%.** The deterioration in 2015 is mainly due to the termination of the capital pensions measure that boosted revenues in 2013 and 2014. The Danish authorities project an improvement of the general government balance from 2015 up to 2020, forecasting a small surplus of 0.1% of GDP in 2020. The programme foresees a closure of the output gap around 2019, so the estimated structural balance in 2020 corresponds to the headline balance. The improvement towards 2020 is gradual, both measured by the headline balance and the primary balance. The projections after 2014 are based only on policies already adopted and are broadly in line with the forecast in last year's programme.

**Public expenditures as a share of GDP is expected to decrease from 56% of GDP in 2013 to 51.0% of GDP in 2020.** The reduction partly reflects a normalisation of the economic cycle both via the denominator effect (higher GDP) and via lower income transfers. The lower expenditure ratio also reflects a normalisation of the level of public investments and effects from reforms adopted until now, such as on early retirement reform, which increases labour supply and GDP, and reduces expenditures for early retirement.

**Public revenues are expected to decrease from 55.1% of GDP in 2013 to 51.1% in 2020.** The reduction partly reflects extraordinary high revenues in 2013, due to the restructuring of capital pensions in 2013 and 2014. However, the reduction over the period also reflects a falling share of personal income and corporate taxes, coming from the 2013 reform package "Growth Plan DK".

**Denmark has complied with the EDP recommendation by sustainably correcting its excessive deficit by the 2013 deadline set by the Council.** According to Statistics Denmark and the Commission 2014 spring forecast, the fiscal deficit reached 0.8% of GDP in 2013 and is projected to stay below 3% in 2014 and 2015. Following the abrogation of the EDP, Denmark will be subject to the preventive arm of the SGP from 2014.

**The convergence programme foresees a deterioration of the structural balance (recalculated with the commonly agreed methodology) from 0.6 % of GDP in 2013 to -0.2% in 2014 and -0.5% in 2015.** Denmark is thus projected to overachieve its MTO of -0.5% of GDP in 2013 and 2014 and to be at its MTO in 2015. Due to the overachievement of the MTO in 2013 and 2014, an assessment of the adherence to the expenditure benchmark is not required for 2014 and 2015.

**Denmark has reduced its gross public debt from 46.4% of GDP in 2011 to 44.5% in 2013, despite running fiscal deficits.** This reflects a reduction of the central government's deposit in Danmarks Nationalbank in the same period. The Convergence Programme foresees a temporary increase in the debt ratio in 2015, before it will gradually decline to 43% in 2017 and 39% in 2020. Denmark's debt ratio is thus expected to stay well below the 60% of GDP Treaty reference value and the debt reduction benchmark is therefore not applicable.



### Box 1. Main measures

Denmark's fiscal consolidation effort has been based on the financing elements of the 2009 Spring Package 2.0, the 2010 Fiscal Consolidation Agreement and the fiscal bill for 2012. According to the Convergence Programme, the effect from these initiatives, measured by the direct budget impact, amounts to 2.7% of GDP over the period 2011-2013. The effects do not add to the total due to rounding.

#### Main budgetary measures

Revenue	Expenditure
<b>2011</b>	
<ul style="list-style-type: none"> <li>• Financing elements Spring Package 2.0 (0.1 % of GDP)</li> <li>• Financing elements Consolidation Agreement (0.3 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Lower growth in public consumption (-0.8 % of GDP)</li> <li>• Public investment (0.1 % of GDP)</li> <li>• Income transfers (-0.1 % of GDP)</li> <li>• Other elements (0.1 % of GDP)</li> </ul>
<b>2012</b>	
<ul style="list-style-type: none"> <li>• Financing elements Consolidation Agreement (0.1 % of GDP)</li> <li>• Financing elements Fiscal Bill 2012 (0.2 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Public investment (0.1 % of GDP)</li> <li>• Income transfers (-0.1 % of GDP)</li> <li>• Other elements (-0.1 % of GDP)</li> </ul>
<b>2013</b>	
<ul style="list-style-type: none"> <li>• Financing elements Spring Package 2.0 (0.2 % of GDP)</li> <li>• Financing elements Consolidation Agreement (0.1 % of GDP)</li> <li>• Financing elements Fiscal Bill 2012 (0.1 % of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>• Lower growth in public consumption (-0.4 % of GDP)</li> <li>• Public investment (-0.1 % of GDP)</li> <li>• Income transfers (-0.1 % of GDP)</li> <li>• Other elements (-0.1 % of GDP)</li> </ul>
<p><u>Note:</u> The budgetary impact in the table is the impact reported in the programme, i.e. by the national authorities. A positive sign implies that revenue / expenditure increases as a consequence of this measure.</p>	

### **Box 2. Excessive deficit procedure for Denmark**

Denmark is currently subject to the corrective arm of the Stability and Growth Pact. The Council opened the Excessive Deficit Procedure for Denmark on 13 July 2010 and recommended to correct the excessive deficit by 2013 at the latest.

Specifically, in order to bring the general government deficit below 3% of GDP in a credible and sustainable manner, the Danish authorities were recommended to (a) implement the fiscal measures in 2010 as envisaged; (b) ensure an average annual structural adjustment of ½% of GDP over the period 2011-2013; (c) specify the measures that are necessary to achieve the correction of the excessive deficit by 2013, cyclical conditions permitting, and to accelerate the reduction of the deficit if economic or budgetary conditions turned out better than expected at the time the EDP recommendations were issued.

In 2014, following the accomplished correction of the excessive deficit, Denmark will be subject to the preventive arm of the Pact. Denmark is expected to remain at its Medium Term Objective in 2014 and 2015 and should preserve a sound fiscal position which maintains compliance with the Medium Term Objective.

#### *Fiscal framework*

**Denmark's fiscal framework is suitable.** The general objective of budgetary policy in Denmark is to achieve a structural general government balance or surplus in the medium to longer term, as specified in the medium-term budgetary framework (MTBF).

**In May 2012, the Danish Parliament approved the government's proposal to ratify the Treaty of Stability, Cooperation and Governance (TSCG).** Although Denmark has an exemption with the effect of a derogation within the meaning of the Treaty, it has opted to apply Article 14.5 of the TSCG, implying that Denmark is bound by the substance of the TSCG, including its Fiscal Compact. The provisions of the TSCG, including the introduction of a structural balanced budget rule endowed with a correction mechanism and independent monitoring, were transposed in the new Danish Budget Law, which was passed by a large majority in the Danish Parliament in June 2012<sup>4</sup>.

**The independent Danish Economic Council (DORS) has been given the task of monitoring the long-term sustainability of public finances and the general balance of public finances in the medium-term,** i.e. to evaluate and monitor whether the planned and conducted fiscal policy is in accordance with the Danish Budget Law. Under the budget law, the parliament sets expenditure ceilings at central, regional and municipal level for four years. DORS has the task of assessing the expenditure ceilings for the general government and their compatibility with fiscal targets, and of assessing the compliance of budgets and actual accounts for the general government with expenditure ceilings. In order to attribute these new

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<sup>4</sup> The relevant provisions (cf. Art. 2-4) came into force on February 1 2013.

tasks to the DORS, a revision of the Law on the Danish Economic Council and the Environmental Economic Council was approved in June 2012 by the Danish Parliament and came into force at the beginning of 2014.

### *Long-term sustainability*

**Denmark does not seem to be experiencing long-term sustainability challenges.** Government debt reached 44.5% of GDP in 2013 and is well below the 60% of GDP requirement of the Stability and Growth Pact.

**Taking more measures to contain age-related expenditure growth would contribute to further increasing the long-term sustainability of public finances.** In particular, expenditure on long-term care may become a fiscal challenge in the long-term. However, the reforms of the Voluntary Early Retirement Pension scheme and the linking of the statutory retirement age with life expectancy has improved the long-term sustainability of public finances.

### *Tax systems*

**On the basis of standard tax performance indicators, the tax system appears to be well designed.** Denmark has one of the highest tax-to-GDP ratio in the EU, significantly above the EU average<sup>5</sup>. The tax base is broad and taxes linked to consumption and property are above the EU average. Tax compliance costs are below the EU average and tax compliance is high. Denmark's performance is close to the EU average with respect to both the proportion of 'growth-friendly' taxes and the implicit tax rate on labour (but the marginal tax rate is relatively high for high-income earners<sup>6</sup>). Taken across the EU, the tax burden on corporate income is a little above average in Denmark while revenue from indirect taxes has been stable at a significantly higher rate than the EU average. Its share of recurrent property taxes, considered among the least distortive types of tax, remains above the EU average.

**The tax reforms in 2009 and 2012 have lowered the tax burden on labour and reduced progressivity of the personal income tax system in order to increase labour supply and contribute positively to growth.** The 2009 tax reform will be implemented gradually between 2010 and 2019, reducing the high marginal tax rates on personal income while at the same time reducing mortgage interest deductibility and introducing and increasing energy, transport and environmental taxes and excise duties on health-related products such as confectionery, soft and alcoholic beverages and tobacco.<sup>7</sup> A 'green cheque' compensates average income households for the higher tax on energy, environment and health-related products. The 2012 tax reform will be implemented between 2013 and 2023, gradually

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<sup>5</sup> Denmark has both a tradition of using gross recording and of taxing transfer incomes such as pensions, which also contributes to a high tax-to-GDP ratio.

<sup>6</sup> Labour is taxed through relatively high taxes on personal income, with the use of social security contributions being limited. This does not influence the growth-friendliness of the tax structure.

<sup>7</sup> However, for health-related products the trend is being reversed by subsequent measures to counter cross-border trade in such products.

increasing the threshold for the top income tax rate and increasing the employment allowance. It will be financed in part through the indexation of certain excise duties but mainly through cuts in public expenditure.

**Denmark has taken steps to foster economic growth and generate employment.** This has been done through a combination of tax reductions and public investment with the ‘Growth Plan DK’, and accelerated by the 2014 Budget. The plan will be implemented between 2013 and 2020 and foresees a gradual decrease in the corporate tax rate (except on profits from North Sea drilling of oil and natural gas) whilst the payroll tax for the financial sector is being increased.

**In the area of taxation, although the tax base is broad, the design of the property tax system remains a challenge.** Since 2002, the regular update of the cadastral values for property value tax has been put on hold, leading to a frozen property value tax in nominal terms, and a continuous erosion of tax revenues. A situation with no taxation of imputed rents for owner-occupied housing, rather low recurrent taxation of property compared to other investment options and allowing interest deductibility for mortgages may contribute to an over-allocation of capital to this sector and high household indebtedness. The Productivity Commission recommended recently to unfreeze the property value tax in Denmark. It argues, that tax burden should be shifted from labour to property taxation, which should be increased until a level that neutralises tax deductibility of interest payments on mortgage loans. Challenges also remain regarding the 7% cap on the annual increase in assessed property prices for land value tax, which distorts the responsiveness of the land value tax to price changes, and may contribute to increased volatility in the housing market. In response to criticism from the National Audit Office of Denmark, the government has set up an expert committee to improve the property valuation system. Based on the recommendations of this committee, which are to be expected in June this year, a new property valuation system will be established in 2015. Changes in the valuation system are however not expected to have any impact on the freeze or cap of property valuation for tax purposes and therefore the main challenges as regards the undervaluation of property will remain.

**Denmark has one of the highest environmental tax revenues relative to GDP in the EU, amounting to 3.9%, against the EU average of 2.3% of GDP<sup>8</sup>.** There is nevertheless potential to improve the structure of environmental taxes, while maintaining revenues and the current system’s incentive to reducing CO<sub>2</sub> emissions and other transport-related externalities, externalities, such as congestion and accidents Overall, vehicle taxation could be made more environmentally efficient by decreasing tax on vehicle purchases and increasing tax on traffic, roads use and fuel. Tax at the point of purchase of vehicles is high, while tax on fuel is lower than the EU average. Reducing environmentally harmful subsidies is another key area underlined in the AGS 2014. Denmark would benefit from phasing out such subsidies, (e.g. the reduced energy duty for diesel) as it would both address negative impacts on the environment and free up economic resources.

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<sup>8</sup> EUROSTAT, <http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=ten00065&plugin=0..>

### 3.2. Financial sector

**Risks stemming from high private sector indebtedness seem to be contained and the financial sector has been reformed through regulatory and supervisory measures.** The Danish housing market seems to be recovering from the crisis and the deleveraging of the household gross debt is progressing, albeit at a slow pace.

#### *Private sector indebtedness and the housing market*

**Private sector debt, especially that of households, remains high.** Since 2009 gross household debt has fallen from 146.5% of GDP to 140.4% in 2012. The debt level represents a challenge for the Danish economy; however, as pointed out in the 2014 in-depth review for Denmark (see Box 3), the high debt of households is matched by the private sector's high assets, mirroring large savings in pension schemes and real estate.

**The risks to financial and economic stability linked to households' indebtedness seem to be contained.** Households were able to withstand house price developments since 2007 and stress tests suggest they would remain resilient to adverse economic shocks such as an increase in interest rates or unemployment. Nevertheless, the Danish authorities and mortgage credit institutions (MCIs) have introduced stricter requirements for granting risky loans to borrowers and are trying to reduce households' incentives to take up debt.

#### *Banking sector*

**The banking system is still recovering from the economic crisis, which negatively affected its profitability, in particular for non-systemic banks.** In 2013, banks' assets decreased by around 10%, after having increased in previous years. The loan-to-deposit ratio remains high at 287%; the non-performing-loans ratio is decreasing but the profitability of banks remains weak. However, the high level of the loan-to-deposit ratio is a structural feature of the country's banking sector and is the result of households' preference for saving in pension schemes rather than in deposits at banks. The non-performing-loans ratio has fallen from 6.0% in 2012 to 4.7% in 2013 and does not pose a systemic risk to financial stability; non-performing loans are mainly concentrated in agricultural and small business loans and in non-systemic credit institutions.

**Denmark's banking sector mainly relies on market funding and the upcoming EU and international regulations may pose a challenge regarding liquidity and refinancing issues for the mortgage credit institutions (MCIs).** Danish banks are mostly relying on market funding, based on deposits from credit institutions and their own issuance of long-term debt instruments; in particular the MCIs rely on mortgage covered bonds, with short and long-term maturity.<sup>9</sup> The pension schemes — in which Danish households hold a large proportion of their savings — invest a part of the portfolio in debt instruments issued by the banks. The definition of what constitutes high quality liquid assets will be included in the forthcoming Delegated Act to be adopted by the Commission in summer 2014, considering the

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<sup>9</sup> Mortgage banks funding consists almost in total of mortgage covered bonds, which is a special feature of the Danish mortgage system.

implications of this issue for both the markets concerned and the prudential effectiveness of the liquidity buffer. Meanwhile, the Danish authorities have taken measures to address the possible refinancing risk, such as compulsory maturity extension of short-term mortgage bonds used to finance mortgage loans in the event of liquidity stress<sup>10</sup>.

**The capital adequacy ratios of Danish banks have generally improved.** In 2013, banks managed to maintain their average capital ratio of 17%, which is above the minimum requirements imposed by the Basel III rules. The Core Equity Tier 1 ratio<sup>11</sup> for the largest banks ranged from 8.5% to 16.6%.

**Financial supervision in Denmark has been strengthened in recent years.** In addition to the implementation of the ‘Supervisory Diamond’, which was introduced in 2010 to monitor the stability of the banking system,<sup>12</sup> the Danish authorities have established specific bodies responsible for systemic risk<sup>13</sup> and macro-prudential policies<sup>14</sup>. In 2014, the Financial Supervisory Authority (FSA) is expected to design a new ‘Supervisory Diamond’ for mortgage credit institutions.

### *Access to finance*

**Due to the high perceived risk related to small businesses, lending conditions for this sector remain below the pre-crisis level.** In 2013, credit to non-financial corporations increased marginally. In 2011 (latest available data) the rate of rejected loan applications of SMEs was 20%, above the EU average of 15%. Even though interest on loans in Denmark is very low in comparison to the EU average, the credit cost for SMEs (loans up to EUR 1 million) is 52% higher than for large businesses (loans over EUR 1 million). In comparison, the EU average differential is 19%<sup>15</sup>.

**The Danish authorities have taken measures to facilitate access to finance.** In 2012, the government offered a number of SME guarantee facilities and innovation support measures. Since April 2013, as part of the ‘Growth Plan DK’, the government has initiated further measures, such as to expand the Loan Guarantees for loans of a minimum DKK 2 million (EUR 0.3 million), new growth loans targeting entrepreneurs and a bill to improve the Danish market for corporate bonds.

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<sup>10</sup> <http://www.ft.dk/samling/20131/lovforslag/L89/index.htm>

<sup>11</sup> The Core Equity Tier 1 (CET1) ratio is calculated as the volume of a bank's core Tier 1 regulatory capital over its Risk Weighted Assets.

<sup>12</sup> The ‘Supervisory Diamond’ tool was introduced by the Financial Stability Authority in 2010 and took effect from 2013. The supervisory tool is monitoring banks' performance against five benchmark values.

<sup>13</sup> In 2012, a Committee on Systemically Important Financial Institutions (SIFIs) was established, which in October 2013 designed a set of stricter requirements for SIFIs.

<sup>14</sup> The Ministry of Business and Growth established in February 2013 a Systemic Risk Council to monitor the systemic risk and to issue recommendations on macro-prudential policies to the FSA and the government.

<sup>15</sup> European Commission, Small Business Act Fact Sheet 2013.

### **Box 3. Conclusions from the March 2014 in-depth review on Denmark**

The third in-depth review (IDR) on Denmark under the Macroeconomic Imbalances Procedure (MIP) was published on 5 March 2014. On the basis of this review, the Commission concluded that macroeconomic challenges in Denmark no longer constitute substantial macroeconomic risks and are no longer identified as imbalances in the sense of the MIP.

The main findings from the analysis in the IDR are as follows:

- Denmark has been losing export market shares and this can be linked to the deterioration in cost competitiveness. The main contributors were excessive wage growth and weak productivity growth. Wage growth has slowed in recent years but productivity growth remains a major challenge.
- The risks stemming from high households debt seem to be contained. The Danish housing market is recovering from the crisis and households have been able to withstand house price adjustments since 2007. The high household debt has to be set against the favourable net asset position with large savings in pension schemes and real estate.
- The financial sector appears stable and the Danish authorities have taken regulatory and supervisory measures to tackle the remaining challenges.

The following policy challenges are discussed in the IDR:

- Regarding external competitiveness, boosting productivity growth is an important challenge. The IDR pointed to the importance of following up on the work of the ‘Productivity Commission’, a body established by the government, which delivered a final report with recommendations on improving ‘productivity growth, in March 2014.
- Concerning the challenges to the high household debt and housing sector, it is important to focus on avoiding pro-cyclical taxation, reducing the debt bias in taxation and ensuring a sound fiscal policy. The stability of the mortgage market must be safeguarded by reducing households’ incentives to take on debt, introducing stricter regulatory and supervision rules specific for the mortgage credit institutions and reducing their refinancing risk.
- Further measures to reduce the vulnerabilities of the financial sector include continuous monitoring of internal-rating-based models used by systemic banks along with the leverage ratio. At the same time, a few small banks still need to build more robust capital and liquidity buffers.

### 3.3. Labour market<sup>16</sup>, education, and social policies

**The key labour market challenge for Denmark continues to be increasing long-term labour supply, against the background of the demographic ageing and a low ratio of employed persons relative to working-age persons on transfer incomes.** The unemployment rate fell to 7.0% in 2013, and the employment rate of 75.6% showed a first slight increase since the crisis. However, the employment rate remains lower for those with a migrant background and those with reduced work capacity and disabilities. Increasingly, skills mismatches are being reported with unmet demands for certain qualifications. Denmark continues to face challenges concerning the cost-efficiency of its education system. Upper-secondary school completion rates were at 41.3% in 2013, below the 46.7% EU average; the drop-out rates are high especially in vocational training and education. Attainment levels for basic skills in primary and lower secondary education are also low. There has been an increase in the number of young persons neither in employment, education or training (NEETs)<sup>17</sup>, although the level of 6.0% (15-24 years) in 2013 is still low in European comparison.

**In 2013, Denmark received a country-specific recommendation concerning the labour market and the education system.** Overall, Denmark has made some progress in addressing this CSR; reforms addressing the challenges have already been implemented and others are expected soon. However, results in the form of actual change for many groups at the margins of the labour market has not yet improved and further efforts seem necessary. Important reforms have also been implemented in the education sector as well as agreed on vocational training but extensive monitoring is required to ensure they are implemented effectively.

#### *Labour market and social policies*

**Despite significant job losses in the private sector during the crisis, Denmark's traditionally well-functioning labour market has to some extent alleviated the impact of these losses.** There are tentative signs of a post-crisis improvement of the labour market including a fall in the overall unemployment rate, from 7.5% in 2012 to 7.0% in 2013, and a decrease in the youth unemployment rate from 14.1% to 13.1% over the same period. In 2013 Denmark received a country-specific recommendation concerning the employability of people at the margins of the labour market, including people with a migrant background, the long-term unemployed and low-skilled workers. Meanwhile, the reforms of disability pensions and flexi-jobs are slowly showing results, the social assistance reform has entered into force, the sickness benefit reform has been agreed upon and the expert group on active labour market policies has proposed a first set of reforms. These reforms are going in the right direction and strike an appropriate level of ambition.

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

<sup>17</sup> People neither in employment nor in any education nor training (for the four weeks preceding the survey), as a proportion of total population in the same age group.



**The reforms of disability pension and flexi-jobs entered into force in January 2013 have arguably contributed to the drop of the number of new disability pensioners.** The limited number of rehabilitation programmes raises concerns, but it could be partly explained by the more than 3 000 new ‘mini-flex-jobs’ (less than 10h/week) that became possible with the reform. The employment rate for persons with disabilities fell during the crisis to reach 53.3% in 2011, significantly below the rate for persons without disabilities. The gap between unemployed with and without disabilities at 7.7% is slightly higher than the EU average at 7.3%<sup>18</sup>.

**In January 2014, the reform of the social assistance system (cash benefits) entered into force.** The right and obligation of young social assistance claimants without an education to acquire benefits was extended to 25-29 year olds (where the rate of persons not in education, employment or training (NEETs) is higher than the younger groups), but the benefit they can claim is reduced to the level of the student allowance. Those who are not considered ready to begin an education can remain at the normal benefit level, provided that they participate in programmes aimed at enabling them to start an education. The reform also includes activities with an element of workfare for those who are considered suitable for it. The success of the reform is dependent on the Danish municipalities utilising the full range of instruments the reform provides for. Although low in European comparison, the rate of young NEETs has only begun to show slight improvements in 2013, when it had increased to 6.0% for the overall group (15-24), and to 8.7% and 10.8% for the age-groups 20-24 and 25-29<sup>19</sup>, respectively. These NEETs risk becoming the future groups on the margins of the labour market. Therefore, it is essential that implementation of the reform addresses the causes for which these young persons are being lost in the transition between school, education and employment. The remaining challenges to deliver a Youth Guarantee in Denmark include ensuring a sufficient number of apprenticeships and enhancing their quality and better perception, upgrading the vocational education and training system and addressing the high drop-out rates. Furthermore, as the unemployment benefit has been limited to two years, many long-term unemployed people now have to rely on social assistance. It will be important to monitor the effects of the reform on the most vulnerable groups on the labour market.

**In February 2014, an expert committee on active labour market policies (the ‘Koch Committee’) made a number of recommendations on insured workers (on unemployment benefit) advising more individualised and job-targeted measures.** The Danish government has proposed a reform of active labour market policies on 30 April 2014, focusing on more education and less activation, taking many of the committee's recommendation into account. Recommendations on activation measures for uninsured workers (on social assistance or without financial support) who are particularly relevant for groups at the margins of the labour market are due later in 2014. Given Denmark's high expenditure on active labour market policies, it is important that the final reform ensures an improvement of the quality provided to both insured and uninsured workers.

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<sup>18</sup> Data on employment rate and unemployment gap from EU SILC 2011 (latest available year).

<sup>19</sup> The 2013 EU average rate of young NEETs (15-24) is 13.0% and 18.6% and 21.0% for the age groups 20-24 and 25-29.

**Employment rates for the foreign born population remain low, particularly among female immigrants from outside of the EU<sup>20</sup>.** Increased and more gender balanced labour market participation among this group is essential in order to boost labour supply and better inclusion of all groups on the labour market. When drafting and implementing the active labour market policies reform expected later in 2014, it will be essential to ensure that the more individualised and job-targeted measures also take into account the specific obstacles faced by this group.

**Denmark has taken major steps to promote longer working lives through pension reform. However, these measures have not been sufficiently underpinned by new measures enabling women and men to work longer.** Improvements in the employment rate of older workers and the effective exit age over the past decade have been rather modest by European standards. Given that the early retirement option is being phased out and that the pensionable age will be raised from 65 to 67 and then linked to developments in life expectancy, there is a need for measures to help individuals and the labour market adapt to longer working lives. A combination of work place and labour market initiatives in collaboration with the social partners would be important to overcome challenges in extending working lives and avoid major spillovers onto other benefits.

### *Education*

**Cost effectiveness of education remains a challenge.** Denmark has a high level of expenditure in education, which reached 7.8% of GDP in 2012 compared to a 5.3% EU average. Public expenditure per student<sup>21</sup> is well above the EU average at every education level<sup>22</sup>. However, there are effectiveness issues related to secondary vocational education and training (VET), school performance and attainment levels, and the longest average transition periods in the EU from lower secondary to upper secondary and from higher education to work<sup>23</sup>. An additional issue of concern for the education system is skill-mismatches, as new jobs are not necessarily similar to those lost during the crisis and employers are often reported to not being able to satisfy their skill requirements because of a shortage for such skills. In order to cope with this mismatch of unemployed people with unmet skill demands, the government set up an independent committee in October 2013 to prepare recommendations on how higher education programmes can contribute to growth, productivity and prosperity in Denmark. The first report published in April 2014 indicates that the quality of teaching and study programmes in higher education must be raised, all students must acquire competencies that can be translated into relevant employment (especially in the private sector) and greater coherence in higher education must be ensured, so as to prevent overlaps in the education system, wasted time and duplicating education.

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<sup>20</sup> The employment rate for female immigrants is 55.4% compared to 65.7% for men.

<sup>21</sup> Measured in purchasing power standard.

<sup>22</sup> In addition, according to Eurostat, Denmark has a high tertiary attainment rate (43.4% of 30-34 year-olds in 2013 vs. 36.8% EU average) and good results in early school leaving indicators (9.1% in 2012).

<sup>23</sup> The average age of labour market entry for tertiary graduates was nearly 28 in 2011, compared to nearly 29 in 2001.

**Denmark is still experiencing difficulties with high drop-out rates from upper secondary vocational education and training (VET).** Drop-out rates stand at almost 50% <sup>24</sup> and one in four students has insufficient knowledge of Danish or maths. The main reasons — apart from those related to social backgrounds — include a perceived lack of quality of educational programmes, a lack of apprenticeship places, insufficient basic skills of pupils and insufficient career guidance and possibly a relative ease of swapping between areas of study. Although nine out of ten who completed vocational education or training in 2013 had an apprenticeship place throughout their education, only 500 students had in-education internships. In February 2014, a political agreement was reached on a new VET reform, which is expected to be adopted in early 2014 and implemented during 2014-2016 with the objective of raising completion rates. The focus is on improving the quality of teaching through the application of the European Quality Assurance Framework, making the education environment more attractive to young students, introducing entry requirements, offering specific courses for those who do not meet the admission standards and upgrading teacher competences. The reform seeks to ensure that VET is better matched to labour market needs and provides special incentives to increase the number of training places in companies. Before the recent introduction of more flexible solutions for apprenticeships, the system has been rather rigid for many SMEs, with three year contracts and a full educational programme.

**In terms of improving the quality of the VET, the reform can be considered as an effective policy instrument.** However, it is difficult to assess whether the reform will lead to a sufficient number of apprenticeships. The long term success of the reform depends largely on its ability to improve the ‘image’ of the VET system among potential students. Finally, there is a risk that some vulnerable youth will be caught in the ‘gap’ between the social assistance reform (obligating them to start an education) and the new VET admission criteria (making it more difficult for them to start an education). The new ‘Combined Youth Education’ and the strengthening of production schools may help in this respect.

**Basic skills attainment is only EU-average, which is a challenge regarding the quality of school education.** The OECD PISA 2012 study shows that the proportion of low achievers is in line with the EU average in science (16.7% vs. 16.6%), but lower in reading (14.6% vs. EU 17.8%) and maths (16.8% vs. EU 22.1%). In June 2013, the government reached an agreement with the two main opposition parties on a reform of publicly provided compulsory education (primary school), which will enter into force as from the school-year 2014/2015. More teaching hours in core subjects such as Danish, English and maths will be supplemented with practical lessons, physical exercise and other social, personal and digital skills. There will also be targeted in-service training of teachers and initiatives to upgrade skills in school leadership.

**Denmark has also one of the longest average transition periods from lower secondary to upper secondary education and from higher education to work.** To speed up completion of tertiary studies, as a part of higher education, the reform of ‘Grants and Loans Scheme’ and the framework for higher education (to be implemented July 2014), increases incentives to

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<sup>24</sup> ‘Faglært til Fremtiden – Bedre og mere attraktive erhvervsuddannelser’, Ministry of Education, October 2013.

start to work earlier, and rewards faster progress with a bonus for faster completion. The reform is expected to lead to an increase in the labour supply of approximately 5 900 persons and an improvement in public finances of DKK 2.2bn by 2020.

### **3.4. Structural measures promoting sustainable growth and competitiveness**

**Productivity growth in Danish economy has been weak over the past two decades vis-à-vis comparable countries, and an important cause is arguably the low competitiveness level.** Prices are on average higher in Denmark than in comparable countries and this seems to be at least partly related to a lack of competition, notably in the domestic service sectors. The main reasons for this, on top of inherent market problems of some services, may relate to factors such as excessive regulation limiting entry, ownership restrictions, national standards and restrictive business practices. Accordingly, in 2013, Denmark received a country-specific recommendation concerning competition, in particular in the services sector. Denmark has implemented and planned important reforms, and thus made some progress with regard to this CSR.

#### *Internal market, liberalisation and competition*

**Promoting competitiveness and productivity growth is an important challenge for the Danish economy.** According to the in-depth review for Denmark<sup>25</sup>, productivity in the Danish economy has only slightly increased in recent decades and less than in comparable countries. In 2012, the government established the Productivity Commission which has issued several recommendations on how to boost productivity, including through enhanced competition, opening up sheltered sectors and increasing internationalisation. The Productivity Commission suggests that the Danish productivity problem can be alleviated through a wide range of measures within areas such as competition, public procurement, education, internationalisation, innovation, taxation and infrastructure. The Government has itself envisaged in its 2020 plan to reach productivity gains of 14 bn DKK and 12 bn DKK in the private and public sectors respectively. This will require - according to the Productivity Commission – a speedy and ambitious implementation of the recommendations and concrete initiatives suggested. Based on a number of macroeconomic and market studies, the Productivity Commission demonstrates that Danish enterprise behaviour is less competitive than in other countries, that consumers are passive in some markets and that a number of markets are sheltered from competition. The recommendations encourage the government to review business regulation in order to remove the barriers to market entry, strengthen the competition law, adapt the planning law to allow for larger outlets, remove ownership restrictions, replace national standards with international ones, speed up and harmonise building permits procedures, support free trade agreements and implement the service directive in a more ambitious way. Based on this input, the government launched a growth package in May 2014, and negotiations on this package are currently ongoing.

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<sup>25</sup> Report written under the Macroeconomic Imbalance Procedure (MIP)

**Denmark performs overall well in terms of compliance with the internal market provisions, but its highly regulated economy and small market size may still be an obstacle for the entry of foreign market participants.** National regulations and standards (sometimes voluntary) such as fire security regulations, often impose additional costs on foreign providers and may prevent market entry. According to the Danish Competition and Consumer Authority, domestic prices are considerably higher on average than in comparable markets and this difference at least partly stems from a lack of competition, notably in the domestic services sector. The competition challenges in Denmark are mostly related to three domains: competition law, private services and the public sector.

### *Competition law*

**Danish competition could better reflect international standards.** In 2012 and 2013, amendments to the competition law were introduced to strengthen the enforcement regime. It is too early to assess the impact of the amendments, but the Productivity Commission has already stated that Denmark's competition law is not sufficiently in line with international standards. It found that competition infringements are only subject to fines in cases of 'gross negligence', that the independence of the authority is impaired when conducting market studies and that its decision making powers were insufficient. The competition authority increased its activities in 2013.

### *Private services*

**Competition problems in domestic services sectors seem linked to regulation and business practices.** The retail sector is often given as an example. Retail trade is highly concentrated in Denmark (the five main retailers account for nearly 90% of the market) and characterised by a lack of large surface retail establishments, a low proportion of foreign-owned companies and high prices. The productivity of the retail sector is lower than the EU average both in terms of levels and growth. The Productivity Commission has asked for removing restrictions to retail establishment (the planning and zoning restrictions for large retail outlets) in order to boost competition on the market and thus reduce the productivity gap. The proposed measures include a significant relaxation of the rules governing the location of shops, allowing substantially larger stores to be built and promoting competition at municipal level through planning.

**In the construction sector, the presence of foreign competitors is very low, prices are higher and productivity is lower than in comparable countries such as Germany and Sweden.** One reason identified is the number of specific standards in Denmark for certain construction materials or building processes, which could have the effect of an entry barrier. The Productivity Commission recommends that these national standards should be replaced by international standards and that procedures for municipal building certificates be harmonised and streamlined. It also recommended to restructure the treatment of building permits, with faster procedures and 'one-stop-shop' solutions, with mutual recognition of permits between communes. Another identified barrier would be the restrictive authorisation schemes for crafts.

**Consumers in Denmark still do not benefit from genuinely competitive prices for electricity and gas.** Though the electricity and gas markets have been liberalised, few consumers have exercised their right to change supplier and thus remain on default contracts with regulated prices. However, Denmark appears to be slowly moving away from this system – at least in the electricity sector.

**A series of other sectors have been identified to have competition problems, including difficulties related to ownership rules, geographical restrictions or other barriers<sup>26</sup>.** The government is said to be reviewing 170 professions, of which 21 are expected to be subjected to targeted measures. It is expected that the announced growth package will follow up on this. A new law making authorisations for plumbers, electricians and sewage installations more flexible was adopted by the national parliament in April 2014. It will make it easier for companies to manage all the various working processes involved in for instance installations of kitchens.

### *Public sector*

**Due to its relatively large size, the public sector has a substantial impact on the country's productivity performance.** The Productivity Commission has issued a range of recommendations for the public sector on public infrastructure, the use of outsourcing, public-private partnerships and public tendering to private operators and more broadly on the management of public services. About 25% of public services in Denmark are subject to open tenders. The Productivity Commission recommends opening up private-sector competition for these services to boost productivity both in the public and the private sector and to improve resource allocation, savings, innovation and quality improvements. It sees potential in the soft services sectors (care for the elderly, health services) and recommends supporting first movers on public procurement and liberalising the law on public tenders (*tilbudsloven*), which regulates procurement below EU thresholds. It also welcomes the government's plan to draft a new law on public procurement based on the new EU procurement directive.

### *Research and innovation*

**Denmark could benefit from better leveraging its world-class science base into more innovative economy solutions.** The country has already reached its R&D intensity target of 3%, notably thanks to a continuous increase in public R&D intensity, reaching about 1% in 2012. However, business R&D intensity has slightly fallen. Although Denmark ranks second in the EU for the rate of highly-cited scientific publications<sup>27</sup>, it ranks only seventh on the new EU innovation output indicator. The Danish government is currently implementing a comprehensive innovation strategy launched in December 2012 with three focus areas. First, it gives higher priority to solutions addressing specific societal challenges. Second, it seeks to step up cooperation between knowledge institutions and companies and efficiency of

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<sup>26</sup> These sectors include transport, pharmacies, dentists, chiropractors, physiotherapists, real estate agents, telecommunication, TV distribution, liquidators and law firms, waste incineration, etc. Many of these sectors are subject to review in cross-ministerial committees or to analysis or investigations by the competition authorities.

<sup>27</sup> Scientific publications within the 10% most cited scientific publications worldwide as % of total scientific publications of the country.

innovation schemes. Third, it promotes a change of culture in the education system with more focus on innovation and entrepreneurship. However, and as highlighted by the Productivity Commission, the innovation strategy appears not to sufficiently tackle a major bottleneck, namely the rigid legal framework governing collaboration between universities and firms.

### ***Energy, climate and environment***

**Denmark's markets for electricity and gas are functioning well at the wholesale level, but there is scope for improving competition at the retail level.** Regarding the gas network, following the gradual depletion of gas fields, Denmark will require enhanced interconnectivity with its neighbours. Capacity expansion at the Danish-German border is planned for 2016 and the new gas pipeline connecting Denmark and Poland (the 'Baltic Pipe') is planned for construction with a commissioning date for 2020. The process has started to move away from contracts with regulated prices in the electricity sector, and this could be replicated in the gas sector. Increased efforts to actively encourage consumers to switch suppliers could also boost competition on these markets. Regarding the energy infrastructure, Denmark has nine critical projects (seven in the electricity sector and two in the gas sector) included on the EU's list of projects of common interest laid down by Commission Delegated Regulation (EU) No 1391/2013.<sup>28</sup> The reduction of environmentally harmful subsidies (EHS) is another key area underlined in the AGS 2014. Denmark would benefit from phasing out EHS, (e.g. the reduced energy duty for diesel) as this would both reduce the negative impacts on the environment and free up economic resources.

**The long-term goal of Denmark's energy policy is to cover the entire supply of energy (electricity, heating, industry and transport) with renewable energy by 2050.**<sup>29</sup> Particular attention is needed to ensure demand-focused solutions and investments in electricity grids, if Denmark is to have more than 50% renewable electricity by 2020. The public sector is committed to fulfilling an exemplary role by reducing energy consumption in national administration buildings. Denmark introduced a national energy obligation system in 2006, which has over time undergone various improvements, including a tightening of the energy saving calculations. The scheme is currently being revised to align it with the requirements of the Energy Efficiency Directive. If the government's plans are put into practice, Denmark will be a frontrunner for the EU in this area.

**Denmark has committed to reduce its emissions not covered by the EU ETS by 20% by 2020 compared to 2005 levels.** Based on inventory data, non-ETS emissions were 11% below the 2005 level in 2012. According to the latest national projections,<sup>30</sup> when existing

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<sup>28</sup> Commission Delegated Regulation (EU) No 1391/2013 of 14 October 2013 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council on guidelines for trans-European energy infrastructure as regards the Union list of projects of common interest; (OJ L 349, 21.12.2013, p. 28).

<sup>29</sup> As of 2012 (latest available data), Denmark has already achieved its 2011/2012 interim target and has now 25.6% of renewable energy. It is now aiming at 35% in 2020 (while the RED target is 30%).

<sup>30</sup> Source: European Environmental Agency: *Greenhouse gas emission trends and projections in Europe 2013 - Tracking progress towards Kyoto and 2020 targets*  
<http://www.eea.europa.eu/publications/ghg-trends-and-projections-2013>

measures are taken into account, Denmark is expected to reduce its non-ETS GHG emissions by 22 %, which would exceed the target by 2 percentage points. In August 2013, Denmark published a Climate Plan in which it outlined its targets to fulfil the pledge to reduce overall GHG emissions by 40% by 2020 in comparison to 1990 levels. The government has announced its intention to put forward a climate bill during the next parliamentary session.<sup>31</sup>

**Although the proportion of renewable energy sources used in transport remains low in Denmark, substantial progress has been made to reduce transport emissions.** In September 2013, the Ministry of Transport set up a Committee for Transport, Environment and Climate with the task of developing a roadmap to establishing a fossil fuel-independent transport sector by 2050. A major milestone in greening the transport sector was reached in January 2014 when a political agreement was reached to spend DKK 28.5 bn on electrifying a large part of the Danish rail network and on increasing speed and frequency of trains between the major cities.

**Given the expected achievements in the energy and transport sectors, agriculture will account for an increasing proportion of total emissions in the decades to come.** The sector of agriculture, forestry and fisheries has seen substantial emission reductions since 1990, but they have stabilised or slightly increased since 2005. Measures are being taken to increase the removal of emissions through forest management.<sup>32</sup>

#### **Box 4. Potential impact of structural reforms on growth – a benchmarking exercise**

Structural reforms are crucial for boosting growth. It is therefore important to know the potential benefits of these reforms. Benefits of structural reforms can be assessed with the help of economic models. The Commission uses its QUEST model to determine how structural reforms in a given Member State would affect growth if the Member State narrowed its gap vis-à-vis the average of the three best EU performers on key indicators such as labour market participation. Improvements on these indicators could raise Denmark's GDP by 1½% in a 10-year period. Some of the reforms could have an effect even within a relatively short time horizon. The model simulations corroborate the analysis of Section 3.3, according to which the largest gains would likely stem from reducing the benefit replacement rate and increasing labour market participation among women and the elderly.

<sup>31</sup>

[http://www.kemin.dk/da-DK/KLIMAOGENERGIIOGBYGNINGSPOLITIK/danmark/reduktionafdrivhusgasser/Maalsaetninger\\_og\\_rammer/Sider/For side.aspx](http://www.kemin.dk/da-DK/KLIMAOGENERGIIOGBYGNINGSPOLITIK/danmark/reduktionafdrivhusgasser/Maalsaetninger_og_rammer/Sider/For side.aspx)

<sup>32</sup> The evaluation of the Danish Nature Agency's Private Afforestation Scheme, which provides grants for afforestation projects on privately owned land, showed an increase of 18 629 acres of forest on open areas in 1998-2012. This will increase removals in medium-term.



**Table: Structural indicators, targets and potential GDP effects<sup>33</sup>**

Reform areas		DK	Average 3 best EU performers	GDP % relative to baseline	
				5 years	10 years
Market competition	Final goods sector markups (price-cost margin)	0.14	0.13	0.1	0.1
Market regulation	Entry costs	0.00	0.13	0.0	0.0
Tax reform	Implicit consumption tax rate	31.4	28.6	0.0	0.0
Skill enhancing reforms*	Share of high-skilled	7.4	10.7	0.0	0.0
	Share of low-skilled	22.1	7.5	0.0	0.0
Labour market reforms	Female non-participation rate (25-54ys):			0.3	0.4
	- low-skilled	30.4	26.4		
	- medium-skilled	13.9	10.5		
	- high-skilled	7.4	4.3		
	Low-skilled male non-participation rate (25-54ys)	18.8	7.7	0.1	0.2
	Elderly non-participation rate (55-64ys):			0.1	0.4
	- low-skilled	16.0	13.4		
	- medium-skilled	8.2	4.8		
	- high-skilled	4.7	3.3		
	ALMP (% of GDP over unemployment share)	38.9	37.4	0.0	0.0
	Benefit replacement rate**	73.0	52.6	0.5	0.7
Total				1.0	1.6

Source: Commission services. Note: Simulations assume that all Member States undertake reforms which close their structural gaps by half. The table shows the contribution of each reform to total GDP after five and ten years. If the country is above the benchmark for a given indicator, we do not simulate the impact of reform measures in that area; however, the Member State in question can still benefit from measures taken by other Member States.<sup>34</sup> \* The long-run effect of increasing the share of high-skilled population could be 1.7% of GDP and of decreasing the share of low-skilled labour could be 2.6%. \*\* EU average is set as the benchmark.

### 3.5. Modernisation of public administration

#### Denmark's public administration performs well compared to other EU countries.<sup>35</sup>

However, public services could be made more efficient by applying more modern management techniques and reducing internal bureaucracy. For example, bureaucratic requirements for detailed controlling of employees' working processes could be limited and public organisations could focus on achieving and enhancing the outcome of their activities. This way management and employees would be given more autonomy and more responsibility for their outcomes. The Productivity Commission estimates that the DKK 12 bn which the government has envisaged in potential efficiency gains to be made by reforming the public sector, will be relatively easy to gain if the recommendations are followed. According to a survey published by a trade union for public employees<sup>36</sup>, bureaucratic requirements take

<sup>33</sup> Final goods sector mark-ups is the difference between the selling price of a good/service and its cost. Entry cost refers to the cost of starting a business in the intermediate sector. The implicit consumption tax rate is a proxy for shifting taxation away from labour to indirect taxes. The benefit replacement rate is the % of a worker's pre-unemployment income that is paid out by the unemployment scheme. For a detailed explanation of indicators see Annex.

<sup>34</sup> For a detailed explanation of the transmission mechanisms of the reform scenarios see: European Commission (2013), "The growth impact of structural reforms", Chapter 2 in QREANo. 4. December 2013. Brussels; [http://ec.europa.eu/economy\\_finance/publications/qr\\_euro\\_area/2013/pdf/qrea4\\_section\\_2\\_en.pdf](http://ec.europa.eu/economy_finance/publications/qr_euro_area/2013/pdf/qrea4_section_2_en.pdf)

<sup>35</sup> Composite indicators regarding government effectiveness, corruption and fraud, business start and licenses, public procurement, tax compliance and administration as well as civil justice are above the EU-average. Source: European Commission, "Excellence in public administration for competitiveness in EU Member States".

<sup>36</sup> [www.ftf.dk](http://www.ftf.dk)

one hour every day out of every employee's working time — amounting to 60 million working hours a year.

#### 4. Conclusions

**After three years of economic standstill, an improvement in the Danish economy is underway.** The economy seems to be moving out of stagnation, with unemployment falling slightly, confidence indicators remaining at relatively high levels, house prices stabilising (and even increasing in the largest cities) and interest rates remaining low.

**The analysis in this staff working document leads to the conclusion that Denmark has made some progress on measures taken to address the 2013 country-specific recommendations.** Denmark is pursuing a prudent fiscal policy, complying with the country-specific recommendation and the requirements under the excessive deficit procedure. The Commission 2014 spring forecast project that the budget deficit will stay below 3% over the period 2014-15 and that Denmark will continue to meet its medium-term budgetary objective.

**Regarding employment issues, some progress has been made to improve the situation of groups at the margins of the labour market.** The reform of disability pensions and flexi-jobs is slowly showing results, the cash benefit reform has entered into force, a sickness benefit reform has been agreed upon and the government has recently launched a reform proposal on active labour market policies. In the area of education, some progress has been noted. On the vocational education and training, a reform agreement was reached in February 2013 and is expected to come into force in mid-2015, seeking to improve the quality of vocational education and training through a wide range of initiatives. Limited progress has been achieved on competition issues. However, the ongoing implementation of the 2012 Competition package — including the strengthening of the competition law, which came into force in March 2013 — will be followed-up with new measures that are currently under negotiation.

**The convergence programme and the national reform programme address the challenges identified in the 2014 Annual Growth Survey.** The general goal of the reform agenda is to increase the Danish economy's long-term growth potential. The reforms aim to support economic recovery by boosting productivity and competitiveness, better utilising the labour force potential and improving the education system. They are accompanied by a plan to pursue sustainable and prudent fiscal policy. The policy plans submitted by Denmark are relevant, specific and credible. Their implementation needs to be closely monitored.

## OVERVIEW TABLE

2013 commitments	Summary assessment <sup>37</sup>
<b>Country-specific recommendations (CSRs)</b>	
<p><b>CSR 1:</b> Implement the budgetary strategy in 2013 as envisaged, so as to ensure the correction of the excessive deficit by 2013. Furthermore, implement the budgetary strategy for 2014 and beyond to ensure an adequate fiscal effort to remain at the medium-term objective.</p>	<p>Denmark has made <b>substantial progress</b> in addressing CSR 1:</p> <ul style="list-style-type: none"> <li>• Denmark is pursuing prudent fiscal policy, complying with the EU recommendation and meeting the excessive deficit procedure (EDP) requirements.</li> <li>• Latest forecasts project that the budget deficit will stay below 3% over the period 2013-15 and Denmark will continue to meet its fiscal medium-term objective (MTO).</li> </ul>
<p><b>CSR 2:</b> Take further steps to improve the employability of people at the margins of the labour market, including people with a migrant background, the long-term unemployed and low-skilled workers. Improve the quality of vocational training to reduce drop-out rates and increase the number of apprenticeships. Implement the reform of primary and lower secondary education in order to raise attainment levels and improve the cost-effectiveness of the education system.</p>	<p>Denmark has made <b>some progress</b> in addressing CSR 2:</p> <ul style="list-style-type: none"> <li>• Recent labour market reforms include reforms of disability pension, flexi-job, cash benefits, and sickness benefit — and a reform of the active labour market policies is in the pipeline; but the current situation for those at the margins of the labour market has not yet markedly improved.</li> <li>• The vocational education and training reform addresses quality and drop-out rates. The low number of apprenticeships remains a concern.</li> <li>• Some progress has been also made in terms of improving the cost-effectiveness of the education system; and in reforming primary and lower secondary education</li> </ul>
<p><b>CSR 3:</b> Continue efforts to remove obstacles to competition in the services sector including in the retail and construction sectors and enhance effectiveness in the provision of public services.</p>	<p>Denmark has made <b>limited progress</b> in addressing CSR 3:</p> <ul style="list-style-type: none"> <li>• A few concrete initiatives were taken in</li> </ul>

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

	<p>2013. A reform on the professions of plumbers and electricians was adopted by the national parliament in April 2014.</p> <ul style="list-style-type: none"> <li>• The findings of the Productivity Commission and the Danish government's efforts to identify the market barriers in the services sectors will prepare the ground for future reforms strengthening competition.</li> <li>• An upcoming Growth Plan — which is currently under negotiation — will build on the Productivity Commission's recommendations. It should be ambitious and also target the competition issues in retail and construction.</li> </ul>
<b>Europe 2020 (national targets and progress)</b>	
<p>Employment rate target: 75%</p> <p>For DK (national target): 80%</p>	<p>Employment rate</p> <p>2011: 75.7%</p> <p>2012: 75.4%</p> <p>2013: 75.6%</p> <p>Denmark is overachieving the 75% employment rate target. The employment rate has stabilised after the crisis. The level is still below the 2008 figures and the national target.</p>
<p>R&amp;D target: 3% of GDP</p>	<p>The 3 % target was reached in 2009. Since 2010, Denmark's performance has been stable around 3 % (2010: 3.00 %, 2011: 2.98 %, and 2012: 2.99 %).</p> <p>Public R&amp;D expenditure is continuously increasing and reached 1.0 % of GDP in 2011. Denmark is the third European country to have reached this level, after Finland and Sweden in 2009. On the other hand, business R&amp;D intensity have been slightly declining as a proportion of GDP (2008: 1.99 %, 2009: 2.21 %, <sup>38</sup> 2010: 2.01 %, 2011 &amp; 2012: 1.96 %).</p>
<p>Greenhouse gas (GHG) emissions target: -20% (compared to 2005 emissions, ETS emissions not covered by this national target)</p>	<p>Change in non-ETS greenhouse gas emissions between 2005 and 2012: -11%.</p> <p>According to the latest national projections submitted to the Commission and when existing measures are taken into account, the target is expected to be exceeded: -22 % in 2020 compared to 2005 (representing a projected 2 percentage points over the target)..</p>
<p>Renewable energy target: 30%</p> <p>Share of renewable energy in the transport sector: 10%</p>	<p>Proportion of renewable energy (RES) in gross final energy consumption was 26 % in 2012.</p> <p>RES proportion in transport: 5.8 %.</p>

<sup>38</sup> This relatively high value can be explained by the sharp decline of GDP in 2009 (- 5.7 %).

<p>Energy Efficiency target: 12.6% (compared to 2006)</p> <p>By 2020: level of 17.8 Mtoe primary consumption and 14.8 Mtoe final energy consumption.</p>	<p>Denmark continues to follow a trend of slowly decreasing primary energy consumption (gross inland consumption minus non energy uses), moving from 19.5 Mtoe in 2005 to 18.7 in 2011.</p> <p>Transport and household energy consumption with 5.1 and 4.4 Mtoe are by far the largest final consumption sectors. Although transport consumption slightly fell from its 5.5 Mtoe peak in 2008 to 5.1 Mtoe in 2011, household consumption fell by 11% from 4.9 Mtoe (2010) to 4.4 Mtoe (2011) more than offsetting the increase of 11% in 2009-10.</p> <p>Denmark has set an indicative national energy efficiency target of 12.6% energy savings compared to 2006, which implies reaching a 2020 level of 17.8 Mtoe primary consumption and 14.8 Mtoe final energy consumption.</p>
<p>Early school leaving target: &lt;10% (Less than 10 per cent school drop-out rates of the population aged 18-24)</p>	<p>Early school leaving rate</p> <p>2011: 9.6%</p> <p>2012: 9.1%</p> <p>2013: 8.0%</p> <p>The EU target has already been achieved.</p>
<p>Tertiary education target: &gt;40% (At least 40 per cent of the population aged 30-34 having completed tertiary)</p>	<p>Tertiary educational attainment rate:</p> <p>2011: 41.2%</p> <p>2012: 43.0%</p> <p>2013: 43.4%</p> <p>The EU target has already been achieved.</p>
<p>Target on the reduction of population at risk of poverty or social exclusion in number of persons:</p> <p>For DK (national target): Reduce the number of people in households with low work intensity by 22,000 towards 2020.</p>	<p>Number of people in households with low work intensity:</p> <p>2011: 480 000</p> <p>2012: 464 000</p> <p>Some sign of improvement, but still considerably above the pre-crisis trough in 2008 and the target.</p>

## ANNEX

## Standard Tables

Table I. Macro-economic indicators

	1996-2000	2001-2005	2006-2010	2011	2012	2013	2014	2015
<b>Core indicators</b>								
GDP growth rate	2.9	1.3	0.0	1.1	-0.4	0.4	1.5	1.9
Output gap <sup>1</sup>	1.4	0.9	0.1	-3.6	-4.6	-4.8	-4.3	-3.6
HICP (annual % change)	2.0	1.9	2.1	2.7	2.4	0.5	1.0	1.6
Domestic demand (annual % change) <sup>2</sup>	2.7	1.9	0.2	0.2	-0.1	0.6	1.3	1.7
Unemployment rate (% of labour force) <sup>3</sup>	5.2	5.0	4.9	7.6	7.5	7.0	6.8	6.6
Gross fixed capital formation (% of GDP)	19.7	19.5	19.9	17.4	17.4	17.2	17.2	17.4
Gross national saving (% of GDP)	21.4	23.6	23.7	23.7	23.4	24.7	24.2	24.3
<b>General Government (% of GDP)</b>								
<b>Net lending (+) or net borrowing (-)</b>	<b>0.2</b>	<b>1.9</b>	<b>1.6</b>	<b>-1.9</b>	<b>-3.8</b>	<b>-0.8</b>	<b>-1.2</b>	<b>-2.7</b>
<b>Gross debt</b>	<b>61.4</b>	<b>45.8</b>	<b>35.2</b>	<b>46.4</b>	<b>45.4</b>	<b>44.5</b>	<b>43.5</b>	<b>44.9</b>
<b>Net financial assets</b>	<b>-30.3</b>	<b>-16.5</b>	<b>2.8</b>	<b>-2.6</b>	<b>-7.5</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>
Total revenue	56.4	55.9	55.5	55.7	55.5	56.2	55.6	53.2
Total expenditure	56.2	54.1	53.9	57.5	59.2	57.0	56.8	55.8
<i>of which: Interest</i>	4.6	2.7	1.6	1.8	1.6	1.5	1.4	1.3
<b>Corporations (% of GDP)</b>								
<b>Net lending (+) or net borrowing (-)</b>	<b>3.3</b>	<b>2.9</b>	<b>4.2</b>	<b>9.0</b>	<b>9.3</b>	<b>8.9</b>	<b>9.4</b>	<b>10.5</b>
<b>Net financial assets; non-financial corporations</b>	<b>-62.4</b>	<b>-62.2</b>	<b>-88.8</b>	<b>-71.3</b>	<b>-72.1</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>
<b>Net financial assets; financial corporations</b>	<b>-4.1</b>	<b>-8.9</b>	<b>-5.9</b>	<b>-1.3</b>	<b>-4.0</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>
Gross capital formation	13.6	13.3	12.7	10.7	10.4	10.8	10.8	11.2
Gross operating surplus	20.4	20.4	19.8	20.4	20.8	20.8	21.4	21.8
<b>Households and NPISH (% of GDP)</b>								
<b>Net lending (+) or net borrowing (-)</b>	<b>-2.4</b>	<b>-1.2</b>	<b>-2.5</b>	<b>-0.7</b>	<b>0.7</b>	<b>-0.6</b>	<b>-1.3</b>	<b>-0.8</b>
<b>Net financial assets</b>	<b>76.3</b>	<b>78.2</b>	<b>92.9</b>	<b>103.8</b>	<b>121.1</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>
Gross wages and salaries	49.5	49.5	50.3	50.1	49.7	49.6	49.2	48.8
Net property income	1.4	1.3	1.1	1.1	1.3	2.1	1.5	1.3
Current transfers received	21.4	21.5	21.4	23.1	23.5	24.3	24.3	23.3
Gross saving	2.7	4.1	3.2	4.1	3.5	3.6	3.1	3.6
<b>Rest of the world (% of GDP)</b>								
<b>Net lending (+) or net borrowing (-)</b>	<b>1.1</b>	<b>3.3</b>	<b>3.3</b>	<b>6.3</b>	<b>6.0</b>	<b>7.3</b>	<b>7.0</b>	<b>7.1</b>
<b>Net financial assets</b>	<b>21.0</b>	<b>9.9</b>	<b>-0.1</b>	<b>-26.7</b>	<b>-35.7</b>	<b>n.a</b>	<b>n.a</b>	<b>n.a</b>
Net exports of goods and services	4.4	5.7	3.6	5.2	5.1	5.7	5.8	5.8
Net primary income from the rest of the world	-1.4	-0.3	1.7	2.7	3.0	3.9	3.4	3.2
Net capital transactions	0.1	0.1	0.0	0.3	0.0	0.0	0.1	0.3
Tradable sector	40.8	39.7	37.5	36.4	36.3	36.4	n.a	n.a
Non tradable sector	44.7	45.7	47.9	49.5	49.8	49.9	n.a	n.a
<i>of which: Building and construction sector</i>	4.5	4.5	4.6	4.2	4.1	4.0	n.a	n.a
Real effective exchange rate (index, 2000=100)	91.6	96.2	108.2	108.1	104.6	106.9	108.4	107.7
Terms of trade goods and services (index, 2000=100)	94.0	97.1	100.9	101.6	101.5	103.2	103.2	102.8
Market performance of exports (index, 2000=100)	102.7	103.4	97.9	95.6	95.4	96.1	95.4	94.2
<b>Notes:</b>								
<sup>1</sup> The output gap constitutes the gap between the actual and potential gross domestic product at 2005 market prices.								
<sup>2</sup> The indicator on domestic demand includes stocks.								
<sup>3</sup> 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.								
<i>Source:</i>								
<i>Commission 2014 spring forecast (COM)</i>								

**Table II. Comparison of macroeconomic developments and forecasts**

	2013		2014		2015		2016	2017
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	0.4	0.4	1.5	1.6	1.9	1.9	2.1	2.2
Private consumption (% change)	0.0	0.0	1.3	1.3	1.7	1.6	2.3	2.5
Gross fixed capital formation (% change)	0.6	0.7	2.4	2.6	3.0	3.2	6.6	5.8
Exports of goods and services (% change)	1.2	1.2	3.1	3.7	4.0	4.7	5.6	5.6
Imports of goods and services (% change)	1.7	1.7	2.8	3.9	3.8	4.5	7.2	6.9
<i>Contributions to real GDP growth:</i>								
- Final domestic demand	0.4	0.4	1.3	1.5	1.6	1.5	2.5	2.5
- Change in inventories	0.2	0.2	-0.1	0.0	0.0	0.0	0.1	0.1
- Net exports	-0.2	-0.2	0.3	0.1	0.3	0.4	-0.5	-0.5
Output gap <sup>1</sup>	-4.8	-4.8	-4.3	-3.8	-3.6	-2.6	-1.3	0.0
Employment (% change)	0.4	0.2	0.5	0.6	0.5	0.6	0.8	1.2
Unemployment rate (%)	7.0	7.1	6.8	6.9	6.6	6.6	6.2	5.7
Labour productivity (% change)	0.0	0.2	1.1	1.0	1.3	1.3	1.3	1.0
HICP inflation (%)	0.5	0.5	1.0	1.1	1.6	1.8	1.8	1.9
GDP deflator (% change)	1.4	1.4	1.4	1.3	1.5	1.5	1.6	1.9
Comp. of employees (per head, % change)	1.2	1.3	1.8	1.8	2.0	2.2	2.2	2.6
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	7.3	7.3	7.0	7.2	7.1	7.5	6.7	5.7
<u>Note:</u>								
<sup>1</sup> 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.								
<u>Source:</u>								
Commission 2014 spring forecast (COM); Convergence programme (CP).								

**Table III. Composition of the budgetary adjustment**

(% of GDP)	2013	2014		2015		2016	2017	Change: 2013-2017
	COM	COM	CP	COM <sup>1</sup>	CP	CP	CP	CP
<b>Revenue</b>	<b>56.2</b>	<b>55.6</b>	<b>54.2</b>	<b>53.2</b>	<b>51.7</b>	<b>51.7</b>	<b>51.5</b>	<b>-4.7</b>
<i>of which:</i>								
- Taxes on production and imports	16.6	16.5	16.7	16.4	16.7	16.9	17.0	0.4
- Current taxes on income, wealth, etc.	31.8	31.5	31.4	29.3	29.1	29.0	28.6	-3.2
- Social contributions	1.8	1.8	0.8	1.8	0.8	0.8	0.8	-1.0
- Other (residual)	6.0	5.8	5.3	5.7	5.1	5.0	5.1	-0.9
<b>Expenditure</b>	<b>57.0</b>	<b>56.8</b>	<b>55.6</b>	<b>55.8</b>	<b>54.6</b>	<b>53.9</b>	<b>53.1</b>	<b>-3.9</b>
<i>of which:</i>								
- Primary expenditure	55.5	55.4	54.1	54.5	53.2	52.6	51.7	-3.8
<i>of which:</i>								
Compensation of employees	18.2	18.0	18.1	17.8	17.9	17.7	17.5	-0.7
Intermediate consumption	9.8	9.6	9.8	9.6	9.7	9.7	9.7	-0.1
Social payments	18.7	19.0	19.1	18.9	18.9	18.5	18.1	-0.6
Subsidies	2.6	2.6	2.6	2.5	2.6	2.5	2.5	-0.1
Gross fixed capital formation	2.3	2.3	2.3	2.1	2.1	2.0	2.0	-0.3
Other (residual)	3.9	3.9	2.2	3.7	2.0	2.1	1.9	-2.0
- Interest expenditure	1.5	1.4	1.5	1.3	1.4	1.3	1.4	-0.1
<b>General government balance (GGB)</b>	<b>-0.8</b>	<b>-1.2</b>	<b>-1.3</b>	<b>-2.7</b>	<b>-2.9</b>	<b>-2.2</b>	<b>-1.6</b>	<b>-0.8</b>
<b>Primary balance</b>	<b>0.7</b>	<b>0.2</b>	<b>0.2</b>	<b>-1.3</b>	<b>-1.5</b>	<b>-0.9</b>	<b>-0.2</b>	<b>-0.9</b>
One-off and other temporary measures	1.5	1.6	1.1	0.0	-1.0	-0.8	-0.6	-2.1
<b>GGB excl. one-offs</b>	<b>-2.3</b>	<b>-2.8</b>	<b>-2.4</b>	<b>-2.7</b>	<b>-1.9</b>	<b>-1.4</b>	<b>-1.0</b>	<b>1.3</b>
Output gap <sup>2</sup>	-4.8	-4.3	-3.8	-3.6	-2.6	-1.3	0.0	4.9
Cyclically-adjusted balance <sup>2</sup>	2.1	1.4	1.0	-0.5	-1.3	-1.4	-1.6	-3.7
<b>Structural balance (SB)<sup>3</sup></b>	<b>0.6</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.5</b>	<b>-0.3</b>	<b>-0.6</b>	<b>-1.0</b>	<b>-1.6</b>
<i>Change in SB</i>	<i>0.0</i>	<i>-0.8</i>	<i>-0.6</i>	<i>-0.3</i>	<i>-0.2</i>	<i>-0.3</i>	<i>-0.4</i>	-
<i>Two year average change in SB</i>	<i>0.1</i>	<i>-0.4</i>	<i>-0.4</i>	<i>-0.5</i>	<i>-0.4</i>	<i>-0.3</i>	<i>-0.3</i>	-
Structural primary balance <sup>3</sup>	2.1	1.2	1.4	0.9	1.1	0.7	0.4	-1.7
<i>Change in structural primary balance</i>		<i>-0.9</i>	<i>-0.7</i>	<i>-0.4</i>	<i>-0.3</i>	<i>-0.4</i>	<i>-0.3</i>	-
<b>Expenditure benchmark</b>								
Applicable reference rate <sup>4</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-
Deviation <sup>5</sup> (% GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-
Two-year average deviation (% GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-

**Notes:**
<sup>1</sup>On a no-policy-change basis.

<sup>2</sup>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.

<sup>3</sup>Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.

<sup>4</sup>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.

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

**Source:**
*Convergence programme (CP); Commission 2014 spring forecast (COM); Commission calculations.*



**Table IV. Debt dynamics**

(% of GDP)	Average 2008-2012	2013	2014		2015		2016	2017
			COM	CP	COM	CP	CP	CP
<b>Gross debt ratio</b> <sup>1</sup>	<b>41.7</b>	<b>44.5</b>	<b>43.5</b>	<b>43.2</b>	<b>44.9</b>	<b>44.3</b>	<b>43.8</b>	<b>43.0</b>
Change in the ratio	3.6	-0.9	-1.0	-1.3	1.4	1.1	-0.5	-0.8
<i>Contributions</i> <sup>2</sup> :								
<b>1. Primary balance</b>	<b>-0.1</b>	<b>-0.7</b>	<b>-0.2</b>	<b>-0.2</b>	<b>1.3</b>	<b>1.5</b>	<b>0.9</b>	<b>0.2</b>
<b>2. “Snow-ball” effect</b>	<b>1.1</b>	<b>0.7</b>	<b>0.1</b>	<b>0.2</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.3</b>	<b>-0.3</b>
<i>Of which:</i>								
Interest expenditure	1.6	1.5	1.4	1.5	1.3	1.4	1.3	1.4
Growth effect	0.3	-0.2	-0.7	-0.7	-0.8	-0.8	-0.9	-0.9
Inflation effect	-0.9	-0.6	-0.6	-0.6	-0.6	-0.6	-0.7	-0.8
<b>3. Stock-flow adjustment</b>	<b>2.7</b>	<b>-0.9</b>	<b>-0.9</b>	<b>-1.3</b>	<b>0.1</b>	<b>-0.4</b>	<b>-1.1</b>	<b>-0.7</b>
<i>Of which:</i>								
Cash/accruals diff.								
Acc. financial assets								
<i>Privatisation</i>								
Val. effect & residual								
		<b>2013</b>	<b>2014</b>		<b>2015</b>		<b>2016</b>	<b>2017</b>
			<b>COM</b>	<b>CP</b>	<b>COM</b>	<b>CP</b>	<b>CP</b>	<b>CP</b>
<b>Gap to the debt benchmark</b> <sup>3,4</sup>		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Structural adjustment</b> <sup>5</sup>		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>To be compared to:</i>								
Required adjustment <sup>6</sup>		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Notes:</b>								
<sup>1</sup> End of period.								
<sup>2</sup> 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.								
<sup>3</sup> Not relevant for Member States that were subject to an EDP procedure in November 2011 and for a period of three years following the correction of the excessive deficit.								
<sup>4</sup> 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.								
<sup>5</sup> Applicable only during the transition period of three years from the correction of the excessive deficit for EDP that were ongoing in November 2011.								
<sup>6</sup> 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/CP) budgetary projections for the previous years are achieved.								
<b>Source :</b>								
Convergence programme (CP); Commission 2014 spring forecast (COM); Commission calculations.								

**Table V. Sustainability indicators**

	Denmark			European Union		
	2013 scenario	No-policy-change scenario	Convergence programme scenario	2013 scenario	No-policy-change scenario	Convergence programme scenario
S2*	1.0	2.2	2.8	2.4	2.4	0.7
<i>of which:</i>						
Initial budgetary position (IBP)	-0.7	0.6	1.0	0.5	0.4	-1.3
Long-term cost of ageing (CoA)	1.6	1.6	1.8	1.9	2.0	2.0
<i>of which:</i>						
pensions	-1.4	-1.3	-1.1	0.7	0.8	0.9
healthcare	0.7	0.7	0.6	0.9	0.9	0.8
long-term care	2.6	2.6	2.6	0.6	0.6	0.6
others	-0.3	-0.3	-0.3	-0.4	-0.4	-0.3
S1**	-3.4	-2.1	-1.3	1.5	1.7	-0.2
<i>of which:</i>						
Initial budgetary position (IBP)	-2.7	-1.2	-0.3	-0.2	-0.4	-2.0
Debt requirement (DR)	-0.9	-1.0	-1.3	1.5	1.8	1.5
Long-term cost of ageing (CoA)	0.2	0.1	0.3	0.2	0.3	0.3
S0 (risk for fiscal stress)***	0.22	:	:	:	:	:
Debt as % of GDP (2013)	44.5			88.9		
Age-related expenditure as % of GDP (2013)	30.7			25.8		

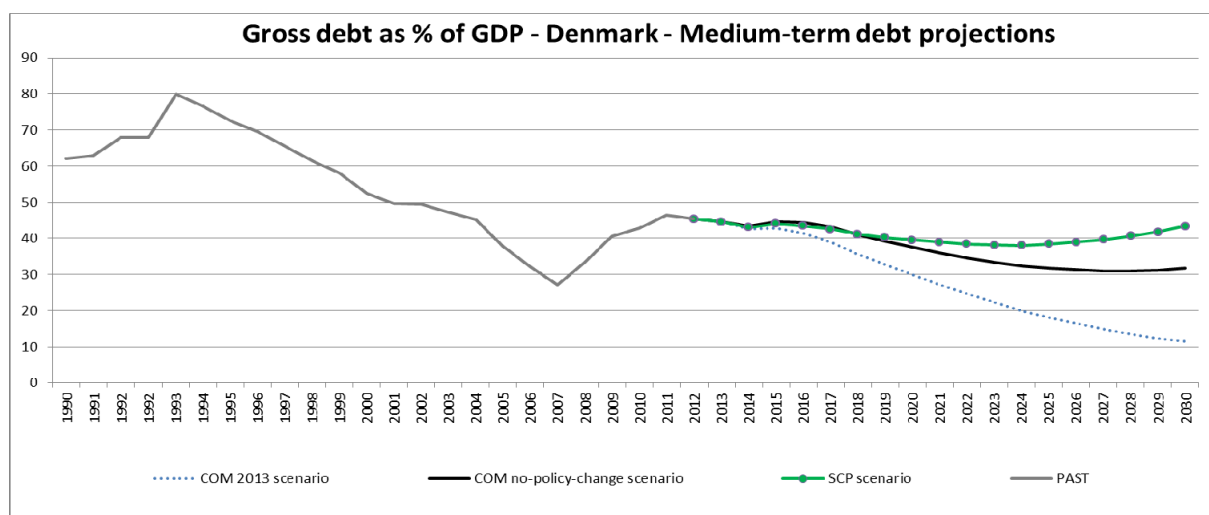
Source : Commission; 2014 convergence programme.

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

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

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

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



**Table VI. Taxation indicators**

	2002	2006	2008	2010	2011	2012
<b>Total tax revenues</b> (incl. actual compulsory social contributions, % of GDP)	47.9	49.6	47.8	47.5	47.7	48.1
<b>Breakdown by economic function</b> (% of GDP) <sup>1</sup>						
Consumption	15.8	16.3	15.4	14.9	15.0	14.9
of which:						
- VAT	9.6	10.3	10.1	9.8	9.9	10.0
- excise duties on tobacco and alcohol	0.9	0.7	0.6	0.6	0.6	0.7
- energy	2.6	2.2	2.1	2.3	2.3	2.2
- other (residual)	2.7	3.1	2.6	2.2	2.2	2.1
Labour employed	21.2	19.9	20.6	19.4	19.3	19.2
Labour non-employed	4.9	4.7	4.8	5.0	5.2	5.3
Capital and business income	3.5	6.2	4.2	5.5	5.5	6.1
Stocks of capital/wealth	2.7	2.7	2.9	2.8	2.8	2.7
<i>p.m.</i> Environmental taxes <sup>2</sup>	4.8	4.8	4.2	4.0	4.0	3.9
<b>VAT efficiency</b> <sup>3</sup>						
Actual VAT revenues as % of theoretical revenues at standard rate	60.2	64.7	62.4	58.1	59.1	59.0
<b>Note:</b>						
1. Tax revenues are broken down by economic function, i.e. according to whether taxes are raised on consumption, labour or capital. See European Commission (2014), Taxation trends in the European Union, for a more detailed explanation.						
2. This category comprises taxes on energy, transport and pollution, and resources included in taxes on consumption and capital.						
3. The VAT efficiency is measured via the VAT revenue ratio. It is defined as the ratio between the actual VAT revenue collected and the revenue that would be raised if VAT was applied at the standard rate to all final (domestic) consumption expenditures, which is an imperfect measure of the theoretical pure VAT base. A low ratio can indicate a reduction of the tax base due to large exemptions or the application of reduced rates to a wide range of goods and services (policy gap) or a failure to collect all tax due to e.g. fraud ('collection gap'). It should be noted that the relative size of cross-border shopping compared to domestic consumption also influences the value of the ratio, notably for smaller economies. See European Commission (2012), Tax Reforms in EU Member States and OECD (2012), Consumption tax trends for a more detailed discussion.						
<i>Source: Commission</i>						

**Table VII. Financial market indicators**

	2009	2010	2011	2012	2013
Total assets of the banking sector (% of GDP)	494.3	481.6	476.1	472.0	418.6
Share of assets of the five largest banks (% of total assets)	64.0	64.4	66.3	65.6	-
Foreign ownership of banking system (% of total assets)	19.9	19.1	15.0	16.6	-
Financial soundness indicators:					
- non-performing loans (% of total loans) <sup>1)</sup>	3.3	4.1	3.7	6.0	4.8
- capital adequacy ratio (%) <sup>1)</sup>	16.1	16.0	17.2	18.9	18.3
- return on equity (%) <sup>1)</sup>	-3.2	0.0	-0.6	1.5	1.3
Bank loans to the private sector (year-on-year % change)	-1.9	1.2	-1.3	-0.4	0.6
Lending for house purchase (year-on-year % change)	5.2	2.5	1.9	1.2	0.6
Loan to deposit ratio	301.1	305.6	306.2	295.4	291.9
CB liquidity as % of liabilities <sup>2)</sup>	1.7	0.2	0.5	0.9	0.4
Banks' exposure to countries receiving official financial assistance (% of GDP) <sup>3)</sup>	7.6	6.4	5.6	4.9	4.7
Private debt (% of GDP)	250.9	243.1	237.0	238.3	-
Gross external debt (% of GDP)					
- Public	16.0	16.3	21.1	20.6	18.4
- Private	47.0	47.0	43.9	42.8	37.5
Long term interest rates spread versus Bund (basis points)*	36.5	18.4	12.2	-9.2	17.6
Credit default swap spreads for sovereign securities (5-year)*	57.9	29.1	63.7	80.0	17.6
<b>Notes:</b>					
<sup>1)</sup> Latest data 2013Q3.					
<sup>2)</sup> Latest data September 2013.					
<sup>3)</sup> Covered countries are CY, EL, ES, LV, HU, IE, PT and RO. Latest data 2013Q3.					
* Measured in basis points.					
<b>Source:</b>					
<i>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).</i>					

**Table VIII. Labour market and social indicators**

<b>Labour market indicators</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Employment rate (% of population aged 20-64)	79.7	77.5	75.8	75.7	75.4	75.6
Employment growth (% change from previous year)	1.7	-3.4	-2.5	-0.2	-0.3	0.3
Employment rate of women (% of female population aged 20-64)	75.5	74.5	73.0	72.4	72.2	72.4
Employment rate of men (% of male population aged 20-64)	83.9	80.5	78.6	79.0	78.6	78.7
Employment rate of older workers (% of population aged 55-64)	58.4	58.2	58.4	59.5	60.8	61.7
Part-time employment (% of total employment, 15 years and more)	24.4	25.9	26.3	25.9	25.7	25.4
Part-time employment of women (% of women employment, 15 years and more)	36.0	37.5	38.4	37.6	36.4	35.8
Part-time employment of men (% of men employment, 15 years and more)	14.3	15.3	15.1	15.3	16.0	15.9
Fixed term employment (% of employees with a fixed term contract, 15 years and more)	8.5	8.7	8.4	8.8	8.5	8.8
Transitions from temporary to permanent employment	:	:	:	:	24.0	:
Unemployment rate <sup>1</sup> (% of labour force, age group 15-74)	3.5	6.0	7.5	7.6	7.5	7.0
Long-term unemployment rate <sup>2</sup> (% of labour force)	0.5	0.6	1.5	1.8	2.1	1.8
Youth unemployment rate (% of youth labour force aged 15-24)	8.1	11.8	13.9	14.3	14.0	13.0
Youth NEET rate (% of population aged 15-24)	4.3	5.4	6.0	6.3	6.6	6.0
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	12.5	11.3	11.0	9.6	9.1	8.0
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	39.2	40.7	41.2	41.2	43.0	43.4
Formal childcare (from 1 to 29 hours; % over the population less than 3 years)	8.0	10.0	10.0	5.0	8.0	:
Formal childcare (30 hours or over; % over the population less than 3 year)	65.0	63.0	68.0	69.0	59.0	:
Labour productivity per person employed (annual % change)	-2.4	-2.4	3.9	1.3	0.0	0.0
Hours worked per person employed (annual % change)	-0.5	0.2	-1.2	1.1	-0.1	-0.7
Labour productivity per hour worked (annual % change; constant prices)	-1.9	-2.5	5.2	0.2	0.1	0.7
Compensation per employee (annual % change; constant prices)	-0.7	2.6	-0.8	0.6	-0.8	-0.2
Nominal unit labour cost growth (annual % change)	6.1	5.8	-0.5	0.0	1.5	1.2
Real unit labour cost growth (annual % change)	1.8	5.1	-4.5	-0.7	-0.8	-0.2
<b>Notes:</b>						
<sup>1</sup> 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.						
<sup>2</sup> Long-term unemployed are unemployed persons for at least 12 months.						
<b>Sources:</b>						
Commission (EU Labour Force Survey and European National Accounts)						

<b>Expenditure on social protection benefits (% of GDP)</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Sickness/Health care	6.3	6.5	7.3	7.0	6.9
Invalidity	3.8	3.7	4.1	4.2	4.1
Old age and survivors	12.6	12.7	14.0	13.8	14.2
Family/Children	4.0	4.0	4.5	4.3	4.1
Unemployment	1.2	0.9	1.6	1.8	1.8
Housing and Social exclusion n.e.c.	0.7	0.6	0.7	0.7	0.7
<b>Total</b>	<b>29.3</b>	<b>29.2</b>	<b>33.1</b>	<b>32.8</b>	<b>32.8</b>
of which: means tested benefits	1.5	1.4	1.6	1.6	1.7
<b>Social inclusion indicators</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
At-risk-of-poverty or social exclusion <sup>1</sup> (% of total population)	16.3	17.6	18.3	18.9	19.0
At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	12.7	14.0	15.1	16.0	15.3
At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	18.6	20.6	18.4	16.6	14.6
At-Risk-of-Poverty rate <sup>2</sup> (% of total population)	11.8	13.1	13.3	13.0	13.1
Severe Material Deprivation <sup>3</sup> (% of total population)	2.0	2.3	2.7	2.6	2.8
Share of people living in low work intensity households <sup>4</sup> (% of people aged 0-59)	8.5	8.8	10.6	11.7	11.3
In-work at-risk-of poverty rate (% of persons employed)	5.0	5.9	6.5	6.4	5.6
Impact of social transfers (excluding pensions) on reducing poverty	57.6	58.0	54.3	54.2	53.7
Poverty thresholds, expressed in national currency at constant prices <sup>5</sup>	106 235	106 229	107 694	108 360	106 292
Gross disposable income (households)	796 214	816 051	859 763	886 965	906 724
Relative median poverty risk gap (60% of median equivalised income, age: total)	18.0	18.4	21.6	21.4	22.8
<b>Notes:</b>					
<sup>1</sup> 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).					
<sup>2</sup> At-risk-of poverty rate (AROP): share of people with an equivalised disposable income below 60% of the national equivalised median income.					
<sup>3</sup> 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.					
<sup>4</sup> 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.					
<sup>5</sup> For EE, CY, MT, SI, SK, thresholds in nominal values in Euros; HICP - index 100 in 2006 (2007 survey refers to 2006 incomes)					
<b>Sources:</b>					
For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.					

**Table IX. Product market performance and policy indicators**

<b>Performance indicators</b>	<b>2004-2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Labour productivity <sup>1</sup> total economy (annual growth in %)	-0.4	-1.8	3.8	1.4	0.1	0.1
Labour productivity <sup>1</sup> in manufacturing (annual growth in %)	0.5	-1.7	11.8	7.2	4.0	5.4
Labour productivity <sup>1</sup> in electricity, gas, water (annual growth in %)	-6.9	-14.9	25.4	-14.9	0.8	n.a.
Labour productivity <sup>1</sup> in the construction sector (annual growth in %)	-2.2	0.1	-2.1	7.1	-2.6	-0.9
Patent intensity in manufacturing <sup>2</sup> (patents of the EPO divided by gross value added of the sector)	408.2	393.8	401.2	389.6	n.a.	n.a.
<b>Policy indicators</b>	<b>2004-2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Enforcing contracts <sup>3</sup> (days)	380.0	380.0	410.0	410.0	410.0	410.0
Time to start a business <sup>3</sup> (days)	6.2	6.0	5.5	5.5	5.5	5.5
R&D expenditure (% of GDP)	2.6	3.2	3.0	3.0	3.0	n.a.
Tertiary educational attainment (% of 30-34 years old population)	41.0	40.7	41.2	41.2	43.0	43.4
Total public expenditure on education (% of GDP)	8.0	8.7	8.8	8.8	n.a.	n.a.
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Product market regulation <sup>4</sup> , Overall (Index; 0=not regulated; 6=most regulated)	1.3	n.a.	n.a.	n.a.	n.a.	1.2
Product market regulation <sup>4</sup> , Retail (Index; 0=not regulated; 6=most regulated)	1.8	n.a.	n.a.	n.a.	n.a.	1.7
Product market regulation <sup>4</sup> , Network Industries <sup>5</sup> (Index; 0=not regulated; 6=most regulated)	1.8	n.a.	n.a.	n.a.	n.a.	1.6
<b>Notes:</b>						
<sup>1</sup> Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.						
<sup>2</sup> Patent data refer to applications to the European Patent Office (EPO). They are counted according to the year in which they were filed at the EPO. They are broken down according to the inventor's place of residence, using fractional counting if multiple inventors or IPC classes are provided to avoid double counting.						
<sup>3</sup> The methodologies, including the assumptions, for this indicator are presented in detail on the website <a href="http://www.doingbusiness.org/methodology">http://www.doingbusiness.org/methodology</a> .						
<sup>4</sup> The methodologies of the product market regulation indicators are presented in detail on the website <a href="http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html">http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html</a> .						
<sup>5</sup> Aggregate ETCR.						
<b>Source:</b>						
Commission, World Bank - <i>Doing Business</i> (for enforcing contracts and time to start a business) and OECD (for the product market regulation indicators).						

**Table X. Green Growth**

		2003-2007	2008	2009	2010	2011	2012
<b>Green Growth performance</b>							
<i>Macroeconomic</i>							
Energy intensity	kgoe / €	0.11	0.10	0.11	0.11	0.10	0.10
Carbon intensity	kg / €	0.37	0.33	0.33	0.33	0.30	n.a.
Resource intensity (reciprocal of resource productivity)	kg / €	0.80	0.77	0.65	0.60	0.68	n.a.
Waste intensity	kg / €	n.a.	0.08	n.a.	0.11	n.a.	n.a.
Energy balance of trade	% GDP	1.5%	1.7%	0.8%	0.9%	0.7%	1%
Energy weight in HICP	%	11	11	10	11	11	11
Difference between change energy price and inflation	%	1.22	4.10	-3.80	5.10	4.5	-0.7
Environmental taxes over labour taxes	ratio	19.0%	16.6%	14.6%	16.3%	16.6%	n.a.
Environmental taxes over total taxes	ratio	9.7%	8.8%	8.3%	8.4%	8.5%	n.a.
<i>Sectoral</i>							
Industry energy intensity	kgoe / €	0.08	0.07	0.07	0.07	n.a.	n.a.
Share of energy-intensive industries in the economy	% GDP	9.2	7.2	6.5	n.a.	n.a.	n.a.
Electricity prices for medium-sized industrial users**	€ / kWh	n.a.	0.08	0.08	0.09	0.08	0.08
Gas prices for medium-sized industrial users***	€ / kWh	n.a.	0.03	0.02	0.03	0.03	0.04
Public R&D for energy	% GDP	n.a.	0.03%	0.03%	0.05%	0.05%	0.04%
Public R&D for the environment	% GDP	n.a.	0.02%	0.03%	0.02%	0.02%	0.02%
Recycling rate of municipal waste	ratio	94.5%	95.7%	96.6%	96.5%	96.6%	97.5%
Share of GHG emissions covered by ETS*	%	n.a.	41.5%	41.7%	41.1%	38.0%	35.2%
Transport energy intensity	kgoe / €	0.34	0.37	0.39	0.35	n.a.	n.a.
Transport carbon intensity	kg / €	0.87	0.95	0.99	0.90	n.a.	n.a.
<b>Security of energy supply</b>							
Energy import dependency	%	-37.6%	-21.4%	-20.3%	-16.1%	-6.1%	-3.4%
Diversification of oil import sources	HHI	n.a.	0.17	0.21	0.12	0.19	n.a.
Diversification of energy mix	HHI	0.29	0.27	0.27	0.27	0.26	0.26
Share renewable energy in energy mix	%	13.8%	16.3%	17.2%	19.5%	21.2%	23.3%

**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 CO<sub>2</sub> equivalents) divided by GDP (in EUR)

Resource intensity: Domestic Material Consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP

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

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

Environmental taxes over labour or total taxes: from DG TAXUD's database "Taxation trends in the European Union"

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)

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

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

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

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

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

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

Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector

Energy import dependency: net energy imports divided by gross inland energy consumption incl. energy consumption international bunkers

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

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

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

\* Commission and EEA.

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

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



## List of indicators used in Box 4 on the potential impact on growth of structural reforms.

**Final goods sector mark-ups:** Price-cost margin, i.e. the difference between the selling price of a good or service and its cost. Final goods mark-ups are proxied by the mark-ups in selected services sectors (transport and storage, post and telecommunications, electricity, gas and water supply, hotels and restaurants and financial intermediation but excluding real estate and renting of machinery and equipment and other business activities<sup>39</sup>).

Source: Commission services estimation using the methodology of Roeger, W. (1995). "Can imperfect Competition explain the Difference between primal and dual Productivity?" *Journal of Political Economy* Vol. 103(2) pp. 316-30, based on EUKLEMS 1996-2007 data.

**Entry costs:** Cost of starting a business in the intermediate sector as a share of income per capita. The intermediate sector is proxied by the manufacturing sector in the model.

Source: World Bank, Doing Business Database. www.doingbusiness.org. 2012 data.

**Implicit consumption tax rate:** Defined as total taxes on consumption over the value of private consumption. In the simulations it is used as a proxy for shifting taxation away from labour to indirect taxes. The implicit consumption tax-rates are increased (halving the gap vis-à-vis the best performers) while labour tax-rates are reduced so that the combined impact is ex-ante budgetary neutral.

Source: European Commission, Taxation trends in the European Union, 2013 edition, Luxembourg, 2013. 2011 data.

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

Source: EUROSTAT. 2012 data or latest available.

**Female non-participation rate:** Share of women of working age not in paid work and not looking for paid work in total female working-age population

Source: EUROSTAT. 2012 data or latest available.

**Low-skilled male non-participation rates:** Share of low-skilled men of working age not in paid work and not looking for paid work in total male working-age population

Source: EUROSTAT. 2012 data or latest available.

**Elderly non-participation rates (55-64 years):** Share of the population aged 55-64 years not in paid work and not looking for paid work in total population aged 55-64 years.

Source: EUROSTAT. 2012 data or latest available.

**ALMP:** Active Labour Market Policy expenditures as a share of GDP over the share of unemployed in the population.

Source: EUROSTAT. 2011 data or latest available.

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<sup>39</sup> The real estate sector is excluded because of statistical difficulties of estimating a mark-up in this sector. The sector renting of machinery and equipment and other business activities is conceptually part of intermediate goods sector.

**Benefit replacement rate:** Share of a worker's pre-unemployment income that is paid out by the unemployment insurance scheme. Average of net replacement rates over 60 months of unemployment.

Source: OECD, Benefits and Wages Statistics.

[www.oecd.org/els/benefitsandwagesstatistics.htm](http://www.oecd.org/els/benefitsandwagesstatistics.htm). 2012 data.