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**Assessment of the 2013 national reform programme and convergence programme for
POLAND**

Accompanying the document

Recommendation for a COUNCIL RECOMMENDATION

**on Poland's 2013 national reform programme and delivering a Council Opinion on
Poland's 2013 convergence programme for 2012-2016**

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EXECUTIVE SUMMARY

Economic outlook

According to the Commission's spring 2013 forecast, Poland's economic activity is expected to slow down, after an already sluggish 2012, to 1.1% in 2013 on the back of falling domestic demand and a difficult global environment, the weakest outcome in two decades. Growth is expected to pick up again to 2.2% in 2014. The unemployment rate is forecast to rise from 10.1% in 2012 to 10.9% in 2013 and again to 11.4% in 2014. The current-account deficit is set to improve from 3.5% of GDP in 2012 to 2.4% of GDP in 2014. Inflation is projected to decrease strongly to 1.4% in 2013 (from 3.7% in 2012), in line with weak domestic demand, and to pick up to 2% in 2014 as domestic demand recovers.

In 2012, the headline government deficit amounted to 3.9% of GDP, which means Poland did not comply with the deadline of 2012 for the correcting the excessive deficit. Poland intends to correct the deficit by 2014, though according to Commission forecasts it will stick at 3.9% in 2013 and rise to 4.1% in 2014. The structural deficit (minus one-off and temporary measures) was 3.8% in 2012 and is estimated to fall to 3.3% in 2013 and 2.9% in 2014. Poland's medium-term objective is for a structural budget deficit of 1% of GDP by 2016, though there is considerable uncertainty over this target. General government debt is projected to remain below 60%, though it will rise from 55.6% of GDP in 2012 to 58.9% of GDP in 2014.

Key issues

Poland is the only economy in the EU that has posted positive growth throughout the crisis, though recent economic developments are less encouraging. Poland's good economic performance throughout the crisis was based on well suited macroeconomic policies, a strong manufacturing base and a price-competitive labour force.

Poland has undertaken reforms to tackle some of the challenges identified in the 2012 CSRs. The general government deficit has been reduced, but at 3.9% of GDP in 2012 (Poland's deadline for correction) it remains above the EU's 3% of GDP limit. The government has reformed the pension system, implemented vocational training reform and proposed further changes to the education system, which should help to address high unemployment. In addition, plans to liberalise professional services and improve research funding have continued.

However, Poland faces many other challenges, which require more ambitious and sustained efforts to sustain growth and create jobs. Challenges are concentrated in four areas: public finances, labour market participation, infrastructure and the business and innovation environment.

- **Public finances:** It is necessary to specify additional measures to correct the excessive deficit by 2014, particularly in the light of lower than expected growth, in order to maintain the confidence of financial markets. Improving the efficiency of healthcare is crucial to ensure the long-term sustainability of public finances. And there is

significant room for improvement on tax compliance, in particular by reducing the administrative burden on taxpayers and improving the efficiency of tax administration. Finally, reforms to improve budgetary coordination between the different layers of government are necessary.

- **Labour market, education and social policy:** Despite recent increases in the overall employment rate (to 64.7% in 2012), older workers, especially women, are not benefitting, owing partly to a lack of affordable childcare and care for dependent adults. Youth unemployment is growing (rising to 26.5% in 2012 from 17.2% in 2008), mainly due to insufficient match between education and the labour market needs. The labour market is divided into those that work under permanent contracts with a higher level of protection and those that are working under temporary employment contracts with limited possibilities to transit into permanent work. Fixed-term employment is particularly widespread among the young and often results in lower pay and limited access to vocational training. The share of population living at risk of poverty and social exclusion is high, notably among children and working poor (27.2% of the population in 2011). A special pension scheme for miners and an overly-generous social security system for farmers hold back productivity growth and prevent workers moving between regions and sectors.
- **Infrastructure:** Despite sizeable investments in the road network, the country's infrastructure, particularly its railway system as well as the energy networks and generating capacity, remains underdeveloped, which hinders growth. Poland still lags considerably behind other Member States when it comes to information and communication technology, and fixed broadband coverage is among the lowest in the EU.
- **Business environment and innovation:** Public and private research spending was 0.77% of GDP in 2011, compared to an EU average of around 2%, and further efforts are needed if Poland is to reach the national R&D target of 1.7% by 2020. Measures taken so far have not led to a visible improvement in innovation capacities of Polish companies which continue to underinvest in research and innovation. In particular, public instruments to support innovation are not well targeted; grant financing is predominant and more efficient instruments such as tax incentives or credits are hardly used. Poland performs worse than the EU average in terms of the efficiency of its public administration; reforms needs are most pressing in the judicial system and the tax administration.

1. INTRODUCTION

In May 2012, the Commission proposed a set of country-specific recommendations (CSRs) for economic and structural reform policies for Poland. On the basis of these recommendations, the Council of the European Union adopted six CSRs in the form of a Council Recommendation in July 2012. These CSRs concerned public finances, the pension system, education and training, the labour market, the business environment, energy, transport and deregulation. This Staff Working Document (SWD) assesses the state of implementation of these recommendations in Poland.

The SWD assesses policy measures in light of the findings of the Commission's Annual Growth Survey (AGS)¹ and the Alert Mechanism Report (AMR),² which were published in November 2012. The AGS sets out the Commission's proposals for building the necessary common understanding about priorities for action at national and EU level in 2013. It identifies five priorities to guide Member States to renewed growth: pursuing differentiated, growth-friendly fiscal consolidation; restoring normal lending to the economy; promoting growth and competitiveness for today and tomorrow; tackling unemployment and the social consequences of the crisis; and modernising public administration. The AMR serves as an initial screening device to determine whether macroeconomic imbalances exist or risk emerging in Member States. The AMR found positive signs that macroeconomic imbalances in Europe are being corrected. To ensure that a complete and sustained rebalancing is achieved, 14 Member States were selected for a review of developments in the accumulation and unwinding of imbalances.³

Against the background of the 2012 Council Recommendation, the AGS and the AMR, Poland presented updates of its national reform programme (NRP) and of its convergence programme on 30 April 2013. These programmes provide detailed information on progress made since July 2012 and on the government's plans. The information in these programmes provides the basis for the assessment made in this Staff Working Document.

The national reform programme went through a limited consultation process involving different stakeholders including, *inter alia*, representatives of local and regional authorities, trade unions and employers' organisations. No consultation process took place for the convergence programme.

Overall assessment

The analysis in this SWD leads to the conclusion that Poland has made limited progress on measures taken to address the CSRs of the Council Recommendation. On the positive side, the country managed to reduce further its fiscal deficit. It implemented the reform of the pension system, made progress on its vocational training reform and proposed further changes to the education system. Notwithstanding these important achievements, reform efforts were limited, particularly as regards the fiscal framework, childcare facilities, labour market, an innovation-friendly business environment, energy, transport and deregulation. Therefore, in these areas, the challenges identified in July 2012 and reiterated in the AGS remain valid.

¹ COM (2012) 750 final.

² COM (2012) 751 final.

³ 13 in-depth reviews were published on 10 April 2013. While selected for an in-depth review in the AMR, Cyprus was ultimately not reviewed under the Macroeconomic Imbalance Procedure in view of the advanced preparations for a financial assistance programme.

Poland's most pressing challenges are in public finances, labour market participation, infrastructure development, and the business and innovation environment. The budget deficit has to be further reduced to correct the excessive deficit, to subsequently make progress towards the medium-term objective (MTO) and to maintain the confidence of financial markets. There is significant room for improvement on tax compliance.

Despite recent progress, the labour force participation rate, which is still low, is another major concern in the medium to long term, given an ageing population. Only 64.7% of the population between the ages of 20 and 64 is active on the labour market, and the rates are even lower for youth and elderly people (notably women). Youth unemployment has continued to rise and there are signs of labour market segmentation affecting young people. The efficiency of public administration needs to be significantly improved. Despite sizeable investments in the road network, the country's infrastructure, particularly its railway system, remains underdeveloped and is thus a factor that severely hinders labour mobility, foreign investment and growth. The low level of R&D spending and poor innovation performance is another important policy issue. Finally, in the light of persistent uncertainties in international financial markets, continued prudent and pre-emptive policies in financial regulation and supervision remain important.

The policy plans submitted by Poland address most of the challenges identified in last year's Staff Working Paper, and broad coherence between the two documents has been ensured. The national reform programme confirms Poland's commitment to address shortcomings in the areas of low employment, youth unemployment, the education system and unjustified restrictions on professional services. The convergence programme reiterates Poland's commitment to continue fiscal consolidation, improve the budgetary position towards the medium-term objective and to ensure the long-term sustainability of public finances in line with the Stability and Growth Pact. However, in some areas, in particular innovation-friendly business environment and the quality of fiscal consolidation, the programmes lack the ambition to address the challenges in a comprehensive way.

2. ECONOMIC DEVELOPMENTS AND CHALLENGES

2.1. Recent economic developments and outlook

Recent economic developments

In 2012 and early 2013, growth and employment in Poland were strongly affected by the general weakening of global activity and on-going fiscal consolidation. The year 2012 saw a steady decline in economic performance and a growth rate of only 1.9%. While exports, driven by sustained price- and non-price competitiveness gains, supported the economy, domestic demand was sluggish. In particular, private consumption growth was disappointing as labour market prospects worsened, real wages declined and consumer sentiment deteriorated.

Against this backdrop, investment growth was negative and further hampered by worsening financing conditions and a slowdown in public investment. Consumer price inflation remained high at 3.7% in 2012 as a result of currency depreciation, high commodity prices and a rise in administered prices. Faltering economic growth limited labour demand and the unemployment rate rose from 9.7% in 2011 to 10.1% in 2012. The current account deficit improved from 4.9% in 2011 to 3.5% in 2012, mainly on account of cyclical factors.

Economic outlook

According to the Commission 2013 spring forecast, a weak economic outlook for Poland's main trading partners is expected to hamper domestic confidence, worsen the situation of exporters and ultimately constrain the growth of domestic demand in 2013. Real GDP is forecast to rise by 1.1% in 2013. Economic activity is set to get no support from sluggish public investment, due to fiscal consolidation needs and completion of EU co-financed projects in previous years. Uncertain demand prospects and weak global sentiment are expected to impede private investment. Moreover, private consumption is likely to suffer from weak growth in disposable income and a rise in household savings.

Domestic demand is likely to pick up only in 2014, when the euro area is expected to recover. Prospects for better growth in the global economy are set to positively impact prospects for Polish exporters, overall confidence and ultimately labour market conditions and consumer sentiment fuelling growth in private consumption. Against this backdrop and supported by accelerating credit supply, private investment is also expected to rise. Imports are expected to grow in parallel, due to accelerating domestic demand. The current account deficit is set to improve from 3.5% of GDP in 2012 to 2.4% of GDP in 2014. Inflation is projected to decrease strongly to 1.4% in 2013, in line with weak domestic demand, and to pick up to 2% in 2014 as domestic demand recovers.

National reform programme and convergence programme share the same macroeconomic outlook. For 2013, the authorities project real GDP growth of 1.5% and a stronger increase in private consumption and private investment compared to the Commission 2013 spring forecast. The contribution of domestic demand to growth (+0.8 pp) is therefore over optimistic. Moreover, for 2014, the Polish authorities forecast real GDP growth of 2.5%, higher than the Commission 2013 spring forecast (+2.2%). The macroeconomic scenario does not include an estimate of the impact of structural reforms on macroeconomic variables.

2.2. Challenges

Poland faces significant challenges as regards public finances, labour market participation, youth unemployment, education, efficiency of healthcare, business environment, and efficiency of public administration and innovativeness of the economy. These challenges were identified in the 2012 SWD and reflected in the Council Recommendations issued for Poland. As suggested by the AGS and the AMR, these challenges remain fully or partly relevant. In addition, new challenges have appeared in the light of recent economic developments.

One major challenge relates to public finances. Continued fiscal consolidation is required to correct the excessive deficit and subsequently make progress towards the medium-term objective and to maintain the confidence of financial markets. A higher share of growth-enhancing expenditure (education, research and innovation) remains a prerequisite for sustaining good macroeconomic performance. Improving the efficiency of healthcare is crucial in view of the long-term sustainability of public finances. Moreover, structural weaknesses in the fiscal framework are a challenge: poor monitoring of budget implementation, discrepancies between the public accounting and reporting system and the European System of National and Regional Accounts (ESA95), as well as problems with coordination between various tiers of the general government in the annual and multi-annual budgetary planning all need attention. Tax compliance remains a focal point in terms of combating the shadow economy. Reducing the administrative burden on taxpayers and improving the efficiency of tax administration also need attention.

In the labour market, low employment rates of older workers, women in particular, linked to a relatively low effective retirement age and sector-specific pension systems pose a challenge. Despite the progress observed since 2005, employment rate of people aged 55-64 is the fifth lowest in the EU, and the average exit age from the labour market is still very low. A very marked gap with the EU average is observed in relation to older women out of whom only 29.2% are employed. Possibilities for early retirement have been significantly reduced, but there is still a generous special pension scheme for miners. Women's participation in the labour market is very low, owing partly to the lack of affordable childcare, as well as lack of quality care for dependant adults. While some positive steps have been taken to increase the availability of childcare facilities, the childcare system still fails to take into account the geographical distribution of demand and there are still too few places available. The overly generous social security system for farmers (KRUS) creates incentives for small-scale farmers to remain in the agricultural sector. This results in hidden unemployment in rural areas, holding back productivity growth and keeping regional and sectoral labour mobility at bay.

Subdued growth puts strains on the employment prospects of the young. Unemployment among young people is growing and the youth employment rate is below the EU average. In addition, the widespread use of civil law contracts and fixed-term employment often results in lower pay and limited access to vocational training; barriers to move to more sustainable forms of employment should be removed. Public Employment Services focus too narrowly on administrative tasks, while activation, job search, career guidance and retraining are still of relatively low quality and do not satisfy employers' needs. This aggravates the mismatch between the supply of skills and labour market needs, because of the low quality and relevance of higher education and poor access to good quality apprenticeships and work-based learning.

Poland lacks an effective social protection system. It invests a very low share of its GDP (below 10%) in social protection (excluding pensions), the coverage and the level of social benefits and housing support are low. The benefits are poorly targeted with only 7.5% of non age related social protection benefits means-tested (compared to the EU27 average of 14.7% in 2010) The share of the population living at risk of poverty and social exclusion is high, notably among children and the working poor. Having a job is not a sufficient safeguard against poverty and social exclusion. On the other hand, in-work benefits are limited and insufficient to prevent slipping into long-term unemployment.

Regarding the structure of the economy, Poland's export capacities are concentrated at the lower end of the value chain, while the innovation and R&D framework is fragmented and suffers from underinvestment. Poland's good economic performance throughout the crisis was based on a strong manufacturing base and a price-competitive labour force. In a medium-term perspective, however, a shift towards an innovation-driven economy seems warranted. Measures adopted so far have not led to a visible improvement in the innovativeness of Polish companies. Low public R&D spending, weak linkages between science and industry, a low level of in-house technological innovation, fragmentation of R&I policies and severe underinvestment in research and innovation in the private sector are key challenges in this respect.

Low level of domestic savings hampers the creation of an innovative economy. So far, Poland has relied largely on continued inflows of foreign capital, while domestic savings were less important. Although capital inflows have an important role to play in financing investments, dependence on foreign capital in the current context of heightened financial market volatility points to the importance of vigilant financial supervision as well as carefully

designed prudential regulation to avoid abrupt capital reversals. Moreover, Poland's low domestic savings rate poses a challenge, as an increase, for example, through more widespread use of long-term savings instruments, would support growth potential of the economy.

Finally, a burdensome business environment and lengthy as well as complicated interaction with the public administration impede growth and competitiveness. Limited competition among incumbent electricity suppliers, insufficient interconnections with other Member States and ageing energy generation capacity keep energy prices high. Moreover, Poland's underdeveloped and neglected transport infrastructure, especially in the rail sector, continues to be a major growth bottleneck. Businesses would greatly benefit from improvements in tax administration, further streamlining of procedures for granting construction permits, starting up and closing down businesses, faster insolvency proceedings and appeals procedures in the second and highest instance administrative courts, as well as from better contract enforcement and property registration. Finally, lifting unjustified restrictions in the field of professional services would reduce costs of doing business and boost productivity in the economy.

3. ASSESSMENT OF POLICY AGENDA

3.1. Fiscal policy and taxation

Budgetary developments and debt dynamics

In its 2013 convergence programme, Poland confirms its plans to further improve its fiscal position and to progress towards correcting the excessive deficit and meeting the medium-term budgetary objective (MTO). The objective of the budgetary strategy outlined in the programme is to improve the general government balance to 3.5% in 2013 and 3.3% in 2014. The planned consolidation path is thus not sufficient to bring the headline deficit below 3% of GDP by the end of 2014. The programme confirms the previous MTO of -1% of GDP and aims to reach it by 2016 (compared to 2015 in the previous programme). The MTO reflects the objectives of the Stability and Growth Pact.

In 2012, the general government deficit amounted to 3.9% of GDP, well above the reference value of the Treaty and the 2.9% projected in the previous year's programme. This was mainly due to the economic slowdown in 2012, which had a negative effect on revenues, in particular indirect and direct tax revenues. With the deficit reaching 3.9% in 2012, Poland did not comply with the deadline of 2012 for the correcting of the excessive deficit, even after taking into account the direct costs of pension reform.

The general government deficit projected in the programme is lower than the projected deficits of 3.9% and 4.1% of GDP in the Commission's 2013 spring forecast. The difference stems mainly from the Polish authorities' higher GDP growth forecast. Moreover, the Commission forecast does not take into account the decision to keep VAT rates at their current level instead of lowering them back to their pre-2011 level, as provided for in legislation. This was announced in the 2013 update of the Polish Convergence Programme. The (recalculated) structural balance⁴ from the convergence programme improves by 1% in

⁴ Cyclically adjusted balance net of one-off and temporary measures, recalculated by the Commission services on the basis of the information provided in the programme, using the commonly agreed methodology.

2013 and 0.5% in 2014. The difference in the structural balance between the convergence programme and the Commission 2013 spring forecast is 0.6% in 2013 and 0.7% in 2014.

The adjustment envisaged by the programme is front loaded, with an improvement in the headline deficit by 0.4% in 2013 and 0.2% in 2014. It is based on the expenditure side, with the expenditure-to-GDP ratio falling by 1.8 pps in 2012–2014 and a simultaneous fall in revenue-to-GDP ratio by 1.2 pps. The main downside risk to budgetary targets in 2013 and beyond is weak budget implementation and strong pro-cyclicality of indirect and direct tax revenues.

Box 1. Main measures	
Main budgetary measures	
Revenue	Expenditure
2012	
<ul style="list-style-type: none"> • Changes in excise duty regulations (+0.1%) • Tax on copper and silver extraction (+0.1%) • Freeze of PIT thresholds (+0.1%) • Increase in dividends from state-owned companies due to exceptionally high profits (+0.1%) (one-off) 	<ul style="list-style-type: none"> • Expenditure rule (including nominal freeze in wage fund) (-0.1%) • Decrease in complementary payments to farmers (-0.1%)
2013	
<ul style="list-style-type: none"> • Freeze of PIT thresholds (+0.1%) • Amendment of the pension reform (-0.1 %) • Digital dividend (+0.1%) (one-off) • Increase in dividends from state owned companies (+0.2%) (one-off) 	<ul style="list-style-type: none"> • Expenditure rule (including nominal freeze in wage fund) (-0.1%) • Wage increases for university teachers and soldiers (+0.1%)
2014	
<ul style="list-style-type: none"> • Maintaining the VAT rates raised temporarily in 2011 (avoiding -0.4%) • Reinstatement of VAT reimbursement on the purchase of cars and fuel (-0.1%) • Freeze of PIT thresholds (+0.1%) 	<ul style="list-style-type: none"> • Expenditure rule (including nominal freeze in wage fund) (-0.1%) • Extension of maternity leave (+0.2%) • Wage increases for university teachers and soldiers (+0.1%) • Reduction in national direct payments to farmers (-0.1%)
2015	
<ul style="list-style-type: none"> • Freeze of PIT thresholds (+0.1%) 	<ul style="list-style-type: none"> • Expenditure rule (including nominal freeze in wage fund) (-0.2%) • Reduction of national direct payments to farmers (-0.2%) • Wage increases for university teachers and soldiers (+0.1%)
2016	
<ul style="list-style-type: none"> • Freeze of PIT thresholds (+0.1%) 	<ul style="list-style-type: none"> • Expenditure rule (including nominal freeze in wage fund) (-0.3%) • Reduction in national direct payments to farmers (-0.1%)
<p>Note: The budgetary impact in the table is the impact reported in the programme, i.e. by the national authorities. A positive sign implies that revenue / expenditure increases as a consequence of this measure. The degree of detail reflects the information made available in the convergence programme and, where available, of a multiannual budget.</p>	

After correcting the excessive deficit by 2014, Poland intends to reach the MTO of -1% by 2016. However, there is considerable uncertainty over this target. According to the information provided in the programme, the (recalculated) structural balance is projected to improve by 0.3 pp in 2015 and 0.7 pp in 2016. At the same time, the growth rate of government expenditure, net of discretionary revenue measures, over the years 2015–2016 is

expected to be below the reference medium-term rate of potential GDP growth of 2.45% and to respect the expenditure benchmark. Following an overall assessment of the budgetary plans, with the structural balance as a reference, including an analysis of expenditure net of discretionary revenue measures, the minimum adjustment path towards the MTO in 2015-2016 is respected but does not enable Poland to reach the MTO by 2016, as the (recalculated) structural balance is projected to reach -1.2% that year.

General government debt is projected to remain below 60% of GDP in Poland over the programme period. The national authorities forecast a slightly increase, from 55.6% of GDP in 2012 to 55.7% of GDP in 2014 (then a decrease to 54.5% by 2016), whereas the Commission, taking account of possible risks to the consolidation plans and debt decreasing items, expects an increase to 58.9% of GDP in 2014. Medium-term debt projections (see Graph below Table V in annex) indicate that full implementation of the programme would put debt on a downward path by 2020.

Box 2. Excessive deficit procedure for Poland

On 7 July 2009, the Council decided that there was an excessive deficit in Poland. The most recent Council Recommendation under 104 (7) TEC was adopted on the same date. The Council recommended that the Polish authorities should put an end to the present excessive deficit situation by 2012. To bring the general government deficit below 3% of GDP in a credible and sustainable manner, the Council Recommendation called on the Polish authorities to implement fiscal consolidation measures in 2009 as planned, to ensure an average annual structural budgetary adjustment of at least 1¼% percentage points of GDP, starting in 2010, and to spell out detailed measures needed to bring the deficit below the reference value by 2012. Reforms to contain primary current expenditure over the following years were also recommended.

An overview of the current state of excessive deficit procedures, including additional steps adopted after the finalisation of this Staff Working Document, is available on:

http://ec.europa.eu/economy_finance/economic_governance/sgp/deficit/index_en.htm (please refer to country sections at the bottom of the page).

Long-term sustainability

Overall, Poland appears not to face a risk of fiscal stress in the short run. Nonetheless, there are some indications that the macro-financial and competitiveness side of the economy could pose potential challenges. The country is at medium sustainability risk in a medium-term and a long-term perspective, conditional upon full implementation of the planned ambitious fiscal consolidation and on maintaining the primary balance well beyond 2014 at the level expected to be reached in that year. Government debt (55.6% of GDP in 2012 and expected to rise to 58.9% in 2014) is below the 60% of GDP Treaty threshold. Risks would be higher in the event of the structural primary balance reverting to lower values observed in the past, such as the average for the period 1998-2012.

Pressing issues to be addressed in the Polish healthcare system relate to limitations in access to care and cost inefficiencies.⁵ This is of particular importance, as healthcare spending is expected to grow considerably in the medium to long term, increasing the burden on public finances. Poland has limitations in access to care, especially for specialised treatment. The country has an above EU average number of acute hospital beds per 1000 inhabitants (4.4 in Poland versus 3.6 in the EU), but relatively few general practitioners. This implies cost-saving potential by shifting relatively costly hospital care towards primary and ambulatory care and strengthening the role of general practitioners as gate-keepers to further levels of care. In recent years, the Polish health sector has been undergoing a restructuring, with incentives to commercialise hospitals, some privatisation of healthcare institutions and recent attempts to improve the indebtedness of medical entities. However, more efforts are needed to enhance the efficiency and quality of public spending. In particular, cost efficiency within hospitals could be improved, for example, by linking remuneration to performance and improving management skills. Enhanced computerisation, leading to better information, communication and monitoring systems could further foster cost efficiency gains in the sector.

Fiscal framework

The Polish fiscal framework is composed of three main elements: (i) fiscal rules, applicable to general and local levels of government separately, (ii) medium-term programming (based on the Multiannual Financial Plan of the State and Multiannual Financial Projections for local governments), and (iii) performance budget system. At the level of general government, a debt rule, set out in the Constitution and Public Finance Law, puts a ceiling on the general government debt-to-GDP ratio, while a temporary expenditure rule limits the annual nominal growth of all newly enacted expenditure items and existing discretionary items to the inflation rate (CPI) plus 1%. At the local level, there is a complex set of deficit, expenditure and debt rules, not compatible with the rules applying to central government.

As of mid-2013, the Polish government has not yet implemented a permanent expenditure rule consistent with the ESA by 2013, as recommended by the Council in 2012. The convergence programme provides a broad outline of the planned expenditure rule without specifying an exact date, but mentions an obligation to introduce it by 2013. The current outline mentions a nominal target, instead of a structural one. There is still no draft law, and details are not known and thus, so progress depends on whether the government will ultimately deliver. There has also been no progress in medium-term planning and improving coordination among different levels of government when it comes to the budgetary process. The government has dropped plans to enact a new deficit rule for local government, arguing that the current fiscal framework has been successful in containing the fiscal balance of local government. It is also not yet known whether compatibility between the local and the central expenditure rules and the mechanisms to implement and monitor the process will be ensured.

⁵ See: Joint EC(ECFIN)-EPC Report on Health Systems at: http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/pdf/ocp74_en.pdf, and Annual National Report 2012: Pensions, Health Care and Long-term Care at http://www.socialprotection.eu/files_db/1276/asisp_ANR12_POLAND.pdf

Tax system

Overall composition of tax revenue in Poland compares favourably to the EU average. In 2011 (latest available data), 42.7% of tax revenues came from growth-friendly taxes (i.e. taxes on consumption and recurrent property, which are less detrimental to growth), compared to the EU GDP-weighted average of 36.7%. Of that, a significant share is raised from indirect taxes. Poland has one of the highest levels of revenue from consumption taxes other than value-added tax (VAT), such as excise duties on alcohol and tobacco (1.95% of GDP compared to 0.9% EU GDP weighted average), recurrent property taxes (1.2% of GDP compared to 1.3% in the EU) or energy taxes (2.2% of GDP, compared to 1.8% in the EU). The rise in disability pension contributions (from 4.5% to 6.5%) and the nominal freeze of tax brackets increased the tax-wedge last year. However, despite an increase in the implicit tax rate on labour since 2008 by 0.5 pp, the overall tax burden on labour in Poland Poland is still relatively low compared to the EU average.

Poland has some potential for improving VAT efficiency by extending the scope of the standard 23% rate. The VAT revenue ratio (measuring actual VAT revenues as a percentage of theoretical revenue if the standard rate were applied to all final consumption) is 49.3% — well below the EU average of 54.7% [2011]. The reduced rates (5% and 8%) apply to a relatively wide range of goods and services. At the same time, there is scope for broadening the tax base in direct taxation by cutting tax expenditure.

There is scope to improve the effectiveness of environmental ('green') taxation through better targeting. For instance, Poland applies an excise duty rate on passenger cars with an engine capacity above 2000 cm³ that is six times higher than on other passenger cars, but is one of the very few Member States applying vehicle taxes without explicit CO² or fuel-efficiency differentiation. Moreover, some excise duty exemptions or lower rates are applicable to certain users and uses of fossil fuels, driven by reasons other than environmental considerations.

The development and implementation of a comprehensive tax compliance strategy remains a key challenge. At least three elements are of importance: combating the shadow economy, reducing the administrative burden on taxpayers and increasing the efficiency of tax administration. A report published in November 2012 on the transformation of the Polish revenue administration into an efficient, electronic-oriented service appears to be a good basis for future action. Moreover, Poland has started work on a general anti-avoidance rule (GAAR) as well as on the simplification of some procedures. In 2012, some compliance rules were relaxed and more electronic filing could be expected in 2013 due to removal of the certified signature condition for VAT returns. Still, Poland remains one of the most burdensome administrations in the EU in terms of time needed to comply with tax requirements and the high administrative cost of revenue collection (1.72% of tax collected in 2009). A recent Ministry of Finance survey showed that the Polish tax authorities face a heavy workload on tasks related to debt enforcement and recovery for other government bodies and communes. It appears that 78% of such tasks are not tax-related. This could point in the direction of an issue with tax administration efficiency. The Ministry of Finance plans to address this by reorganising of the tax administration possibly starting as of 2014. Progress on a comprehensive tax compliance strategy would enable Poland to comply with the 2012 country specific recommendations, as improved efficiency in tax collection and lower tax evasion would mean higher revenues, given the existing tax structure.

3.2. Financial sector

In recent years, Poland's financial sector has been profitable and increased its capital buffers despite a recent increase in non-performing loans. The capital adequacy ratio (Tier 1) for the banking sector as a whole increased to 13.1%, well above the level required under the Basel III agreement. Financial institutions in Poland continued to benefit from relatively benign macroeconomic conditions and increased their profits by 4% in 2012. However, the loan portfolio quality deteriorated: the proportion of non-performing loans (domestic definition) increased from 8.2% in 2011 to 8.8% in 2012 and is bound to rise throughout 2013. The weakening of the economy in 2012 negatively affected both loans to the construction sector and mortgages. Lending to the non-financial sector grew by 1.2% year-on-year to December 2012, driven mainly by domestic currency lending to corporates, while lending to households stagnated.

Nevertheless, Poland implemented measures to address credit risk in the banking sector, stemming from the fact that 32% of the outstanding loan portfolio comprises foreign currency loans (mainly housing loans in Swiss francs). In 2012, the Polish financial supervisor (KNF) introduced a supervisory resolution increasing the risk weight for foreign currency-denominated loans from 75% to 100%. Moreover, it plans to revise recommendation S,⁶ which should result in almost full abolishment of these loans in 2013. These regulatory and legal changes are relevant and effective, as the supply of new foreign currency housing loans was brought to a standstill in 2012. The stock of outstanding foreign currency housing credit fell from 24.7% of the outstanding loan portfolio in 2011 to 22% in 2012. However, these regulatory changes, in conjunction with recommendation T⁷ tightening the rules for consumption credit resulted in stagnation in the lending rate to households in 2012. To counterbalance this negative effect for domestic currency credit to households, the authorities changed recommendation T, easing the rules for obtaining consumer credit. Moreover, the revised recommendation S sets the maximum loan-to-value ratio for all housing loans at 80%, while easing some other rules (e.g. less stringent debt-to-income ratios).

Poland made progress in tackling the problem of the positive funding gap in the banking sector. The average funding gap (difference between loans granted to domestic non-financial sectors and deposits collected) in the banking sector declined from 15.2% in 2011 to 12.7% in 2012, as gradual deleveraging of foreign parent banks ultimately led domestic banks to compete for deposits. However, some subsidiaries of foreign financial institutions have a higher funding gap and often depend on the ability and willingness of their parent entities to continue funding. To address this dependency, which could pose a risk to the financial system, the KNF has recommended retaining 2011 and 2012 profits, depending on the capital situation of individual banks. Moreover, both the National Bank of Poland and the financial regulator are actively monitoring the financial situation of banks and have taken steps to revive the market for long-term bank securities. These steps are intended to strengthen the liquidity and capital positions of banks and to facilitate access to long-term funding. Overall, the country should continue with its prudent and pre-emptive regulatory policy, though more ambitious efforts to increase domestic deposits, ultimately lowering further the loan-to-deposit ratio, might be useful.

⁶ Recommendation S, enacted by the KNF, sets the rules to be followed by the banks granting mortgages.

⁷ Recommendation T, enacted by the KNF, sets the rules to be followed by the banks granting consumption loans.

Poland made limited progress in improving the availability of credit to small and medium enterprises (SMEs). The debt financing gap of SMEs was addressed by a national scheme of credit guarantees operated by the BGK (public bank) and regional and local guarantee or loan funds. However, the national guarantee system is still under reconstruction and has so far been offering guarantees on a commercial basis only, with guarantee fees too high to be attractive to businesses. Therefore, a new guarantee scheme for SMEs (de minimis scheme) was put in place in 2013, targeting working capital only, but at significantly improved conditions. The venture capital market is still not well developed. Innovative companies at the early stages of their development in particular have difficulties in getting financing. The National Capital Fund active in this area became operational in 2010. By the end of 2012, 15 funds received co-financing and made investments in 36 companies. Moreover, the Polish Growth Fund of Funds, created in 2013 by the European Investment Fund (EIF) and BGK, intends to stimulate investments into venture capital, private equity and mezzanine funds.

3.3. Labour market, education and social policies

One of the strengths of the Polish economy is its endowment with labour and the regulatory set-up of the labour market. Compared to the EU-27, the labour force is relatively cheap⁸, labour taxes are comparatively low⁹ and labour laws provide for a substantial degree of flexibility¹⁰. Employment has been growing continuously since 2004, and the labour force has been growing recently. However, the economic slowdown resulted in a rise in the unemployment rate, especially among the young, and stagnating real wages, partly driven by the nominal freeze on public sector employees' salaries, contributing to an increase in the poverty rate.

In 2012, the Council Recommendations for Poland included a CSR concerning availability of apprenticeships and work-based learning, the quality of vocational training, matching of education outcomes with labour market needs, quality of teaching, and unjustified use of civil law contracts. There was also a CSR addressing low female labour market participation and entrenched practices of early retirement, as well as phasing out special pension schemes for miners and farmers.

Labour market policies

Poland has only partially addressed the challenge of low employment rates of older workers and phasing out special pension schemes for miners and farmers. The gradual increase and equalisation of the statutory retirement age between men and women will have a positive impact on the employment rates of older workers, but its implementation is protracted (equalisation to be reached in 2040). Moreover, there are still two remaining special retirement regimes. First, Poland has not delivered on the long-standing commitment to reform the special pension system for miners. The government, together with the social partners, has been working for the past year on a draft law limiting the early retirement age of

⁸ Real unit labour costs in Poland declined by 3.4% between 2005 and 2011, while remained unchanged in the EU.

⁹ Tax wedge on labour (amounting to 35.5% for a single individual in 2012) is slightly below the OECD average and much below the average for those EU member states which are also members of the OECD (41.8%).

¹⁰ Poland's rules for hiring and firing workers are relatively flexible, as measured by the OECD employment protection legislation (EPL 2008) indicators which for Poland amounts to 2.4 (OECD average is 2.25), the level of unionization is low and the wage bargaining system is highly decentralised (conducted mostly at the company level).

miners who do not work underground, but the law has not yet been adopted. Second, the oversized agricultural sector still employs almost 13% of the working population. A major reason for this is an ineffective social security scheme for farmers (KRUS) that hampers a sectoral shift away from agriculture towards more productive sectors and hinders regional mobility. Minor temporary changes introduced in 2011 (owners of farms larger than 6ha pay health contributions themselves) will be prolonged into 2013, but no permanent and credible solution has been proposed to solve the problem.

Poland started to implement a couple of short-term measures to improve the social activity of people over 60 years. These measures are credible, but only partially relevant, as their aim is not an increase in employment, but better participation of the elderly in social life. An integrated active ageing strategy to encourage older workers (notably women) to stay in employment longer and to raise the effective retirement age is still not being pursued. Such an approach would combine workplace improvements, labour market measures, reforms in the healthcare system, tax-benefit incentives and lifelong learning.

In terms of early childcare, government efforts concentrated on the implementation of the ‘Toddler programme’. As a result, the number of nurseries almost doubled over the last two years, but the total number remains extremely low in relative terms¹¹ and does not satisfy needs (36000 places compared to 400000 children born annually in Poland). Furthermore, most investment is concentrated in metropolitan areas and selected municipalities (more than 90% of the total). In 2013, expenditure on early childcare is expected to double, reaching EUR 25 million. Despite a government declaration on increasing spending for pre-school education to EUR 80 million in 2013, this has been postponed to 2014. Thus, the government target of ensuring a place in pre-school education for every eligible child by 2016 may not be met. In spite of growing demand for pre-school education, Poland has not yet fully addressed the need for qualified teaching staff. The measures targeting childcare facilities are only partially relevant and lack credibility. Furthermore, they need to be sustained over time to have a tangible impact on women's participation in the labour market. This is all the more important considering the role that quality childcare can play in supporting child development, breaking the cycle of disadvantage.

In parallel, the government has decided to extend parental leave by six months, paid at 60% of salary, in addition to the current six months of maternity leave with full pay and unpaid parental leave of maximum three years. This prolonged six-month leave is optional, can be shared between both parents and combined with part-time work. The effects of the planned increase of parental leave on the re-integration of mothers into the labour market should be assessed. Furthermore, given the substantial funding for the proposed solution (rising from a maximum of EUR 850 million in 2014 to EUR 1.1 billion in 2018) and the lack of childcare infrastructure, the question arises as to whether funding priorities are set correctly.

Another major concern is growing unemployment among the young, reaching 26.7% (2012). The government has acknowledged this and a further EUR 163 million in ESF funding has been deployed to support young people. Through the Youth Employment Initiative, the ESF will reinforce its action targeting to young people not in employment, education or training. It will be important to successfully implement a Youth Guarantee.¹² In

¹¹ 2% of children aged 0-3 years have a place, while the EU-average is 28% (Eurostat, EU-SILC 2010)

¹² Council Recommendation of 22 April 2013 on establishing a Youth Guarantee (2013/C 120/01) to ensure that all young people under the age of 25 years receive a good-quality offer of employment, continued education, an apprenticeship or a traineeship within four months of becoming unemployed or leaving formal education.

addition, the Ministry of Labour has been implementing a pilot project 'Your Career – Your Choice', which aims to test innovative tools for labour offices to deal with young unemployed people. The pilot project is relevant and credible, but its scale remains limited, given the importance of the problem.

Further efforts were undertaken to improve placement services and to reduce the workload of the Public Employment Services. A pilot project, 'Partnership for Jobs' for outsourcing employment services to private agencies, has been implemented in three regions. A draft law introducing job efficiency monitoring of active labour market policies through rewarding the most successful labour offices has been sent to social consultations. Proposed changes are relevant and ambitious, but the reform is as yet at a very early stage and its effects remain to be seen.

Poland took only minor steps to address the extensive use of temporary employment. The country has the third highest share of involuntary fixed-term employment in the EU, especially in the 15-24 age group. Often seen as an instrument for the unemployed to re-enter the labour market and later move into a permanent contract, this does not appear to be the case for most workers in Poland. Contracts with a probationary period, which could be used as a 'screening device' by employers and might allow for a smoother transition between unemployment and permanent employment, cannot pay this role, as they are of limited duration. The extensive use of fixed-term contracts appears to work against the quality of human capital and productivity, as temporary employees tend to have less access to vocational training. In addition, the use of so-called civil law contracts that have significantly reduced social protection rights compared to standard employment contracts is widespread. According to the government report 'Youth 2011', over 50% of young workers (18-32 years) are employed on the basis of civil law contracts. The government is taking part in a discussion with social partners on possible changes to labour law as regards fixed-term contracts, permanent contracts and a contract for a probationary period. However, these discussions have not yet led to concrete results and the issue of labour market segmentation in Poland remains unaddressed.

Education policies

There is growing unemployment among the young because the low quality of teaching does not match labour market needs. The reform of the education and science system introduced in 2010-2011 was a first step in addressing the skills-jobs mismatch, strengthening university-business links and making the courses available more flexible. This was followed by further legislative amendments presented by the authorities in 2012, which differentiate between academic and vocational higher education institutions and introduce dual studies linking academic studies with practical training in companies. The authorities plan to reduce the number of graduates without jobs by publishing a list of faculties that received a negative opinion from accreditors. Finally, the European Social Fund (ESF) and the European Regional Development Fund (ERDF) are contributing to raising student numbers in mathematics, science and technology. All of these reforms are going in the right direction, but there needs to be more emphasis on enhancing structured and formalised cooperation between higher education institutions and enterprises, raising the qualifications of teachers and improving the quality of teaching materials, teaching soft skills and career guidance.

Regarding the need to increase the availability of apprenticeships and work-based learning, a reform of vocational education and training came into force in September 2012. This aims to involve employers in the education and examination system and to encourage schools to customise their curricula to labour market requirements. A new flexible formula of vocational exams has been introduced. The reform is credible, but companies need to be more involved in creating curricula and to be invited to sit on vocational education and training (VET) schools boards, and there need to be more quality training. Participants need to focus on improving transversal skills (ICT, communication, problem solving).

Further efforts are also required to enhance the skills profile of the workforce, focusing on older workers, low-skilled workers and the unemployed. The draft strategic document 'Prospects for Lifelong Learning' has not yet been approved and the responsibility for the strategy is continuously shifting between ministries. Thus, the recommendation calling on Poland to adopt a lifelong learning strategy has not been implemented.

Social policies

Poland is among the countries with the lowest real household income per capita and with one of the lowest statutory minimum wages in the EU. The wage penalty (the difference between average pay of employees on open-ended and fixed-term contracts) on fixed-term contracts, at nearly 28%, is the highest in the EU. Thus, nearly 12% of employees with fixed-term contracts face in-work poverty, which is double the rate among employees who hold a permanent contract¹³. Poland increased its minimum wage from PLN 1500 (EUR 375) to PLN 1600 (EUR 400) and the raised income ceilings for social assistance and family benefits, thereby raising the level of benefits. These measures are only partially relevant and are not sufficient to address the scale of the challenge, as many workers employed on civil law contracts are not covered by the minimum wage. The higher income ceilings conferring entitlement to social assistance and family allowances (the first since 2006) are only a partial adjustment. The change has not been coupled with any significant changes to the social protection system. Poland is one of the Member States whose spending on social transfers is the lowest and has the lowest impact on poverty reduction. The coverage of the unemployment benefit system in Poland is one of the lowest in EU (23.3% compared to the EU-average of 53.5%). The situation is not getting better, if one takes into account other benefits (such as sickness and disability): the rate is 34.2% - the lowest in the EU. The system is also characterised by low adequacy and coverage of social assistance and housing support.

Although the pension system in Poland currently provides a high degree of adequacy, this may become an issue in future, notably for low-wage earners and those with short working careers, predominantly women. The average duration of women's working life is only 29 years, thus adversely affecting their future pension entitlements, since accruals are tied to earnings-related lifetime contributions. The recent pension reform gradually increasing and equalising retirement age is a step in the right direction, though the so-called partial early retirement is available to men at 65 and women at 62. However, its long implementation period will have less favourable implications both for sustainability and for the adequacy of women's pension entitlements.

¹³ Source: SILC, 2011

3.4. Structural measures promoting growth and competitiveness

Poland has steadily experienced gains in its external competitiveness and further improvement is likely over the near term, though at a slower pace. The real effective exchange rate based on unit labour costs depreciated by nearly 7% over the last two years, while Poland's world export market share stabilised at around 1%. Further advances can be expected, but at a slower pace, as Poland is already close to the technology frontier. Although the business environment in Poland has improved in recent years (the country advanced 19 ranks in the World Bank's 2013 Doing Business survey from 74th to 55th, out of 183 economies), Poland still significantly lags behind compared to the rest of the EU.

In 2012, the Council Recommendations for Poland included two CSRs concerning structural measures promoting growth and competitiveness. These refer to creating an innovation-friendly business environment and to access to finance for research and innovation activities. The CSRs also cover investment in energy generation and efficiency, development of the electricity grid, cross-border exchange of electricity and competition in the gas sector.

Transport infrastructure

Despite some progress, Poland's underdeveloped transport infrastructure remains a major bottleneck to growth. While major road infrastructure projects advanced, railway investment projects are still largely delayed.

The degraded rail infrastructure requires substantial and increasing investment since only 36% of approximately 20000 km of rail lines in operation are in good technical condition.¹⁴ Improving the railway infrastructure through effective and swift implementation of co-financed railway projects still requires a lot of effort. In 2012, the government replaced the management board of the state-owned railway operator holding (PKP SA); the new management is expected to improve PKP's corporate governance and profitability and presented a reform plan in late 2012. While actions are indeed required, the plan to reduce costs by closing several thousand kilometres of unprofitable railway lines raised some controversies¹⁵ and would be likely to lead to a further displacement of rail transport onto roads. The functioning of the railway market also poses a significant challenge, with obstacles such as high railway infrastructure charges (despite its very poor state), the weak position of the rail regulator (UTK) and problems with access to freight terminals and rail-related services faced by new entrants.

As regards road infrastructure, progress has been made, but not all regions have benefited to the same extent. Overall, more than 620 km of new motorways and expressways were completed in 2012, and another 600 km are currently under construction. The government has substantially improved traffic conditions and road safety on some of the major transport corridors, including the TEN-T network. However, due to higher-than-expected construction costs, the network is still quite underdeveloped in a number of regions,

¹⁴ The condition of railway infrastructure is reflected by poor consumer assessment of train services (second lowest in the EU). Trust in providers, comparability of offers and overall consumer satisfaction are amongst the four lowest ratings in the EU and the incidence of problems is above EU average. See 8th Consumer Markets Scoreboard, December 2012, European Commission, DG SANCO, http://ec.europa.eu/consumers/consumer_research/editions/cms8_en.htm.

¹⁵ First, the plan might constitute a breach of the rule on durability of EU co-financed operations, second, it would contravene various national and EU plans and objectives, including to increase the share of rail in passengers and freight transport and third, several of the lines have important feeder functions to the TEN-T network.

hampering their attractiveness for businesses. Problems with the road infrastructure programme included the bankruptcies of several road construction companies due to fierce price competition, often in public tenders, and allegations of irregularities in tender procedures, leading to a suspension of some EU funds in December 2012.

Information and Communication Technologies

Despite recent efforts, Poland still lags considerably behind other Member States when it comes to seizing the growth potential of information and communication technologies (ICT). Fixed broadband coverage is among the lowest in the EU, both at national level and for rural areas.¹⁶ In addition, the actual award of spectrum to operators for the rollout of mobile broadband has been delayed and aggravates the problem of low fixed broadband coverage, especially in rural areas.¹⁷ Broadband and e-service projects co-financed from structural funds are delayed and are at risk of non-implementation. Although Poland has lately advanced to ensure full implementation of over EUR 1 billion of Structural Funds for broadband roll-out and has developed a first draft of the National Broadband Plan for the Commission, significant implementation difficulties remain. These could be addressed through better governance and coordination at national level.

R&D and innovation

Poland is among the EU countries with the lowest level of R&D expenditure and one of the worst performers in broader innovativeness indicators. The overall ratio of (public and private) R&D expenditures to GDP in Poland, at 0.77% in 2011, was among the lowest in the EU (EU average is approximately 2%). Polish enterprises have relied largely on technology absorption, i.e. application of already existing technologies through fixed capital investment¹⁸. While this has been successful in ensuring productivity gains and economic growth, a transition towards a more indigenous innovation-based model is needed in future. However, business R&D expenditure accounted for only 0.2% of GDP in 2011.¹⁹ Poland is ranked among the modest innovation performers according to the Innovation Union Scoreboard 2013 (forth worse performer in the EU). Moreover, Poland is relatively weak in terms of high-impact scientific publications, patent applications, intensity of business researchers and in the number of public-private co-publications.²⁰

The country has started to act. However, further efforts are needed if Poland is to reach the national R&D target of 1.7% in 2020. Reforms of the science and higher education systems initiated a major restructuring, including support mechanisms to induce science-industry cooperation. The creation of two executive agencies — the National Science Centre for basic research and the National Centre for R&D for applied research — is intended to boost more competitive allocation of funding. However, no concrete evaluations are available on the real effect of these reforms. A more holistic approach is needed, linking efforts under

¹⁶ Based on the latest available EU-wide data (as of December 2011), validated in the Commissions' Digital Agenda Scoreboard, 24 and 50 pps. below the EU average respectively.

¹⁷ Poland has until 2015 to meet the requirements of Art. 6 of the Radio Spectrum Policy Programme (RSPP). So far, the country has assigned only 472 MHz of the required 1200MHz radio spectrum for wireless broadband. In particular, the 800 MHz band, essential for rural area coverage, has not been cleared and made available yet.

¹⁸ According to 'Science and Technology 2011' by Polish Statistical Office (2013), R&D represented 13% of Polish firms' innovation spending in 2011. The rest was capital expenditure on fixed assets, acquisition of external knowledge and software, training and marketing of new or improved products.

¹⁹ However, these statistics might underestimate private R&D due to the lack of appropriate incentives for business to declare them.

²⁰ European Commission, Directorate-General for Research and Innovation, 'Research and Innovation performance in EU Member States and Associated countries. Innovation Union progress at country level 2013'.

research, innovation and industrial policy, and ensuring that there are adequate instruments supporting the whole innovation cycle.

In particular, public policy instruments are not well targeted and are not tailored to different stages of the innovation cycle. Public R&D funding has been concentrated largely on the absorption of new technologies, and has been less successful in promoting indigenous research and innovation, especially at regional level. It is also mostly distributed through grants, supporting less risky stages of the innovation cycle. However, grant financing would be more beneficial for early high-risk stages of technology development, whereas less risky projects would benefit from equity and debt financing. Moreover, fiscal instruments, such as tax incentives or credits, are hardly used. Appropriate mobilisation of public funds, including EU funds in 2014-2020, to stimulate business R&D is crucial in this context. More broadly, an appropriate business environment enabling successful SMEs to grow, innovate and move to higher value added is also important.

Environment and energy

Environmental challenges identified in the 2012 SWD remain valid. Recent reforms in the municipal waste system are expected to improve its coverage and separate collection. However, low landfill taxes and insufficient use of other economic instruments such as 'Pay-as-You-Throw' and producer responsibility schemes continue to compromise the potential of waste recycling. Insufficient investments in largely outdated water networks, especially in big cities, endanger continued water availability for households and industry. Exposure of the urban population to air pollutants from energy production, transport and solid fuel-based residential heating remains high.

Poland could face difficulties in delivering on its commitment to limit the increase of greenhouse gas (GHG) emissions in non-ETS sectors. According to Poland's own projections, there will be no change in emissions by 2020 compared to 2005, but inventory data for 2011 show that emissions are higher than expected. Therefore, the accuracy of the projections needs to be reassessed and further measures might be required to meet its target.

With respect to energy generation, coal still remains the dominant source of fuel, while renewables remain at low levels. The share of renewable energy sources in final energy consumption was 10.4% in 2011; Poland was on track to meet its national action plan trajectory, with the exception of the electricity sector. However, the country still has to make a considerable effort to ensure continuous growth of its renewable energy sector to reach renewable energy targets for 2020. Thus, there needs to be faster removal of non-cost barriers to large-scale development of renewable energy, especially in the electricity sector, which is furthest from Europe 2020 target. However, the necessary legal requirements have not yet been implemented, because the legislation including the Draft Law on Renewable Energy proposed by Ministry of Economy in December 2011 has still not been adopted.

As far as energy efficiency is considered, potential gains remain very high in all sectors of Poland's economy and achieving them could support green growth. Poland set an indicative national energy efficiency target to stabilise its primary energy consumption at the level of 96 Mtoe²¹ in 2020. According to Eurostat, in 2010, primary energy consumption excluding non-energy uses in Poland had already reached 96.9 Mtoe. Keeping this level for 2020 could be a challenge because of projected economic growth, so further efforts in strengthening energy efficiency might be required. Large reductions could be achieved in the

²¹ Million tonnes of oil equivalent.

building sector through better insulation. In January 2013, Poland started a new white certificate scheme intended to deliver at least half the overall targeted energy savings. The start of the scheme is an important step in achieving energy efficiency. However, its progress requires close monitoring so that it is adjusted if the desired results are not delivered.

The domestic electricity grid is still congested, but plans are advancing to create more interconnection capacity with neighbouring markets. The Polish transmission system operator (TSO) — Polskie Sieci Energetyczne (PSE) — has prepared an ambitious investment programme, which envisages a new Poland-Germany interconnector and an upgrade of the two existing interconnections. A new 500MW link between Poland and Lithuania (LitPolLink, a part of the Baltic Energy Market Interconnection Plan (BEMIP)) is to be completed by October 2015. It remains to be seen whether the ambitious programme can be implemented in a timely fashion.

The key problem in the natural gas market remains a lack of diversification and lack of competition. Almost 90% of natural gas imports come from Russia. However, once new investments are finalised, this situation is expected to improve. These investments, co-financed by the EU, comprise an LNG import terminal (to be completed in 2014), a new interconnection with the Czech Republic and Germany, and new storage facilities. Furthermore, in an effort to introduce more competition, the Polish authorities strongly encourage the exploration of shale gas and have granted over 100 shale gas exploration licences. Although a gas exchange platform was initiated in December 2012, the phasing out of regulated prices is still to be implemented. This would stimulate competition in the gas sector, which remains very strongly concentrated, with the incumbent holding a share of around 97% in both wholesale and retail markets.

Professional services and competition

Unjustified restrictions in the field of professional services have been hampering economic growth. According to the European Commission database on regulated professions, Poland has the second highest number of regulated professions in the EU, more than double the EU average (368 in Poland compared to about 150 in the EU on average). In many cases, the requirements for access to a profession create unnecessary barriers to job creation and competition with a negative impact on the competitiveness of the sector. At the same time, these barriers to entry allow incumbents charging high prices thereby increasing the costs for doing business in other sectors and undermining the competitiveness and growth potential of the whole economy.

In 2012, Poland initiated a reform to facilitate access to regulated professions. However, the reform is less ambitious than initially announced, and behind schedule. The draft of the first (out of planned three) liberalising laws, covering 50 professions, was adopted by the Council of Ministers in September and is in the process of being adopted by parliament (according to the initial schedule, it was supposed to have been enacted by the end of January 2013). It should have been followed by two other laws covering the remaining targeted professions. Competition in postal services still encounters substantive regulatory barriers, notably with the broad VAT exemptions given to the incumbent which, in effect, prevent competitors from entering the postal market.

3.5. Modernisation of public administration

In the field of modernisation of public administration, the 2012 Council Recommendations for Poland mentioned a need to improve tax compliance as well as to simplify contract enforcement and requirements for construction permits.

Overall, Poland's performance in terms of the efficiency of its public administration is below the EU average²². Key problems include transparency of the public administration, complexity of tax compliance, increasing average length of proceedings in civil and commercial cases, long insolvency proceedings and low recovery rates. The use of e-Government in the public administration also remains below the EU average.

Improvements in public administration and policy design and delivery continue to be crucial to enhance the business environment. Although Poland has lowered its regulatory burden in 2012,²³ the country still scores significantly below the EU average on the costs and time needed to start up and wind up a business, the number of procedures and time necessary to obtain a construction permit, and the ease of dealing with the tax administration. Tax compliance rules remain complex, and taxpayers, as well as tax authorities, have difficulties in dealing with them. The construction sector is still waiting for the highly anticipated reform of the cumbersome legislation covering construction permits. The standard procedure to obtain all necessary registrations when setting up a limited liability company is overly lengthy, and take-up of internet-based registration is low. Bureaucracy and unproductive activities persist in dealings with public authorities, as the legislation on the reduction of administrative burdens does not envisage monitoring mechanisms, while the deregulation agenda lacks coordination. The deployment of e-services and e-administration is slow and lacks coherence, and citizens' use of e-government is also below the EU average. The November 2012 report on the e-tax system (e-podatki) notes these issues and proposes solutions. The finalisation of significant investments made to set up the Polish Point of Single Contact would bring efficiency gains and savings both for public administration and businesses.

There is scope for improvement in the justice system. The number of judicial proceedings is relatively high. Although the average length of proceedings in civil and commercial cases is still reasonable, it has been increasing steadily since 2007, which could become a matter of concern. In the same period, the duration of appeal procedures for administrative cases has doubled (445 days in the second and highest instances), and the clearance rate is very low (75%). Insolvency proceedings are long and recovery rates low. ICT tools for communication between courts and parties, which could help shorten proceedings and improve access to justice for businesses and citizens, are not very well developed. In 2012, a legislative amendment to the code of civil procedure entered into force, making proceedings in business cases simpler and less formal.

²² World Bank government effectiveness ranking (2012) ranks Poland 23rd among EU-27 member states.

²³ World Bank, Doing Business report 2013.

4. OVERVIEW TABLE

2012 commitments	Summary assessment
Country-specific recommendations (CSRs)	
<p>CSR 1: Ensure planned progress towards the correction of the excessive deficit. To this end, fully implement the budget for the year 2012 and achieve the structural adjustment effort specified in the Council recommendations under the EDP. Thereafter, specify the measures necessary to ensure implementation of the budgetary strategy for the year 2013 and beyond as envisaged, ensuring an adequate structural adjustment effort to make sufficient progress towards the MTO, including meeting the expenditure benchmark. Minimise cuts in growth-enhancing expenditure in the future and improve tax compliance.</p>	<p>Limited progress in the implementation of the CSR. Poland did not correct the excessive deficit in 2012, which came in at 3.9% of GDP. It made very limited progress in minimising cuts in growth-enhancing expenditure as significant part of deficit reduction comes from cuts in investments (driven in turn by the EU funds cycle). The same applies to tax compliance — tax compliance rules will be relaxed as, upon taxpayer’s request, the tax authorities will have to reduce the tax advances payable and tax base will be broadened. On 1 October 2012, the list of e-declarations which can be transmitted without a secure e-signature has been extended to some declarations for VAT and for civil law actions tax.</p>
<p>CSR 2: Speed up the reform of the fiscal framework by enacting legislation with a view to introducing a permanent expenditure rule by 2013. This rule should be consistent with the ESA. Take measures to strengthen the mechanisms of coordination among the different levels of government in the medium-term and annual budgetary processes.</p>	<p>Limited progress in the implementation of the CSR. The permanent expenditure rule is still pending and the government plans to enact it by the end of 2013. The current draft is not consistent with ESA. Very limited progress on strengthening mechanisms of coordination among different levels of government, government argues that no further effort required.</p>
<p>CSR 3: To reduce youth unemployment, increase the availability of apprenticeships and work-based learning, improve the quality of vocational training and adopt the proposed lifelong learning strategy. Better match education outcomes with the needs of the labour market and improve the quality of teaching. To combat labour market segmentation and in-work poverty, limit excessive use of civil law contracts and extend the probationary period to permanent contracts.</p>	<p>Some progress in the implementation of the CSR. While efforts have been undertaken to reduce youth unemployment, they should have been more ambitious given the scale of the challenge, and in light of establishing a Youth Guarantee. Poland has introduced several reforms in the area of education and training, which are relevant to tackle the challenges identified in the CSR. There need to be more efforts to enhance better cooperation between companies and schools and to raise the quality of the teaching offer. Improving the access to apprenticeships and work-based learning remains a priority. The adoption of the lifelong learning strategy is pending. The Government participated in a discussion with the social partners on the issue of labour market segmentation, but these discussions did not lead to concrete results. Some measures have been taken to combat in-work poverty, but they are unlikely to bring any noticeable effect.</p>
<p>CSR 4: Reinforce efforts to increase the labour market participation of women and raise enrolment rates of children in both early childcare and pre-school education, by ensuring stable funding and investment in public infrastructure, the provision of qualified staff, and affordable access. Tackle entrenched practices of early retirement to increase exit ages from the labour market. Phase out the special pension scheme for miners with a view to integrating them into the general scheme. Take more ambitious, permanent steps to reform the KRUS to better reflect individual incomes.</p>	<p>Some progress in the implementation of the CSR The number of childcare places is growing, but the offer of nurseries remains far too low to satisfy the needs. Poland has set a target to offer a place in pre-school education for every eligible child by 2016 but the funding to meet this target has not been increased. The Government proposal to extend the parental leave to 12 months could make it more difficult for mothers to come back onto the labour market and will also absorb substantial costs. A permanent and credible reform of KRUS still needs to be implemented. The draft Law reducing early</p>

	retirement possibilities only for miners working underground has not yet been adopted.
<p>CSR 5: Take additional measures to ensure an innovation-friendly business environment, by ensuring better links between research, innovation and industry, and by establishing common priority areas and instruments supporting the whole innovation cycle; improve access to finance for research and innovation activities through guarantees and bridge financing.</p>	<p>Limited progress in the implementation of the CSR. The reform of science and higher education has been a step in the right direction but only partially addresses the problem of poor innovation performance of Polish companies through fostering science-industry cooperation. More holistic approach is needed linking efforts under research, innovation and industry policy. There are no new initiatives in terms of facilitating access to finance. Delays in the adoption of key strategic documents (SIEG, PRP) hamper the implementation of possible improvements in access to finance, especially for innovative SMEs.</p>
<p>CSR 6: Intensify efforts to improve incentives for investment in electricity generation capacity and energy efficiency in the whole energy chain, and strengthen competition in the gas sector by phasing out regulated prices. Strengthen the role and resources of the railway market regulator and ensure effective and swift implementation of railway investment projects Reduce restrictions on professional services and simplify contract enforcement and requirement for construction permits.</p>	<p>Some progress in the implementation of the CSR. The reforms in the area of energy are delayed. Most of the measures in this sector are only at the preparation stage and therefore the outcome is unclear. However, in both electricity and gas sector some progress has been noticed, with launch of some projects in development and upgrade of the electricity grid (including interconnectors) and gas trading platform opened in December 2012. Minor progress with expected increase of resources of the railway regulator in 2013; railway investment projects are still largely delayed and a Task Force (Poland-European Commission) has been set up to monitor the progress and identify obstacles to implementation (some, but not sufficient progress in 2012). Poland has set a serious reform agenda to eliminate or reduce qualification requirements for up to 230 professions, although the reform is behind schedule.</p> <p>Contract enforcement: Implemented changes to the legal procedure, greater resources for enforcement lead to quicker procedures. Construction permits: no changes and progress.</p> <p>Concerning energy efficiency, there was some progress in 2012 mainly as regards investments in energy efficiency of public buildings using support from ERDF. However, in the view of the large needs for energy efficiency improvements in all sectors of economy, it may be necessary to consider a major increasing of energy efficiency allocations under the in the future financial framework 2014-2020 for EU Cohesion Policy Funds. One of the new main energy efficiency measure aimed to help Poland its 2020 target is the White Certificate system and it started its operation in January 2013 with first tenders for delivering energy savings planned to be launched in April 2013.</p>

Europe 2020 (national targets and progress)	
Employment rate target: 71%	Employment rate reached 64.6% in 2010 and 64.8% in 2011. Government's efforts concentrated rather on the supply side of the labour market. Resources directed into pro-employment investment are still limited. Simple measures aimed at stimulating GDP growth may not translate into an increase in stable jobs and to reaching of the employment target
R&D target: 1.7%	Gross domestic expenditure on R&D (in % of GDP) reached 0.74% in 2010 and 0.77% in 2011. Marginal progress has been made towards the achievement of the target.
Greenhouse gas (GHG) emissions target: 14% (compared to 2005 emissions, ETS emissions not covered by this national target).	Change in non-ETS greenhouse gas emissions between 2005 and 2010: + 9% [provisional data] According to the latest national projections submitted to the Commission and when existing measures are taken into account, the target is expected to be reached: 0% in 2020 compared to 2005 (with a margin of 14 percentage points). However, provisional inventory data for the year 2011 show that emissions are higher than expected in the projection. With a 9% increase since 2005, emissions are indeed already slightly higher than required as of 2013 under the Effort Sharing Decision. Therefore, projections need to be revised to assess whether Poland will be able to meet its 2020 GHG emission target.
Renewable energy target: 15% Share of renewable energy in all modes of transport: 10%	Share of total renewable energy in gross final energy consumption was 10.4 % in 2011 and 6.5 % in the transport sector. (Source: Eurostat. April 2013. For 2011, only formally reported biofuels compliant with Art. 17 and 18 of Directive 2009/28/EC are included). In 2011, Poland was on track of its national action plan trajectory, except electricity sector. No progress has been made on transposition of the Renewable Energy Directive and development of national legislation in energy sector including renewable energy.
Indicative national energy efficiency target for 2020: 13.6 Mtoe primary energy savings in 2020. The preliminary data suggests that the primary energy consumption level in 2020 would be 96 Mtoe.	Poland has set an indicative national energy efficiency target in accordance with Articles 3 and 24 of the Energy Efficiency Directive (2012/27/EU). However, it has neither expressed it, as required, in terms of an absolute level of primary and final energy consumption in 2020, nor has provided information on the basis on which data this has been calculated.

Early school leaving target: 4.5 %	The share of early leavers from education and training has slightly increased from 5.4% in 2010 to 5.7% in 2012. Poland is already well below the target set for 2020 for the EU average (10%). However, the national target is very ambitious and progress towards reaching the target has been reversed recently.
Tertiary education target: 45%	Tertiary educational attainment reached 35.3% in 2010 and 39.1% in 2012. More effort is needed to reach the ambitious national target set above the EU target.
Target on the reduction of population at risk of poverty or social exclusion in number of persons: 1.500.000	In 2011 the number of people at risk of poverty and social exclusion was reduced by 213.000. Poland has made a limited progress towards reaching the target. More efforts are needed to develop a comprehensive strategy of reducing poverty and fighting social exclusion.

5. ANNEX

Table I. Macroeconomic indicators

	1995-1999	2000-2004	2005-2009	2010	2011	2012	2013	2014
Core indicators								
GDP growth rate	6.0	3.2	4.7	3.9	4.5	1.9	1.1	2.2
Output gap ¹	1.8	-1.4	1.4	1.1	1.1	-0.7	-2.4	-2.8
HICP (annual % change)	11.3	4.3	2.8	2.7	3.9	3.7	1.4	2.0
Domestic demand (annual % change) ²	7.5	2.4	4.6	4.6	3.6	-0.2	0.2	1.6
Unemployment rate (% of labour force) ³	12.0	18.7	11.3	9.7	9.7	10.1	10.9	11.4
Gross fixed capital formation (% of GDP)	21.7	19.9	20.6	19.9	20.2	19.4	18.7	18.7
Gross national saving (% of GDP)	20.3	17.4	18.0	16.7	17.6	17.3	17.4	17.6
General Government (% of GDP)								
Net lending (+) or net borrowing (-)	-4.1	-5.0	-4.1	-7.9	-5.0	-3.9	-3.9	-4.1
Gross debt	42.8	41.8	47.6	54.8	56.2	55.6	57.5	58.9
Net financial assets	0.1	-21.0	-20.0	-28.0	-31.9	n.a	n.a	n.a
Total revenue	42.3	38.3	39.3	37.6	38.4	38.4	37.6	36.9
Total expenditure	46.4	43.3	43.5	45.4	43.4	42.3	41.6	41.0
<i>of which: Interest</i>	4.4	3.0	2.5	2.7	2.7	2.8	2.7	2.5
Corporations (% of GDP)								
Net lending (+) or net borrowing (-)	-4.5	-1.8	0.6	4.4	5.3	5.8	5.3	5.5
Net financial assets; non-financial corporations	-74.7	-74.3	-85.4	-82.5	-80.0	n.a	n.a	n.a
Net financial assets; financial corporations	10.3	9.2	-6.2	-5.0	2.8	n.a	n.a	n.a
Gross capital formation	14.7	12.4	12.5	10.2	11.4	11.4	11.5	11.7
Gross operating surplus	14.7	18.0	22.3	23.5	23.8	25.2	25.0	25.7
Households and NPISH (% of GDP)								
Net lending (+) or net borrowing (-)	6.3	3.4	0.1	0.7	-3.0	-3.2	-2.3	-2.4
Net financial assets	37.1	47.6	55.9	50.0	45.5	n.a	n.a	n.a
Gross wages and salaries	35.1	34.2	32.5	32.6	31.6	31.3	31.2	30.9
Net property income	5.6	5.4	3.5	3.2	3.0	2.4	2.3	2.0
Current transfers received	20.4	20.6	19.4	19.5	18.7	19.7	20.3	20.6
Gross saving	10.5	8.1	4.8	5.4	1.3	0.9	1.9	2.0
Rest of the world (% of GDP)								
Net lending (+) or net borrowing (-)	-2.3	-3.1	-2.6	-2.7	-2.7	-1.3	-0.8	-0.9
Net financial assets	27.5	39.1	56.4	66.9	65.2	n.a	n.a	n.a
Net exports of goods and services	-2.8	-3.7	-1.9	-1.2	-1.2	0.3	1.2	1.5
Net primary income from the rest of the world	-0.8	-1.0	-2.7	-3.8	-4.1	-4.5	-4.6	-4.7
Net capital transactions	0.1	0.1	1.2	1.6	1.8	2.0	1.7	1.5
Tradable sector	53.1	51.3	51.1	50.8	51.0	51.8	n.a	n.a
Non tradable sector	35.2	37.4	36.9	37.3	36.8	36.8	n.a	n.a
<i>of which: Building and construction sector</i>	7.3	6.0	6.4	7.1	7.2	6.6	n.a	n.a
Real effective exchange rate (index, 2000=100)	100.5	104.7	104.4	103.9	100.4	96.7	98.4	98.1
Terms of trade goods and services (index, 2000=100)	103.5	96.9	100.9	101.9	100.0	98.7	98.7	98.0
Market performance of exports (index, 2000=100)	76.9	89.0	108.2	120.0	122.4	125.1	126.6	127.0
Notes:								
¹ The output gap constitutes the gap between the actual and potential gross domestic product at 2005 market prices.								
² The indicator on domestic demand includes stocks.								
³ Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.								
Source:								
Commission services' 2013 spring forecasts (COM); Convergence programme (CP).								

Table II. Comparison of macroeconomic developments and forecasts

	2012		2013		2014		2015	2016
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	1.9	1.9	1.1	1.5	2.2	2.5	3.8	4.3
Private consumption (% change)	0.8	0.8	0.8	1.1	1.5	2.1	3.2	3.5
Gross fixed capital formation (% change)	-0.8	-0.8	-2.6	-0.7	2.2	4.4	7.8	9.2
Exports of goods and services (% change)	2.8	2.8	2.6	2.8	5.5	4.3	5.0	5.1
Imports of goods and services (% change)	-1.8	-1.8	0.6	0.9	4.3	4.9	5.5	5.9
<i>Contributions to real GDP growth:</i>								
- Final domestic demand	0.3	-0.2	0.2	0.8	1.6	2.7	4.0	4.6
- Change in inventories	-0.6	-0.6	0.0	0.0	0.0	0.5	0.4	0.4
- Net exports	2.1	2.0	0.9	0.8	0.6	-0.1	-0.2	-0.3
Output gap ¹	-0.7	-0.8	-2.4	-2.2	-2.8	-2.7	-2.0	-1.1
Employment (% change)	0.2	0.2	-0.4	-0.3	-0.2	0.0	0.6	0.6
Unemployment rate (%)	10.1	10.1	10.9	10.8	11.4	11.0	10.6	10.3
Labour productivity (% change)	1.7	1.7	1.5	1.7	2.4	2.5	3.1	3.6
HICP inflation (%)	3.7	3.7	1.4	1.6	2.0	2.4	2.5	2.5
GDP deflator (% change)	2.5	2.5	1.4	1.5	1.7	2.2	2.5	2.5
Comp. of employees (per head, % change)	3.1	2.7	2.6	2.2	3.3	3.2	4.7	5.2
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-1.3	1.3	-0.8	0.2	-0.9	1.1	2.4	3.8
<p><u>Note:</u></p> <p>¹In percent of potential GDP, with potential GDP growth recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.</p> <p><u>Source:</u></p> <p>Commission services' 2013 spring forecasts (COM); Convergence programme (CP).</p>								

Table III. Composition of the budgetary adjustment

(% of GDP)	2012	2013		2014		2015	2016	Change: 2012-2016
	COM	COM	CP	COM ¹	CP	CP	CP	CP
Revenue	38.4	37.6	37.8	36.9	37.2	36.2	35.6	-2.8
<i>of which:</i>								
- Taxes on production and imports	12.9	12.7	12.8	12.2	12.8	12.6	12.3	-0.6
- Current taxes on income, wealth, etc.	7.2	6.9	6.9	7.1	6.9	6.9	7.0	-0.2
- Social contributions	12.3	12.2	12.2	12.1	12.0	11.8	11.7	-0.6
- Other (residual)	6.0	5.8	5.9	5.5	5.5	4.9	4.6	-1.4
Expenditure	42.3	41.6	41.3	41.0	40.5	38.9	37.2	-5.1
<i>of which:</i>								
- Primary expenditure	39.5	38.9	38.6	38.4	38.1	36.7	35.1	-4.4
<i>of which:</i>								
Compensation of employees	9.7	9.6	9.7	9.5	9.5	9.1	8.6	-1.1
Intermediate consumption	5.6	5.5	5.5	5.5	5.3	5.0	4.8	-0.8
Social payments	16.4	16.7	16.4	16.7	16.2	15.9	15.5	-0.9
Subsidies	0.4	0.4	0.3	0.4	0.4	0.4	0.3	-0.1
Gross fixed capital formation	4.6	3.8	3.8	3.6	3.5	3.3	2.8	-1.8
Other (residual)	2.9	2.9	2.9	2.8	3.2	3.0	2.9	0.0
- Interest expenditure	2.8	2.7	2.7	2.5	2.4	2.2	2.1	-0.7
General government balance (GGB)	-3.9	-3.9	-3.5	-4.1	-3.3	-2.7	-1.6	2.3
Primary balance	-1.1	-1.3	-0.8	-1.5	-0.9	-0.5	0.5	1.6
One-off and other temporary measures	0.1	0.3	0.1	0.0	0.0	0.0	0.0	-0.1
GGB excl. one-offs	-4.0	-4.2	-3.6	-4.1	-3.3	-2.7	-1.6	2.4
Output gap ²	-0.7	-2.4	-2.2	-2.8	-2.7	-2.0	-1.1	-0.4
Cyclically-adjusted balance ²	-3.7	-3.0	-2.6	-2.9	-2.2	-1.9	-1.2	2.5
Structural balance (SB)³	-3.8	-3.3	-2.7	-2.9	-2.2	-1.9	-1.2	2.6
<i>Change in SB</i>	<i>1.7</i>	<i>0.5</i>	<i>1.0</i>	<i>0.3</i>	<i>0.5</i>	<i>0.3</i>	<i>0.7</i>	-
<i>Two year average change in SB</i>	<i>2.3</i>	<i>1.1</i>	<i>1.4</i>	<i>0.4</i>	<i>0.8</i>	<i>0.4</i>	<i>0.5</i>	-
Structural primary balance ³	-0.9	-0.6	0.0	-0.4	0.2	0.3	0.9	1.8
<i>Change in structural primary balance</i>		<i>0.3</i>	<i>0.9</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.6</i>	-
Expenditure benchmark								
Applicable reference rate ⁴	2.57	2.57	2.57	2.45	2.45	2.45	2.45	-
Deviation ⁵ (% GDP)	-2.0	-1.1	-1.4	-0.2	-0.6	-0.8	-0.6	-
Two-year average deviation (% GDP)	-2.5	-1.6	-1.2	-0.7	-1.0	-0.7	-0.7	-
Notes:								
¹ On a no-policy-change basis.								
² Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.								
³ Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.								
⁴ Reference medium-term rate of potential GDP growth. The (standard) reference rate applies from year t+1, if the country has reached its MTO in year t. A lower rate applies as long as the country is adjusting towards its MTO, including in year t. The reference rates applicable to 2014 onwards have been updated in 2013.								
⁵ Deviation of the growth rate of public expenditure net of discretionary revenue measures and revenue increases mandated by law from the applicable reference rate. The expenditure aggregate used for the expenditure benchmark is obtained following the commonly agreed methodology. A positive sign implies that expenditure growth exceeds the applicable reference rate.								
Source:								
<i>Convergence programme (CP); Commission services' 2013 spring forecasts (COM); Commission services' calculations.</i>								

Table IV. Debt dynamics

(% of GDP)	Average 2007-2011	2012	2013		2014		2015	2016
			COM	CP	COM	CP	CP	CP
Gross debt ratio ¹	50.8	55.6	57.5	55.8	58.9	55.7	55.6	54.5
Change in the ratio	1.7	-0.6	1.9	0.2	1.4	-0.1	-0.1	-1.1
<i>Contributions</i> ² :								
1. Primary balance	2.7	1.1	1.3	0.8	1.5	0.9	0.5	-0.5
2. “Snow-ball” effect	-0.9	0.5	1.3	1.1	0.4	-0.1	-1.1	-1.4
<i>Of which:</i>								
Interest expenditure	2.5	2.8	2.7	2.7	2.5	2.4	2.2	2.1
Growth effect	-2.0	-1.0	-0.6	-0.8	-1.2	-1.3	-2.0	-2.2
Inflation effect	-1.4	-1.3	-0.8	-0.8	-0.9	-1.2	-1.3	-1.3
3. Stock-flow adjustment	0.0	-2.2	-0.7	-1.7	-0.5	-0.8	0.5	0.9
<i>Of which:</i>								
Cash/accruals diff.				0.3		0.1	0.1	0.1
Acc. financial assets				-1.6		-0.3	0.8	1.1
<i>Privatisation</i>				-0.1		-0.1	-0.1	0.0
Val. effect & residual				-1.9		-3.2	-3.9	-3.9
			2013		2014		2015	2016
		2012	COM/ CP ³	CP ⁴	COM/ CP ³	CP ⁴	CP	CP
Gap to the debt benchmark ^{5,6}		n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Structural adjustment ⁷		n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
<i>To be compared to:</i>								
Required adjustment ⁸		n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Notes:								
¹ End of period.								
² The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.								
³ Assessment of the consolidation path set in CP assuming growth follows the COM forecasts.								
⁴ Assessment of the consolidation path set in the CP assuming growth follows the CP projections.								
⁵ 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.								
⁶ Shows the difference between the debt-to-GDP ratio and the debt benchmark. If positive, projected gross debt-to-GDP ratio does not comply with the debt reduction benchmark.								
⁷ Applicable only during the transition period of three years from the correction of the excessive deficit for EDP that were ongoing in November 2011.								
⁸ Defines the remaining annual structural adjustment over the transition period which ensures that - if followed – Member State will comply with the debt reduction benchmark at the end of the transition period, assuming that COM (SP) budgetary projections for the previous years are achieved.								
Source:								
Convergence programme (CP); Commission services' spring 2013 forecasts (COM); Commission services' calculations.								

Table V. Sustainability indicators

	PL		EU27	
	No-policy change scenario	Programme (SCP) scenario	No-policy change scenario	Programme (SCP) scenario
S2	2.8	1.5	3.0	1.3
<i>of which:</i>				
Initial budgetary position (IBP)	1.8	0.3	0.8	-0.9
Long-term cost of ageing (CoA)	1.0	1.2	2.2	2.2
<i>of which:</i>				
Pensions	-0.8	-0.6	1.0	1.1
Health care	1.5	1.4	0.9	0.8
Long-term care	0.6	0.5	0.6	0.6
Others	-0.2	-0.2	-0.4	-0.3
S1 (required adjustment)*	1.1	-0.8	2.2	0.5
<i>of which:</i>				
Initial budgetary position (IBP)	1.0	-0.6	0.0	-1.8
Debt requirement (DR)	-0.1	-0.4	1.9	1.9
Long-term cost of ageing (CoA)	0.2	0.2	0.3	0.4
S0 (risk for fiscal stress)**	0.41		:	
Debt, % of GDP (2012)	55.6		87.0	
Age-related expenditure, % of GDP (2012)	20.7		25.8	

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

Source:
Commission services; 2013 stability programme.

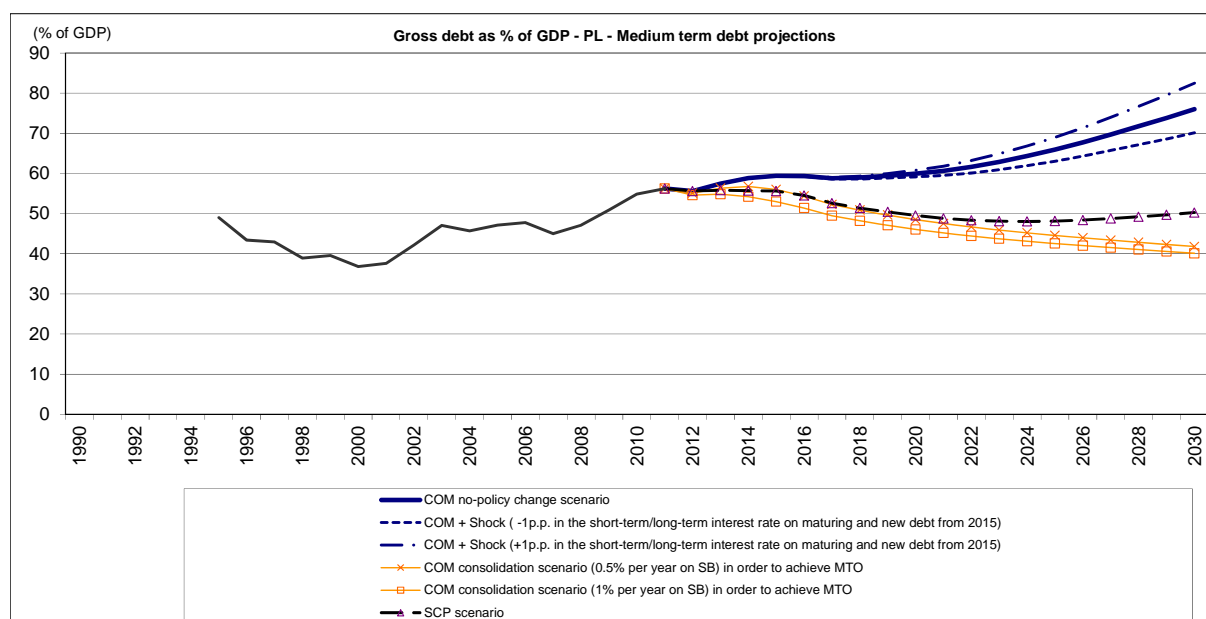


Table VI. Taxation indicators

	2002	2006	2008	2009	2010	2011
Total tax revenues (incl. actual compulsory social contributions, % of GDP)	32.7	33.8	34.3	31.8	31.8	32.4
Breakdown by economic function (% of GDP) ¹						
Consumption	11.9	12.7	13.0	11.7	12.5	12.7
of which:						
- VAT	7.2	8.1	8.0	7.4	7.8	8.1
- excise duties on tobacco and alcohol	1.9	1.9	2.2	1.6	2.0	2.0
- energy	2.0	2.3	2.2	2.1	2.2	2.2
- other (residual)	0.8	0.4	0.6	0.6	0.5	0.5
Labour employed	12.7	12.6	11.9	11.5	11.2	11.7
Labour non-employed	0.7	0.8	0.8	0.8	0.8	0.8
Capital and business income	5.8	6.2	6.9	6.2	5.8	5.8
Stocks of capital/wealth	1.9	1.9	1.7	1.6	1.6	1.6
<i>p.m.</i> Environmental taxes ²	2.4	2.7	2.6	2.6	2.6	2.6
VAT efficiency ³						
Actual VAT revenues as % of theoretical revenues at standard rate	42.1	50.9	50.6	46.8	48.7	49.3
Note:						
¹ Tax revenues are broken down by economic function, i.e. according to whether taxes are raised on consumption, labour or capital. See European Commission (2013) Taxation trends in the European Union, for a more detailed explanation.						
² This category comprises taxes on energy, transport and pollution and resources included in taxes on consumption and capital.						
³ The VAT efficiency is measured via the VAT revenue ratio. The VAT revenue ratio is defined as the ratio between the actual VAT revenue collected and the revenue that would theoretically be raised if VAT was applied at the standard rate to all final consumption. A low ratio can indicate a reduction of the tax base due to large exemptions or the application of reduced rates to a wide range of goods and services ('policy gap') or a failure to collect all tax due to e.g. fraud ('collection gap'). See European Commission (2012), Tax reforms in EU Member States, European Economy 6/2012 and Taxation Papers 34/2012 for a more detailed explanation.						
<i>Source: Commission</i>						

Table VII. Financial market indicators

	2008	2009	2010	2011	2012
Total assets of the banking sector (% of GDP)	72.3	88.2	87.8	83.8	93.4
Share of assets of the five largest banks (% of total assets)	44.2	43.9	43.4	43.7	...
Foreign ownership of banking system (% of total assets)	84.9	64.1
Financial soundness indicators:					
- non-performing loans (% of total loans) ¹⁾	4.4	7.9	8.8	8.2	5.1
- capital adequacy ratio (%) ¹⁾	11.2	13.3	13.9	13.1	14.1
- return on equity (%) ^{1), 2)}	20.7	11.2	13.2	16.6	14.5
Bank loans to the private sector (year-on-year % change)	24.4	8.0	5.9	5.9	7.3
Lending for house purchase (year-on-year % change)	41.6	11.8	19.3	8.8	6.8
Loan to deposit ratio	108.4	105.2	107.1	105.4	101.7
CB liquidity as % of liabilities	2.0	1.6	0.1	0.0	0.0
Banks' exposure to countries receiving official financial assistance (% of GDP)
Private debt (% of GDP)	43.6	54.7	53.4	53.5	...
Gross external debt (% of GDP) ³⁾					
- Public	13.4	19.5	23.0	24.2	29.1
- Private	23.1	28.7	27.6	27.8	28.7
Long term interest rates spread versus Bund (basis points)*	2.1	2.9	3.0	3.3	3.5
Credit default swap spreads for sovereign securities (5-year)*	226.0	190.8	129.6	171.6	154.8
Notes:					
¹⁾ Latest data (September 2012).					
²⁾ After extraordinary items and taxes. Accumulated income of the last 12 months. Tier 1 capital. Branches of foreign banks are excluded.					
³⁾ Latest data 2012Q3.					
* Measured in basis points.					
Source:					
<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

Labour market indicators	2007	2008	2009	2010	2011	2012
Employment rate (% of population aged 20-64)	62.7	65.0	64.9	64.6	64.8	64.7
Employment growth (% change from previous year)	4.5	3.9	0.4	0.5	1.0	-1.6
Employment rate of women (% of female population aged 20-64)	55.5	57.3	57.6	57.7	57.6	57.5
Employment rate of men (% of male population aged 20-64)	70.2	73.0	72.6	71.6	72.2	72.0
Employment rate of older workers (% of population aged 55-64)	29.7	31.6	32.3	34.0	36.9	38.7
Part-time employment (% of total employment, 15 years and more)	9.2	8.5	8.4	8.3	8.0	8.0
Part-time employment of women (% of women employment, 15 years and more)	12.5	11.7	11.6	11.5	11.1	11.3
Part-time employment of men (% of men employment, 15 years and more)	6.6	5.9	5.8	5.7	5.5	5.3
Fixed term employment (% of employees with a fixed term contract, 15 years and more)	28.2	27.0	26.5	27.3	26.9	26.9
Transitions from temporary to permanent employment	4.6	4.6	5.8	4.2	:	:
Unemployment rate ¹ (% of labour force, age group 15-74)	9.6	7.1	8.1	9.7	9.7	10.1
Long-term unemployment rate ² (% of labour force)	4.9	2.4	2.5	3.0	3.6	4.1
Youth unemployment rate (% of youth labour force aged 15-24)	21.6	17.2	20.6	23.7	25.8	26.5
Youth NEET rate (% of population aged 15-24)	10.6	9.0	10.1	10.8	11.6	11.8
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	5.0	5.0	5.3	5.4	5.6	5.7
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	27.0	29.7	32.8	35.3	36.9	39.1
Formal childcare (from 1 to 29 hours; % over the population less than 3 years)	0.0	0.0	0.0	0.0	0.0	:
Formal childcare (30 hours or over; % over the population less than 3 year)	2.0	3.0	2.0	2.0	3.0	:
Labour productivity per person employed (annual % change)	2.2	1.2	1.2	3.4	3.3	3.7
Hours worked per person employed (annual % change)	-0.1	-0.2	-0.9	-0.2	-0.5	0.0
Labour productivity per hour worked (annual % change; constant prices)	2.3	1.4	2.2	3.6	3.8	3.7
Compensation per employee (annual % change; constant prices)	0.9	5.6	-0.2	3.3	0.9	2.1
Nominal unit labour cost growth (annual % change)	2.6	7.5	2.2	1.3	0.7	1.0
Real unit labour cost growth (annual % change)	-1.3	4.3	-1.4	-0.1	-2.3	-1.6
Notes:						
¹ Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed.						
² Long-term unemployed are unemployed persons for at least 12 months.						
Sources:						
Commission (EU Labour Force Survey and European National Accounts)						

Expenditure on social protection benefits (% of GDP)	2006	2007	2008	2009	2010
Sickness/Health care	3.84	3.93	4.45	4.72	4.51
Invalidity	1.88	1.64	1.52	1.32	1.37
Old age and survivors	11.52	10.77	10.93	11.43	11.33
Family/Children	0.82	0.79	0.73	0.75	0.79
Unemployment	0.57	0.40	0.35	0.40	0.42
Housing and Social exclusion n.e.c.	0.11	0.09	0.06	0.06	0.06
Total	18.97	17.79	18.22	18.83	18.63
of which: means tested benefits	0.99	0.90	0.78	0.70	0.70
Social inclusion indicators	2007	2008	2009	2010	2011
At-risk-of-poverty or social exclusion ¹ (% of total population)	34.4	30.5	27.8	27.8	27.2
At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	37.1	32.9	31.0	30.8	29.8
At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	27.3	26.9	25.8	24.4	24.7
At-Risk-of-Poverty rate ² (% of total population)	17.3	16.9	17.1	17.6	17.7
Severe Material Deprivation ³ (% of total population)	22.3	17.7	15.0	14.2	13.0
Share of people living in low work intensity households ⁴ (% of people aged 0-59)	10.0	7.9	6.9	7.3	6.9
In-work at-risk-of poverty rate (% of persons employed)	11.7	11.5	11.1	11.5	11.1
Impact of social transfers (excluding pensions) on reducing poverty	34.7	32.7	27.5	27.9	26.6
Poverty thresholds, expressed in national currency at constant prices ⁵	8187	9196	10048	10291	10555
Gross disposable income (households)	743459	806098	863531	903723	949586
Relative median poverty risk gap (60% of median equivalised income, age: total)	24.0	20.6	22.7	22.2	21.4

Notes:

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

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

³ Share of people who experience at least 4 out of 9 deprivations: people cannot afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish, or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour tv, or ix) have a telephone.

⁴ People living in households with very low work intensity: share of people aged 0-59 living in households where the adults (excluding dependent children) work less than 20% of their total work-time potential during the previous 12 months.

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

Sources:

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

Table IX. Product market performance and policy indicators

Performance indicators	2003-2007	2008	2009	2010	2011	2012
Labour productivity ¹ total economy (annual growth in %)	2.7	1.2	1.2	3.4	3.3	3.7
Labour productivity ¹ in manufacturing (annual growth in %)	n.a.	3.1	9.4	11.0	9.4	n.a.
Labour productivity ¹ in electricity, gas, steam and air conditioning supply (annual growth in %)	n.a.	-10.9	-9.6	21.1	14.3	n.a.
Labour productivity ¹ in the construction sector (annual growth in %)	n.a.	-8.8	5.7	9.0	5.2	3.9
Total number of patent ² applications per million of labour force	8.3	13.6	15.4	17.4	n.a.	n.a.
Policy indicators	2003-2007	2008	2009	2010	2011	2012
Enforcing contracts ³ (days)	958	830	830	830	830	685
Time to start a business ³ (days)	31	31	32	32	32	32
R&D expenditure (% of GDP)	0.6	0.6	0.7	0.7	0.8	n.a.
Tertiary educational attainment (% of 30-34 years old population)	22.4	29.7	32.8	35.3	36.9	n.a.
Total public expenditure on education (% of GDP)	5.28	5.08	5.10	n.a.	n.a.	n.a.
	2007	2008	2009	2010	2011	2012
Product market regulation ⁴ , Overall (Index; 0=not regulated; 6=most regulated)	n.a.	2.3	n.a.	n.a.	n.a.	n.a.
Product market regulation ⁴ , Retail (Index; 0=not regulated; 6=most regulated)	n.a.	3.2	n.a.	n.a.	n.a.	n.a.
Product market regulation ⁴ , Network Industries ⁵ (Index; 0=not regulated; 6=most regulated)	2.3	n.a.	n.a.	n.a.	n.a.	n.a.
Notes:						
¹ Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.						
² Total number of patent applications to the European Patent Office (EPO) per million of labour force						
³ The methodologies, including the assumptions, for this indicator are presented in detail on the website http://www.doingbusiness.org/methodology .						
⁴ The methodologies of the product market regulation indicators are presented in detail on the website http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html . The latest available product market regulation indicators refer to 2003 and 2008, except for Network Industries.						
⁵ Aggregate Energy, Transport and Communications Regulation (ETCR).						
*figure for 2007.						
Source:						
Commission, World Bank - <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

		2002-2006	2007	2008	2009	2010	2011
Green Growth performance							
<i>Macroeconomic</i>							
Energy intensity	kgoe / €	0.45	0.40	0.38	0.36	0.37	0.36
Carbon intensity	kg / €	1.85	1.66	1.56	1.46	1.47	n.a.
Resource intensity (reciprocal of resource productivity)	kg / €	2.56	2.56	2.50	2.36	n.a.	n.a.
Waste intensity	kg / €	n.a.	n.a.	0.54	n.a.	0.59	n.a.
Energy balance of trade	% GDP	-1.9%	-2.6%	-3.1%	-2.3%	-2.7%	-3.3%
Energy weight in HICP	%	n.a.	16	13	13	13	14
Difference between change energy price and inflation	%	n.a.	1	5.7	6.8	1.4	3.4
Environmental taxes over labour taxes	ratio	19.9%	20.8%	19.8%	21.1%	22.6%	n.a.
Environmental taxes over total taxes	ratio	8.0%	7.8%	7.6%	8.2%	8.2%	n.a.
<i>Sectoral</i>							
Industry energy intensity	kgoe / €	0.34	0.28	0.24	0.22	0.21	n.a.
Share of energy-intensive industries in the economy	% GDP	11.5	5.6	5.6	5.9	n.a.	n.a.
Electricity prices for medium-sized industrial users**	€/ kWh	n.a.	0.09	0.09	0.09	0.10	0.10
Gas prices for medium-sized industrial users***	€/ kWh	n.a.	0.03	0.03	0.03	0.03	0.03
Public R&D for energy	% GDP	n.a.	0.01%	0.01%	0.01%	0.01%	0.01%
Public R&D for the environment	% GDP	n.a.	0.01%	0.01%	0.00%	0.00%	0.00%
Recycling rate of municipal waste	ratio	4.7%	7.7%	10.5%	17.4%	21.4%	n.a.
Share of GHG emissions covered by ETS*	%	n.a.	51.3%	50.7%	49.9%	49.6%	50.6%
Transport energy intensity	kgoe / €	n.a.	0.86	0.91	0.92	n.a.	n.a.
Transport carbon intensity	kg / €	n.a.	2.47	2.58	2.56	n.a.	n.a.
Security of energy supply							
Energy import dependency	%	n.a.	25.6%	30.6%	31.7%	31.5%	33.7%
Diversification of oil import sources	HHI	n.a.	0.58	0.58	0.62	0.64	n.a.
Diversification of energy mix	HHI	n.a.	0.41	0.39	0.38	0.38	0.37
Share renewable energy in energy mix	%	n.a.	5.0%	5.6%	6.6%	7.2%	8.1%
<p><u>Country-specific notes:</u> The year 2012 is not included in the table due to lack of data.</p> <p><u>General explanation of the table items:</u> Source: Eurostat unless indicated otherwise; ECFIN elaborations indicated below</p> <p>All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2000 prices)</p> <p>Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)</p> <p>Carbon intensity: Greenhouse gas emissions (in kg CO2 equivalents) divided by GDP (in EUR)</p> <p>Resource intensity: Domestic Material Consumption (in kg) divided by GDP (in EUR)</p> <p>Waste intensity: waste (in kg) divided by GDP (in EUR)</p> <p>Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP</p> <p>Energy weight in HICP: the share of the "energy" items in the consumption basket used in the construction of the HICP</p> <p>Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual %-change)</p> <p>Environmental taxes over labour or total taxes: from DG TAXUD's database "Taxation trends in the European Union"</p> <p>Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)</p> <p>Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP</p> <p>Electricity and gas prices medium industrial users: consumption band 500 - 2000MWh and 10000 - 100000 GJ; figures excl. VAT.</p> <p>Recycling rate of municipal waste: ratio of municipal waste recycled over total municipal waste</p> <p>Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP</p> <p>Share of GHG emissions covered by ETS: based on greenhouse gas emissions as reported by Member States to EEA (excl LULUCF)</p> <p>Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transp industry gross value added (2005 EUR)</p> <p>Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector</p> <p>Energy import dependency: net energy imports divided by gross inland energy consumption incl. energy consumption international bunkers</p> <p>Diversification of oil import sources: Herfindahl index (HHI), calculated as the sum of the squared market shares of countries of origin</p> <p>Diversification of the energy mix: Herfindahl Index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels</p> <p>Share renewable energy in energy mix: %-share in gross inland energy consumption, expressed in tonne oil equivalents</p> <p>*Provisional data (15 April 2013). Commission Services and EEA.</p> <p>** For 2007 average of S1 & S2 for DE, LU, NL, FI, SE & UK. Other countries only have S2.</p> <p>*** For 2007 average of S1 & S2 for IT, NL, FI, SE & UK. Other countries only have S2.</p>							