

Brussels, 2.6.2014 SWD(2014) 422 final

#### COMMISSION STAFF WORKING DOCUMENT

Assessment of the 2014 national reform programme and convergence programme for  ${
m POLAND}$ 

Accompanying the document

**Recommendation for a COUNCIL RECOMMENDATION** 

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

{COM(2014) 422 final}

EN EN

## **CONTENTS**

Executi	ve summary	3
1.	Introduction	5
2.	Economic situation and outlook	5
3.	Challenges and assessment of policy agenda	7
3.1.	Fiscal policy and taxation	7
3.2.	Financial sector	16
3.3.	Labour market, education and social policies	16
3.4.	Structural measures promoting sustainable growth and competitiveness	20
3.5.	Modernisation of public administration	27
4.	Conclusions	28
Overview table		
Annex		36

#### **EXECUTIVE SUMMARY**

In 2014, the Polish economy is expected to pick up noticeably after a slowdown over the past two years. Domestic demand is expected to become the main engine of economic growth, gradually replacing net exports. Public investment is expected to remain sluggish, while private investment will recover as prospects for private domestic demand improve and capacity utilisation rises. Inflation will remain subdued, and the rate of unemployment will go on falling. As a result, confidence is set to strengthen, improving the environment for further expansion of economic activity.

Overall, Poland has made some progress in addressing the 2013 country-specific recommendations. Progress in ensuring the timely correction of the excessive deficit was limited until autumn 2013. Since then, and following a new Council recommendation under the Excessive Deficit Procedure, the situation of public finances has improved on the back of both better than expected economic growth and some additional measures. Substantial progress has been made towards strengthening the fiscal framework, notably by enacting a permanent expenditure rule and improving the coordination among different levels of government. The government has started reforms to increase the efficiency of the tax administration and the tax compliance. Efforts to tackle youth unemployment and increase the labour market participation of women as well as employability of older workers go in the right direction: A lifelong learning strategy is now in place and access to childcare facilities has been improved. However, no progress has been made in fighting labour market segmentation and no steps have been taken to reform the special schemes for farmers and miners. Poland has presented promising strategic programmes aiming at improving its innovation support framework for private companies but implementation remains limited. Progress on improving energy generation capacity, energy efficiency and developing railway infrastructure has also been limited and broadband coverage remains low. There has been substantial progress in implementing an ambitious reform facilitating access to regulated professions and some progress was made to improve the business environment.

As a result, Poland continues to face challenges requiring ambitious efforts to sustain growth and create jobs. The policy plans submitted by Poland address most of these challenges. The national reform programme confirms Poland's commitment to address shortcomings in the areas of employment, innovation-friendly business environment as well as energy-related issues, while the convergence programme reiterates Poland's commitment to continue fiscal consolidation. Overall, challenges that Poland faces are concentrated in four areas: public finances, labour market participation, infrastructure, and the business and innovation environment.

- **Public finances:** Further fiscal consolidation is required to correct the excessive deficit in a timely and sustainable manner and subsequent progress towards the medium-term objective. In this regard, cuts in growth-enhancing expenditure (education, research and innovation) should be avoided. There is a scope for improving the efficiency of social and healthcare spending. Low tax compliance remains an issue, in particular in terms of efficiency of tax administration and in the level of administrative burden on taxpayers. The extensive and incoherent use of reduced rates in VAT leads to losses of budgetary revenue and high tax compliance costs for businesses, while it is a distortive and imperfect instrument to achieve redistribution aims. The Polish fiscal framework lacks a fully-fledged independent fiscal council.
- Labour market, education and social policy: Employment rose consistently between 2004 and 2013. However, the lagged effects of the economic slowdown are still noticeable and the employment rate remains low, especially for women

and older workers. Unemployment among young people remains at very high levels. The widespread use of fixed-term employment contracts, including civil law contracts that are not covered by the Labour Code, often means that those in such jobs earn lower pay and have limited access to training. A special pension scheme for miners and an overly generous social security system and a preferential tax system for farmers hamper labour mobility between regions and sectors and the effective use of resources. There is a persistent mismatch between the skills in demand and those available. There is still insufficient access to good quality apprenticeships and work-based learning. The proportion of the population living at risk of poverty and social exclusion is high compared to other EU countries, even for those in employment.

- Infrastructure: In spite of sizeable investment in the road network, the country's infrastructure, particularly its railway system and energy network, remain underdeveloped, creating bottlenecks for growth. Limited competition among incumbent electricity suppliers, a lack of interconnections with other Member States and ageing energy generation capacity keep energy prices high. The energy intensity of the economy is high and potential gains from improving energy efficiency are significant. Poland still lags behind other Member States in the use of information and communication technologies. Fixed broadband coverage is among the lowest in the EU. There are still environmental challenges in air quality and waste management.
- **R&D**, innovation and business environment: Poland's export capacities are concentrated at the lower end of the value chain, while the innovation and R&D support framework is fragmented and requires substantial further investment. Poland's good economic performance throughout the crisis was based on a strong manufacturing base and competitive labour costs. Though measures to create an innovation-friendly business environment have been adopted, these have yet to yield a tangible improvement in the innovative capacity of Polish companies. A burdensome business environment and an inefficient public administration weigh on growth and competitiveness. An on-going reform aimed at lifting restrictions in the field of professional services will reduce the costs of doing business and boost productivity in the economy.

#### 1. Introduction

In May 2013, the Commission proposed a set of country-specific recommendations for economic and structural reform policies for Poland. On the basis of these recommendations, the Council of the European Union adopted seven country-specific recommendations in the form of a Council Recommendation in July 2013. These recommendations concerned fiscal consolidation, the domestic fiscal framework, unemployment among young, women and the elderly, the capacity of companies to innovate, public infrastructure, and the business environment. This staff working document assesses the extent to which these have been implemented in Poland.

This staff working document assesses policy measures in light of the findings of the Commission's Annual Growth Survey 2014¹ and the third annual Alert Mechanism Report,² which were published in November 2013. The Annual Growth Survey sets out the Commission's proposals for building the necessary common understanding about the priorities for policy action at national and EU level in 2014. It identifies five priorities to guide Member States to renewed growth: pursuing differentiated, growth friendly fiscal consolidation; restoring normal lending to the economy; promoting growth and competitiveness for today and tomorrow; tackling unemployment and the social consequences of the crisis; and modernising public administration. The Alert Mechanism Report serves as an initial screening device to determine whether macroeconomic imbalances exist or risk emerging in Member States. The Report found positive signs that macroeconomic imbalances in Europe are being corrected. To ensure that a complete and durable rebalancing is achieved, 16 Member States were selected for a review of developments in the accumulation and unwinding of imbalances. These in-depth reviews were published on 5 March 2014 along with a Commission Communication.<sup>3</sup>

Against the background of the 2013 recommendations, the Annual Growth Survey, and the Alert Mechanism Report, Poland presented updates of its national reform programme and its convergence programme on 24 April 2014. These programmes provide detailed information on progress made since July 2013 and on the plans of the government. The information contained in these programmes provides the basis for the assessment made in this staff working document. The national reform programme went through a wide consultation process involving different stakeholders including, inter alia, representatives of local and regional authorities, trade unions and employers' organisations. Limited consultation process involving experts took place for the convergence programme.

#### 2. ECONOMIC SITUATION AND OUTLOOK

#### **Economic situation**

**Economic activity rebounded in late 2013, supported by a general recovery of global activity**. After a feeble first half, the second half of 2013 saw an upturn in economic activity resulting in real GDP growing by 1.6% over the year. This was better than the 1.1% projected in the previous staff working document and significantly stronger than the EU average (+0.1%) and Poland's closest peers, such as the Czech Republic, Hungary and Slovakia.

<sup>&</sup>lt;sup>1</sup> COM(2013) 800 final.

<sup>&</sup>lt;sup>2</sup> COM(2013) 790 final.

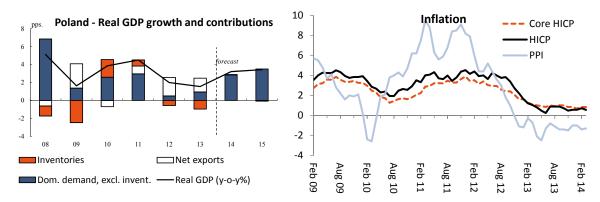
<sup>&</sup>lt;sup>3</sup> Aside from the 16 Member States identified in the Alert Mechanism Report, Ireland was also covered by an indepth review, following the conclusion by the Council that it should be fully integrated into the normal surveillance framework after the successful completion of its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

The recovery was initially export-led on the back of sustained gains in price and non-price competitiveness, while domestic demand lagged behind. Growth in private consumption remained subdued in the first half of 2013, as labour market prospects worsened and consumer sentiment deteriorated. Against this backdrop, investment growth was fragile at the beginning of 2013, due in part to a marked slowdown in public investment. The economic situation started to improve in the third quarter of 2013, with private consumption and private investment picking up on the back of a rise in external orders and an improvement in business confidence.

Consumer price inflation was contained at 0.8 % in 2013 due to low commodity prices, lower increases in administered prices and weak domestic demand. The rate of unemployment rose from 10.1 % in 2012 to 10.3 % in 2013, reflecting the usual lag between economic growth and labour market performance. The current account deficit improved significantly from 3.4 % in 2012 to 1.6 %, due to a strong recovery in the trade balance.

Poland's financial sector has been profitable and has increased its capital buffers. The capital adequacy ratio (Tier 1) for the banking sector as a whole increased from 13.1% in 2012 to 14.2% in 2013, well above the level required under the Basel III agreement (8.5% including the conservation buffer). Weak economic activity affected the profitability of the banking sector, which, measured by return on assets, decreased to 1.1%, from 1.4% in 2012. Subdued real GDP growth and a fragile labour market situation did not, however, affect asset quality: the proportion of non-performing loans (NPLs) decreased from 8.8% in 2012 to 8.5% in 2013 and is bound to decrease further throughout 2014. Lending to the non-financial sector grew by 3.5% year-on-year to December 2013, up from 1.2% in 2012, driven by growth in mortgage loans (4.5%) and a rise in lending to large corporates (6.1%).

Figure 1: Main macroeconomic indicators



#### **Economic outlook**

The outlook is improving for Poland's main trading partners, and this is expected to support growth in 2014. Real GDP is forecast to grow by 3.2% in 2014, up from 1.6% in 2013, as the global economic outlook improves. This is likely to rub off on the tradable goods sector and, ultimately, should support domestic demand. Public investment is expected to pick up only moderately, due to fiscal consolidation requirements under the Excessive Deficit Procedure. By contrast, private investment is expected to recover on the back of a rise in private domestic demand and higher capacity utilisation. Private consumption is likely to benefit from moderate improvements in the labour market and contained inflation.

Domestic demand is forecast to accelerate further in 2015, when the euro area recovery is expected to gather steam. Private consumption is set to strengthen on the back of further improvements in the external environment and better labour market conditions. Against this backdrop, private investment is also expected to rise, financed by a rise in credit supply and

accumulated profits. Imports are set to grow in parallel, due to stronger domestic demand, leading to a slight rise in the current account deficit to 2.3% of GDP in 2015, up from 1.6% of GDP in 2013. Overall, real GDP growth is expected to reach 3.4% in 2015, significantly stronger than the EU average 2% and for the closest peers. Inflation is set to remain contained at 1.1% in 2014, thanks to moderate wage rises and in line with weak external inflationary pressures. It is set to pick up to 1.9% in 2015 on the back of accelerating domestic demand. The rate of unemployment is set to fall gradually from 10.3% in 2013 to 9.5% in 2015.

Poland's short-term growth prospects are highly dependent on the economic environment in neighbouring countries. The deterioration of the situation in Ukraine might have a negative impact on the Polish economy. First, Polish exports could fall significantly, especially food, chemicals and machinery. Secondly, disruptions in imports of oil and gas might have a severe impact on Polish industry. Thirdly, lower confidence among businesses and consumers might have a direct impact on domestic demand, while foreign investors might be deterred, leading to more volatility in capital flows.

The national reform programme and convergence programme share the same macroeconomic outlook. For 2014, the authorities project real GDP growth of 3.3% with contribution of domestic demand to growth (+2.8 pp) which is in line with the Commission forecast. For 2015, the Polish authorities forecast real GDP growth of 3.8%, higher than the Commission 2014 spring forecast (+3.4%). The macroeconomic scenario does not include an estimate of the impact of structural reforms on macroeconomic variables.

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

#### 3.1. Fiscal policy and taxation

Budgetary developments and debt dynamics

In the 2014 convergence programme, Poland plans to improve its fiscal position in order to correct the excessive deficit by the 2015 deadline and meet the medium-term budgetary objective by 2018. It aims at improving the general government balance from a deficit of 4.3% of GDP in 2013 to 2.5% of GDP in 2015, thus bringing it below the 3% of GDP reference value by the deadline set by the Council under the Excessive Deficit Procedure (see Box 2). The programme confirms the previous medium-term budgetary objective of -1% of GDP and aims to reach it by 2018, two years later than planned in last year's programme update. The medium-term budgetary objective is more stringent than what the Pact requires (-2% of GDP).

In 2013, the general government deficit amounted to 4.3% of GDP, well above the reference value of the Treaty and the 3.5% of GDP projected in the previous year's programme, although real GDP growth in 2013 turned out slightly better than projected). This was due to both higher total expenditure (by 0.6% of GDP) and lower total revenues (by 0.3% of GDP). On the expenditure side, the slippage compared to the 2013 programme was driven by higher social transfers and intermediate consumption, while on the revenue side taxes on production and imports turned out lower than planned.

The profile of the general government headline balance in 2014-2015 is strongly affected by the systemic pension reform reversal enacted in December 2013, in particular the transfers of assets from the second to the first pension pillar: a one-off asset transfer worth around 9% of GDP in 2014, as well as annual transfers of assets of people retiring within 10 years. Under the current accounting rules of European System of Accounts (ESA95), such transfers are treated as general government revenue. Under the new rules (ESA2010), which will come into force this autumn, such transfers will not count as revenue anymore. Accordingly, the programme foresees a general government surplus of 5.8% of GDP in 2014

and a deficit of -2.5% of GDP in 2015 under ESA95. Excluding these asset transfers, the headline balance foreseen in the programme would amount to -3.5% in 2014 and -2.7% in 2015. In structural terms, the programme foresees an improvement in (recalculated) structural balance of 1.2% of GDP in 2014 and 0.6% of GDP in 2015.

The budgetary adjustment envisaged by the Polish authorities is equally distributed across 2014 and 2015, with an improvement in the headline deficit by 0.8% in each year (excluding the asset transfers from private pension funds). It is focused on the expenditure side, with the expenditure-to-GDP ratio falling by 1.5 pp in 2013–2015 and a simultaneous increase in revenue-to-GDP ratio by 0.4 pp (0.2 pp excluding the pension funds asset transfers). The budgetary targets are subject to implementation risks in the view of slippages in the past and of upcoming elections. On the other hand, the fiscal balance might turn out better than planned in case more people do not decide to remain the second pillar of the pension system (the programme assumes that 50% of people would remain, which is a conservative assumption taking into account that the default option in case of lack of explicit declaration is to shift a person entirely to the first pillar and that private pension funds are prohibited to advertise), thereby increasing the amount of social contributions retained in the first pillar.

The consolidation path outlined by the Polish authorities is faster than the one projected in the Commission 2014 spring forecast. In 2014, the Commission projects a general government balance of +5.7% of GDP (-3.6% of GDP excluding the transfers of pension funds' assets), similar to the Polish authorities'. However, in 2015, the Commission projects a deficit of 2.9% of GDP (3.1% of GDP excluding the assets transfers), which is 0.4% of GDP higher than the one projected by the Polish authorities. The difference is mostly due to the fact that, based on common practice, the Commission's projection does not yet include the future impact of the 2015 budget which will only be available by mid-October. This is for instance evidenced by a higher projection of current expenditure, in particular intermediate consumption. The Commission foresees that intermediate consumption will follow nominal GDP growth (as in past years), while the Polish authorities assume it will fall as a share of GDP. The more cautious Commission forecast of the headline figures is also reflected in its estimates of the cyclically adjusted budget balance net of one-offs and other temporary measures. The structural budget is projected to improve by 1% in 2014 and 0.4% in 2015.

**Poland is currently subject to the corrective arm of the Pact** (see Box 2). The EDP recommendation requires Poland to reach a headline deficit target of 4.8% of GDP in 2013, of 3.9% of GDP in 2014 and of 2.8% of GDP in 2015 (excluding the impact of asset transfers from private pension funds due to the December 2013 reversal of the past pension reform). This is consistent with the structural balance improving by 1% of GDP in 2014 and 1.2% of GDP for 2015, based on the Commission's 2013 autumn forecast.

Poland has met the headline target in 2013 and is expected to meet it in 2014 as well. The headline deficit, which amounted to 4.3% of GDP in 2013, was lower than the recommended level of 4.8% of GDP. For 2014, the 3.5% of GDP deficit (excluding the asset transfers related to the pension reform) target in the Convergence programme is also below the recommended level. In the Commission 2014 spring forecast, the 2014 headline deficit is projected at 3.6% of GDP (excluding the pension assets transfers), broadly in line with the programme target and thus also below the headline target set in the recommendation. For 2015, the programme deficit target of 2.7% of GDP (excluding the pension assets transfers) is slightly better than the recommended level. The Commission 2014 spring forecast, based on the no-policy-change assumption, projects the 2015 deficit (excluding the impact of the asset transfer) at 3.1% of GDP, thus above the recommended level.

The change in the structural balance in 2014 is in line with the recommendation. The planned change amounts to 1.2% of GDP according to the programme, above the 1% required by the Council. The Commission 2014 spring forecast projects a slightly smaller adjustment of 1% of GDP, which is still in line with the requirement, albeit narrowly. For 2015, the programme targets a change in the structural balance of 0.6% of GDP, i.e. below the recommended level. The Commission forecast, on a no-policy-change assumption, projects an even lower adjustment of 0.4% of GDP, well below the recommended adjustment of 1.2% of GDP.

The budgetary adjustment envisaged in the programme and in the effective action report is underpinned by a set of measures, the overall impact of which, according to the Polish authorities, is 1.05% of GDP in 2014 and 1.1% of GDP in 2015. For the summary of the main reported measures, see Box 1 below. However, most of these measures had already been taken before the Council adopted the new recommendation under the EDP on 10 December 2013 and were already included in the Commission services' 2013 autumn forecast. According to the Commission's assessment, the additional measures taken since then have a marginal impact in 2014, while they are expected to reduce the deficit by app. 0.1% of GDP in 2015.

The fiscal effort based on the corrected change in the structural balance and the bottom-up assessment falls well short of the requirement set by the Council. When corrected for the downward revision in potential growth since the time of the Council Decision as well as for revenue developments compared to the forecast underlying the Council Decision, the adjusted structural improvement is estimated at 0.6% of GDP in 2014, below the effort required by the Council. This shortfall is confirmed by a bottom-up assessment which estimates the size of the additional fiscal effort in 2014 on the basis of the discretionary revenue measures and the expenditure developments between the baseline scenario underpinning the Council Decision and the Commission spring forecast: it shows an effort of -0.1% of GDP, compared to the required 0.4% of GDP. For 2015, on the basis of the usual nopolicy-change assumption, the adjusted change in the structural balance is projected at 0.1% of GDP, well below the 1.2% of GDP required by the revised EDP recommendation. This shortfall is confirmed in the bottom-up assessment which projects an effort of -0.8% of GDP in 2015, well below the effort estimated as needed at the time of the recommendation.

Therefore, in conclusion, according to the Commission's projection, the headline balance and the structural improvement in 2014 are set to be in line with the new Council recommendation under the Excessive Deficit Procedure, albeit the latter only narrowly. In 2015, however, and prior to the presentation of the 2015 budget, the Commission services expect the headline balance and the structural improvement to be below the targets recommended by the Council. There are risks to the correction as the fiscal effort measured by both the corrected change in the structural balance and the bottom-up assessment is well below the recommended level.

#### **Box 1. Main budgetary measures** Revenue **Expenditure** 2014 • Reversal of the systemic pension reform: • Limitation of the possibility of early transfer of assets from private pension retirement (-0.2%) funds (+9%) (one-off)\* • Gradual increase of the retirement age (-Reversal of the systemic pension reform: 0.1%"suwak" (+0.3%)\* Reversal of the systemic pension reform: • Reversal of the systemic pension reform: lower debt-financing costs due to the higher social contributions (+0.2%)pension assets transfer (-0.4%) Measures to improve tax compliance and • Partial freeze of public wages (-0.1%) the efficiency of tax administration (0.1%) 2015 • Limitation of the possibility of early Reversal of the systemic pension reform: "suwak" (+0.2%)\* retirement (-0.2%) • Reversal of the systemic pension reform: Gradual increase of the retirement age (higher social contributions (+0.5%) • Measures to improve tax compliance and • Partial freeze of public wages (-0.1%) the efficiency of tax administration (0.1%)

<u>Note</u>: The budgetary impact in the table is the impact reported in the programme, i.e. by the national authorities. A positive sign implies that revenue / expenditure increases as a consequence of this measure. The table contains the measures with an impact of at least 0.1% of GDP.

\* These measures have an impact on revenues under ESA95 but will not be treated as such under ESA2010.

General government debt is projected to remain below 60% of GDP in Poland over the programme period. The national authorities project it to fall sharply from 57.1% of GDP in 2013 to 49.5% in 2014, mainly thanks to the large, one-off transfer of pension fund assets, and remain at this level in 2015. The Commission projects a similar pattern, with a slightly higher debt-to-GDP ratio of 49.9% in 2015 due to more cautious general government balance forecast. Since the debt-to-GDP ratio is below the reference rate over the programme period, the debt reduction benchmark is not applicable.

#### Box 2. Excessive deficit procedure for Poland

Poland is currently subject to the corrective arm of the Stability and Growth Pact. The Council opened the Excessive Deficit Procedure on 13 May 2009 and recommended that Poland corrects its excessive deficit by 2014 at the latest. On 10 December 2013, the Council decided, on the basis of Article 126.8 of the Treaty, that Poland had not taken effective action in response to the Council's recommendation and issued a new recommendation under Article 126 (7) of the Treaty.

Poland was given a deadline of 15 April 2014 to take effective action to ensure a sustainable correction of the excessive deficit by 2015 and to report in detail on the consolidation strategy to achieve the targets. According to the Council recommendation, Poland should reach a

headline deficit target of 4.8% of GDP in 2013, of 3.9% of GDP in 2014 and of 2.8% of GDP in 2015 (excluding the impact of asset transfers from private pension funds due to the December 2013 reversal of the past pension reform). This is consistent with the structural balance improving by 1% of GDP in 2014 and 1.2% of GDP for 2015, based on the Commission's 2013 autumn forecast.

Poland was recommended to implement rigorously measures it had already announced and adopted, while complementing them with additional measures to achieve a sustainable correction of the excessive deficit by 2015. Poland is also expected to use all windfall gains for deficit reduction.

The Polish authorities were also asked to:

- (i) improve the quality of public finances, in particular by minimising cuts in growthenhancing infrastructure investments and carefully reviewing social expenditures and their efficiency;
- (ii) improve tax compliance and increase the efficiency of tax administration; and
- (iii) make the institutional framework of public finances more binding and transparent, adjusting definitions used in national accounting to ESA standards, and ensuring sufficiently broad coverage, improving intra-annual monitoring of budget execution and ensuring effective and timely monitoring of compliance with the permanent expenditure rule, based on reliable and independent analysis carried out by independent bodies or bodies endowed with functional autonomy vis-à-vis the fiscal authorities.

Finally, to ensure the success of the fiscal consolidation strategy, the Council stressed that it would be important for Poland to back fiscal consolidation with comprehensive structural reforms, in line with Council recommendations in the European Semester.

At the established deadline, and pursuant to the latest Council recommendation under Art. 126(7) of the Treaty, the Polish authorities submitted a report to the Commission outlining the consolidation strategy aimed at bringing an end to the situation of an excessive government deficit.

#### Fiscal framework

\_

**Poland has introduced a new permanent expenditure rule**, following the Council's 2013 recommendation to enact such a rule, consistent with the ESA95. The rule limits expenditure growth to an eight-year average real GDP growth rate multiplied by forecasted inflation. The level of expenditure is reduced by a correction mechanism if the public debt / general government deficit are above certain thresholds or if there are accumulated deviations from the mid-term objective in the general government balance. The new rule has the potential to improve the Polish fiscal framework. It is close to ESA95, as it sets the expenditure level for almost the entire general government sector and the correction mechanism for the new rule is based on the result for the general government sector. Apart from its main features, the effectiveness of the new rule will depend on how it is actually implemented, in particular in view of frequent changes to the fiscal framework introduced in the past. Overall (and subject to the preceding qualification), the 2013 country-specific recommendations to introduce a new permanent expenditure rule has been fully addressed.

<sup>&</sup>lt;sup>4</sup> In particular, it covers the government funds managed by the Bank Gospodarstwa Krajowego (a state-owned bank) — including the National Road Fund.

Poland strengthened the annual and medium-term budgetary coordination mechanisms across different levels of government as recommended by the Council. First, according to the new permanent expenditure rule, if local government expenditure is forecast to rise faster than the dynamics implied by the rule, then the rest of the general government sector would have to compensate for this by adjusting its planned spending level accordingly. Furthermore, if the general government deficit turns out to be excessively high due to the local government sub-sector, deviations from the mid-term objective are accumulated, and when the sum exceeds a certain threshold, the correction component is added to the formula of the rule. Secondly, from 2014, existing uniform limits on the level of debt and the level of debt servicing costs of local governments have been replaced by individual debt constraints. reflecting the economic capacity of individual units to pay off liabilities. Thirdly, the regional financial chambers acquired the power to require from a local government to draw up a remedial programme, in cases where such government is at risk of not being able to perform its public duties and breaching its individual debt constraint. Fourthly, the central government introduced a uniform type of long-term financial forecast for the local governments. In sum, there has been substantial progress in this field.

Poland made some other changes to the fiscal framework, weakening its stringency. First, the specific correction mechanism for breaching the 50% debt-to-GDP threshold (according to which the ratio of deficit to revenues in a given year cannot be higher than in the previous year) was suspended by the 2013 budget amendment and then removed altogether by the law introducing the permanent expenditure rule. Secondly, the same law removed the provision which prohibited adopting certain acts while Poland is subject to an excessive deficit procedure: containing exemptions, reliefs and deductions whose financial outcome may be a reduction in government revenues; and causing an increase in state budget expenditure which was not covered by the previous expenditure rule (in force until 2014). Lastly, the same law withdrew the provision according to which the draft budget for a given year cannot include a deficit higher than the deficit set for that year in the Multi-Annual State Financial Plan.

The Polish fiscal framework lacks a fully-fledged independent fiscal council, an institutional feature already established or currently being introduced by almost all EU Member States. The current framework contains some positive elements regarding the ex-ante assessment of the government's macroeconomic forecast and the ex-post control of its fiscal policy. At the preparatory stage, the Monetary Policy Council of the National Bank provides an opinion on the macroeconomic assumptions underlying the state budget, and the social partners are consulted. Ex post, the Supreme Audit Office presents annual reports on the execution of the budget act and its compliance with the rules governing the budgetary process to the Parliament. However, the remit of an independent fiscal council would be broader. It would typically cover: (1) ex-ante checks of compliance with fiscal rules, an assessment of macroeconomic and budgetary forecasts and an analysis of the long-term sustainability of public finances; and (2) an ex-post assessment of compliance with fiscal rules. By issuing regular recommendations on fiscal policy to the government, such a body could contribute significantly to improving the quality of public debate on public finances. As mentioned above, the fiscal framework in Poland has been frequently modified in the recent past, and some of these modifications went largely unnoticed. A fiscal council could play an essential role in raising public awareness of such issues.

Long-term sustainability

Poland appears to face medium fiscal sustainability risks in the medium-term. The medium-term sustainability gap<sup>5</sup>, showing the adjustment effort up to 2020 required to bring debt ratios to 60% of GDP in 2030, is at 0.2% of GDP. It is primarily related to the structural primary balance in 2015 (-0.2% of GDP in 2015). In the long-term, Poland appears to face medium fiscal sustainability risks. They are primarily related to the structural primary balance in 2015 and the projected ageing costs (contributing with 1.4 and 1.1 pp. of GDP respectively over the very long run), in particular in the field of health care. The long-term sustainability gap<sup>6</sup> shows the adjustment effort needed to ensure that the debt-to-GDP ratio is not on an ever-increasing path amounts to 2.5% of GDP. 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 2004-2013. It is therefore appropriate for Poland to maintain sufficient primary surpluses and to further contain age-related expenditure growth to contribute to the sustainability of public finances in the long term.

Growing healthcare needs related to ageing population could create fiscal challenges in the future. Already, due to existing inefficiencies, Poland faces difficulties in delivering adequate healthcare and long-term care services. The extent to which waiting times in Poland restrict access to medical care is the highest in the EU. As a result, the proportion of unmet needs for medical care has risen significantly in recent years. Patients are often forced to opt for private medical services, and usually have to pay for them in full. The indebted hospital sector has a relatively high number of acute beds. This number has been steadily decreasing. but not getting closer to the EU average. There is a lack of transparency in the contracting of services in hospital and specialist medical care. Poland has relatively few general practitioners, so the role of these as care coordinators is relatively weak. The Polish authorities have implemented only limited measures regarding the assessment of patient eligibility to join medicines management programmes to improve the cost effectiveness and efficiency of the healthcare system. Based on the information available, it is not possible to judge if these measures will improve the effectiveness and efficiency of healthcare expenditure. Overall, Poland has made limited progress in improving the cost effectiveness and efficiency of spending in the healthcare sector.

#### Tax system

Tax compliance remains a challenge, in particular due to inefficiencies in tax administration. The average cost incurred by the tax administration to achieve a given amount of tax revenue is well above the EU average. The tax administration appears to be highly fragmented. There are more than 400 tax offices with separate management, human

\_

<sup>&</sup>lt;sup>5</sup> See Table V. The medium-term sustainability gap (S1) indicator shows the upfront adjustment effort required, in terms of a steady improvement in the structural primary balance to be introduced until 2020, and then sustained for a decade, to bring debt ratios back to 60% of GDP in 2030, including financing for any additional expenditure until the target date, arising from an ageing population. The following thresholds were used to assess the scale of the sustainability challenge: (i) if the S1 value is less than zero, the country is assigned low risk; (ii) if a structural adjustment in the primary balance of up to 0.5 p.p. of GDP per year until 2020 after the last year covered by the autumn 2013 forecast (year 2015) is required(indicating an cumulated adjustment of 2.5 pp.), it is assigned medium risk; and, (iii) if it is greater than 2.5 (meaning a structural adjustment of more than 0.5 p.p. of GDP per year is necessary), it is assigned high risk.

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

resources and accounting functions as well as IT systems and databases, which may contribute to high overhead costs. Poland also makes only limited use of multilateral controls in the field of VAT, a useful tool to tackle cross-border VAT fraud in cooperation with neighbouring countries. Poland has made some steps aimed at improving the situation. A single database of tax identification numbers was introduced to replace the fragmented local databases managed by the tax offices. In April, the government presented a package of planned further reforms aimed at increasing tax compliance and the efficiency of tax and customs administration. A consolidation of the overhead functions of tax administration has been announced. To sum up, some progress has been achieved.

**High tax compliance costs are one of the main problems in the business environment in Poland.** The number of hours per year spent on tax compliance is very high in Poland,<sup>7</sup> as is the number of tax payments required over a year from a standardised business<sup>8</sup>. E-filing of tax returns by taxpayers remains low<sup>9</sup> while prefilling services offered by the tax administration are marginal. To address the challenge, the government has started working on a comprehensive reform named "e-tax". It aims at the digitalization of most tax compliance processes on the side of the tax administration and the introduction of e-filing at a larger scale. Legislative work to give tax authorities tools for prefilling of tax returns (such as better access to third party information) has also started. Overall, only limited progress has been achieved.

There is scope to increase VAT efficiency by limiting the use of reduced and zero rates. The 23% standard VAT rate is above the EU average, while two reduced rates (8% and 5%) are applied to broad categories of goods and services. The resulting system appears complex and inconsistent. The VAT policy gap in Poland (i.e. loss of potential revenue due to reduced rates and exemptions) has been the highest in the EU. The extensive use of reduced rates leads to revenue losses to the state budget (see Box 3 below) and higher tax compliance costs for businesses, while it is an imperfect instrument to achieve redistribution aims. Limiting the scope of reduced VAT rates could improve the efficiency of the system as compared to temporary increases in the standard VAT rate<sup>10</sup>.

#### Box 3. VAT revenues in Poland in recent years

VAT revenues<sup>11</sup> fell by 5.1% in 2012 compared to 2011, and staged a moderate recovery of 0.4% in 2013<sup>12</sup>. This pattern was largely unexpected, since household consumption (the tax base of VAT) grew by 5% in 2012 and by 1.6% in 2013. The left chart below compares actual VAT collections in 2012-13 with the level of VAT implied by observed household consumption growth and the standard tax elasticity. The 'VAT gap', defined as the difference between the two, amounted to 0.8% of GDP in 2012 and 0.9% of GDP in 2013.<sup>13</sup>

7

<sup>&</sup>lt;sup>7</sup> 286 hours per year in Poland, compared to 178 hours per year in the EU (2012).

<sup>&</sup>lt;sup>8</sup> 18 payments in Poland compared to an average of 11 in the EU. In particular, Poland requires 12 separate VAT payments a year. In vast majority of EU countries VAT is either paid once a year or filed electronically (World Bank, Doing Business 2014).

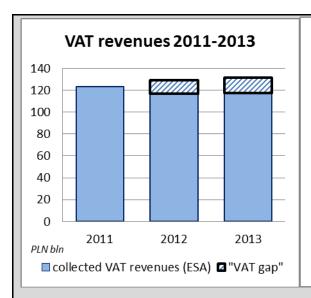
<sup>&</sup>lt;sup>9</sup> According to the national data, the number of all tax declarations filed electronically has risen from 10% in 2011 to 27% in 2013 but still remains below the EU average of 60%. See: Ministry of Finance website www.epodatki.mf.gov.pl

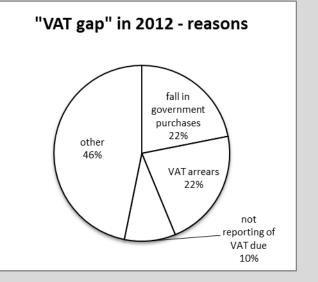
<sup>&</sup>lt;sup>10</sup> In 2014, Poland prolonged the 2011 temporary increase in VAT rates by one percentage point until 2017.

<sup>&</sup>lt;sup>11</sup> In ESA-95 terms. According to the national statistics, VAT revenues fell by 0.7% in 2012 and by 5.3% in 2013. This is PLN 12 billion (0.7% of GDP) lower than planned in the 2012 budget law and PLN 18.6 billion (1.1% of GDP) lower than provided for in the original 2013 budget law. The main difference between the national and the ESA statistics is that the former are cash-based, while the latter are accrual-based.

<sup>&</sup>lt;sup>12</sup> Commission services projection.

<sup>&</sup>lt;sup>13</sup> The hypothetical VAT revenues in 2013 are calculated using the hypothetical 2012 VAT revenues (and not the factual 2012 VAT revenues).





Importantly, in 2012-13, there were no significant changes to existing VAT regulations that could explain the shortfall. For the purpose of sound budgetary planning, it is crucial to gain a better understanding of the reasons underlying recent trends in VAT revenues in Poland.

The following elements seem to have contributed to the 'VAT gap' in 2012: (i) a significant fall in public investment. VAT revenues also depend on purchases by the government sector. As the government cannot deduct VAT incurred on purchases of inputs, this VAT is part of government expenditure as well as revenues. Estimating 2012 revenues with a composite tax base consisting of household consumption, public investment and public intermediate consumption lowers implied VAT revenues and explains 22% of the 'VAT gap'; (ii) increase in VAT arrears<sup>14</sup> as a share of GDP, which seems to explain another 22% of the 'VAT gap'; (iii) Increase in not reporting of VAT due, i.e. situations in which a seller of goods or services charges his customer the full price inclusive of VAT without reporting the transaction to the tax authorities. An increase of this type of fraud would seem to explain around 10 % of the 'VAT gap'; (iv) Other factors, for example a shift towards sales subject to lower VAT rates or increase in other types of tax fraud.

In 2013, VAT revenues followed the growth of the composite VAT base without closing the gap that had emerged in 2012. Hence, the 2013 'VAT gap' shown in the chart above is due to the 2012 level effect. The VAT shortfall is an issue of concern from a budgetary planning perspective and, more general for fiscal policy.

Environmental taxation in Poland is relatively low. Although taxes on energy yield 2.2% of GDP (compared with 1.8% in the EU in 2012), this is due to the high energy intensity of the economy rather than the environmental targeting of the tax system. The implicit tax rate on energy is relatively low<sup>15</sup>, while some energy products are treated preferentially with respect to excise duties. The rates of excise duties on both un-leaded petrol and diesel, expressed in fixed amounts per 1 000 litres, have been almost unchanged since 2007, and are relatively low compared to those in neighbouring countries. Poland is also one of the few EU countries that has no CO<sub>2</sub> component in car taxation.

\_

<sup>&</sup>lt;sup>14</sup> Arrears data published by Polish Ministry of Finance: <a href="http://www.finanse.mf.gov.pl/budzet-panstwa/zaleglosci-budzetowe">http://www.finanse.mf.gov.pl/budzet-panstwa/zaleglosci-budzetowe</a>.

<sup>15</sup> Implicit towards are account.

<sup>&</sup>lt;sup>15</sup> Implicit tax rate on energy is energy tax revenues in relation to final energy consumption (Euro per ton oil equivalent, deflated with the final demand deflator). It amounted to 122.5 in Poland compared to the EU weighted average of 214.8 in 2011.

#### **3.2.** Financial sector

The challenges to Poland's financial sector are comparatively limited. They include a relatively high proportion of non-performing loans, the highest since the end of 2006 (especially in the corporate sector), a still-high proportion of housing loans denominated in Swiss francs (the legacy of the pre-2009 credit boom), a funding gap in the banking sector (though this is shrinking), limited availability of credit for small and medium-sized enterprises (SMEs) and low capital buffers in the credit unions subsector.

Poland implemented measures to address credit risks in the banking sector in line with the recommendations issued by the Polish Financial Supervision Authority. Housing loans can only by granted in the currency in which the debtor receives revenues. It limits the length of repayment of mortgage credits to 35 years and sets the maximum loan-to-value ratio for all housing loans at 80% (to be reached gradually by 2017), while easing some other rules (e.g. less stringent debt-to-income ratios). Revised rules making it easier to obtain consumer bank credit with a view to attracting clients currently with unregulated credit companies entered into force in July 2013.

Poland made further progress in tackling the funding gap in the banking sector. The average funding gap (the difference between loans granted to the domestic non-financial sector and deposits) in the banking sector fell from 15.4% in December 2012 to 12.6% in September 2013, as the gradual deleveraging of foreign parent banks ultimately led domestic banks to compete for deposits. To address the remaining dependency on foreign owners and short-term financing, 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.

Poland has made some progress in improving the availability of credit to small and medium-sized enterprises. In 2013, Poland introduced a programme of de minimis guarantees for SMEs for loans on working capital. The scheme was very well received and in the second half of the year, it was extended to cover investment capital. In 2013, it provided PLN7 billion of guarantees for almost 39 000 SMEs, covering PLN12 billion of credit. The Polish Growth Fund of Funds was established by the European Investment Fund and Bank Gospodarstwa Krajowego to stimulate equity investment in venture capital, private equity and mezzanine funds. The role of the National Capital Fund (Krajowy Fundusz Kapitałowy) is being refocused on venture capital funds supporting the start-up phase of innovative SMEs.

The recent reform of the Polish pension system will have repercussions on capital markets, especially on the bond and equity segments. The transfer of participants (and their contributions) and accumulated assets from defined contribution Open Pension Funds (Otwarte Fundusze Emerytalne) to notional defined contribution Social Insurance Institution (Zaklad Ubezpieczen Spolecznych) will influence the bond market, as greater dependence on non-residents might ultimately result in more market volatility and, potentially, a higher risk premium. The impact on equity markets is likely to be more stretched over time, but the liquidation of Open Pension Funds is likely to have an adverse impact on the primary market, since pension funds were becoming a major investor for Polish equities in recent years.

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

Competitive labour costs and the relatively flexible regulatory set-up of the labour market are among specific features of the Polish economy. Compared to the EU-28, labour

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

is relatively inexpensive and productive,<sup>17</sup> labour taxes are comparatively low<sup>18</sup> and labour laws provide for a substantial degree of flexibility. Employment rose steadily between 2004 and 2012. Nevertheless, the lagged effects of the economic slowdown are still noticeable. As a result, the unemployment rate remains high, especially among the young. Stagnating real wages, partly driven by the nominal freeze on public sector employees' salaries, contribute to an increase in the poverty rate. Labour market participation in Poland remains low, especially for women and older workers. Public employment services and active labour market policies do not address the needs of specific groups of unemployed people, while labour market segmentation and skills mismatches persist.

In the 2013 recommendations, Poland was encouraged to strengthen efforts to reduce youth unemployment through the Youth Guarantee (please see Box 4), increase the availability of apprenticeships and work-based learning, reinforce cooperation between schools and employers while improving the quality of teaching, to adopt the life-long learning strategy, combat labour market segmentation and in-work poverty and reduce the excessive use of civil law contracts in the labour market. Further recommendations aimed at increasing female labour market participation and the employability of older workers and phasing out special pensions schemes for miners and farmers. The analysis in this staff working document leads to the conclusion that Poland has made some progress on measures taken to address these recommendations (for the full country-specific recommendations assessment see the overview table in Section 4).

## Labour market policies

Labour market participation in Poland remains low, especially for women and older workers. Early retirement schemes have been reduced significantly but more effort is still needed to improve the employability and labour market participation of older workers (particularly women) and thus the effective duration of working life, especially when the statutory retirement age is set to rise gradually to 67 as of 1 January 2013. Disability pensions based on a defined benefit formula may be another bottleneck in the social insurance scheme. A proposal for an extensive active ageing strategy was approved in December 2013 but its implementation is still pending. The strategy includes actions to raise the numbers of those aged 50 or more in employment and to promote the development of their skills and competences. Overall, there has been some progress in implementing the recommendation on the labour market participation of older workers.

**Female labour market participation also remains low.**<sup>19</sup> There have been significant efforts to raise the number of children enrolled in pre-school education and to provide more childcare facilities. Poland plans to offer every eligible child a place in pre-school education by 2017 and has planned to boost funding to meet this target. Nevertheless, Poland still ranks bottom in the EU regarding the availability of early childcare services, most of which are concentrated in urban areas. There are also disparities in access to pre-school education facilities between urban and rural areas and the overall participation rate is lower than the EU average. In parallel, Poland decided to extend parental leave, effective as of June 2013, and plans to assess the effects of the reform at the end of 2014. These changes must be seen in

\_

<sup>&</sup>lt;sup>17</sup> Real unit labour costs declined by 4% in Poland between 2005 and 2012 while remaining broadly unchanged in the ELI

<sup>&</sup>lt;sup>18</sup> The tax wedge on labour (amounting to 35.5% for a single individual in 2012) is slightly below the OECD average, slightly above the EU-27 average (34.1%) and far below the average for those EU Member States which are also members of the OECD (41.8%). However, the tax wedge in 2012 increased by 1.1 pp compared to 2011.

<sup>&</sup>lt;sup>19</sup> Women's employment rate remains particularly low in Poland at 57.5% (EU average: 62.3%), with an important gender employment gap (men's employment rate: 72%), which indicates a significant growth potential on the supply side.

conjunction with the relatively low availability of childcare facilities. Overall, there has been some progress in addressing the recommendation on female labour market participation.

**Youth unemployment has been rising steadily over recent years.** The quality of youth employment is a concern, as Poland has the second highest incidence of temporary contracts among young people in the EU, and the transition rate from temporary to permanent employment is low. The proportion of young people who are neither in education, nor in employment or training is also growing<sup>20</sup>. There is a lack of access to good quality apprenticeships and work-based learning, even though Poland started implementing reforms of its vocational education and training system as from the 2012/13 school year. Overall, adjustments to facilitate more work-based learning and apprenticeships are going in the right direction There has therefore been some progress in addressing the recommendation.

#### Box 4. The delivery of a Youth Guarantee in Poland

After assessing the Polish Youth Guarantee Implementation Plan, the remaining challenges to deliver a Youth Guarantee (YG)<sup>21</sup> in Poland<sup>22</sup> are:

- Ensuring the quality of offers under a Youth Guarantee in order to support lasting labour market integration of the young persons, accounting for the urban/rural differences among young people, who are neither in education, nor in employment or training;
- Effectively implementing a pro-active, tailored outreach to the different subgroups of non-registered young people, who are neither in education, nor in employment or training;
- Developing quality partnerships between all relevant stakeholders (in particular strengthening cooperation between schools and employers) allowing for a strong and coherent intervention;
- Setting up of a monitoring system enabling continuous progress evaluation and underpinning regular policy review.

Labour market segmentation persists, especially regarding the protracted transition from fixed-term to permanent employment and the excessive use of so-called civil-law contracts. Fixed-term contracts are particularly widespread among the young (aged 15-24)<sup>23</sup> and the transition rate from temporary to regular employment is very low (19.5% in 2011). Fixed-term contracts also include civil law contracts, the number of which has increased significantly throughout the crisis years, amounting to at least 28.5% of all temporary employees in 2012. The government recently recognised this and put the issue on the political agenda. It announced that all types of contracts would be covered with obligatory social security contributions, with the first proposal already tabled to cover the contracts of mandate. However, there is neither an effective control system within the National Labour Inspectorate (*Państwowa Inspekcja Pracy*) nor labour law enforcement in terms of shorter and smoother judicial procedures to reduce the excessive use of civil law contracts. There has to date been no progress in addressing the recommendation in this field.

<sup>&</sup>lt;sup>20</sup> From 9.0% in 2008 to 12.2% in 2013.

<sup>&</sup>lt;sup>21</sup> Pursuant to the Council Recommendation of 22 April 2013 on establishing a Youth Guarantee (2013/C 120/01): "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 a period of four months of becoming unemployed or leaving formal education".

Poland presented a Youth Guarantee Implementation Plan in December 2013. It was assessed by the Commission's services and feedback was provided to the Polish authorities in a meeting on 11 February 2014 and during a fact-finding mission to Poland on 14 March 2014. Poland sent an updated version of a Youth Guarantee Implementation Plan in April 2014, which was taken into account in a Commission's services revised assessment.

<sup>&</sup>lt;sup>23</sup> The proportion of temporarily employed 15-24 year-olds amounted to 68.6% in 2013

**Reforming the special pension schemes for miners and farmers remains a challenge.** The farmers' scheme (*Kasa Rolniczego Ubezpieczenia Spolecznego*) is still heavily subsidised, with very low pension contributions and low benefit levels, while miners continue to enjoy privileges in terms of pension rights and the minimum work record required. The farmers' scheme and income tax exceptions create incentives for small-scale farmers to remain in the agricultural sector, which still employed 12.6% of the workforce in 2012. This results in hidden unemployment in rural areas on the one hand and an informal economy on the other, negatively impacting sectoral and territorial labour mobility and the effective use of resources. Except for minor improvements, no new credible measures have been introduced nor announced. Labour market mobility is similarly hampered by the special pension scheme for miners<sup>25</sup> and there has been no progress on the draft law limiting the early retirement age since summer 2013. Overall, there has been no progress in implementing the recommendation.

Public employment services and active labour market policies have not yet been adjusted to address the particular needs of specific groups of unemployed. However, Polish authorities recognise the importance of modernising public employment services. In April 2014 an amendment of law on promotion of employment and labour market institutions was approved, but its implementation is still pending. The law includes a package of new activation measures and tools supporting the employment of young and older workers.

#### **Education policies**

**Education outcomes have significantly improved**. The OECD's 2012 Programme for International Student Assessment (PISA) shows very good results in reading, mathematics and science. The OECD Adult Skills Survey (PIAAC) shows young adults are at the same level as (or above) those in other OECD countries. However, the results also show an urgent need to improve the skills of older adults such as numeracy, literacy and ICT skills, as these competencies are currently significantly lower in this age group and tend to decrease with age.

Poland continues to face a mismatch between skills and labour market needs despite substantial efforts to improve the quality of education and its appropriateness for the current labour market. There was progress in modernising core curricula, improving the practical aspect of education and adjusting it to the needs of employers. The reform of the vocational education system is currently being implemented. Some amendments planned in the 2011 reform of higher education, e.g. a national graduates' tracking system or faster paths for adults to complete tertiary education, are already envisaged. Poland has a high tertiary attainment rate<sup>26</sup> but 10.4% of higher education graduates aged 25-29 and 22.5% of graduates aged 20-24 remain unemployed since employers, apart from professional competences, look also for interpersonal skills. There are still shortcomings in the provision and quality of apprenticeships and work-based learning and these deficiencies contribute to growing unemployment among young people. There is also considerable scope to increase the involvement of social partners in improving the labour market relevance of the educational system to co-create curricula and provide practical training opportunities. Overall, Poland has made substantial progress in implementing the recommendation on the quality of teaching. However, making education more relevant to the needs of the labour market is still a challenge.

<sup>&</sup>lt;sup>24</sup> The supplementary budgetary payments to the farmers' scheme reached PLN 15.2 billion (EUR 3.8 billion); meanwhile farmers contributions amounted only to PLN 1.5 billion (EUR 0.37 billion).

<sup>&</sup>lt;sup>25</sup> Although the number of active miners is decreasing (there are around 107 thousand miners), according to the data of the Ministry of Labour, the supplementary payment from the State budget to the miners' pension scheme amounted to 6.5 billion PLN (1.65 billion EUR) in 2012.

 $<sup>^{26}40\%</sup>$  in 2013 vs. 36.6 % EU average and a national target of 45 % for 2020.

**Participation in lifelong learning remains very low, especially among older and low-skilled workers.** In September 2013, Poland finally adopted a lifelong learning strategy to address these challenges but the lack of a framework to complement this (e.g. National Qualification Framework) puts in question its effective implementation. Adult participation in lifelong learning is one of the lowest in the EU, especially for older workers<sup>27</sup>. There are still significant challenges ahead to tailor the training on offer and the support available to the needs of different age groups to ensure permeability among different sectors of education, addressing the results of the OECD's Adult Skills Survey. There has been substantial progress in implementing the recommendation through the adoption of the strategic framework but it constitutes only a first step to overcome the challenge.

#### Social policies

**Poland lacks an effective social protection system with limited overall impact on poverty reduction.** The coverage and adequacy of unemployment and social assistance benefits is low<sup>28</sup>, while spending on pensions remains high, partly due to the inefficient special schemes. The country is among the Member States with the lowest real household income per capita and it also has one of the lowest statutory minimum wages in the EU. Access to work is only part of the answer, as the level of in-work poverty in Poland is still the fifth highest in the EU. Key factors behind in-work poverty are mostly linked to household size, labour intensity and low skills that are connected to low wages. It is also focused in some sectors, especially agriculture. Temporary and part-time job holders are much more at risk of poverty than those in permanent jobs. Poland concentrates efforts to reduce in-work poverty on increasing the statutory minimum wage, while overlooking poverty drivers linked to sectoral mobility, family support and household work intensity. Overall, there has been limited progress in addressing the recommendation on improving the targeting of social policies by the government.

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

Poland has steadily improved its external competitiveness, and further improvement is likely over the near term. The real effective exchange rate, based on unit labour costs, depreciated by nearly 9% over the last two years, while Poland's world export market share stabilised at 1.1% (Box 5 describes in details the performance of Polish exports after 2000). Further advances can be expected, but at a slower pace, as Poland is already close to its technology frontier. Although the business environment has slightly improved in recent years thanks to steps taken to improve the situation in registering property, Poland still lags behind the rest of the EU.

#### **Box 5. Performance of Polish exports**

Poland's role as an exporter has been growing steadily. Aggregate data show that since 2000, in real terms, the value of goods exported rose by a factor of 2.5, while exports of services almost doubled. In 2013, Poland accounted for 1.1% of world exports of goods and 0.87% of exports of commercial services

The change in the market share for goods between 2000 and 2012 can be broken down into a number of different factors: initial product specialisation, initial geographical specialisation, market share gains in geographical destinations and market share gains in product markets.<sup>29</sup> Initial product specialisation and initial geographical specialisation indicate whether a country

 $^{27}$  Adult participation in life-long learning was 4,3 % vs. 10.4% in EU 28 in 2013; 0.8% in 2012 vs. 5.7% in EU28 for the age group 55-64 in 2013

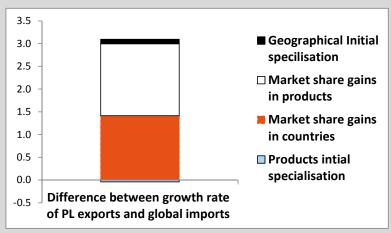
<sup>28</sup> Coverage of unemployment benefits 10.3% vs 30% EU28 (LFS, 2012); non-coverage rate of jobless poor 39.3%, 5<sup>th</sup> highest in EU (EU-SILC, 2012)

<sup>&</sup>lt;sup>29</sup> See Section 3.2 of the Quarterly Report of the Euro Area, Vol. 11, No 2, 2012 for the methodology of shift-share decomposition.

is specialised in sectors with dynamic global demand and whether destination countries are dynamic markets. The two remaining components measure the performance within product markets and within geographical markets and are the outcome of a country's competitive advantage (reflecting both price and non-price competitiveness).

The initial product specialisation was not favourable (Figure 5.1). Poland's export were heavily concentrated in products with low global import growth (paper, wood, apparel, machinery, electrical equipment and vehicles), the share of new highly-innovative product markets was low as a result of low R&D spending, underdeveloped links between research institutes, academia and firms and few innovation-enhancing instruments. By contrast, Poland's initial geographical specialisation was favourable, as it was well placed to benefit from strong growth in demand for imports from Russia, Ukraine, the Czech Republic, Lithuania and Slovakia.

Figure 5.1: Constant market share decomposition of the difference between growth rate of Polish exports and global imports in 2000-12



Source: UN Comtrade

Moreover, Poland benefited from the dynamic effects of increasing competitiveness. Exports grew much more strongly than global imports in several product categories (machinery, electronic equipment, vehicles, plastics and meat), mainly on account of limited growth in labour costs. The growth of Polish exports to Germany, the United Kingdom, France, Italy, the Czech Republic and the Netherlands was also much stronger than growth in imports from those countries.

Revealed comparative advantage indices (RCA) use the trade pattern to identify sectors in which an economy has a comparative advantage, by comparing the trade profile of a country with the world average. The aggregated RCA index for goods shows that from 2000 to 2012, Poland sustained its comparative advantage in low and medium-low technology goods. It also shows that Poland lacked comparative advantage in medium-high and high technology goods, reflecting low R&D spending in the private sector, heavy reliance on technology-absorption and low intensity of in-house innovation among exporters.<sup>30</sup>

Overall, Poland's strong export growth since 2000 was backed by increased competitiveness and diversification in terms of product composition and geographical destinations. However, the RCA analysis reveals that Poland lags behind peers in exports of technologically advanced goods, and the export structure still mainly reflects relatively contained labour costs. If Poland is to sustain strong export growth it will have to bring about a significant change in the export

<sup>&</sup>lt;sup>30</sup> We refer here to the OECD's classification of manufacturing industries based on R&D intensities as proposed by T. Hatzichronoglou in *Revision of the high-technology sector and production classification*, OECD Science, Technology and Industry Working Papers, No 2, 1997.

sector towards technologically advanced goods and services, supported by further reforms of the innovation framework and business environment.

In 2013, Poland received three recommendations 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. They also cover improving the functioning of several network industries, including investment in energy generation and efficiency, development of the electricity grid, cross-border exchange of energy and competition in the gas sector, improvement of the railway infrastructure, broadband coverage, and improving waste and water management. The country-specific recommendations also covered access to professional services. The analysis in this staff working document leads to the conclusion that Poland has made limited progress in taking measures to address these recommendations (for the full country-specific recommendations assessment see the overview table, Section 4).

#### Transport infrastructure

Poland's heavily underdeveloped and neglected transport infrastructure continues to be a major bottleneck to growth. The deteriorating railway network particularly needs significant investment to boost the competitiveness of the sector and to achieve a better balance between road and rail transport. Only a third of about 20 000 km of functioning railway lines is in a good condition. There are persistent problems with the timely implementation of railway projects, mainly due to administrative and organisational capacity constraints, the burdensome regulatory environment and prioritisation of other modes of transport by the authorities. On the positive side, the railway regulator's budget was increased significantly and, following a European Court of Justice ruling, average track access charges were reduced by about 20% as of December 2013. In spite of this, overall, there was limited progress in 2013 regarding railway. Other challenges in transport include a low, although slowly improving, level of road safety<sup>31</sup> and a high level of urban congestion. Urban congestion is linked to the overall unsustainable structure of urban transport and results in high costs and delays, a rising level of greenhouse gas emissions and a particularly high energy intensity of the transport sector. The reasons for the underperformance of the urban transport system include underinvestment in public transport, a low number of comprehensive urban transport/mobility plans and insufficient usage of Intelligent Transport Systems.

#### R&D and innovation

Poland still has one of the lowest levels of R&D expenditure in the EU and is one of the worst performers in broader innovativeness indicators. R&D expenditure has grown by 9.7% on average between 2007 and 2012, reaching 0.9% of GDP in 2012 but it is still well below its national target (1,7% of GDP for 2020). A strong increase in public R&D intensity since 2007 has been a main driver of overall R&D intensity growth. However, private R&D expenditure is especially low (0.33% of GDP), therefore private funds will have to play a much stronger role if Poland is to reach its 2020 target. A low level of R&D expenditure, especially in the private sector, coupled with weak research and innovation activity in companies, a low degree of commercialisation of research and an insufficiently innovation-friendly business environment are reflected in Poland's weak science and innovation performance. Traditionally, the innovation support system in Poland has been risk-averse, based mostly on grants, supporting technology absorption and transfer without a large impact on genuinely new innovation. Box 6 provides a detailed analysis on economic growth potential hindered by current innovation capacity of the Polish economy.

<sup>&</sup>lt;sup>31</sup> Poland had the second worst road deaths record in the EU in 2013 with 87 fatalities per million inhabitants.

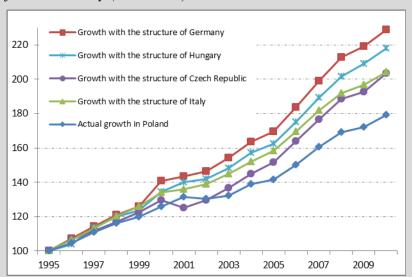
#### Box 6. The innovation gap in the Polish economy

Poland has been the only EU country that has weathered the past crisis without a contraction in aggregate economic activity. One of the key challenges going forward is to manage the transition from a growth model based on favourable cost competitiveness in low and medium technology sectors to sectors with higher technological content and value added.

A very simple but illustrative way to explore the potential for up-grading the current growth model is a shift-share analysis. This analysis indicates what Poland's economic growth would have been if it had the economic structure, in terms of sectorial composition of GDP, of another country. We use Germany, Italy and two Central and Eastern European countries - the Czech Republic and Hungary - as reference<sup>32</sup>.

Between 1995 and 2010, Polish Gross Value Added increased by 80.5%, more than any of the five countries mentioned above. At the same time our analysis shows that Poland's growth would have been significantly higher not only if one applies the sectorial composition of Germany but also with the composition of Italy, Hungary or the Czech Republic (see Figure 6.1). The differences are due to the different technological content of the different growth models.

Figure 6.1: Comparison of the actual GVA growth in Poland and implied GVA growth by structure of a reference country (1995=100)



Source: Commission services

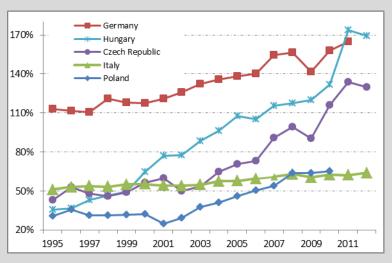
\_

Relying on a commonly used OECD classification, individual sectors can be grouped in terms of their R&D intensities: high technology, medium-high technology industries, medium-low technology, low-technology and a residual category of technologically non-classified industries<sup>33</sup>. Importantly, sectors with higher technological content tend to growth faster. Figure 6.2 shows trends in the ratio of GVA produced in high technology industries (combined high and medium-high) to low technology (medium-low and low). While Poland, the Czech Republic and Hungary started with broadly similar ratios (around 0.3 - 0.4), Poland made little progress since the mid-1990s, although it managed to catch up with Italy.

<sup>&</sup>lt;sup>32</sup> In our analysis we have used the NACE (revision 2) statistical classification of economic activities, which was broken down to 38 branches of the economy. The analysis covers the period of 1995–2011, being restricted by data availability. We have also referred to the OECD's classification of manufacturing industries based on R&D intensities as proposed by T. Hatzichronoglou that is compatible with the NACE.

<sup>&</sup>lt;sup>33</sup> High technology industries include aircraft and space craft manufacturing and pharmaceuticals; medium-high technology industries include electrical machinery and motor vehicles manufacturing, machinery and equipment; medium-low technology industries include building and repairing ships, rubber and plastic products; low technology industries embrace wood and paper products, food and beverages.

Figure 6.2: Relation of high/high- medium technology to low/low- medium technology in GVA of manufacturing Poland and reference countries



Source: Commission services

Taken together, the shift-share analysis and comparison of the technological content of production indicate that there is significant scope to catch up in terms of innovative capacity of the economy. Over the last decade, Poland has managed to build and safeguard substantial cost competitiveness, which is demonstrated by the relative fall of unit labour costs. Although it currently gives Poland a considerable competitive advantage, it cannot be taken for granted going forward. Moreover, non-price competitiveness (e.g. R&D expenditure, number of patent applications or a share of highly-innovative products in Polish exports) is comparatively low.

Raising the innovation capacity of Polish small and medium enterprises, improving links between science and industry and developing targeted instruments adapted to the whole innovation cycle, has been a long-standing challenge for Poland. There have been various policy responses in recent years. The Enterprise Development Programme together with the National Strategy for Smart Specialization was finally adopted by the government on 8 April 2014. The programme focuses on promoting an innovation-friendly business environment and improving the financing of the R&D support system with better financial instruments and tax incentives. The EU-funded 2014-20 Smart Growth Operational Programme focuses primarily on commercialising new technologies. Recent reforms in the field of science and higher education have started to bear fruit, i.e. the applied research agency (Narodowe Centrum Badan i Rozwoju) proved successful in inducing a growing share of private investment in R&D projects. Additional measures to encourage innovation, such as more efficient financing of scientific activities or relaxing R&D services from binding restrictions related to public procurement procedures are foreseen. Taken together, the changes are comprehensive and consistent in their approach. Implementation will show how effective they are. Unless the Enterprise Development Programme is implemented effectively, progress in addressing the relevant recommendation will remain limited.

Existing tax incentives for R&D are ineffective in promoting internal R&D in the private sector and are used only by big companies. In 2012, tax incentives for the purchase of new technologies amounted to almost 0.35% of corporate income tax revenues, but only 94 corporate taxpayers actually used them. At the same time, personal income tax taxpayers hardly used them at all. A tax incentive addressing internal R&D is available to companies that have obtained the status of R&D centre. However, take-up has been limited, as the law requires strict conditions to obtain that status. In 2013, only 29 entities were registered as such

centres. Overall, limited progress has been observed in respect of tax incentives for R&D, since the Enterprise Development Programme envisages a tax relief for R&D activities, which may replace the existing relief for the acquisition of new technologies.

### Information and communication technologies

Despite recent efforts, Poland still lags behind considerably when it comes to seizing the growth potential of information and communication technologies. Fixed broadband coverage is among the lowest in the EU, both at national level and especially in rural areas<sup>34</sup>, and the take-up of broadband is the fourth lowest in the EU. Broadband projects co-financed from EU structural funds continue to face significant implementation difficulties. The absorption of broadband funds from the Rural Development Programme has also been very low. Moreover, the assignment of spectrum for mobile broadband has again been postponed, despite the expiry of the derogation decision, which aggravates the problem of low fixed broadband coverage, especially in rural areas. There has therefore been limited progress on this country-specific recommendation.

#### Environment and energy

Environmental challenges identified in the 2013 staff working document remain valid. 75% of collected municipal waste is landfilled while only 13% is recycled, resulting in missed business opportunities for Poland<sup>35</sup>. Landfill charges still fail to bring incentives to make recycling and re-use economically attractive. Further constraints arise due to insufficient separate collection and inadequate infrastructure for alternative treatment. Unsatisfactory enforcement of the waste legislation also stands for a major bottleneck, in particular in case of the Extended Producer Responsibility schemes, where the scale of abuses undermines viability of the system. Poor air quality is a significant problem for some urban areas, as the exposure of the urban population to air pollution by particulate matter is far above the EU-28 average with the main sources of pollution stemming from transport and residential heating based on coal. Although urban wastewater collecting systems and treatments plants require further investments, Poland successfully uses the EU Funds to build the infrastructure required by the EU environmental directives.

Difficulties in delivering on Poland's commitment to limit the increase of greenhouse gas emissions in sectors outside the Emission Trading Scheme are expected. The latest inventory data show that emissions are higher than expected in Poland's latest EU projections. The emissions outside the Emission Trading Scheme increased by 14% between 2005 and 2012 and are already equal to the 2020 target<sup>36</sup>. In particular, transport emissions have grown considerably over the last decade and are projected to rise yet further by 2020.

As far as energy efficiency is concerned, there are still very high potential gains in all sectors of Poland's economy and achieving them could support economic growth and play a role in reducing Poland's energy dependency. Poland set an indicative national energy efficiency target to stabilise its primary energy consumption at the level of 96 Mtoe<sup>37</sup> in 2020. However, the energy and carbon intensity of the Polish economy are two and three times higher, respectively, than the EU average. The energy intensity of the transport sector is

 $<sup>^{34}</sup>$  In 2013 71% at national level compared to EU average of 96% and 38% at rural level compared to EU average of 86%

<sup>&</sup>lt;sup>35</sup> Full implementation of the existing waste legislation could create more than 37,000 jobs in Poland and increase the annual turnover of the waste sector by over € 4 bn. Moving towards "0" landfilling could take this to over 44,000 additional jobs and increase the annual turnover by over €4,6 bn. Source: Commission study "Implementing EU legislation for Green Growth", 2011, <a href="http://ec.europa.eu/environment/waste/studies/pdf/study%2012%20FINAL%20REPORT.pdf">http://ec.europa.eu/environment/waste/studies/pdf/study%2012%20FINAL%20REPORT.pdf</a>

 $<sup>^{36}</sup>$  204 MT CO<sub>2</sub> eq. in 2012 against a 2020 target of 204,6 MT CO<sub>2</sub> eq.

<sup>&</sup>lt;sup>37</sup> Million tonnes of oil equivalent.

particularly high compared to the EU average and has been increasing at an annual rate of 6% between 2005 and 2011, mainly due to a surge in passenger and freight road traffic, relatively low excise duties on motor fuel, and a vehicle tax system which does not incentivise the use of emission-efficient cars. The residential sector accounts for almost a third of total energy consumption and grew at an average annual rate of 1% in 2005 - 2011. There is significant potential for improving the energy efficiency particularly in housing and in public buildings, but also in district heating systems. The Polish White Certificate System supports investment in end-use energy efficiency.

The domestic energy generation capacity is ageing, the electricity grid is congested, while coal remains the major source of energy, and the use of renewable energy sources remains low. Poland has made progress in enabling reverse flows on gas interconnectors with Germany. The construction of the LNG terminal in Świnoujście and the expansion of three underground gas storage facilities are to be finished by the end of 2014. Preparatory work on major interconnections between Poland and its neighbours (the Czech Republic, Slovakia and Lithuania) is well advanced. Regarding energy generation, the share of renewables in consumption has grown rapidly (from 7% in 2005 to 11% in 2012). However, the current system to support renewable energy generation based on quotas did not deliver as expected, though a new draft law has been adopted by the government in April 2014. The price of green certificates that each non-renewable electricity producer had to purchase to meet quotas was too low and did not compensate renewable electricity producers sufficiently.

The key problems in the natural gas market are still a lack of diversification and lack of competition. Almost 90% of natural gas imports come from Russia. Ongoing investments in infrastructure are likely to improve diversification. To introduce more competition, the Polish authorities continue to encourage the exploration of shale gas. However, there has been limited progress in improving competition in retail energy markets. Price regulation for household customers continues to prevent competition in the household gas market and regulation is broadly maintained for most industrial customers. Poland also continues to regulate retail electricity prices for households but competition in the industrial consumers' segment is more vibrant and not restricted by retail price controls.

Overall, Poland has made limited progress in addressing the recommendation in the energy sector.

#### Professional services and competition

In the field of professional services, unjustified restrictions are still hampering economic activity. Professional services play an important role in the business service markets that account for 7.8% of Polish GDP. This sector is composed mainly of SMEs facing a high regulatory burden, which affects their growth potential. Although the number of regulated professions is still among the highest in the EU, the government is committed to a highly ambitious deregulation reform. Access to 50 professions has been liberalised in the first tranche of reform in 2013. Deregulation of the second tranche, covering 91 professions, was adopted by the Polish Parliament on 4 April 2014. The third tranche, covering 101 further professions has been passed to the Parliament and is planned for the beginning of 2015. A fourth tranche is also considered, with 40 possible further professions proposed through an open consultation. Overall, the current advancement represents a significant improvement in opening access to professions, and a substantial progress in the respective country-specific recommendation is observed, although a large part of the reform is still to be implemented.

#### Box 7: Potential impact of structural reforms on growth – a benchmarking exercise

Structural reforms are crucial for boosting growth. It is therefore important to know the potential benefits of these reforms. Benefits of structural reforms can be assessed with the help of economic models. The Commission uses its QUEST model to determine how structural reforms in a given Member State would affect growth if the Member State narrowed its gap vis-à-vis the average of the three best EU performers on key indicators such as the degree of competition or labour market participation. Improvements on these indicators could raise Poland's GDP by about 9 % in a 10-year period. Some reforms could have an effect even within a relatively short time horizon. The model simulations corroborate the analysis of Section 3.3, according to which large gains would likely stem from increasing participation rates among the elderly. In addition, the simulations support the priority placed by the authorities on increasing participation rates among women by investing in childcare.

Table: Structural indicators, targets, and potential GDP effects<sup>38</sup>

Reform areas		PL	Average 3 best EU	GDP % relative to baseline	
			performers	5 years	10 years
Market competition	Final goods sector markups (price-cost margin)	0.27	0.13	2.7	4.8
Market regulation	Entry costs	17.30	0.13	0.1	0.4
Tax reform	Implicit consumption tax rate	20.8	28.6	0.4	0.5
Skill enhancing reforms*	Share of high-skilled	5.8	10.7	0.0	0.1
	Share of low-skilled	10.4	7.5	0.0	0.1
Labour market reforms	Female non-participation rate (25-54ys):			0.5	1.1
	- low-skilled	43.5	26.4		
	- medium-skilled	24.8	10.5		
	- high-skilled	9.5	4.3		
	Low-skilled male non-participation rate (25-54ys)	26.3	7.7	0.0	0.1
	Elderly non-participation rate (55-64ys):			0.8	1.7
	- low-skilled	33.2	13.4		
	- medium-skilled	15.6	4.8		
	- high-skilled	4.8	3.3		
	ALMP (% of GDP over unemployment share)	7.4	37.4	0.2	0.3
	Benefit replacement rate**	46.7	52.6	0.0	0.0
Total				4.8	9.0

Source: Commission services. Note: Simulations assume that all Member States undertake reforms which close their structural gaps by half. The table shows the contribution of each reform to total GDP after five and ten years. If the country is above the benchmark for a given indicator, we do not simulate the impact of reform measures in that area; however, the Member State in question can still benefit from measures taken by other Member States. The long-run effect of increasing the share of high-skilled labour in the population could be 3.0% of GDP and of decreasing the share of low-skilled labour could be 0.7%. \*\* EU average is set as the benchmark.

#### 3.5. Modernisation of public administration

The particular challenges in this field are in contract enforcement, obtaining construction permits and tax compliance costs for businesses, as reflected in 2013 country-specific recommendations. Moreover, there is scope for improvement in the use of e-administration.

\_

<sup>&</sup>lt;sup>38</sup> Final goods sector mark-ups is the difference between the selling price of a good/service and its cost. Entry cost refers to the cost of starting a business in the intermediate sector. The implicit consumption tax rate is a proxy for shifting taxation away from labour to indirect taxes. The benefit replacement rate is the % of a worker's pre-unemployment income that is paid out by the unemployment scheme. For a detailed explanation of indicators see Annex.

<sup>&</sup>lt;sup>39</sup> For a detailed explanation of the transmission mechanisms of the reform scenarios see: European Commission (2013), "The growth impact of structural reforms", Chapter 2 in QREA No. 4. December 2013. Brussels; <a href="http://ec.europa.eu/economy\_finance/publications/qr\_euro\_area/2013/pdf/qrea4\_section\_2\_en.pdf">http://ec.europa.eu/economy\_finance/publications/qr\_euro\_area/2013/pdf/qrea4\_section\_2\_en.pdf</a>

Poland has made some progress in addressing the 2013 recommendations (for the full country-specific recommendations assessment see the overview table in Section 4).

Contract enforcement in Poland continues to be lengthy. Poland scores 55<sup>th</sup> in the World Bank's global ranking on the overall number of days needed to enforce a contract. As to the general performance of the judicial system, Poland performs well as regards the time needed to resolve litigious civil and commercial cases at first instance. However, the clearance rate for such cases is low and it deteriorated between 2010 (95%) and 2012 (89%), creating a considerable backlog. Alternative methods of dispute resolution are little used. The government amended the civil procedure code to streamline civil and commercial proceedings, which might speed up the enforcement of contracts. Overall, some progress has been made.

The area of construction permits is still a challenge, as the number of required administrative procedures is high. Poland is ranked 88<sup>th</sup> in the World Bank's global ranking on the ease of dealing with construction permits. 42 Moreover, there is a considerable backlog of cases before the administrative courts, which has a negative impact in case of an appeal against an administrative decision needed for a construction permit. The government submitted to the Parliament legal amendments that would simplify the requirements for certain types of construction permits (mostly residential). Furthermore, the Codification Committee for the Construction Law is scheduled to present its findings in late 2014 on a comprehensive reform on planning, land use and construction. Overall, limited progress has been made.

Overall, the digitisation of administration and the interoperability of existing IT systems is low. The government adopted a law on the standardisation of forms in administrative procedures, intended to raise the number of forms available for online processing. Poland made some progress in improving the Point of Single Contact, however, it does not fully comply with the Services Directive in relation to the possibility of completing procedures online. The share of e-Procurement in total public procurement is among the lowest in the EU.

#### 4. Conclusions

Although Poland has weathered the post-2007 global economic and financial crisis relatively well, it faces significant economic policy challenges: further fiscal consolidation, low labour market participation, high youth unemployment, relatively low levels of education, weaknesses in public healthcare and business environment as well as a lack of innovative capacity. There are also deficiencies in public administration and waste management. These challenges were already identified in the 2013 Staff Working Document. In July 2013, relevant policy responses were recommended in the country-specific recommendations issued for Poland. As suggested by the 2014 Annual Growth Survey and the 2013 Alert Mechanism Report, these challenges remain fully or partly relevant.

The analysis in this staff working document concludes that Poland has made some progress in addressing the 2013 country-specific recommendations. Progress in ensuring the timely correction of the fiscal deficit was limited until autumn 2013. Since then, and following a new Council recommendation under the Excessive Deficit Procedure, the situation of public finances has improved on the back of both better than expected economic growth and some additional policy measures. Substantial progress has been made towards strengthening the fiscal framework, notably by enacting a permanent expenditure rule and improving the coordination among different levels of government. The government has

<sup>&</sup>lt;sup>40</sup> 685 days in Poland compared the OECD average of 529 days.

<sup>&</sup>lt;sup>41</sup> Clearance rate is the number of resolved cases over the number of incoming cases.

<sup>&</sup>lt;sup>42</sup> Source: World Bank, Doing Business database: http://www.doingbusiness.org/Rankings.

started reforms to increase the efficiency of the tax administration and increasing the tax compliance. Efforts to tackle youth unemployment and increase the labour market participation of women and older people go in the right direction: A lifelong learning strategy is now in place and access to childcare facilities has been improved. However, no progress has been made in fighting labour market segmentation and no steps have been taken to reform the special schemes for farmers and miners. Poland has presented promising strategic programmes aim at improving its innovation support framework for private companies but implementation remains limited. Progress on improving energy generation capacity and energy efficiency and developing railway infrastructure has been also limited and broadband coverage remains low. There has been substantial progress in implementing an ambitious reform facilitating access to regulated professions and some progress was made to improve the business environment.

The policy plans submitted by Poland address most of the challenges identified in last year's Staff Working Document 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, innovation-friendly business environment as well as energy generation and efficiency. 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 in phasing out special pension schemes to enhance labour mobility, the programmes lack the ambition to address the challenges in a comprehensive way.

#### 2013 commitments

#### **Summary assessment**

#### Country-specific recommendations (CSRs)

**CSR 1:** Reinforce and implement the budgetary strategy for the year 2013 and beyond, supported by sufficiently specified measures for both 2013 and 2014, to ensure a timely correction of the excessive deficit by 2014 in a sustainable manner and the achievement of the fiscal effort specified in the Council recommendations under the EDP. A durable correction of the fiscal imbalances requires credible implementation of ambitious structural reforms, which would increase the adjustment capacity and boost potential growth and employment. After the correction of the excessive deficit, pursue the structural adjustment effort that will enable Poland reaching the medium-term objective by 2016. With a view to improving the quality of public finances minimise cuts in growth-enhancing investment, reassess expenditure policies improving the targeting of social policies and increasing the cost effectiveness and efficiency of spending in the healthcare sector. Improve tax compliance, in particular by increasing the efficiency of the tax administration.

## Poland has made some progress in addressing CSR 1:

- Progress in ensuring the timely correction of the excessive deficit was limited until autumn 2013. Since then, and following a new Council recommendation under the EDP, the situation of public finances has improved on the back of both better than expected economic growth and some additional policy measures. According to the Commission's 2014 spring forecast, the headline balance and the structural improvement in 2014 are set to be in line with new **EDP** Council the recommendation. Further consolidation measures are needed to ensure sustainable correction of the excessive deficit in 2015
- Limited progress in targeting social policies. Some measures to reform social protection system announced but no further developments observed.
- Limited progress in increasing the cost effectiveness and efficiency of spending in the healthcare sector. Some measures on patient eligibility assessment to join pharmaceutical programmes were implemented.
- Some progress in increasing tax compliance and the efficiency of the tax administration. More information has been made accessible to tax authorities in the mortgage register and reverse charge in VAT was introduced for some products. A single database of tax identification numbers was introduced and changes to the structure of the tax administration announced.

**CSR 2:** Ensure the enactment of a permanent expenditure rule in 2013 consistent with the rules of the European System of Accounts. Take measures to strengthen annual and medium-term budgetary

## Poland has made substantial progress in addressing CSR 2:

• Substantial progress in enactment of permanent expenditure rule. The rule has

<sup>43</sup> The following categories are used to assess progress in implementing the 2013 country-specific

recommendations: No progress: The Member State has neither announced nor adopted any measures to address the country-specific recommendations. This category also applies if a Member State has commissioned a study group to evaluate possible measures. Limited progress: The Member State has announced some measures to address the country-specific recommendation, but these measures appear insufficient and/or their adoption/implementation is at risk. Some progress: The Member State has announced or adopted measures to address the country-specific recommendation. These measures are promising, but not all of them have been

implemented yet and implementation is not certain in all cases. <u>Substantial progress</u>: The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the country-specific recommendation. <u>Fully addressed</u>: The Member State has adopted and implemented measures that address the country-specific recommendation appropriately.

coordination mechanisms among different levels of government.

been adopted.

• Substantial progress in taking measures to strengthen coordination among different levels of government. The new permanent expenditure rule takes into account the spending of local governments when setting the expenditure level; existing uniform limits on local governments replaced by individual debt constraints; adopted regulations concerning remedial programme for local governments in cases of breaching of individual debt constraints; uniform type of long-term financial forecast for the local governments adopted

CSR 3: Strengthen efforts to reduce youth unemployment, for example through a Youth Guarantee, increase the availability of apprenticeships and work-based learning, strengthen cooperation between schools and employers and improve the quality of teaching. Adopt the proposed life-long learning strategy. Combat in-work poverty and labour market segmentation through better transition from fixed-term to permanent employment and by reducing the excessive use of civil law contracts

## Poland has made some progress in addressing CSR 3:

- Some progress in efforts to reduce youth unemployment. Youth Guarantee Implementation Plan presented in December 2013 and an updated version in April 2014
- Some progress in increasing the availability of apprenticeships and workbased learning. The reform of the vocational education system is on-going.
- Some progress in strengthening cooperation between schools and employers. Modernisation of core curricula aimed at adjusting tem to the needs of employers is on-going.
- Substantial progress in improving the quality of teaching. National graduates' tracking system is planned and faster paths for adults to complete tertiary education are envisaged.
- Substantial progress on the life-long learning strategy. In September 2013, the lifelong learning strategy was adopted but its implementation is still pending.
- Limited progress in combating in-work poverty. Increase in the statutory minimum wage was undertaken.
- No progress in combating labour market segmentation.

CSR 4: Continue efforts to increase female labour market participation, in particular by investing in affordable quality childcare and pre-school education, by ensuring stable funding and qualified staff. With a view to improving sectoral labour mobility, take permanent steps to reform the farmers' social security scheme KRUS. Phase out the special pension system for miners with a view to integrating them into the general scheme. Underpin the general pension reform with measures promoting the employability of older workers to raise exit ages from the labour market.

# Poland has made some progress in addressing CSR 4:

- Some progress in increasing female labour market participation. Poland plans to offer every eligible child a place in pre-school education by 2017 and has planned to boost funding. The number of places in early childcare still far too low to satisfy needs.
- No progress in phasing out special pension scheme for farmers and miners.
- Some progress in promoting employability of older workers. The lifelong learning strategy has been adopted and some

measures have been announced in the draft programme: Solidarity across Generations 50+.

**CSR 5:** Take additional measures to ensure an innovation-friendly business environment by strengthening the links between research, innovation and industrial policy, by further developing revolving instruments and tax incentives, and by better targeting existing instruments to the different stages of the

innovation cycle.

# **CSR 6:** Renew and extend energy generation capacity and improve efficiency in the whole energy chain; speed up and extend the development of the electricity grid, including cross-border interconnections, and eliminate obstacles in electricity cross border exchange; reinforce competition in the gas sector by phasing out regulated prices; strengthen the role and resources of the railway market regulator and ensure effective implementation of railway investment projects without further delay; accelerate efforts to increase broadband coverage. improve waste and water management.

## Poland has made limited progress in addressing CSR 5:

- Some progress in strengthening links between research, innovation and industrial policy. The Enterprise Development Programme, the Smart Growth Operational Programme 2014-20 and the Smart Specialisation Strategy were adopted. Numerous co-operative projects and funding instruments involving academia and business are being introduced and coordinated by the applied research agency (NCBiR).
- Limited progress in further developing revolving instruments. The Enterprise Development Programme proposes new support system of financial instruments for R&D.
- Limited progress with reforming tax incentives for R&D. The Enterprise Development Programme announces the introduction of tax reliefs for innovative projects.
- Limited progress in better targeting existing instruments. New support instruments have been introduced to fill in the identified gaps such as the support to innovative capital (NCBiR and National Fund). Capital The Enterprise Development Programme and the programmes of the new financial perspective 2014-2020 include several measures streamlining the support for the entire innovation cycle.

## Poland has made limited progress in addressing CSR 6:

- Limited progress in energy generation and efficiency. The White Certificate System has been started but overall energy efficiency remains poor.
- Some progress in developing the electricity grid. Progress in enabling reverse flows was achieved. Short-term solutions for unscheduled loop flows going through its electricity grid were adopted and cross-border electricity interconnections are under development.
- Limited progress on phasing out regulated prices. Price regulation continues at the retail gas markets and it is maintained for most industrial customers.
- Limited progress in railway investment and infrastructure. Progress on many projects is still slow and poorly planned. However, the railway regulator's budget was increased in 2013 and some legal changes

were introduced. Limited progress in broadband coverage. Absorption of funds from Rural Development Programme remains low and the assignment of spectrum for mobile systems is postponed. Some progress in improving waste and water management. Law on waste management has been implemented but further constraints arise due to insufficient separate collection and inadequate infrastructure for alternative treatment. Poland has made some progress in addressing **CSR 7:** Some progress in the simplification of contract enforcement. Some electronic procedures were introduced, complaints procedure speeded up and there is more use of the mediation procedure. Clearance rate of enforcement cases rose to 99%. Limited progress in simplification of requirements for construction permits. Amendments to the construction law have CSR 7: Take further steps to improve the business environment by simplifying contract enforcement and been proposed covering mostly residential requirements for construction permits and by reducing permits. Codification committee expected to present proposal for a comprehensive tax compliance costs. Adopt and implement the planned liberalisation of access to professional services. reform in late 2014, Limited progress on reducing compliance costs. Changes to the structure of the tax administration have been introduced as a prelude to an e-tax reform and the legal framework to set up a tax portal was announced. Substantial progress in facilitating access to regulated professions. First of the three tranches of reform planned fully implemented and further tranches are to

follow in 2014.

Europe 2020 (national targets and progress)				
Policy field target	Progress achieved			
Employment rate target: 71 %	Employment rate (20-64 age group) has been rising slightly (0.4 pp in comparison to 2010, 0.2 pp to 2011 and 0.2 pp to 2012), reaching 64.9% in 2013. Nevertheless, more efforts are needed to meet 2020 target.			
R&D target: 1.7% of GDP  Greenhouse gas (GHG) emissions target: 14% (compared to 2005 emissions; ETS emissions not covered by this national target)	Polish R&D intensity reached 0.9% of GDP in 2012. Although Polish R&D intensity over 2007-12 rose at an impressive average growth rate of 9.7%, slightly higher than 8.3% average annual growth required to reach the ambitious Polish target of 1.7% by 2020, reaching the target will not be possible without a significantly bigger role for the business sector in the R&D system. Business R&D intensity is now at 0.33%, well below EU average (23rd place in the EU).  Change in non-ETS greenhouse gas emissions between 2005 and 2012: +14%.  According to the latest national projections submitted in 2014 to the relevant United Nation body (UNFCCC), the target is expected to be reached by a singlificantly narrover margin than			
2020 Renewable energy target: 15% Share of renewable energy in all modes of transport: 10%	according to the lastest EU projections.  Share of total renewable energy in gross final energy consumption was 11% in 2012 and 6.1% in the transport sector.			
Energy efficiency target: 13.6 Mtoe (reduction of energy consumption)  By 2020: not exceeding the level of 96.4 Mtoe primary consumption and 70.4 Mtoe final energy consumption	Limited progress has been made on transposition of the Renewable Energy Directive and on development of a stable, efficient, reliable legal and regulatory framework for the support for renewable energy sources.  In 2011, primary energy consumption reached 97.38 Mtoe. Keeping it below 96.4 Mtoe until 2020 despite expected economic growth is now a growing challenge requiring increasing the level of ambition of the current energy efficiency policies in all sectors (end-use consumption, transmission/generation, energy generation). Some policy efforts have recently been taken in particular as regards supporting final energy savings among end-use consumers (e.g. initiation of the White Certificate System in 2013). However, compliance with the new EU energy efficiency legislation requires further strengthening of the support for			
Early school leaving target: 4.5%	energy saving in Poland.  The early school leaving rate was 5.6% in 2011, 5.7% in 2012 and 5.6% in 2013. The EU target has			

	already been achieved. Poland is already well below the target set for 2020 for the EU average (10%). The national target is very ambitious, and progress towards reaching it has been reversed over last two
Tertiary education target: 45%	The tertiary educational attainment rate was 36.5% in 2011, 39.1% in 2012 and 40.5% in 2013. Substantial progress has been achieved towards meeting the target. The 2020 target has almost been achieved.
Target on the reduction of population at risk of poverty or social exclusion in number of persons: 1 500 000	The number of people at risk of poverty and social exclusion has been reduced by 281 000 since 2010 (by 68 000 in 2012 and 213 000 in 2011). Poland has made some progress. More coordinated efforts are needed to reach the 2020 target.

#### **ANNEX**

#### **Standard Tables**

**Table I. Macro-economic indicators** 

	1996- 2000	2001- 2005	2006- 2010	2011	2012	2013	2014	2015
Core indicators								
GDP growth rate		3.1	4.7	4.5	2.0	1.6	3.2	3.4
Output gap <sup>1</sup>		-3.3	2.1	1.9	0.4	-1.2	-1.2	-1.2
HICP (annual % change)	11.0	2.7	2.9	3.9	3.7	0.8	1.1	1.9
Domestic demand (annual % change) <sup>2</sup>	6.7	2.2	5.0	3.6	-0.1	0.0	3.3	3.6
Unemployment rate (% of labour force) <sup>3</sup>	12.5	19.0	9.7	9.7	10.1	10.3	9.9	9.5
Gross fixed capital formation (% of GDP)	22.9	18.8	20.9	20.2	19.2	18.4	18.7	19.5
Gross national saving (% of GDP)	20.1	16.8	17.5	17.6	17.1	17.1	17.6	17.8
General Government (% of GDP)								
Net lending (+) or net borrowing (-)	-3.8	-5.2	-4.9	-5.1	-3.9	-4.3	5.7	-2.9
Gross debt	40.3	43.9	49.1	56.2	55.6	57.0	49.2	50.0
Net financial assets	-6.0	-22.5	-20.9	-32.5	-33.6	n.a	n.a	n.a
Total revenue	41.3	38.6	39.0	38.4	38.3	37.5	47.0	38.3
Total expenditure	45.1	43.8	43.9	43.4	42.2	41.9	41.3	41.2
of which: Interest	3.8	2.9	2.5	2.7	2.8	2.6	2.1	2.2
Corporations (% of GDP)								
Net lending (+) or net borrowing (-)	-5.4	-0.2	1.3	5.1	4.3	5.2	3.8	3.7
Net financial assets; non-financial corporations	-72.6	-75.6	-85.3	-78.6	-78.4	n.a	n.a	n.a
Net financial assets; financial corporations	10.8	5.8	-6.8	1.5	-5.7	n.a	n.a	n.a
Gross capital formation	15.9	11.1	12.4	11.7	10.8	10.4	10.9	11.4
Gross operating surplus	15.3	18.9	22.7	24.1	24.3	24.2	24.4	24.1
Households and NPISH (% of GDP)								
Net lending (+) or net borrowing (-)	5.5	2.7	0.1	-2.9	-1.6	-0.1	-8.7	-0.9
Net financial assets	39.1	51.6	53.5	45.3	50.6	n.a	n.a	n.a
Gross wages and salaries	35.3	33.6	32.6	31.9	31.5	31.6	31.5	31.4
Net property income	5.5	5.1	3.3	2.8	2.9	2.7	2.9	2.9
Current transfers received	20.3	20.6	19.4	18.7	18.6	19.1	19.4	19.8
Gross saving	9.9	7.5	4.7	1.3	3.1	4.0	4.0	3.4
Rest of the world (% of GDP)								
Net lending (+) or net borrowing (-)	-3.7	-2.6	-3.5	-2.7	-1.6	0.8	0.8	-0.1
Net financial assets	29.1	41.2	60.4	65.9	68.6	n.a	n.a	n.a
Net exports of goods and services	-4.5	-2.6	-2.0	-1.2	0.3	2.4	2.3	1.8
Net primary income from the rest of the world	-0.6	-1.3	-3.1	-4.1	-4.3	-4.7	-4.7	-4.8
Net capital transactions	0.0	0.1	1.1	1.8	1.7	2.4	2.5	2.2
Tradable sector		51.5	50.8	51.0	52.0	52.6	n.a	n.a
Non tradable sector	52.3 36.2	37.1	37.1	36.8	36.5	36.2	n.a	n.a
of which: Building and construction sector	7.3	5.7	6.7	7.2	6.6	5.8	n.a	n.a
Real effective exchange rate (index, 2000=100)		103.4	105.0	101.0	97.3	98.0	99.2	99.5
Terms of trade goods and services (index, 2000=100)		97.5	101.3	100.0	98.7	100.1	100.1	99.3
Market performance of exports (index, 2000=100)		92.4	112.1	121.6	125.7	130.3	130.8	131.3
Notes:							0.0	

Notes:

<u>Source</u>

Commission 2014 spring forecast (COM); Convergence programme (CP).

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

<sup>&</sup>lt;sup>2</sup> The indicator on domestic demand includes stocks.

<sup>&</sup>lt;sup>3</sup> Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-

Table II. Comparison of macroeconomic developments and forecasts

	20	13	20	14	20	15	2016	2017
	COM	СР	COM	СР	COM	CP	СР	CP
Real GDP (% change)	1.6	1.6	3.2	3.3	3.4	3.8	4.3	4.3
Private consumption (% change)	0.8	0.8	2.3	2.2	2.8	3.0	3.9	4.0
Gross fixed capital formation (% change)	-0.2	-0.2	4.8	4.1	7.3	7.2	6.9	7.8
Exports of goods and services (% change)	4.6	4.6	4.4	5.0	6.0	4.9	4.8	4.1
Imports of goods and services (% change)	1.2	1.2	4.5	4.0	6.5	5.1	5.5	5.4
Contributions to real GDP growth:								
- Final domestic demand	0.9	0.0	2.9	2.8	3.5	3.7	4.5	4.8
- Change in inventories	-0.9	-0.9	0.3	0.2	0.0	0.3	0.5	0.4
- Net exports	1.6	1.6	0.1	0.5	-0.1	0.0	-0.3	-0.6
Output gap <sup>1</sup>	-1.2	-1.3	-1.2	-1.4	-1.2	-1.2	-0.5	0.3
Employment (% change)	-0.1	-0.1	0.5	0.6	0.6	0.8	0.8	0.8
Unemployment rate (%)	10.3	10.3	9.9	9.8	9.5	9.3	8.6	7.9
Labour productivity (% change)	1.7	1.7	2.7	2.7	2.8	3.0	3.4	3.4
HICP inflation (%)	0.8	0.9	1.1	1.2	1.9	2.3	2.5	2.2
GDP deflator (% change)	0.9	0.9	1.0	0.9	1.5	2.1	2.5	2.3
Comp. of employees (per head, % change)	2.7	2.6	3.5	3.8	4.4	4.6	5.0	5.5
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	0.8	-1.0	0.8	-1.4	-0.1	-0.8	0.4	0.5

## Source:

Commission 2014 spring forecast (COM); Convergence programme (CP).

<sup>&</sup>lt;sup>1</sup>In percent of potential GDP, with potential GDP growth recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.

Table III. Composition of the budgetary adjustment

(% of GDP)	2013	20	14	2015		2016	2017	Change: 2013-2017
	COM	COM	СР	COM <sup>1</sup>	СР	СР	СР	СР
Revenue	37.5	47.0	46.9	38.3	37.9	37.5	37.5	0.0
of which:								
- Taxes on production and imports	12.6	12.6	12.6	12.6	12.4	12.1	11.7	-0.9
- Current taxes on income, wealth, etc.	7.0	7.1	7.1	7.2	7.2	7.4	7.6	0.6
- Social contributions	12.2	12.4	12.4	12.7	12.6	12.6	12.5	0.3
- Other (residual)	5.7	14.8	14.8	5.8	5.7	5.4	5.7	0.0
Expenditure	41.9	41.3	41.1	41.2	40.4	39.3	38.7	-3.2
of which:								
- Primary expenditure	39.2	39.2	39.0	39.0	38.2	37.2	36.6	-2.6
of which:								
Compensation of employees	9.3	9.2	9.2	9.2	9.0	8.8	8.6	-0.7
Intermediate consumption	5.8	5.9	5.8	5.9	5.6	5.4	5.3	-0.5
Social payments	16.9	17.1	16.9	16.9	16.5	16.3	16.2	-0.7
Subsidies	0.4	0.3	0.3	0.3	0.3	0.3	0.3	-0.1
Gross fixed capital formation	3.9	3.8	3.9	3.9	3.9	3.6	3.5	-0.4
Other (residual)	2.9	2.8	2.9	2.7	2.9	2.9	2.7	-0.2
- Interest expenditure	2.6	2.1	2.1	2.2	2.2	2.1	2.1	-0.5
General government balance (GGB)	-4.3	5.7	5.8	-2.9	-2.5	-1.8	-1.2	3.1
Primary balance	-1.7	7.8	7.9	-0.7	-0.3	0.4	0.9	2.6
One-off and other temporary measures	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	-4.3	-3.3	-3.2	-2.9	-2.5	-1.8	-1.2	3.1
Output gap <sup>2</sup>	-1.2	-1.2	-1.4	-1.2	-1.2	-0.5	0.3	1.5
Cyclically-adjusted balance <sup>2</sup>	-3.8	6.2	6.4	-2.4	-2.0	-1.6	-1.3	2.5
Structural balance (SB) <sup>3</sup>	-3.8	-2.8	-2.6	-2.4	-2.0	-1.6	-1.3	2.5
Change in SB	0.3	1.0	1.2	0.4	0.6	0.4	0.3	_
Two year average change in SB	1.0	0.6	0.8	0.7	0.9	0.5	0.3	_
Structural primary balance <sup>3</sup>	-1.2	-0.7	-0.5	-0.2	0.2	0.5	0.8	1.9
Change in structural primary balance		0.5	0.6	0.5	0.7	0.3	0.3	_
Expenditure benchmark								
Applicable reference rate <sup>4</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-
Deviation <sup>5</sup> (% GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-
Two-year average deviation (% GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	_
Notes:	11.01.	11.00.	11.00.	11.00.	11.00.	11.00.	11.4.	1

### Notes.

### Source.

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

<sup>&</sup>lt;sup>1</sup>On a no-policy-change basis.

<sup>&</sup>lt;sup>2</sup>Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.

 $<sup>{}^3</sup>Structural \, (primary) \, balance = cyclically-adjusted \, (primary) \, balance \, excluding \, one-off \, and \, other \, temporary \, measures.$ 

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

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

Table IV. Debt dynamics

(% of GDP)	Average	2013	20	14	20	15	2016	2017
(70 01 ODF)	2008-2012	2013	COM	CP	COM	CP	CP	CP
Gross debt ratio <sup>1</sup>	52.9	57.0	49.2	49.5	50.0	49.5	47.5	45.5
Change in the ratio	2.1	1.5	-7.8	-7.5	0.8	0.0	-2.0	-2.0
Contributions <sup>2</sup> :								
1. Primary balance	3.0	1.7	-7.8	-7.9	0.7	0.3	-0.4	-0.9
2. "Snow-ball" effect	-0.3	1.3	-0.2	-0.2	-0.1	-0.5	-0.9	-0.8
Of which:								
Interest expenditure	2.6	2.6	2.1	2.1	2.2	2.2	2.2	2.1
Growth effect	-1.6	-0.8	-1.8	-1.8	-1.6	-1.8	-2.0	-1.9
Inflation effect	-1.3	-0.5	-0.6	-0.5	-0.7	-0.9	-1.2	-1.0
3. Stock-flow	-0.5	-1.5	0.2	0.6	0.3	0.3	-0.6	-0.2
Of which:								
Cash/accruals diff.				0.4		0.5	0.2	0.0
Acc. financial assets				0.0		0.5	0.2	0.2
Privatisation				-0.1		-0.1	0.0	0.0
Val. effect & residual				-2.2		-3.4	-4.2	-3.5
		2013	20	14	20	15	2016	2017
		2013	COM	СР	COM	СР	СР	СР
Gap to the debt benchman	<b>k</b> <sup>3,4</sup>	n.a.						
Structural adjustment <sup>5</sup>		n.a.						
To be compared to:								
Required adjustment <sup>6</sup>		n.a.						

## <u>Source</u> :

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

<sup>&</sup>lt;sup>1</sup>End of period.

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

<sup>&</sup>lt;sup>3</sup>Not relevant for Member Sates that were subject to an EDP procedure in November 2011 and for a period of three years following the correction of the excessive deficit.

<sup>&</sup>lt;sup>4</sup>Shows the difference between the debt-to-GDP ratio and the debt benchmark. If positive, projected gross debt-to-GDP ratio does not comply with the debt reduction benchmark.

<sup>&</sup>lt;sup>5</sup> Applicable only during the transition period of three years from the correction of the excessive deficit for EDP that were ongoing in November 2011.

<sup>&</sup>lt;sup>6</sup>Defines the remaining annual structural adjustment over the transition period which ensures that - if followed – Member State will comply with the debt reduction benchmark at the end of the transition period, assuming that COM (SP/CP) budgetary projections for the previous years are achieved.

Table V. Sustainability indicators

		Poland			European Uni	on	
	2013 scenario	No-policy- change scenario	Convergence programme scenario	2013 scenario	No-policy- change scenario	Convergence programme scenario	
S2*	3.3	2.5	1.4	2.4	2.4	0.7	
of which:							
Initial budgetary position (IBP)	2.4	1.4	0.1	0.5	0.4	-1.3	
Long-term cost of ageing (CoA)	0.9	1.1	1.3	1.9	2.0	2.0	
of which:							
pensions	-0.9	-0.8	-0.5	0.7	0.8	0.9	
healthcare	1.5	1.5	1.4	0.9	0.9	0.8	
long-term care	0.6	0.6	0.6	0.6	0.6	0.6	
others	-0.3	-0.2	-0.1	-0.4	-0.4	-0.3	
S1**	1.1	0.2	-1.3	1.5	1.7	-0.2	
of which:							
Initial budgetary position (IBP)	1.3	0.6	-0.7	-0.2	-0.4	-2.0	
Debt requirement (DR)	-0.2	-0.6	-1.1	1.5	1.8	1.5	
Long-term cost of ageing (CoA)	0.0	0.2	0.4	0.2	0.3	0.3	
S0 (risk for fiscal stress)***	0.27		:		:		
Debt as % of GDP (2013)		57.0		88.9			
Age-related expenditure as % of GDP (2013)		20.3		25.8			

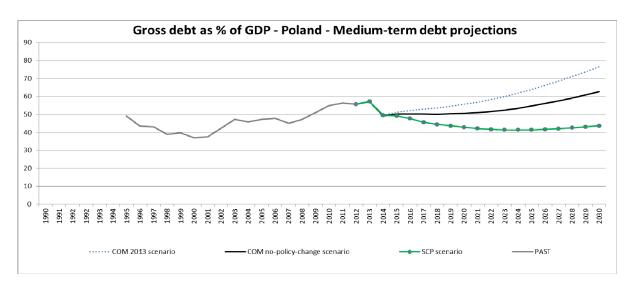
Source: Commission; 2014 convergence programme.

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

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

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

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



**Table VI. Taxation indicators** 

	2002	2006	2008	2010	2011	2012
Total tax revenues (incl. actual compulsory social contributions, % of GDP)	32.7	33.8	34.3	31.8	32.3	32.5
Breakdown by economic function (% of GDP) <sup>1</sup>						
Consumption	11.9	12.7	13.0	12.5	12.6	11.8
of which:						
- VAT	7.2	8.1	8.0	7.8	8.0	7.3
- excise duties on tobacco and alcohol	1.9	1.9	2.2	2.0	1.9	1.8
- energy	2.0	2.3	2.2	2.2	2.1	2.2
- other (residual)	0.8	0.4	0.6	0.5	0.5	0.5
Labour employed	12.7	12.6	11.9	11.2	11.6	12.3
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	5.8	5.8	6.1
Stocks of capital/wealth	1.9	1.9	1.7	1.6	1.6	1.6
p.m. Environmental taxes <sup>2</sup>	2.4	2.7	2.6	2.6	2.6	2.5
VAT efficiency <sup>3</sup>						
Actual VAT revenues as % of theoretical revenues at standard rate	42.1	50.9	50.6	48.7	49.2	44.2

Source: Commission

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

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

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

**Table VII. Financial market indicators** 

	2009	2010	2011	2012	2013
Total assets of the banking sector (% of GDP)	88.2	87.8	83.5	92.9	93.0
Share of assets of the five largest banks (% of total assets)	43.9	43.4	43.7	44.4	-
Foreign ownership of banking system (% of total assets)	65.5	65.8	65.3	62.8	-
Financial soundness indicators: - non-performing loans (% of total loans) <sup>1)</sup> - capital adequacy ratio (%) <sup>1)</sup>	4.3	4.9 13.9	4.7 13.1	5.2 14.8	5.2 15.2
- return on equity (%) 1), 2)	11.2	13.3	16.1	14.0	13.2
Bank loans to the private sector (year-on-year % change)	8.0	5.9	5.9	7.3	4.0
Lending for house purchase (year-on-year % change)	11.8	19.3	8.8	6.8	3.0
Loan to deposit ratio	105.2	104.2	105.4	101.7	99.5
CB liquidity as % of liabilities	1.6	0.1	0.0	0.0	0.0
Banks' exposure to countries receiving official financial assistance (% of GDP)	-	-	-	-	-
Private debt (% of GDP)	68.8	70.7	76.4	74.6	-
Gross external debt (% of GDP) - Public - Private	19.5 28.7	23.0 27.6	24.1 28.3	29.9 28.9	28.6 28.2
Long term interest rates spread versus Bund (basis points)*	289.8	303.8	334.8	350.5	246.3
Credit default swap spreads for sovereign securities (5-year)*	190.4	129.4	172.0	154.1	77.4

### Source:

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

# Table VIII. Labour market and social indicators

<sup>1)</sup> Latest data 2013Q2.

<sup>2)</sup> After extraordinary items and taxes. Accumulated income of the last 12 months. Tier 1 capital. Branches of foreign banks are excluded.

<sup>\*</sup> Measured in basis points.

Labour market indicators	2008	2009	2010	2011	2012	2013
Employment rate (% of population aged 20-64)	65.0	64.9	64.3	64.5	64.7	64.9
Employment growth (% change from previous year)	3.8	0.4	-2.7	0.6	0.1	-0.1
Employment rate of women (% of female population aged 20-64)	57.3	57.6	57.3	57.2	57.5	57.6
Employment rate of men (% of male population aged 20-64)	73.0	72.6	71.3	71.9	72.0	72.1
Employment rate of older workers (% of population aged 55-64)	31.6	32.3	34.1	36.9	38.7	40.6
Part-time employment (% of total employment, 15 years and more)	8.5	8.4	8.4	8.0	7.9	7.8
Part-time employment of women (% of women employment, 15 years and more)	11.7	11.6	11.6	11.2	11.3	11.1
Part-time employment of men (% of men employment, 15 years and more)	5.9	5.8	5.8	5.5	5.2	5.2
Fixed term employment (% of employees with a fixed term contract, 15 years and more)	27.0	26.5	27.3	26.9	26.9	26.9
Transitions from temporary to permanent employment	29.5	28.9	22.4	19.5		:
Unemployment rate <sup>1</sup> (% of labour force, age group 15-74)	7.1	8.1	9.7	9.7	10.1	10.3
Long-term unemployment rate <sup>2</sup> (% of labour force)	2.4	2.5	3.0	3.6	4.1	4.4
Youth unemployment rate (% of youth labour force aged 15-24)	17.2	20.6	23.7	25.8	26.5	27.3
Youth NEET rate (% of population aged 15-24)	9.0	10.1	10.8	11.5	11.8	12.2
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	5.3	5.4	5.6	5.7	5.6
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	29.7	32.8	34.8	36.5	39.1	40.5
Formal childcare (from 1 to 29 hours; % over the population less than 3 years)	0.0	0.0	0.0	0.0	1.0	:
Formal childcare (30 hours or over; % over the population less than 3 year)	3.0	2.0	2.0	3.0	5.0	:
Labour productivity per person employed (annual % change)	1.3	1.3	6.7	3.9	1.9	1.6
Hours worked per person employed (annual % change)	-0.4	-0.8	-0.3	-0.3	-0.3	-0.6
Labour productivity per hour worked (annual % change; constant prices)	1.7	2.0	7.0	4.2	2.1	2.3
Compensation per employee (annual % change; constant prices)	5.3	-0.1	6.7	1.9	1.0	1.5
Nominal unit labour cost growth (annual % change)	7.2	2.3	1.4	1.1	1.5	:
Real unit labour cost growth (annual % change)	4.0	-1.4	0.0	-2.0	-0.9	:

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

<sup>&</sup>lt;sup>1</sup> Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed.

 $<sup>^2\,\</sup>mathrm{Long\text{-}term}$  unemployed are unemployed persons for at least 12 months.

Expenditure on social protection benefits (% of GDP)	2007	2008	2009	2010	2011
Sickness/Health care	3.9	4.5	4.7	4.5	4.3
Invalidity	1.6	1.5	1.3	1.5	1.7
Old age and survivors	10.8	10.9	11.4	11.3	10.9
Family/Children	0.8	0.7	0.8	0.8	1.3
Unemployment	0.4	0.4	0.4	0.4	0.3
Housing and Social exclusion n.e.c.	0.1	0.1	0.1	0.1	0.1
Total	17.8	18.2	18.8	18.8	18.7
of which: means tested benefits	0.9	0.8	0.7	0.7	1.2
Social inclusion indicators	2008	2009	2010	2011	2012
At-risk-of-poverty or social exclusion <sup>1</sup> (% of total population)	30.5	27.8	27.8	27.2	26.7
At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	32.9	31.0	30.8	29.8	29.3
At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	26.9	25.8	24.4	24.7	23.4
At-Risk-of-Poverty rate <sup>2</sup> (% of total population)	16.9	17.1	17.6	17.7	17.1
Severe Material Deprivation <sup>3</sup> (% of total population)	17.7	15.0	14.2	13.0	13.5
Share of people living in low work intensity households <sup>4</sup> (% of people aged 0-59)	8.0	6.9	7.3	6.9	6.9
In-work at-risk-of poverty rate (% of persons employed)	11.5	11.0	11.4	11.1	10.4
Impact of social transfers (excluding pensions) on reducing poverty	32.7	27.5	27.9	26.6	25.3
Poverty thresholds, expressed in national currency at constant prices <sup>5</sup>	9 196	10 048	10 291	10 555	10 551
Gross disponsable income (households)	806 098	863 695	903 856	950 727	985 135
Relative median poverty risk gap (60% of median equivalised income, age: total)	20.6	22.7	22.2	21.4	22.2

### Sources:

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

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

<sup>&</sup>lt;sup>2</sup> At-risk-of poverty rate (AROP): share of people with an equivalised disposable income below 60% of the national equivalised median income.

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

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

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

T. I.I. TX7 D I 4			• . 1•
Table IX. Product	market nertorn	าจทะค จทศ ทกมะ	v indicators
Table 121. I Toutet	market periori	iance and pone	y illuicators

Performance indicators	2004- 2008	2009	2010	2011	2012	2013
Labour productivity <sup>1</sup> total economy (annual growth in %)	1.8	1.5	6.6	3.9	1.9	n.a.
Labour productivity <sup>1</sup> in manufacturing (annual growth in %)	5.2	9.5	14.4	7.8	2.9	n.a.
Labour productivity <sup>1</sup> in electricity, gas, water (annual growth in %)	-1.1	-9.7	23.8	14.2	9.7	n.a.
Labour productivity <sup>1</sup> in the construction sector (annual growth in %)	-2.3	5.6	11.6	9.5	-0.3	n.a.
Patent intensity in manufacturing <sup>2</sup> (patents of the EPO divided by gross value added of the sector)	9.8	16.5	18.9	21.2	n.a.	n.a.
Policy indicators	2004- 2008	2009	2010	2011	2012	2013
Enforcing contracts <sup>3</sup> (days)	924.0	830	830	830	685	685
Time to start a business <sup>3</sup> (days)	31.0	32	32	32	32	30
R&D expenditure (% of GDP)	0.6	0.7	0.7	0.8	0.9	n.a.
Tertiary educational attainment (% of 30-34 years old population)	24.9	32.8	34.8	36.5	39.1	40.5
Total public expenditure on education (% of GDP)	5.2	5.1	5.2	4.9	n.a.	n.a.
	2008	2009	2010	2011	2012	2013
Product market regulation <sup>4</sup> , Overall (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Product market regulation <sup>4</sup> , Retail (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Product market regulation <sup>4</sup> , Network Industries <sup>5</sup> (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

### Source:

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

## Table X. Green Growth

<sup>&</sup>lt;sup>1</sup>Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.

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

<sup>&</sup>lt;sup>3</sup> The methodologies, including the assumptions, for this indicator are presented in detail on the website <a href="http://www.doingbusiness.org/methodology">http://www.doingbusiness.org/methodology</a>.

<sup>&</sup>lt;sup>4</sup> The methodologies of the product market regulation indicators are presented in detail on the website <a href="http://www.oecd.org/document/1/0,3746,en">http://www.oecd.org/document/1/0,3746,en</a> 2649 34323 2367297 1 1 1 1,00.html.

<sup>&</sup>lt;sup>5</sup> Aggregate ETCR.

		2003- 2007	2008	2009	2010	2011	2012
Green Growth performance							
Macroeconomic							
Energy intensity	kgoe / €	0.15	0.14	0.14	0.14	0.14	0.13
Carbon intensity	kg/€	0.40	0.35	0.34	0.35	0.33	n.a.
Resource intensity (reciprocal of resource productivity)	kg/€	0.86	0.77	0.76	0.75	0.76	n.a.
Waste intensity	kg/€	n.a.	0.23	n.a.	0.14	n.a.	n.a.
Energy balance of trade	% GDP	-2.7%	-3.6%	-2.5%	-3.0%	-3.8%	-4%
Energy weight in HICP	%	8	9	8	8	9	9
Difference between change energy price and inflation	%	3.58	2.5	-2.8	1.4	2.2	1.1
Environmental taxes over labour taxes	ratio	11.0%	10.1%	10.0%	9.9%	10.3%	n.a.
Environmental taxes over total taxes	ratio	6.1%	5.6%	5.7%	5.6%	5.8%	n.a.
Sectoral							
Industry energy intensity	kgoe / €	0.17	0.16	0.16	0.17	n.a.	n.a.
Share of energy-intensive industries in the economy	% GDP	10.5	11.0	10.3	n.a.	n.a.	n.a.
Electricity prices for medium-sized industrial users**	€ / kWh	n.a.	0.09	0.10	0.09	0.09	0.09
Gas prices for medium-sized industrial users***	€ / kWh	n.a.	n.a.	0.03	0.03	0.03	0.04
Public R&D for energy	% GDP	n.a.	0.01%	0.01%	0.01%	0.01%	0.02%
Public R&D for the environment	% GDP	n.a.	0.01%	0.01%	0.01%	0.02%	0.02%
Recycling rate of municipal waste	ratio	85.4%	90.4%	91.1%	92.6%	92.5%	92.5%
Share of GHG emissions covered by ETS*	%	n.a.	36.9%	34.1%	36.4%	36.9%	35.4%
Transport energy intensity	kgoe / €	0.61	0.57	0.61	n.a.	n.a.	n.a.
Transport carbon intensity	kg/€	1.68	1.46	1.55	n.a.	n.a.	n.a.
Security of energy supply							
Energy import dependency	%	70.7%	68.7%	65.1%	62.2%	70.1%	63.6%
Diversification of oil import sources	ННІ	n.a.	0.12	0.12	0.12	0.11	n.a.
Diversification of energy mix	ННІ	0.29	0.27	0.28	0.28	0.26	0.27
Share renewable energy in energy mix	%	20.8%	24.8%	27.6%	27.0%	26.3%	30.1%

### Country-specific notes:

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

### General explanation of the table items

Source: Eurostat unless indicated otherwise; ECFIN elaborations indicated below

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

 $Energy\ intensity: gross\ inland\ energy\ consumption\ (in\ kgoe)\ divided\ by\ GDP\ (in\ EUR)$ 

 $Carbon\ intensity: Greenhouse\ gas\ emissions\ (in\ kg\ CO2\ equivalents)\ divided\ by\ GDP\ (in\ EUR)$ 

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

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

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

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

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

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

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

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

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

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

 $Public \ R\&D \ for \ energy \ or \ for \ the \ environment: government \ spending \ on \ R\&D \ (GBAORD) \ for \ the se \ categories \ as \ \% \ of \ GDP \ and \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ as \ \% \ of \ GDP \ (GBAORD) \ for \ the \ categories \ (GBAORD) \ for \ the \ categories \ (GBAORD) \ for \ the \ (GBAOR$ 

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

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

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

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

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

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

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

\* Commission and EEA.

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

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

## List of indicators used in Box 7 on the potential impact on growth of structural reforms.

**Final goods sector mark-ups:** Price-cost margin, i.e. the difference between the selling price of a good or service and its cost. Final goods mark-ups are proxied by the mark-ups in selected services sectors (transport and storage, post and telecommunications, electricity, gas and water supply, hotels and restaurants and financial intermediation but excluding real estate and renting of machinery and equipment and other business activities<sup>44</sup>).

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

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

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

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

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

Source: EUROSTAT. 2012 data or latest available.

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

Source: EUROSTAT. 2012 data or latest available.

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

Source: EUROSTAT. 2012 data or latest available.

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

Source: EUROSTAT. 2012 data or latest available.

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

Source: EUROSTAT. 2011 data or latest available.

\_

<sup>&</sup>lt;sup>44</sup> The real estate sector is excluded because of statistical difficulties of estimating a mark-up in this sector. The sector renting of machinery and equipment and other business activities is conceptually part of intermediate goods sector.

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

Source: OECD, Benefits and Wages Statistics.

www.oecd.org/els/benefitsandwagesstatistics.htm. 2012 data.