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EXECUTIVE SUMMARY

The Czech economy returned to growth in 2014, following two years of contraction, and unemployment has been on a declining trend.

The return to growth has been largely driven by domestic demand, with investment growing particularly strongly. Household consumption has also returned to growth, reflecting ongoing improvements in the labour market. Export and import growth are expected to have been robust in 2014 and the trade surplus to have grown strongly. Inflation has remained low, however, despite the Czech National Bank maintaining an exchange rate floor. In its most recent forecast, the European Commission projected real GDP growth to have picked up to 2.3 % in 2014 and to increase somewhat further in 2015 and 2016. This represents an outperformance compared to the EU average and may give rise to further income convergence, a process that had stalled since the onset of global financial crisis. The general government deficit has improved significantly in recent years and is expected to have reached 1.3 % of GDP in 2014. The debt-to-GDP ratio remains well below 60 % of GDP.

This Country Report assesses the Czech Republic's economy against the background of the Commission's Annual Growth Survey which recommends three main pillars for the EU's economic and social policy in 2015: investment, structural reforms, and fiscal responsibility. In line with the Investment Plan for Europe, it also explores ways to maximise the impact of public resources and unlock private investment. Finally, it assesses the Czech Republic in the light of the findings of the 2015 Alert Mechanism Report, in which the Commission found it useful to further examine the persistence of imbalances or their unwinding. The main observations and findings of the analysis are:

- **The Czech Republic's public finance outturns have improved markedly, but some issues remain in the areas of taxation, fiscal sustainability and the fiscal framework.** The country continues to suffer from a relatively high level of tax evasion, although efforts are being made to counter this. Tax collection remains costly, both for the authorities and for taxpayers. The current design of the fiscal framework has not always ensured sustainable and efficient fiscal outcomes. Projected increases in the pension system and inefficiencies in the health system and healthcare expenditure pose long-term sustainability challenges.
- **There is an overall high level of employment but certain disadvantaged groups remain underrepresented in the labour market.** These groups include parents with young children, low-skilled workers, people with disabilities and Roma. The poor functioning of public employment services does not facilitate adequate transitions from unemployment to employment for these groups, while a persistent lack of affordable and quality childcare services and the limited use of flexible working-time arrangements limit the ability of mothers with young children to remain on the labour market.
- **Educational outcomes have been improving in recent years but some disparities remain.** The Czech schooling system still features disparities in schooling outcomes between regions and social groups, low participation in early childhood education and care, and low attractiveness of the teaching profession. Tertiary and vocational education programmes do not respond adequately to labour market needs.
- **The weak efficiency and transparency of public institutions in the Czech Republic remain a barrier to more robust investment and growth.** The Czech Republic scores poorly on international rankings of the quality of public-sector institutions, in particular as regards corruption. Public procurement procedures are not sufficiently transparent. At the same time, the absorption of EU funds has improved.
- **Despite recent improvements, inefficiencies in the business environment still hold back competitiveness of the Czech economy.** Weaknesses in the business environment are reflected in the Czech Republic's poor rankings in various international classifications. The number of regulated professions has fallen only moderately in recent years.
- **While public investment has increased recently, transport infrastructure remains**

relatively underdeveloped and there is scope to further improve energy efficiency.

Suboptimal transport infrastructure increases export costs, reduces aggregate cost effectiveness and acts as a disincentive to private-sector investment. Inefficiencies in the implementation of infrastructural investment reduce the ability of responsible bodies to fully absorb available funds, including EU funds. There is potential to further improve energy efficiency, which could strengthen the economy's competitiveness and simulate private-sector investment.

Overall, the Czech Republic has made limited progress on addressing the 2014 country-specific recommendations. This includes

recommendations to: reduce taxation on labour; reform the pension and healthcare systems; increase the inclusiveness and quality of education; accelerate the reform of regulated professions; set up an effective research and innovation system; and reinforce the fight against corruption. However, there has been some progress in the following areas: increasing growth-enhancing investment, improving tax compliance; strengthening the fiscal framework; improving energy efficiency; developing public employment services; and improving the management of EU funds. The adoption of the Act on Child Groups is a positive step towards improving the labour market participation of mothers with young children. The adoption of the Civil Service Act also represents some progress on the recommendation to improve public administration.

The country report also reveals challenges stemming from the analysis, notably:

- **Completing the income convergence process vis-à-vis the EU can only be achieved by increasing the potential of the economy, primarily by fostering knowledge-based growth.** Maintaining the pace of this convergence is made more difficult by the fact that income levels in the Czech Republic are already high in comparison to regional peers. Improvements in educational outcomes and increased investment in R&D in recent years suggest that the Czech Republic has started to exploit its potential in human capital. However, investment in both of these sectors is still below the EU average and indicators suggest

that results from the research and innovation system remain weak.

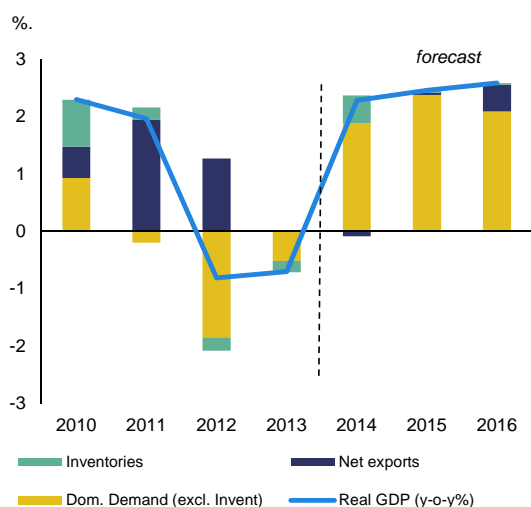
- **A number of factors limit the short-term growth potential of the economy.** Inefficiencies in the implementation of investment projects, particularly in the area of transport infrastructure, and suboptimal energy efficiency reduce the contribution to growth from investment. Inefficient public administration and tax collection are detrimental to the aggregate cost-effectiveness of the economy, as are supply-side constraints such as barriers to employment for disadvantaged groups and the high number of regulated professions.

1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

Macroeconomic developments

The Czech economy returned to growth in 2014, following two years of contraction. The turnaround was largely driven by domestic demand. Latest available data show strong growth in investment activity, which had contracted significantly in the previous two years. Public investment growth is likely to have been particularly strong, with a renewed effort by the authorities to absorb available EU funds. Household consumption is also expected to have contributed positively to growth in 2014. According to the Commission winter 2015 forecast, GDP growth is set to have reached 2.3 % in 2014, compared to an EU average of 1.3 %.

Graph 1.1: Real GDP growth and contributions



Source: European Commission, Eurostat and Commission winter 2015 forecast

Export growth was robust during the first three quarters of 2014 and import growth was equally strong. This was due to rising domestic demand and the high import-intensity of the export sector and of investment activity. The trade surplus is expected to have grown strongly for the year, however, due to favourable price effects that were partly related to the substantial fall in oil prices towards the end of 2014.

Inflation has remained at very low levels. The Harmonised Index of Consumer Prices (HICP) inflation rate averaged just 0.4 % in 2014, partly due to decreases in regulated prices at the start of

the year and falling oil prices in its final few months. The Czech National Bank recently announced that it will continue to pursue a loose monetary policy and will maintain an exchange rate floor until at least the second half of 2016.

Real GDP growth is expected to strengthen further in 2015 and 2016, although developments in the external environment might have a negative effect. In the winter 2015 forecast, the Commission projected GDP growth of 2.5 % and 2.6 % in 2015 and 2016, respectively. Domestic demand is expected to remain the main driver of growth, with robust growth in investment and household consumption. The trade surplus should widen further in 2015, particularly due to the fall in oil prices. This factor is also expected to keep inflation at very low levels.

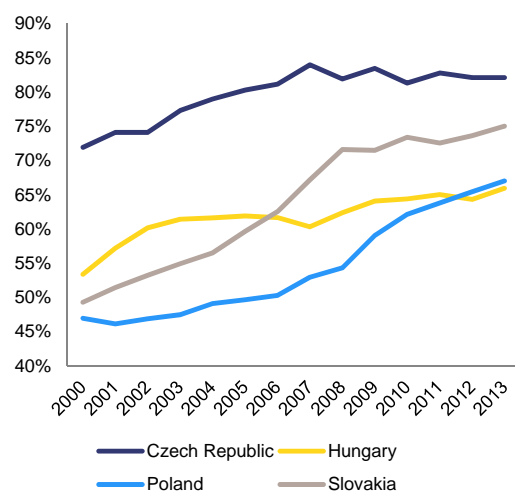
The return to growth may have given rise to renewed income convergence vis-à-vis the EU, a process which had halted in recent years. While income levels are already high in comparison to regional peers (Graph 1.2.), the convergence process had stalled, partly due to the impact of the global slowdown. Regional peers continued to close the income gap during this period, however. The Commission winter 2015 forecast suggests that the income convergence process may have restarted in 2014 and is expected to continue over the next 2 years. However, these growth outcomes partly reflect monetary and fiscal loosening. Moreover public and (to a certain extent) private investment are being temporarily boosted by an expected increase in the absorption of EU funds. Implementing appropriate structural reforms that place an emphasis on knowledge-based growth would help exploit the momentum of the current recovery and increase potential growth.

Investment

There was a sharp contraction in investment in 2009 and growth rates have been weak since then. The initial contraction in investment was largely due to the corporate sector (Graph 1.3), although the general government and household sectors generally contributed negatively in the following period. Investment by the corporate sector in the Czech Republic is sensitive to economic developments in trading partners, particularly in the EU. While further growth is

projected for 2015 and 2016, weakness in EU growth might have a negative effect. The household sector contributed negatively to growth in the period 2011-13 due to deleveraging. Available data for 2014 point to a return to positive growth across sectors and the winter 2015 projects further growth in 2015 and 2016.

Graph 1.2: Nominal GDP per capita as a % of the EU average

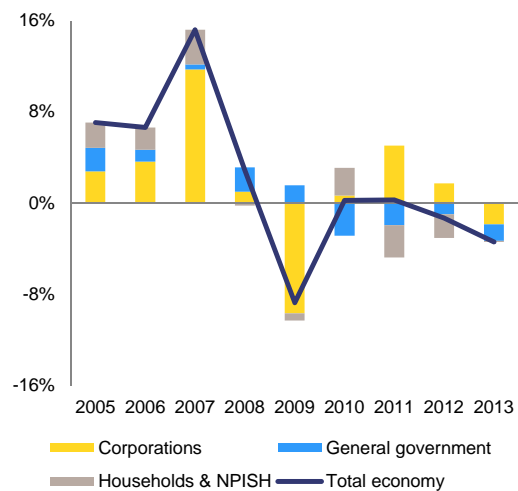


(1) Adjusted for Purchasing Power Parity.
Source: European Commission - Eurostat

Public investment fell quite sharply during the period 2010-13 (Graph 1.4) but is estimated to have increased in 2014. Investment in transport infrastructure fell particularly sharply during this period, although it is likely to have contributed quite strongly to the increase in 2014. There has also been a reduction in the absorption of available funds by implementing institutions in recent years, due partly to various bottlenecks in the planning and implementation of transport infrastructure investment projects. The Czech Republic has had a lower reduction of primary energy consumption since 2000, compared to the EU average, pointing to a need for investment to support energy efficiency. Public investment in research and development (R&D) has increased quite substantially in recent years but this is not reflected in better outcomes, such as the proportion of articles written by Czech authors appearing in top-cited publications. Although the Czech Republic is likely to surpass its Europe 2020 target on R&D investment, this only relates to public R&D

investment and neglects the important role of private investment in this area.

Graph 1.3: Sectoral contributions to growth of gross fixed capital formation (2005-13)



Source: European Commission - Eurostat

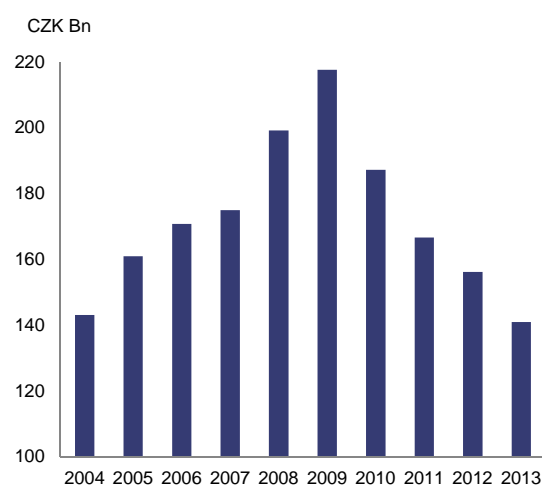
Labour market and skills

The labour market has continued to improve, with unemployment falling back towards its long-term average. The unemployment rate fell to an average of 6.1 % in 2014, compared to 7.0 % in 2013. The unemployment rate is expected to remain close to its long-term average of around 6 % over the next two years. The Czech Republic has a high level of employment and long-term unemployment is low compared to the EU average. Certain groups, such as women with young children, the young, people with disabilities and Roma, are underrepresented in the labour market, however. Access to childcare facilities is far below the EU average and there is relatively low use of flexible working arrangements, limiting the ability of women with children to participate in the labour market. There are wide gender gaps in employment and pay.

Education outcomes have improved in recent years but there are concerns that tertiary and vocational education training courses do not sufficiently respond to labour market needs. Public expenditure on education (as a percentage of GDP) has increased in recent years but it remains below the EU average. Inequalities in education hamper educational and labour market

outcomes for those with low socio-economic backgrounds. Certain groups are marginalised, with Roma children constituting nearly a third of children educated based on a revised curriculum for pupils with mild mental disabilities. Participation in tertiary education has increased significantly but there are concerns about course quality and labour-market relevance.

Graph 1.4: **Gross fixed capital formation by the government sector (2004-13)**



Source: European Commission - Eurostat

Public finances

The general government deficit has improved significantly since 2009 and the Czech public finances do not appear to face sustainability risks in the short term. The deficit reached 3.1% of GDP in 2013, with increases in indirect taxation and the Commission's annual growth survey adopted in November 2014, started the 2015 European Semester, proposing that the EU pursue an integrated approach to economic policy built around three main pillars:

boosting investment, accelerating structural reforms and pursuing responsible growth-friendly fiscal consolidation. The Annual Growth Survey also presented the process of streamlining the European Semester to increase the effectiveness of economic policy coordination at the EU level through greater accountability and by encouraging greater ownership by all actors.

This Country Report includes an assessment of progress towards the implementation of the 2014 Country-Specific Recommendations adopted by the Council in July 2014. The Country-Specific Recommendations for the Czech Republic concerned public finances, taxation, labour market, education, R&D, public administration, energy efficiency and regulated professions.

contributing significantly to this outcome. According to the Commission winter 2015 forecast, the deficit is set to remain broadly unchanged in 2014 but to increase to 2% in 2015. This is mainly due to stronger investment activity and higher expenditure in areas such as healthcare and pensions, coupled with several revenue-decreasing measures. The general government deficit is expected to improve to 1.5 %, in 2016 as a result of an improved macroeconomic environment. The debt-to-GDP ratio remains well below 60% and does not pose any significant risks to fiscal sustainability in the short term. There are nevertheless several weaknesses in the taxation system and in the fiscal framework. Inefficiencies in tax collection and widespread tax evasion have a negative impact on the business environment and reduce sources of public revenue, and the tax structure is not sufficiently supportive of growth and employment of the most vulnerable groups. Finally, the current design of the fiscal framework has not always ensured efficient fiscal policy.

The long-term sustainability of public finances remains an issue for the Czech Republic, although some improvement is expected due to a revised demographic outlook. Population ageing is expected to cause increases in both pension- and healthcare spending in the long term. The pension system is currently relatively successful in preventing old-age poverty, although such poverty is much more prevalent among women than men.

Table 1.1: Key economic, financial and social indicators

	2008	2009	2010	2011	2012	2013	Forecast		
							2014	2015	2016
Real GDP (y-o-y)	2.7	-4.8	2.3	2.0	-0.8	-0.7	2.3	2.5	2.6
Private consumption (y-o-y)	2.9	-0.7	1.0	0.2	-1.8	0.4	1.4	1.9	2.1
Public consumption (y-o-y)	1.1	3.0	0.4	-2.9	-1.0	2.3	1.7	2.2	1.7
Gross fixed capital formation (y-o-y)	2.5	-10.1	1.3	1.1	-2.9	-4.4	3.4	4.1	3.0
Exports of goods and services (y-o-y)	4.2	-9.8	14.8	9.3	4.1	0.3	7.5	4.3	6.8
Imports of goods and services (y-o-y)	3.2	-11.0	14.9	6.7	2.4	0.3	8.2	4.6	6.8
Output gap	4.6	-1.7	-1.0	-0.5	-1.8	-2.9	-1.9	-0.8	0.1
Contribution to GDP growth:									
Domestic demand (y-o-y)	2.3	-2.7	0.9	-0.2	-1.8	-0.5	1.9	2.4	2.1
Inventories (y-o-y)	-0.4	-2.7	0.8	0.2	-0.2	-0.2	0.5	0.0	0.0
Net exports (y-o-y)	0.8	0.5	0.5	1.9	1.3	0.0	-0.1	0.0	0.5
Current account balance (% of GDP), balance of payments	-1.9	-2.3	-3.6	-2.1	-1.6	-1.4	.	.	.
Trade balance (% of GDP), balance of payments	2.1	3.7	3.0	3.9	5.0	5.7	.	.	.
Terms of trade of goods and services (y-o-y)	-1.3	2.0	-2.0	-1.5	-0.6	1.1	1.6	0.8	0.2
Net international investment position (% of GDP)	-38.2	-44.0	-46.1	-45.3	-46.1	-40.7	.	.	.
Net external debt (% of GDP)	-3.9*	-1.3*	.1*	.9*	-4.4*	-3.4*	.	.	.
Gross external debt (% of GDP)	46.378	49.875	54.745	57.5	60.1	66.6	.	.	.
Export performance vs advanced countries (% change over 5 years)	70.3	37.8	20.4	17.2	6.9	-1.1	.	.	.
Export market share, goods and services (%)	0.8	0.8	0.7	0.7	0.7	0.7	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	6.3	8.5	7.6	6.0	6.2	4.3	.	.	.
Private credit flow, consolidated, (% of GDP)	9.1	0.8	2.6	2.1	2.6	3.2	.	.	.
Private sector debt, consolidated (% of GDP)	63.7	66.0	68.1	68.6	70.7	73.8	.	.	.
Deflated house price index (y-o-y)	.	-4.5	-1.7	-0.4	-4.0	-1.3	.	.	.
Residential investment (% of GDP)	4.0	3.8	4.1	3.7	3.5	3.3	.	.	.
Total financial sector liabilities, non-consolidated (y-o-y)	7.1	1.4	4.0	3.4	6.6	6.1	.	.	.
Tier 1 ratio ¹	.	.	.	.	.	.	.	.	.
Overall solvency ratio ²	.	.	.	.	.	.	.	.	.
Gross total doubtful and non-performing loans (% of total debt instruments and total loans and advances) ²	.	.	.	.	.	.	.	.	.
Change in employment (number of people, y-o-y)	1.4	-1.5	-0.2	0.1	0.4	0.8	0.4	0.2	0.2
Unemployment rate	4.4	6.7	7.3	6.7	7.0	7.0	6.1	6.0	5.9
Long-term unemployment rate (% of active population)	2.2	2.0	3.0	2.7	3.0	3.0	.	.	.
Youth unemployment rate (% of active population in the same age group)	9.9	16.6	18.3	18.1	19.5	18.9	15.9	.	.
Activity rate (15-64 year-olds)	69.7	70.1	70.2	70.5	71.6	72.9	.	.	.
Young people not in employment, education or training (%)	6.7	8.5	8.8	8.3	8.9	9.1	.	.	.
People at risk of poverty or social exclusion (% of total population)	15.3	14.0	14.4	15.3	15.4	14.6	.	.	.
At-risk-of-poverty rate (% of total population)	9.0	8.6	9.0	9.8	9.6	8.6	.	.	.
Severe material deprivation rate (% of total population)	6.8	6.1	6.2	6.1	6.6	6.6	.	.	.
Number of people living in households with very low work-intensity (% of total population aged below 60)	7.2	6.0	6.4	6.6	6.8	6.9	.	.	.
GDP deflator (y-o-y)	2.0	2.6	-1.5	-0.2	1.4	1.7	2.3	1.5	1.3
Harmonised index of consumer prices (HICP) (y-o-y)	6.3	0.6	1.2	2.1	3.5	1.4	0.4	0.8	1.4
Nominal compensation per employee (y-o-y)	4.1	-0.6	3.3	2.8	1.4	-0.6	3.0	3.0	3.0
Labour productivity (real, person employed, y-o-y)	0.5	-3.1	3.4	2.2	-1.2	-1.1	.	.	.
Unit labour costs (ULC) (whole economy, y-o-y)	3.5	2.6	0.0	0.6	2.6	0.5	1.1	0.7	0.7
Real unit labour costs (y-o-y)	1.5	0.0	1.4	0.8	1.1	-1.2	-1.2	-0.8	-0.7
REER ³ (ULC, y-o-y)	11.7	-5.4	3.0	2.9	-3.1	-3.0	-5.7	-2.7	-0.3
REER ³ (HICP, y-o-y)	14.3	-4.9	1.5	2.0	-2.5	-2.6	-5.0	-1.1	-0.4
General government balance (% of GDP)	-2.1	-5.5	-4.4	-2.9	-4.0	-1.3	-1.3	-2.0	-1.5
Structural budget balance (% of GDP)	.	.	-4.1	-2.6	-1.4	0.1	-0.7	-1.7	-1.5
General government gross debt (% of GDP)	28.7	34.1	38.2	41.0	45.5	45.7	44.1	44.4	45.0

¹ Domestic banking groups and stand-alone banks.² Domestic banking groups and stand-alone banks, foreign-controlled (EU and non-EU) subsidiaries and branches.³ Real effective exchange rate

(*) Indicates BPM5 and/or ESA95

Source: European Commission; ECB

Table 1.2: **Macroeconomic Imbalance Procedure (MIP) scoreboard indicators**

			Thresholds	2008	2009	2010	2011	2012	2013
External imbalances and competitiveness	Current Account Balance (% of GDP)	3 year average	-4%/6%	-2.8	-2.9	-2.6	-2.7	-2.4	-1.7
		p.m.: level year	-	-1.9	-2.3	-3.6	-2.1	-1.6	-1.4
	Net international investment position (% of GDP)		-35%	-38.2	-44.0	-46.1	-45.3	-46.1	-40.1
	Real effective exchange rate (REER) (42 industrial countries - HICP deflator)	% change (3 years)	±5% & ±11%	23.2	13.6	12.0	-0.6	0.4	-3.1
		p.m.: % y-o-y change	-	14.9	-3.7	1.2	2.0	-2.8	-2.3
	Export Market shares	% change (5 years)	-6%	22.0	10.1	10.2	6.4	-3.4	-7.7
		p.m.: % y-o-y change	-	3.5	1.7	-5.3	0.3	-3.7	-0.8
	Nominal unit labour costs (ULC)	% change (3 years)	9% & 12%	6.8	9.1	6.2	3.2	3.1	3.7
		p.m.: % y-o-y change	-	3.5	2.6	0.0	0.6	2.6	0.5
	Deflated House Prices (% y-o-y change)		6%	7.7	-4.7	-2.3	-1.6	-3.9	-1.2
Internal imbalances	Private Sector Credit Flow as % of GDP, consolidated		14%	9.1p	0.7p	2.7p	2.1p	2.7p	3.1p
	Private Sector Debt as % of GDP, consolidated		133%	63.7p	66.0p	68.1p	68.6p	70.7p	73.7p
	General Government Sector Debt as % of GDP		60%	28.7	34.1	38.2	41.0	45.5	45.7
	Unemployment Rate	3-year average	10%	5.6	5.5	6.1	6.9	7.0	6.9
		p.m.: level year	-	4.4	6.7	7.3	6.7	7.0	7.0
	Total Financial Sector Liabilities (% y-o-y change)		16.5%	6.2p	2.4p	3.1p	4.5p	5.9p	9.8p

Source: European Commission

2. STRUCTURAL ISSUES

2.1. TAXATION, FISCAL SUSTAINABILITY AND FISCAL FRAMEWORK

Taxation

Tax evasion is widespread in the Czech Republic, particularly in the areas of VAT and excise duties, but a number of preventive measures are currently being implemented.

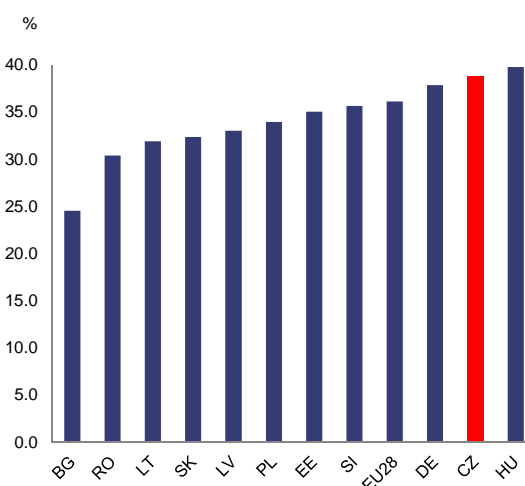
According to a recently published study ⁽¹⁾, the VAT compliance gap in the Czech Republic increased from 17 % in 2011 to 22 % in 2012 and was significantly above the EU-26 (all EU Member States except for Cyprus and Croatia) average of 16 %. The Czech authorities have identified tax compliance and the fight against tax evasion as one of their key priorities and are stepping up work in this area. A task force of tax administration, customs and police officers was set up in June 2014 and strengthened cooperation between these bodies. Several measures were introduced in 2015 to tackle tax evasion in the area of VAT, including extension of the reverse-charge mechanism to more goods and services and a broader definition of the ‘unreliable taxpayer’ status. As for direct taxes, a new reporting obligation for entities participating in transactions with related parties was introduced. This information will be used to assess risks related to taxpayers and decide whether to conduct a tax audit. Additional measures to tackle underreporting of income and VAT fraud are planned for 2016, notably electronic reporting of sales for VAT and income tax purposes and a central registry of bank accounts. Although assessing the effectiveness of these measures is not possible at this stage, they have the potential to contribute to better tax collection and to reduce tax fraud.

Tax collection remains very costly and burdensome both for the tax administration ⁽²⁾ and for tax payers. The Czech Republic has the second highest costs of paying taxes in the EU (more than double the EU average). Recent data from the 2015 Paying Taxes Report ⁽³⁾ do not show any reduction in the time required for

companies to file tax returns compared to the previous year. Use of digital tax declarations remains very low despite some recent improvement. There is very little use of pre-filing of tax returns, which makes tax filing time-consuming for individual tax payers. Harmonisation of tax bases for personal income tax, social security and health contributions, which would help simplify the tax system, has not been achieved, although there are plans to tackle the issue again. Work on simplifying tax returns and increasing the use of pre-filing is not carried out in a systematic way. Similarly, there has been no significant effort to simplify the VAT system. On the contrary, the Czech Republic introduced a second reduced VAT rate of 10 % applicable to a selected group of goods.

Tax revenue in the Czech Republic still relies heavily on taxation of labour income. Social security contributions are the highest in the EU and represent nearly half of all tax revenues while the rate of personal income tax is significantly lower than the EU average. The implicit tax rate on labour was in 2012 the second highest in the EU-10 region and 1 pp higher than in Germany (see Graph 2.1.1).

Graph 2.1.1: Implicit tax rate on labour (2012)



Source: European Commission

Low-income workers, particularly those without children, face a relatively high labour tax burden. The tax wedge on labour for a single worker earning 50 % of the average wage amounts to 36.2 % and is above the EU average, which

⁽¹⁾

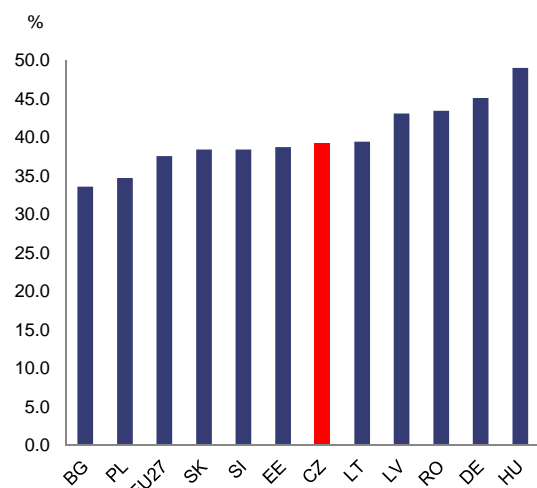
http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/vat_gap2012.pdf

⁽²⁾ See the Tax Administration 2013 report: <http://www.oecd.org/tax/administration/tax-administration-series.htm>

⁽³⁾ <http://www.pwc.com/gx/en/paying-taxes/download.jhtml>

itself is considered high and an impediment to growth and employment. At 67 % of the average wage, the tax wedge on labour amounts to 39.3 %, which is again higher than the EU average and higher than in some of regional peers, such as Poland or Slovakia (see Graph 2.1.2). Low-income workers and second earners also face high inactivity traps ⁽⁴⁾ but this is mainly due to the withdrawal of benefits, as the contribution of labour taxation is low. The concept of inactivity traps does not, however, take into account employers' social security contributions, which are particularly high in the Czech Republic. High-income groups, on the other hand, face a low tax burden compared to EU standards.

Graph 2.1.2: Tax wedge, single earner at 67 % of average wage (2013)



(1) EU27: simple EU average excluding Cyprus

Source: European Commission

High labour taxation may contribute to an unfavourable labour market situation of the low-skilled. While the labour market situation is generally rather favourable compared with that of many other EU countries, the employment rate of the low-skilled is significantly below the EU average ⁽⁵⁾ and their unemployment rate is more

⁽⁴⁾ The inactivity trap measures the part of additional gross wage that is taxed away if an inactive person takes up a job.

⁽⁵⁾ The employment rate of the low-skilled aged 15-64 reached 24.4 % in the third quarter of 2014 compared to the EU average of 44.4 %. However, the low-skilled represent a small share of the total work force in the Czech

than three times higher than the overall unemployment rate. High social security contributions may have a negative impact on labour demand and a particularly discouraging effect for the young low-skilled and the low-skilled over the age of 55, who typically do not benefit from tax relief for families with children. These two groups also record remarkably low employment rates compared with the EU average. The employment rate of the low-skilled aged 15-24 reached 6.4 % in the third quarter of 2014 (EU average 19.2 %). The employment rate of the low-skilled over the age of 55 reached 30.6 % in the third quarter of 2014 (EU average 38.5 %).

Measures entering into force in 2015 will somewhat reduce labour taxation for specific groups but will have a limited impact overall.

Taxation of working pensioners and families with two or more children will decrease somewhat in 2015 as a result of the introduction of tax credits for these two groups. An expert group has been set up to propose further changes to personal income tax. Reform of this tax, which is currently planned for 2016, should be deficit-neutral but no details on specific measures are currently known. Discrepancies in tax treatment between employees and the self-employed are expected to narrow somewhat this year after the introduction of a ceiling for flat-rate expense deductions for several categories of the self-employed. Some of the envisaged tax compliance measures tackle the issue of underreporting of income by the self-employed but the difference between the two groups remains large.

While consumption taxes have increased several times in recent years, property and environmental taxes (except fuel) remain low.

The scope to further increase in consumption taxes is limited as VAT rates and excise duties have been raised several times in the past four years. The implicit tax on consumption stood at 22.5 % in 2012, well above the EU average of 19.9 %. Property taxes are currently the fourth lowest in the EU and they are not sufficiently linked to the real value of property. Although the ratio of environmental tax to GDP is comparable with the

Republic (around 7 %). The low-income group also includes part of medium-skilled workers.

EU average (2.4 % of GDP), pollution and resource taxes are very low (0.02 % of GDP), which does not provide sufficient incentives for environmentally-friendly behaviour, especially in waste management (this concerns in particular the landfill tax and introduction of the incineration tax). Concerning other sources of less distortive tax revenue, the Czech authorities have increased excise duties on tobacco in line with EU requirements and plan to increase tax on gambling. On the other hand, plans to reduce VAT rates for specific products go against the idea of shifting the tax burden towards less distortive taxes.

Fiscal sustainability

Long-term sustainability remains a challenge for the Czech Republic's public finances, although some improvement in the outlook is expected. Based on the long-term sustainability gap indicator (S2 indicator) ⁽⁶⁾, the Czech Republic was identified as a high-risk country until 2011 and then as a medium-risk country (2012-14). The projected increase in pension and healthcare expenditure due to population ageing in the long term contributed to this result. It is expected that in the upcoming revised projections (to be published in the course of 2015), the Czech Republic's outlook with respect to long-term sustainability will improve, mainly due to a better demographic outlook and improved macroeconomic assumptions ⁽⁷⁾. The old-age dependency ratio continues to increase sharply, although the increase may be less pronounced than previously expected.

The statutory retirement age in the Czech Republic is increasing relatively slowly in the medium term, given its very low starting point. Although the statutory retirement age for men is set to reach 65 by 2020 in most Member States, in the Czech Republic it is expected to reach only 63 years and 8 months. It is expected to remain below the EU (population-weighted) average in 2030. The statutory retirement age for women is rising

faster but, due to a low starting point, it is projected to remain significantly below 65 for women with three or more children. The Czech authorities do not plan any changes in this area.

Increases in the statutory retirement age don't currently have a predefined age limit, although a proposal to introduce a link to life expectancy is under discussion. In December 2014, the Expert Committee on Pension Reform adopted a review mechanism that links the statutory retirement age to life expectancy. The envisaged link would be subject to government (or parliamentary) approval once every five years, when a review would be conducted based on an expert report. The proposed system would broadly confirm the increases in the statutory retirement age as currently legislated until around 2055, when the share of life spent in retirement is expected to fall below 25 %, according to current projections. Despite not being fully automatic, the proposed system is an improvement compared to currently legislated increases, which do not shield the pension system from unexpected changes in life expectancy. It is nevertheless important that the long-term sustainability of public finances is sufficiently taken into account in this and in any other pension reform proposals.

With the prospect of a rising statutory retirement age, increasing employability of older workers will become an important element of ensuring long-term sustainability of the pension system. The employment rate of workers above 55 reached 54.7 % in the third quarter of 2014 (an improvement of 2.5 pps. compared to the same period of the previous year) and is higher than the EU average of 52.4 %. There is, however, a significant difference between the employment rate of older women and that of men. Measures implemented in 2014, such as a pilot project aimed at intergenerational exchange of work experience and an increase in employers' subsidies for hiring older workers, go in the right direction.

A discretionary increase of pensions in 2015 was approved but the basic pension indexation formula has not been revised. The temporarily lower indexation of pensions was implemented in 2013 and 2014 for fiscal consolidation reasons. The 2015 budget envisages an extraordinary increase of 1.8 %. The standard formula, which

⁽⁶⁾ The S2 indicator shows the immediate and permanent adjustment required to ensure that the deb-to-GDP ratio is not on an ever-increasing path

⁽⁷⁾ 2015 Ageing Report: Underlying Assumptions and Projection Methodologies (see http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf).

limits pension indexation to the aggregate consumer price index and one third of the real wage increase, will be applied thereafter. The Expert Committee is currently discussing different possibilities of changing the pension indexation formula but no concrete recommendation has been issued as yet.

Stability of the pension system has been hampered by abrupt changes to the second pension pillar. The second pension pillar was introduced in 2013 and will be dismantled in 2016. Lack of broad political support from the onset created considerable uncertainty and resulted in very low participation, which curtailed the aim of diversifying the pension system and providing a viable complement to the pay-as-you-go system. Contributions to the fully-funded pillar will be either returned to the participants in cash or transferred to the existing voluntary third pension pillar. Discussions on possible ways of reinforcing the third pension pillar are currently ongoing.

With long-term projections indicating an increase in healthcare expenditure, the Czech Republic faces challenges in terms of improving cost-effectiveness and governance in the healthcare sector, particularly as regards hospital care. Population health status indicators for the Czech Republic are at a comparable level with those for the rest of the EU, despite the Czech healthcare budget being below the EU average. The healthcare budget is expected to come under pressure in the medium- to long term due to population ageing. Such pressure could be somewhat eased by addressing existing cost inefficiencies in the healthcare sector, which are largely due to misdirected incentives. For example, hospital outpatient consultations per capita are among the highest reported in the EU ⁽⁸⁾, pointing to ineffective screening by general practitioners ⁽⁹⁾. The number of one-day cases in hospitals also seems to be very low by international standards, potentially signalling cost-inefficient treatment

⁽¹⁰⁾. Governance and a lack of transparency are also weaknesses of the Czech healthcare system. Increased transparency could be achieved through complete disclosure of service delivery contracts between insurers and healthcare providers. This would also foster competition between providers and drive the costs of services down. Healthcare-specific public procurement using EU funds suffers from recurrent irregularities, signalling deficiencies of guidance and supervision in this area ⁽¹¹⁾. A lack of data and difficulties in accessing existing data on the inpatient sector impedes the further roll-out and effective use of the reimbursement system ⁽¹²⁾, which was introduced in order to efficiently allocate resources across hospitals in line with clinical activities.

Measures are being taken to improve the cost efficiency and governance of the healthcare sector, although many of them are still under preparation. An *Instruments Commission* was set up in early 2014 to strengthen needs-based principles in the planning process and operation of medical equipment. In early 2015, the government decided to adopt measures aimed at fostering transparency in service delivery contracts between insurers and healthcare providers, as well as promoting competition among providers. With a view to reforming the hospital sector, the project *Diagnosis-related groups (DRG) Restart* was started in January 2015, with the aim of addressing shortcomings in the current hospital funding scheme. Still, the number of hospitals reporting interventions (including their costs) is too narrow to set an optimal price that would optimise the use

⁽⁸⁾ The Czech Republic has 11.1 outpatient consultations on average per year and per capita, compared with 6.8 in the 21 reporting Member States.

⁽⁹⁾ See for instance Garrido et al., 2011, "The effects of gatekeeping: a systematic review of the literature", which shows a correlation of gatekeeping with lower utilisation of health services.

⁽¹⁰⁾ There are 524 one-day cases per 100 000 inhabitants in the Czech Republic, compared with an average of 5 302 for 14 EU Member States (Eurostat, 2011). This possibly also reflects statistical issues, as some one-day cases may be recorded as outpatient care in the Czech Republic.

⁽¹¹⁾ In early 2015, the first phase of a two-phase audit of procurement in public hospitals requested by the Commission was completed and the main findings are being assessed. Information on past audits is available upon request at http://ec.europa.eu/transparency/access_documents/index_en.htm.

⁽¹²⁾ A diagnosis-related groups (DRG) system, i.e. one for classifying patient care by relating common characteristics such as diagnosis, treatment, and age to an expected consumption of hospital resources and length of stay. Its purpose is to provide a framework for specifying case mix and to reduce hospital costs and reimbursements. It is the cornerstone of the prospective payment system (<http://www.ncbi.nlm.nih.gov/mesh?term=DRGs>).

of resources. Measures to cap overheads margins for insurers and to improve the risk-adjusted allocation of resources to insurers are planned for 2015. However, most announced measures referred to above are still at an initial stage of development. Furthermore, the suppression of inpatient fees from 2014 seems to have resulted in increased recourse to hospital care and the same effect can be expected in the outpatient sector, where fees were suppressed at the start of 2015.

separately for local governments, establishment of an independent fiscal council and provisions to improve transparency and fiscal data reporting. Although a comprehensive assessment of the reform is not possible at this stage, experience with the current fiscal framework has shown that appropriate enforcement will be crucial for its successful implementation.

Fiscal framework

The current fiscal framework is relatively weak, compared to EU standards. The main elements, such as a numerical fiscal rule and medium-term budgetary planning, are in place but their scope is limited and enforcement has been weak. The standardised fiscal rules index ⁽¹³⁾ shows that the Czech Republic has the 5th weakest fiscal rules in the EU, and scores particularly low on monitoring and enforcement. The main weakness of the medium-term budgetary framework is the insufficient involvement of sub-national levels of government in setting the budgetary targets and the medium-term strategy. Despite recent improvements, the budgetary process and, in particular, budgetary documentation still lacks transparency and focus. Expenditure is mostly budgeted on an incremental basis without a clear link to the declared policy priorities. The Czech Republic is one of the few Member States that have not yet set up an independent fiscal institution charged with the monitoring of fiscal rules.

A comprehensive reform tackling the main weaknesses of the current fiscal framework is underway. The draft reform package has been modified and delayed several times and its adoption is currently planned for 2015. The package is also meant to belatedly transpose into national legislation crucial elements of the Council Directive 2011/85/EU on budgetary frameworks. Its key elements include a modified expenditure rule that is consistent with the medium-term objective, introduction of a debt rule for the general government as a whole as well as

⁽¹³⁾ For more information, see the fiscal governance database set up by the Commission (last data from 2013): http://ec.europa.eu/economy_finance/db_indicators/fiscal_governance/index_en.htm.

2.2. LABOUR MARKET, EDUCATION AND SKILLS

Labour market

The Czech Republic's labour market situation improved in 2014, in line with a return to GDP growth following two consecutive years of decreases. The employment rate (people aged 20-64) has been increasing and reached 73.9 % in the third quarter of 2014 (Graph 2.2.1), while the total unemployment rate fell to an average of 6.1 % in 2014 (Graph 2.2.2). Indicators for disadvantaged groups also showed improvement between the third quarters of 2013 and 2014, with youth unemployment (people aged 15-24) falling from 19.6 % to 16.3 %, the unemployment of non-qualified workers from 23.9 % to 21.2 % and long-term unemployment from 3.0 % to 2.6 %. The latter figure remains among the lowest in the EU. The unemployment rate of women is also falling, reaching 7.4 % in 2014, although it remains higher than that of men (5.1 % in 2014). Poverty and social exclusion remain among the lowest in the EU but the number of socially excluded localities inhabited mainly by Roma has increased in recent years, as has the risk of housing exclusion and the number of homeless people.

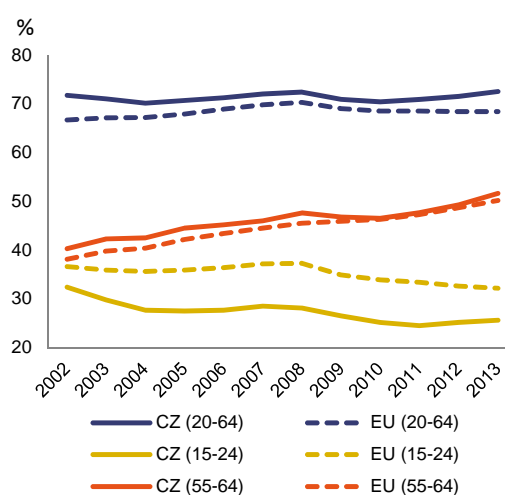
There are two major challenges related to the low labour market participation of certain groups. Firstly, poorly functioning active labour market policies do not ensure adequate transitions from unemployment to employment. Secondly, there are barriers to higher female labour-market participation.

Effectiveness of public employment services and active labour market policies

The poor functioning of public employment services (PES) does not facilitate enough transitions from unemployment to employment for disadvantaged groups. PES reforms carried out since 2011 have not yet produced the expected results. An ineffective management system prevents the efficient translation of objectives into activities, and a lack of operational autonomy of PES hampers market-oriented interventions and consistent service delivery across regions. Competences and objectives between various institutional layers are not clearly defined. Implementation of effective activation strategies is hampered by insufficient scope and spending on active labour market policies (ALMPs) and the provision of tailored services such as job search

assistance or career counselling is limited. The sustainability of measures is often not ensured and the evaluation of their effectiveness is not carried out regularly. There are persistent problems related to an obsolete data-processing IT system for registration of jobseekers and administration of benefits.

Graph 2.2.1: **Employments rates by age group (EU vs. the Czech Republic)**



Source: European Commission - Eurostat

Although some steps have been taken towards strengthening the efficiency and effectiveness of PES in recent years, an effective performance measurement system is still lacking. ALMPs have been cited as a priority for the current governmental coalition and key strategic documents have been adopted to address shortcomings and help better integrate EU-funded and national ALMP measures ⁽¹⁴⁾. There has been an increase in PES personnel capacity ⁽¹⁵⁾, an

⁽¹⁴⁾ These refer to the Employment Policy Strategy until 2020 and the "Activating Package". The strategy is based on four priorities: supporting access to employment, in particular for vulnerable groups; promoting gender equality in the labour market; promoting adaptation of companies and employees to changing labour market conditions; and improvement of PES. CZK 1.5 billion per year will be provided for the measures under the Strategy, in addition to around CZK 70 billion planned under the European Social Funds' Operational Programme on Employment. These amounts represent a substantial increase in resources compared to the 2007-13 period.

⁽¹⁵⁾ Nearly 700 client-oriented employees were recruited in 2014, alleviating a level of understaffing that was estimated at about 20 % at the beginning of 2014 (see

increase in expenditure, and the implementation of new instruments and projects. The scope and number of participants in ALMP is increasing. This is true in particular for job creation measures, including on-the-job experience for young people. The number of participants in public works, retraining and subsidised jobs has increased and the annual change in the number of jobseekers benefitting from ALMP measures was nearly 50 % by October 2014 ⁽¹⁶⁾. Difficulties linked to the inefficiency of the data processing system continue to hinder the development of a more effective design of ALMPs, however, and suboptimal data gathering and processing, and a lack of consistent measure evaluation, become more problematic as spending increases.

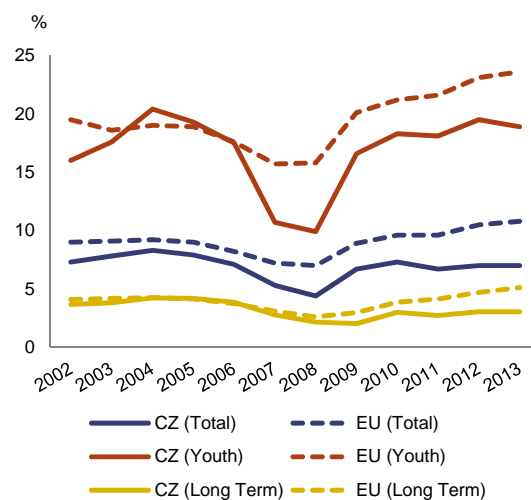
The trend in youth employment is positive and PES try to place an emphasis on young people in their interventions. A number of steps have been taken in 2014 under the Youth Guarantee, including the provision of Youth Guarantee offers, the approval of a new youth strategy, the first steps towards the introduction of a dual system in vocational education and training, the launching of traineeship programmes, and a programme that aims to improve human resource management and build staff capacity in PES. Several major challenges remain, however, including the effectiveness of PES in terms of activating labour market participation of young unemployed workers and offering them individualised and targeted services. Those furthest from the labour market, i.e. non-registered NEETs ⁽¹⁷⁾, are excluded from the Youth Guarantee. Overall, largely due to the relatively good situation of young people on the Czech labour market, there is a visible lack of an ambitious, comprehensive and long-term approach, which raises questions regarding long-term sustainability of measures.

http://www.mpsv.cz/files/clanky/17668/cinnost_UP_2013.pdf.

⁽¹⁶⁾ Data from the Labour Office - state of play on 31 October 2014.

⁽¹⁷⁾ People not in education, employment or training.

Graph 2.2.2: Unemployment rates of disadvantaged groups (EU vs. the Czech Republic)



Source: European Commission - Eurostat

Labour market participation of women

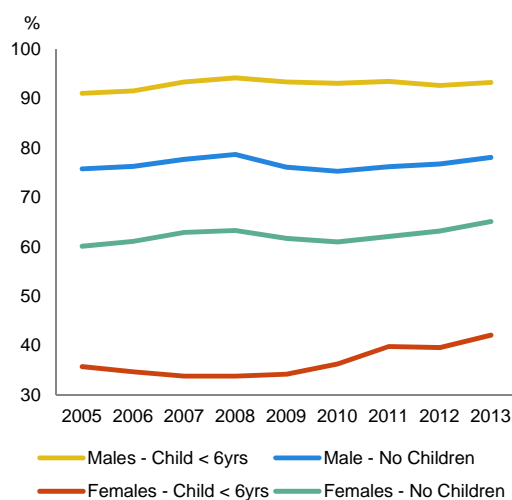
A lack of affordable childcare services and the limited use of flexible working-time arrangements limit the ability of women with children to participate in the labour market.

The employment rate of women remains significantly lower than that of men, although it is close to the EU average. The average duration of women's working lives has increased but remains below the EU average. Access to childcare facilities remains among the lowest in Europe, with only 3 % of children up to 3 years of age cared for in formal childcare, far below the EU average of 28 % (2012). Nurseries for children aged 0-2 are very scarce and are mainly private, with public nurseries no longer recognised as legal entities since a legislative amendment introduced in 2013. The considerable number of women on parental leave or benefiting from the parental allowance (up to the 4th year of the child's life) seems to 'conceal' hidden unemployment of women. According to the results of a study prepared for the European Commission ⁽¹⁸⁾, more than 13 % of 35-year-old college-educated mothers on parental leave with children up to 4 years old would like to work if they had an opportunity to do

⁽¹⁸⁾ Barbara Pertold-Gebicka and Daniel Husek (2014), "Female Labour force participation and childcare policies - A study for the European Commission", draft, Prague.

so. Moreover, 16 % of mothers with young children indicate that their decision not to work is strongly influenced by the lack of childcare services. A low level of part-time working is another obstacle to employment: in 2013, part-time work accounted for only 5.8 % of employment (10 % in the case of women and 2.5 % in the case of men).

Graph 2.2.3: Total employment of men/women with no children vs. with at least one child (<6 years)



Source: European Commission - Eurostat

Some steps have been made towards increasing the availability of childcare facilities, with the Act on Child Groups being adopted in 2014.

Under this legislation, any legal entity can provide childcare in groups of up to 24 children (of at least 1 year of age). In the case of children of 3 years and older, some professional standards are required. The expenditure on company childcare facilities has also been made tax-deductible, and tax relief has been granted to parents who use the services of child groups. The act should result in an increase in childcare services, although stakeholders have raised concerns about its potentially negative impact on some types of existing alternative childcare facilities. It will only be possible to evaluate the act's overall impact after some time. The government has also promised to increase the capacity of public kindergartens. A new initiative was announced to establish a government fund that will support new public facilities providing early childhood education and care. This fund will disburse CZK 1.5 billion for the 2014-21 period and CZK 12

billion for the 2015-23 period, planned to be drawn from EU funds.

Policies supporting public childcare for the youngest children, which would help mothers to return to employment after having a child, are still lacking. Political inaction in tackling this problem continues, with no administrative body having the sole competence for nurseries.

A high gender-employment gap (16.8 pps. in the third quarter of 2014) shows a high level of gender inequality. The female employment rate has not changed significantly over the last few years and is firmly linked to age and care for a child or other dependents. Overall, women's labour inactivity due to family responsibilities is very high (25.4 % in 2013 compared to an EU average of 15.1 %). OECD projections show that the size of the labour force would increase by 5.1 % by 2030 if there was a convergence of the labour market participation of women and men, while it would decrease by almost 10 % in comparison to 2011 if no change occurs ⁽¹⁹⁾. Gender inequalities are visible also in other aspects of the labour market. Women remain disadvantaged in financial terms, with the gender pay gap remaining among the highest in the EU (22 % in 2012 compared to 16.5 % in the EU) and there are few policy initiatives to tackle this problem. According to the World Economic Forum's Global Gender Gap Report, the Czech Republic fell from 83rd place in 2013 to 96th in 2014, due to its very low female-to-male ratio for legislators, senior officials and managers, as well as the political empowerment of women. The European Institute for Gender Equality evaluates the country as being below the EU average (54 points) with only 44.4 points on the Gender Equality Index ⁽²⁰⁾.

The newly adopted Strategy on Gender Equality (2014-20) is expected to have a positive impact on gender balance on the labour market.

The strategy provides a comprehensive framework for a broad gender equality agenda, which was until now pursued with only piecemeal measures that were approved annually. It correctly identifies key gender challenges, such as the low representation of women in politics and top-level

⁽¹⁹⁾ 'Closing the Gender Gap. Act now', OECD 2012, p.53.

⁽²⁰⁾ <http://eige.europa.eu/content/gender-equality-index>

public administration positions, the extreme drop in employment resulting from motherhood, and the low level of women in R&D positions despite education levels (masters and PhD courses). The strategy includes ambitious goals, such as improving the gender balance in private and public entities to reach 40 % of women in decision-making positions and to decrease the gender pay gap to the EU average level by 2020. It also plans to contribute to improving the position of women on the labour market through improvements in flexibility of working arrangements, parental leave possibilities and childcare provision. In 2015, an increase in the usage of flexible working arrangements in public entities is envisaged and a public campaign on private/public life reconciliation and domestic and gender-based violence is planned.

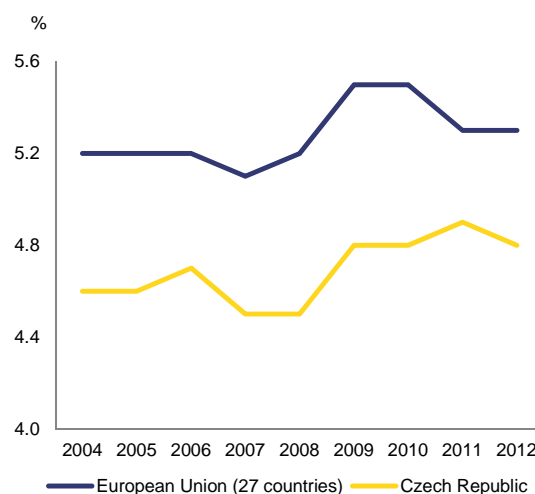
Education and skills

The Czech Republic has a generally high level of educational attainment and educational outcomes have improved in recent years. The most recent data show that the Czech Republic is performing well in indicators such as early school leaving (5.4 % in 2013 compared to an EU average of 12 %) ⁽²¹⁾ and is showing rapid progress in tertiary educational attainment.

Structural challenges still remain, however, with public expenditure on education remaining below the EU average (Graph 2.2.4). Demographic developments have put pressure on capacity, in particular in early childhood education and care and the early stages of primary education. The teaching population is ageing and the profession's attractiveness is low. The added value of schooling in relation to socio-economic background is one of the lowest in the EU ⁽²²⁾. Early tracking at the age of 11 continues, despite its negative impact on students assigned to lower tracks and a lack of evidence that it increases average performance (OECD, 2012). Regional

disparities on indicators such as early school leaving and skills mismatches are high ⁽²³⁾.

Graph 2.2.4: **Spending on education as a % of GDP (EU vs. the Czech Republic)**



Source: European Commission - Eurostat

Compulsory education

A high proportion of the population completes primary and secondary education but inequalities impede educational and labour market outcomes for young people with low socio-economic backgrounds, including Roma, and thus hold back inclusive growth. The early school-leaving rate remains low in the Czech Republic but is much higher for certain disadvantaged groups, such as Roma children (72 %) ⁽²⁴⁾ and people with disabilities (11.2 %) ⁽²⁵⁾. The labour market disadvantage for early school leavers is higher than the EU average ⁽²⁶⁾. The participation of Roma children in early childhood

⁽²¹⁾ It must be noted, however, that the rate has increased from 4.9 % in 2011 to 5.4 % in 2013.

⁽²²⁾ OECD Economic Survey: Czech Republic (see: http://dx.doi.org/10.1787/eco_surveys-cze-2014-en).

⁽²³⁾ Education and Training Monitor 2014 (http://ec.europa.eu/education/library/publications/monitor_14_en.pdf).

⁽²⁴⁾ Roma survey - Data in Focus: Education: the situation of Roma in 11 EU Member States, European Union Agency for Fundamental Rights, 2014.

⁽²⁵⁾ EU-SILC 2012: early school leaving of pupils with disabilities at 11.2 % compared with 4.4 % for pupils without disabilities.

⁽²⁶⁾ The employment rate for those who had not completed upper secondary education or higher education was 40.4 % in the Czech Republic in 2013, while the EU average was 51.4 %.

education and care remains very low (26 %) ⁽²⁷⁾, despite the legal entitlement to a place in the final year. Furthermore, Roma children constitute about a third of pupils educated based on the revised curriculum for pupils with mild mental disabilities ⁽²⁸⁾. The government has adopted a comprehensive strategy for education (until 2020), which focuses on reducing inequalities, and some pro-inclusive amendments to the School Education Act are planned to enter into force in 2016. They include a proposal for individual support to pupils with special education needs in mainstream education, including those from disadvantaged backgrounds, and could therefore improve the education of Roma children. It is still not clear if any provisions that could lead to potential misdiagnosis of children and their placement in practical schools will remain. The current funding system ⁽²⁹⁾, together with insufficient control over diagnosis, may impede efforts towards reducing misplacements. Extending compulsory education to the last year of pre-school, which would better prepare disadvantaged children for education in mainstream schools, is being considered from 2016. New funding from national and EU sources aimed at increasing capacities in pre-primary schools has been agreed with the objective of offering sufficient capacity within three years. It is also planned that qualification requirements for pre-primary teachers will be raised.

A comprehensive evaluation framework and support for low-performing schools and pupils, which could help improve efficiency and equality in the education sector, is lacking. The Czech School Inspectorate, with the support of EU funds, has developed a testing platform for schools, teachers and pupils at grades 5 and 9. Minimum education standards have been

developed for certain topics and further standards are being developed to provide schools and teachers with clearer guidance on the reformed curricula. A common entry exam to upper-secondary schools leading to the State Leaving Exam will be pilot-tested in 2015, although this is a controversial measure as it may lead to a reduction in equity. However, measures to support teacher assessment practices and formative assessment are lacking. Envisaged financial incentives for teachers working in challenging schools or classes could bring positive results.

Demographic projections point to a need to increase the number of teachers in the compulsory education sector in order to maintain the current student-teacher ratio, but low salaries and a negative perception of the profession make it difficult to attract talented candidates. There is also evidence of a strong gender imbalance in the teaching profession ⁽³⁰⁾. While the salaries of public employees were increased by 3.5 % for 2015 (from November 2014), teachers' salaries are still not high enough to compete with the average salaries in other professions requiring similar levels of education. Work towards a new career system for teachers and headmasters has continued, supported by EU funds. It will combine career development and standards-based career progression with performance assessment, continuous professional development and better remuneration. The finalisation of the new system is planned for the first half of 2015 with an envisaged entry into force in September 2016. The new career system is likely to bring clarity in terms of required competences for teachers, educational staff and headmasters, thus improving recruitment and professional development and contributing to reducing the high proportion of young teachers who leave the profession. The overall impact will largely depend on available funding, the level of which remains unclear at this stage. While the ICT infrastructure in schools is relatively well developed and Czech pupils score well in ICT

⁽²⁷⁾ Roma survey - Data in Focus: Education: the situation of Roma in 11 EU Member States, European Union Agency for Fundamental Rights, 2014

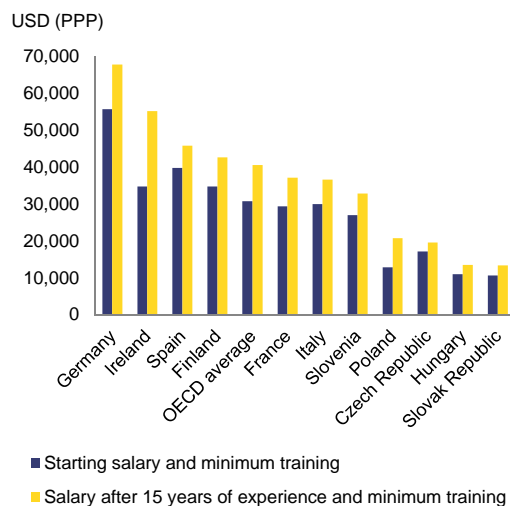
⁽²⁸⁾ In contrast, the proportion of Roma in the overall population is estimated to be in the range of 1.4 to 2.8 % (Survey by the Czech School Inspectorate: "Equal access to education in the Czech Republic: situation and recommendations").

⁽²⁹⁾ Funding for pupils placed in practical schools (based on diagnosis of incapacity to attend mainstream education) is much higher than funding for pupils placed in mainstream education. Some stakeholders point to the fact that funding criteria, together with resistance to closing schools, may encourage misdiagnosis of socially disadvantaged children, in particular Roma, to keep practical schools open.

⁽³⁰⁾ While females are largely over-represented in the teacher population with lower salaries than males, the reverse is true for headmasters' positions (draft Country Background Report prepared for the on-going OECD/EC School Resources Review).

literacy⁽³¹⁾, there is a shortage of ICT professionals and teacher training in the area is lagging behind.

Graph 2.2.5: **Teachers' salaries in lower secondary education (2012)**



(1) Unit is USD converted using Purchasing Power Standards.

Source: OECD

Higher education

Participation in tertiary education has rapidly increased but concerns have emerged over its quality and labour-market relevance. The recent OECD survey on adult skills ⁽³²⁾ highlighted a decline in younger tertiary education graduates' skills compared to older generations with equivalent diplomas, while the employment advantage for graduates has decreased recently and is below the EU average ⁽³³⁾. Draft amendments to the Higher Education Act currently envisage institutional accreditation, an independent accreditation body, strengthened internal quality assurance, and profiling of either academic or profession-oriented study programmes. The systematic use of the HEInnovate tool and

methodology for supporting institutional change conducive to this are currently being investigated. The proportion of performance-based funding for higher education institutions will reach 24 % in 2015 and quality criteria are being improved. EU-supported projects contribute to improving quality assurance and to gathering employers' assessments on graduates' preparedness for the labour market. It is hoped that specific profiles for study programmes will motivate the creation of more professional-oriented bachelor programmes that could contribute to supporting the transition from higher education to the labour market. Such a development could also contribute to increasing the tertiary attainment rate and enable a more efficient use of scarce resources at the level of higher education.

Vocational Education and Training

Vocational education and training programmes do not appear to be fully providing the skills demanded by the market, largely because there is no system to correctly identify labour-market needs ⁽³⁴⁾. The VET system is largely school-based, with upper secondary students' participation significantly above the EU average (73.1 % compared to 50.1 % in 2012). While the employment rate of recent upper secondary graduates is above the EU average (75.4 % compared to 69.4 %), skills mismatches have grown significantly, mainly in particular regions. Binding rules for work-based training, as well as assessment standards to secure transferable skills and to strengthen interaction with private employers, should be a first step to improving vocational education and training programmes. Work towards revising the school funding system is planned, among others measures, to better ensure the labour-market relevance of programmes.

⁽³¹⁾ 2013 International Computer and Information Literacy Study (ICILS) carried out by the International Association for the Evaluation of Educational Achievement (IEA): http://www.iea.nl/fileadmin/user_upload/Studies/ICILS_2013/ICILS_2013_release.pdf

⁽³²⁾ PIAAC 2013, <http://skills.oecd.org/skillsoutlook.html>.

⁽³³⁾ See Education and Training Monitor 2014: http://ec.europa.eu/education/tools/docs/2014/monitor2014-cz_en.pdf.

⁽³⁴⁾ The analysis of the vocational education and training system in the Czech Republic has been carried out within the ESF Together Project (see http://www.nuv.cz/uploads/POSPOLU/Souhrnna_analyticka_studie_FIN.pdf).

2.3. PUBLIC ADMINISTRATION

The quality and transparency of public institutions in the Czech Republic remain a barrier to the country's growth performance, despite some recent reform efforts in this area.

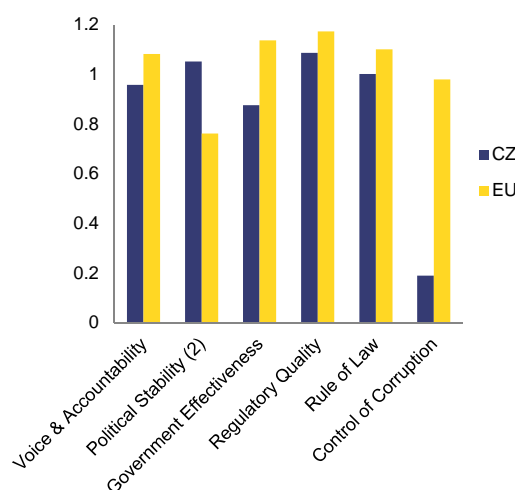
The Czech Republic continues to score below the EU average on indicators of the quality of public institutions. The Czech Republic scores below the EU average on five of the six dimensions of the World Bank's Worldwide Governance Indicators (2014) ⁽³⁵⁾, with the seventh lowest score on 'control of corruption'. The World Economic Forum's Global Competitiveness Report (2014-15) ⁽³⁶⁾ also highlights the corruption problem. The report states that although the Czech Republic improved its ranking on the 'quality of institutions' indicators, this improvement comes from a very low level in some sub-indicators and "major concerns remain about corruption and undue influence" with public trust in politicians ranking "extremely low". Inefficiencies in public administration impinge on the country's growth performance as they directly affect allocation of public funds and worsen the business environment.

Efforts to tackle the problem of corruption in recent years have met with serious delays. The prevention and prosecution of corruption and conflicts of interests remain a prominent issue in the public perception. Since 1999, the Czech Republic has issued five anti-corruption action plans, the most recent one in November 2014. The new action plan aims to identify the risk areas within government institutions and strengthen transparency and relevant control mechanisms. However, many measures under former action plans have not been followed through and have been carried forward without any significant advancement. This is the case for a law on protecting whistle-blowers, a law on financing of political parties, an amendment to the law on free access to information, a new policy on the management of state-owned enterprises and a law on public prosecution, while a law on conflicts of interest is still pending adoption.

⁽³⁵⁾ <http://info.worldbank.org/governance/wgi/index.aspx#home>

⁽³⁶⁾ <http://www.weforum.org/reports/global-competitiveness-report-2014-2015>

Graph 2.3.1: Worldwide governance indicators (2013)



(1) Each indicator ranges between -2.5 (weak) to 2.5 (strong). EU figures are calculated as simple averages of Member State results.

(2) Political stability and absence of violence/terrorism

Source: World Bank

In adopting the Civil Service Act, the Czech Republic has started to address problems of efficiency and stability of public administration but a number of elements are still lacking. The Civil Service Act entered into force on 1 January 2015 and provides a basic legal framework for the civil service at national level by defining its general structure and certain rules for its functioning. However, key elements governing remuneration, entry into service, and rules for co-operation between civil servants and politicians need to be set out in implementing regulations and decrees. The Czech Government has committed to ensure their entry into force by 1 July 2015, although they have still to be published.

Public procurement has been the focus of policy initiatives but concerns about transparency remain. Use of non-transparent procedures (negotiated procedures without publication of a contract notice) is the highest in the EU ⁽³⁷⁾. Although compulsory on-line publication of tender documentation introduced in the 2012 reform of

⁽³⁷⁾ 15 % of all procedures in 2013, which is three times above the EU average. In 40 % of cases no justification is given for their use. See: http://www.zindex.cz/data/2014-08-28-Zakazky_bez_souteze.pdf and http://ec.europa.eu/internal_market/scoreboard/performance_per_policy_area/public_procurement/index_en.htm

the Public Procurement Act should have increased transparency, the penalty for non-compliance (a financial fine imposed by the Review Body), which moreover requires an interested party to make a complaint, does not seem to discourage such practices. Furthermore, as tender documentation has to be published by each contracting authority, systematic monitoring is difficult to put in place. Publication of all public contracts in a centralised register with adequate search tools could make more efficient public control possible. Review procedures are subject to a long decision-making process, although the Review Body has recruited additional personnel in order to address this problem.

Efficiency of public procurement is hampered by insufficient attention to quality and frequent changes of the legal framework. Technical specifications of public tenders remain overly focused on lowest price as the main award criterion (in 82 % of cases compared to the EU average of 56 %) ⁽³⁸⁾, primarily because of fear of complaints from failed bidders on quality criteria. Insufficient attention to quality and efficiency considerations can give rise to the risk of under-priced tenders that require several contract modifications in order for the project to be finalised. The high number of legislative amendments (22 since 2006) undermines the stability of the public procurement framework. A technical amendment of the Public Procurement Act aiming to correct major deficiencies ⁽³⁹⁾ was approved by the Parliament and another reform transposing the 2014 Public Procurement Directive has been launched.

The provision of appropriate guidance and supervision on public tenders to tendering institutions is still lacking. The Ministry of Regional Development has made efforts to disseminate information and provide training, notably through an on-line forum and by launching a series of seminars until the 'Academy of Public

Investment' becomes operational. Nevertheless, the training activities are infrequent and non-systematic.

Although the management of EU funds improved in 2014, irregularities still created obstacles, particularly in the areas of public procurement and conflicts of interest. The measures of the 2012 action plan to strengthen the management and control system for implementing structural funds are being implemented and positive developments were observed in the functioning of the Czech audit authority. Implementation of projects accelerated and a lower amount of funds is expected to be de-committed in 2014 compared with 2013 (EUR 313 million in 2014, down from EUR 411 million in 2013). The number of interrupted operational programmes has also decreased, however some irregularities remain, which may lead to renewed interruption of payments in 2015 and a need to apply financial corrections. Irregularities were also still detected in the area of public procurement procedures. The national law on conflicts of interest is not sufficient and other legislation on this issue is under preparation (including a new act on public procurement and an act on financial control), although these will not enter into force this year.

⁽³⁸⁾ For 2013, see part 2.2.6. in <http://www.portal-vz.cz/getmedia/8965ea38-8a96-490b-ad0f-ce4e1c0a32c9/Vyrocní-zpráva-o-stavu-verejnych-zakazek-za-rok-2013.pdf>.

⁽³⁹⁾ Major elements of the technical amendment include: extending the number of selection criteria beyond the lowest price; allowing for tenders with a single bid; and acceleration of appeal procedures and limiting cost overruns.

2.4. BUSINESS ENVIRONMENT AND R&D

Business environment and consumer protection

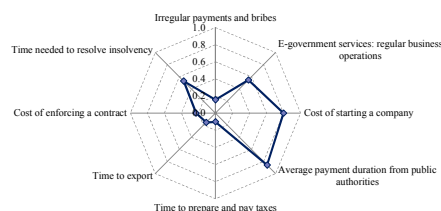
Despite recent improvements, the efficiency and effectiveness of the business environment still represent a challenge. This is due to a number of factors, such as excessive administrative and tax compliance burdens on companies, infrastructural issues, and underdeveloped links between industry and universities/research institutes in order to ensure R&D commercialisation. All these issues reduce competitiveness. This is also reflected in the Czech Republic's rankings in various international classifications, even though there has been some improvement over the past year. The 2015 World Bank Doing Business Report ranks the Czech Republic in 44th place out of 189 countries, and 19th among EU Member States, but notes an improvement in its 'distance to frontier' score ⁽⁴⁰⁾. The main problems identified are in the areas of starting a business, dealing with construction permits, getting an electricity connection, and paying taxes ⁽⁴¹⁾, with no improvement in the total time required to comply with this last obligation. On the positive side, the Czech Republic performs relatively well on registering property and on access to credit ⁽⁴²⁾. There has also been a notable improvement in the Czech Republic's ranking in the Global Competitiveness Report 2014-2015, moving up nine places to 37th place.

⁽⁴⁰⁾ The distance to frontier score shows how much the regulatory environment for entrepreneurs has changed over time in absolute terms.

⁽⁴¹⁾ Total tax time remained at 413 hours in 2014 for the Czech Republic, unchanged from 2013 levels, according to PriceWaterHouseCoopers Paying Taxes 2014.

⁽⁴²⁾ In 2013 and 2014, SMEs in CZ reported access to finance as their least pressing problem. See European Commission 2014 SAFE survey (http://ec.europa.eu/enterprise/policies/finance/data/index_en.htm#h2-1).

Graph 2.4.1: Overall profile of the Czech Republic's business environment



(1) While 1 stands for the best EU performer, 0 for the worst.

Source: European Commission, World Bank, World Economic Forum, Intrum Justitia, latest available 2013 or 2014 data

Some positive developments in recent years have contributed to strengthening the business environment. In particular, the new Civic Code and the Law on Trading Companies in force since 2014 have made it easier to set up a company. The digitalisation of processes related to start-up documentation and the operation of data boxes have improved, and administrative barriers have been reduced. Work is ongoing on aligning the dates of the entry into force of legislation affecting companies. The law on investment companies and investment funds, in force since 1 January 2014, is also expected to encourage private investors to fund companies in the coming years by facilitating an easier establishment of investment funds ⁽⁴³⁾.

Consumer legislation is not effectively enforced, leading to market distortions and level playing field issues for companies. The efficiency of public administration remains limited in this respect. This is reflected in retailers' poor assessment of public authorities' role in ensuring compliance with consumer legislation and of the ease and cost of compliance with this legislation (6th and 3rd third lowest in the EU, respectively) ⁽⁴⁴⁾. The existing legislation lacks clarity as regards the power of the Czech Trade Inspectorate to accept undertakings against companies that are in infringement of consumer legislation and to take public enforcement measures on unfair contract terms.

⁽⁴³⁾ The Ministry of Industry and Trade estimated that there were 282 funds as of 15 December 2014 compared to 262 funds on 1 January 2014.

⁽⁴⁴⁾ Flash Eurobarometer 396, "Retailers' attitudes towards cross-border trade and consumer protection", 2014.

Digital Economy

The Czech Republic performs well with respect to most of the targets of the Digital Agenda for Europe, although there are several areas in which it does not fully exploit its potential. This concerns mainly the use of electronic services in the health-care sector and e-Government. In the area of connectivity, the Czech Republic makes the least use of all EU countries of its mobile broadband spectrum (67.8 %) ⁽⁴⁵⁾. 4G mobile broadband was available to only 12 % of the population in 2013, compared with an EU average of 59 %. In the area of digital skills, only 19.1 % of Czech computer users have skills above a basic level, in comparison with an EU average of 25 %.

E-Government is one of the most prominent areas in which there is potential to exploit the declared determination to improve the effectiveness of public spending. It is estimated that the public authorities could reduce costs by 15-20 % if they moved to e-Government ⁽⁴⁶⁾. Use of e-Government services in the Czech Republic (13.7 %) is far below the EU average of 33 %. On the supply side, the Czech Republic ranks below the EU average for both the newly introduced user-centric e-Government indicator (57 vs. 70 for 2012-13) and the transparent e-Government indicator (29 vs. 49). The Czech Republic underperforms in the field of eHealth, too. In particular, the use of medical data exchange and ePrescriptions is still below the EU average.

Reform of regulated professions

The Czech Republic has one of the highest numbers of regulated professions in the EU. Opening of regulated professions can increase competition and reduce mark-ups, thus improving the overall cost effectiveness of the business environment. Based on domestic sources ⁽⁴⁷⁾, the

number of regulated professions in the Czech Republic is currently more than twice the EU average. This number has not been reduced since the beginning of 2014. The sectors most affected by regulation are health/social services and business services, with a 25 % and 17 % share, respectively, of the total number of professions. Furthermore, the country ranks high on the 2013 OECD Product Market Regulation index ⁽⁴⁸⁾ for entry regulations for the legal, accounting, engineering, and architecture professions.

There have been limited policy initiatives in recent years to accelerate the reform of regulated professions. Reform was initiated in 2012 but has been delayed, with only around 50 professions having been opened up through non-legislative measures since then. Progress has been slow so far and several steps outlined in the initial reform agenda have been postponed. In April 2014, a public consultation on the necessity of such regulations was launched and the responses are currently being assessed. An economic study on the impact of deregulation was also launched in 2014. On that basis, and in line with the agenda of the mutual evaluation exercise initiated by the European Commission in 2013, the Czech authorities are expected to adopt a National Action Plan in spring 2015, with specific measures and actions to improve the regulatory framework for regulated professions. Such a plan would allow authorities to focus on sectors where restrictions are no longer justified or appear disproportionate.

Research & development (R&D)

Public and private R&D investment has increased substantially in the Czech Republic in recent years and the country is well placed to surpass its Europe 2020 target on public R&D ⁽⁴⁹⁾. R&D intensity ⁽⁵⁰⁾ has increased since 2002,

⁽⁴⁵⁾ All data in this and the next paragraph are taken from the Digital Agenda Scoreboard unless otherwise stated (<https://ec.europa.eu/digital-agenda/en/scoreboard>).

⁽⁴⁶⁾ "Public Services Online", eGovernment Benchmark insight report for the European Commission, 2012

⁽⁴⁷⁾ See the Regulated professions database (http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm?fuseaction=home.home). As far as the database is concerned, each country is responsible for updating information on its regulated professions, competent authorities and statistics. Member States have the obligation to notify to the Commission all the regulated

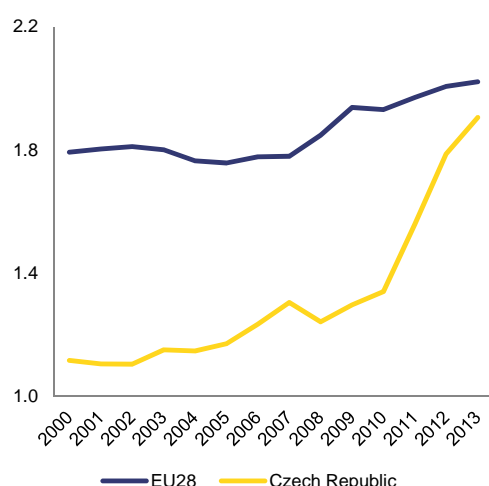
professions by 18 January 2016, which is why the number of regulated professions varies considerably and, in general, increases.

⁽⁴⁸⁾ The OECD PMR index score for the Czech Republic reached 2.36 as compared to an OECD average of 2.2 measured on a sample of 40 countries in 2013 (oecd.org/eco/reform/Services-Indicators-2013.xlsx).

⁽⁴⁹⁾ The Czech Republic set a target of 1 % of public R&D investment by 2020 and is on track to surpass this. The target is not a particularly challenging one, however. A

when it hit a record low of 1.1 %, significantly below the EU average of 1.81 %. Since then, and particularly following an increase in the allocation of EU structural funds to R&D activities in 2007, the country has started to catch up on its R&D investment lag. In 2013, R&D intensity in the Czech Republic rose to 1.9 %, very close to the EU average of 2.0 %. Both private and public R&D investment contributed to this improvement ⁽⁵¹⁾. Should the recent trend continue, the Czech Republic will reach a total R&D intensity of 2.97 % ⁽⁵²⁾ in 2020, in line with the overall EU target of 3 %.

Graph 2.4.2: Public and private R&D investment in the Czech Republic and the EU (% of GDP)



Source: European Commission – Eurostat (2013 data)

Despite the recent increase in R&D investment, the Czech Republic continues to lag behind in terms of scientific and technological results. This can be seen in its weak scientific excellence

more ambitious R&D target would encompass both public and private investment.

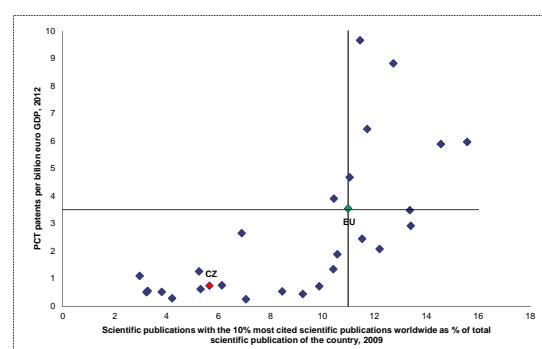
⁽⁵⁰⁾ The source of all R&D statistics is Eurostat (<http://ec.europa.eu/eurostat/web/science-technology-innovation/statistics-illustrated>).

⁽⁵¹⁾ For the 2007-13 period, public R&D investment increased from 0.5 % to 0.9 %, while private R&D increased from 0.8 % to 1.0 %. Both public and private R&D therefore outperformed the EU average annual growth rate of 2.2 % over this period.

⁽⁵²⁾ Based on the annual compound growth rate in R&D investment for the 2007-13 period. This growth rate is then projected for the 2013-20 period resulting in 2.97 % of GDP.

results, with only 5.6 % of Czech scientific publications among the 10 % of publications most cited worldwide ⁽⁵³⁾. This can also be seen in the indicators on technological results, with OECD data showing that the country scores 0.7 patents under the Patent Cooperation Treaty per billion GDP against an EU average of 3.9, i.e. less than 18 % of the EU average.

Graph 2.4.3: Relationship between top-cited scientific publications and PCT patents



Source: European Commission, based on data from the OECD and Innovation Union scoreboard, 2014

Scientific and technological results remain weak and point to a need to continue the modernisation and reform process of the Czech research and innovation system. The current reform process is characterised by the rationalisation and concentration of R&D funding institutions and the creation of specialised research and technological agencies. This process still suffers from strong institutional inertia in, for example, the allocation of institutional funding. Reforms in the allocation of funding across research institutions, as well as in governance within research institutions, could create incentives to reallocate funding towards the best performing research groups. An interim report was presented in November 2014 and a final proposal is expected by the end of 2015, with introduction only planned for 2017. More generally, the adoption of a more targeted approach could also be beneficial, especially as regards the identification of research priorities (in line with the Smart Specialisation Strategy that was presented in December 2014). Such prioritisation would contribute to reaching a critical mass of scientific and technological excellence and will foster the productive use of

⁽⁵³⁾ Source: Science Metrix / Scopus (Elsevier).

research results in the economy. Although support schemes, such as the Competence Centres, have been set up in order to establish long-term collaboration between research institutions and the private sector, knowledge transfer and science-industry links remain weak. According to Eurostat, only 3 % of business R&D expenditure is directed to fund research in public research or higher education institutions, compared to an EU average of 13.7 %.

2.5. TRANSPORT AND ENERGY EFFICIENCY

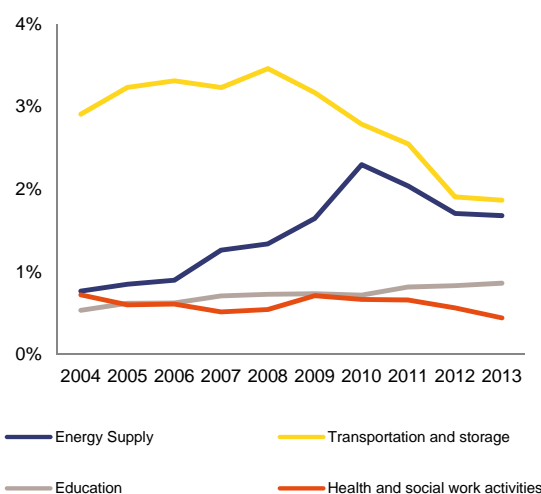
Transport

Despite a recent increase in road density ⁽⁵⁴⁾, relatively underdeveloped transport infrastructure and suboptimal functioning of the transport markets continue to negatively affect the capacity and safety of transport services in the Czech Republic. Underperforming transport services also substantially increase export costs, which are some 15 % higher than the OECD average ⁽⁵⁵⁾. This is particularly detrimental to the overall competitiveness of the Czech Republic, an export-oriented economy with a strong manufacturing base. The rail network is in rather poor condition, making it a less attractive alternative to road transport ⁽⁵⁶⁾. Although certain railway connections have been opened to private operators, competition is still low ⁽⁵⁷⁾ due to various obstacles, including limited public tendering of public-service contracts, technical and safety regulations, and operational barriers ⁽⁵⁸⁾. With regards to the inland waterway network, there is insufficient preparation and coordination of further investment in this area, including a proper cost-benefit analysis.

Challenges related to underdeveloped transport infrastructure are not being addressed with an adequate level of investment. Investment in this area has fallen quite substantially in recent years (Graph 2.5.1). Total expenditure on transport infrastructure decreased in 2013 for the sixth consecutive year and was at its lowest since 2001, at just a third of the 2008 level. The most recent figures suggest that investment in this area increased in 2014, with EU funds representing the main source of funding, although there have been difficulties in providing the necessary co-financing

on the domestic side. Transport infrastructure investment is administered by the State Fund for Transport Infrastructure and implemented by the Road and Motorway Directorate and the Railway Infrastructure Administration.

Graph 2.5.1: Investment in selected activities (as a % GDP)



Source: European Commission - Eurostat

Despite the lower level of funding available for transport infrastructure investment in recent years, absorption capacity has fallen. The realised expenditure of the State Fund for Transport Infrastructure was 76 % of its budgeted expenditure in 2013, according to its annual report. Under absorption of funds reflects bottlenecks in a number of areas. The annual reports of the State Fund for Transport Infrastructure and the Road and Motorways Directorate ⁽⁵⁹⁾ highlight lengthy procedures for issuing building and land-use permits, inefficiencies in public procurement procedures and delays related to complaint procedures at the anti-monopoly office. Independent studies also point to low transparency and politicisation of decision-making processes in this area ⁽⁶⁰⁾, while non-compliance of the national legislative framework with the Environmental Impact Assessment Directive can also act as a

⁽⁵⁴⁾ "Infrastructure in the EU: Developments and Impact on Growth" December 2014, page 54.

⁽⁵⁵⁾ Inland transportation and handling costs in 2014 were estimated to be USD 210 (42 %) higher than in Germany (deflated USD per container); see World Bank Doing Business 2015 (<http://www.doingbusiness.org/data/exploreeconomies/czech-republic#trading-across-borders>).

⁽⁵⁶⁾ Use of rail passenger transport has been steadily decreasing: from 8 million passenger-km in 1995 to 6.7 million passenger-km in 2011, a 16 % decrease (ITF, 2011).

⁽⁵⁷⁾ The market share of all but the principal railway undertakings in passenger rail transport is at 5 % for long distance and at 1 % for urban and suburban operation (RMMS, 2014, p. 69-70).

⁽⁵⁸⁾ 2014 OECD Economic survey of the Czech Republic.

⁽⁵⁹⁾ See: <http://www.sfdi.cz/poskytovani-informaci/poskytovani-informaci-dle-zakona-c-1061999-sb-vyrocn-zpravy-sfdi-v-oblasti-poskytovani-informaci/> and <http://www.rsd.cz/Organizace-RSD/Vyrocn-zpravy>.

⁽⁶⁰⁾ CEE Bankwatch Network (2014), "Governance, transparency and public participation in transport infrastructure projects".

bottleneck. Irregularities in public procurement procedures resulted in a suspension of payments from EU funds in 2013. Inefficient management and a lack of stability in the implementing institutions can also contribute, with frequent changes in management still taking place. For example, the director of the Road and Motorway Directorate changed several times during 2014 ⁽⁶¹⁾.

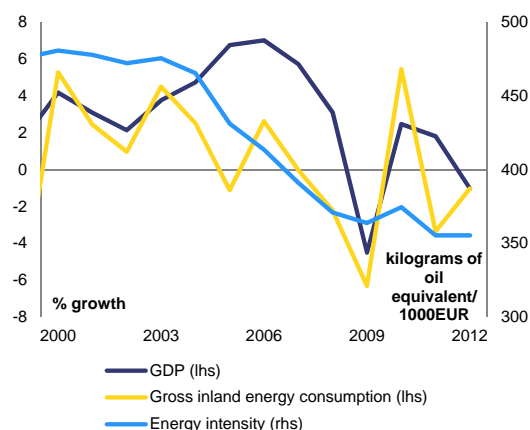
Inefficiencies in the allocation of funding for infrastructure investment also contribute to weak absorption capacity. The State Fund for Transport Infrastructure's medium-term budgetary planning remains linked to the national budgetary process. Given that the medium-term outlook of the national budget is not binding on future budgets, this leads to inadequate levels of predictability for the funding of transport infrastructure investment. According to the Ministry of Transport, this unpredictability can lead to difficulties in preparing and implementing projects and reduces the overall efficiency of expended funds ⁽⁶²⁾. The Ministry of Transport highlights the possibility of using alternative financing sources, such as public-private partnerships, in order to increase the predictability of funding.

Energy efficiency

Despite a slowly increasing trend in energy efficiency ⁽⁶³⁾, the Czech Republic still has one of the highest energy and carbon intensities ⁽⁶⁴⁾ in the EU. Although the recent decline in energy intensity by 2 % per year over 2000-12 was supported by underlying energy efficiency gains, the improvements recorded in industry (especially

in manufacturing) were to a large extent due to shifts towards less energy-intensive sectors.

Graph 2.5.2: **Determinants of energy intensity in the Czech Republic**



(1) The growth levels of GDP and energy consumption have been translated into the standard units required to calculate energy intensity level.

Source: European Commission - Eurostat

Energy intensity in the transport sector has been on an increasing path despite a decline reported in 2012, but there is further scope for energy savings in buildings. The Czech Republic decided to exclude transport from measures that fall under the Energy Efficiency Directive. Despite savings recorded in the energy consumption of buildings over 2008-10 (some 13 Terra Joules (TJ) compared to a target of 4.9 TJ reported in the Second National Energy Efficiency Action Plan), there is further scope to equip public buildings and private dwellings with the latest energy efficiency technologies, also in view of achieving the national energy efficiency target by 2020. Given the Czech Republic's high energy-intensity and the high dependence on imports of oil products and gas (3.2 % and 1.8 % of GDP in 2013, respectively), there are significant vulnerabilities to potential failures in fossil fuel supply and price shocks.

Domestic programmes aimed at increasing energy efficiency are fragmented and overly cost-inefficient ⁽⁶⁵⁾. Several projects promoting

⁽⁶¹⁾ <http://www.rsd.cz/Informacni-servis>

⁽⁶²⁾ http://www.mdcz.cz/NR/rdonlyres/DB292074-62B4-4B09-9D43-9697A1A86FB0/0/B1300298_MINISTERSTVO_DOPRA_VY_2014_2020_ENG05.pdf

⁽⁶³⁾ The Czech Republic achieved its 2008-2010 savings target in the industrial and household sector while failing to achieve its target in the transport sector.

⁽⁶⁴⁾ 355 kilogram of oil equivalent (kgoe) / EUR 1000 compared to an EU average of 143 kgoe / EUR 1000 in 2012 (Eurostat). In the following analysis, energy intensity is used as proxy for energy efficiency, under some caveats. Energy intensity is defined as the amount of energy needed to produce one unit of GDP. This measure overcomes the effect of economic slowdowns (which automatically lead to lower energy consumption) and allows a decoupling of energy consumption and output growth.

⁽⁶⁵⁾ For example, the last 'green savings' programme saved 6.8PJ of energy with costs of around CZK 20 billion (EUR 725 million; 0.5 % GDP). Hence, every kWh saved cost 0.39 EUR of public funds alone. Achieving the required savings (under the Energy Efficiency Directive) with the

energy efficiency are in place or are envisaged shortly. EU funds are the main source of funding. There are several operational programmes for the 2014-20⁽⁶⁶⁾ programming period, with a total budget for energy efficiency measures of around EUR 2 billion (1.4 % of GDP), higher compared with the previous period. Several projects⁽⁶⁷⁾ are also financed domestically, although with fewer resources allocated. There is still a lack of coordination between these programmes. Moreover, given the low income levels of many households and the low funding rate of state subsidies under the domestic schemes, the schemes are still unaffordable for many. The funding application process for private consumers is cumbersome and there is currently no central information point for citizens. Lengthy administrative procedures to obtain the required building permit are another factor that causes delays in the implementation of projects that support energy efficiency. At the same time, sufficient resources do not appear to have been allocated to energy efficiency issues in the public administration after the closure of the Czech Energy Agency in 2007.

Environment and resource efficiency

The Czech Republic continues to face challenges in the areas of the environment and waste management. The current waste management situation is challenging with strong emphasis on landfilling and incineration, and recycling is not sufficiently promoted. The landfilling rate in the Czech Republic is 56.5 %, which is still well above the EU average of 24 %⁽⁶⁸⁾. In line with the July 2014 amendment to the Waste Act, landfilling of recyclable municipal waste is to be abolished by 2024. This still implies,

however, a risk of waste simply being moved to new incinerators, as confirmed by the new Waste Management Plan. Given the highly industrialised nature of the economy, the emissions of particulate matter and its precursors are high, putting pressure on the environment and generating substantial health costs in the country, with an estimated loss of 4.17 million working days per year⁽⁶⁹⁾.

Policies promoting renewable energies have been severely curtailed as a result of potentially high costs⁽⁷⁰⁾. When introducing and implementing new policies, there are lessons to be drawn from the implementation and monitoring of the previous set-up so that any retroactive legislative changes do not undermine investor confidence. Recent legislative amendments and planned changes aim to improve the legal environment for supporting renewable energy sources.

⁽⁶⁹⁾ Cost-benefit Analysis of Final Policy Scenarios for the EU Clean Air Package, October 2014 (<http://ec.europa.eu/environment/air/pdf/TSAP%20CBA.pdf>).

⁽⁷⁰⁾ Based on the findings of the National Audit Office, the costs of supporting renewable energy will reach CZK 1 trillion (roughly 25 % of GDP) by 2030 (see: <http://www.nku.cz/cz/media/podpora-zelene-energie-vyjde-ceskou-republiku-na-bilion-korun--dve-tretiny-teto-castky-odcerpaji-provozovatele-fotovoltaickych-elektraren-id7419/>).

previously achieved low savings per euro spent would require CZK 560 billion (EUR 20.3 billion; 13.6 % of GDP) of public funds alone.

⁽⁶⁶⁾ For example, OP Environment, OP Enterprise and Innovation, Integrated regional OP and OP Prague, JESICCA. Priority will be given to SMEs, although funding large-scale projects would generate more savings. Energy infrastructure will also be newly co-funded by EU funds.

⁽⁶⁷⁾ The EFEKT programme, New Green Savings programme, Panel 2013+ programme. Their budget (i.e. EFEKT and Panel for 2015 and New Green programme overall) totals some EUR 72 million (CZK 2 billion ; 0.05 % of GDP).

⁽⁶⁸⁾ <http://ec.europa.eu/eurostat/web/environment/waste/database>

ANNEX A

Overview table

Commitments	Summary assessment ⁽⁷¹⁾
2014 Country-specific recommendations (CSRs)	
<p>CSR1: Following the correction of the excessive deficit, preserve a sound fiscal position in 2014. Significantly strengthen the budgetary strategy in 2015 to ensure that the medium-term objective is achieved and remain at the medium-term objective thereafter. Prioritise growth-enhancing expenditure to support the recovery and improve growth prospects. Adopt and implement measures to strengthen the fiscal framework, and in particular establish an independent fiscal institution to monitor fiscal policies, introduce fiscal rules for local and regional governments and improve coordination between all layers of government.</p>	<p>The Czech Republic has made some progress in addressing CSR 1 of the Council recommendation (this overall assessment of CSR 1 excludes an assessment of compliance with the Stability and Growth Pact).</p> <p>Some progress has been made in prioritising growth-enhancing expenditure to support the recovery and improve growth prospects. Public investment is expected to increase significantly in 2014 and 2015 as a result of a higher absorption of EU funds.</p> <p>Some progress has been made in the preparation for adoption and implementation of measures aimed at strengthening the fiscal framework. A comprehensive reform of the fiscal framework is expected to be adopted in 2015.</p>
<p>CSR2: Improve tax compliance with a particular focus on VAT and reduce the costs of collecting and paying taxes by simplifying the tax system and harmonising the tax bases for personal income tax and social and health contributions. Reduce the high level of taxation on labour, particularly for low-income earners. Shift taxation to areas less detrimental to growth, such as recurrent taxes on housing and environmental taxes. Further reduce discrepancies in the tax treatment of employees and the self-employed.</p>	<p>The Czech Republic has made limited progress in addressing CSR 2 of the Council recommendation:</p> <p>Some progress has been made in improving tax compliance with a particular focus on VAT. Several measures have been put in place in 2015 and others are in the pipeline for 2016.</p> <p>No progress has been made in reducing the costs of collecting and paying taxes.</p> <p>No progress has been made in shifting taxation to areas less detrimental to growth, such as recurrent taxes on housing and environmental taxes.</p> <p>Limited progress has been made in reducing the high level of taxation on labour,</p>

⁽⁷¹⁾ The following categories are used to assess progress in implementing the 2014 CSRs of the Council Recommendation: No progress: The Member State has neither announced nor adopted any measures to address the CSR. This category also applies if a Member State has commissioned a study group to evaluate possible measures. Limited progress: The Member State has announced some measures to address the CSR, but these measures appear insufficient and/or their adoption/implementation is at risk. Some progress: The Member State has announced or adopted measures to address the CSR. These measures are promising, but not all of them have been implemented yet and implementation is not certain in all cases. Substantial progress: The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the CSR. Fully addressed: The Member State has adopted and implemented measures that address the CSR appropriately.

	<p>particularly for low-income earners and in further reducing discrepancies in the tax treatment of employees and the self-employed.</p>
<p>CSR3: Ensure the long-term sustainability of the public pension scheme, in particular by accelerating the increase of the statutory retirement age and then by linking it more clearly to changes in life expectancy. Promote the employability of older workers and review the pension indexation mechanism. Take measures to improve significantly the cost-effectiveness and governance of the healthcare sector, in particular for hospital care.</p>	<p>The Czech Republic has made limited progress in addressing CSR 3 of the Council recommendation:</p> <p>No progress has been made in accelerating the increase of the statutory retirement age and in reviewing the pension indexation mechanism.</p> <p>Some progress has been made in linking the statutory retirement age more clearly to changes in life expectancy.</p> <p>Some progress has been made in promoting the employability of older workers.</p> <p>Limited progress has been made in taking measures to improve significantly the cost-effectiveness and governance of the healthcare sector, in particular for hospital care.</p>
<p>CSR4: Strengthen the efficiency and effectiveness of the public employment service, in particular by setting up a performance measurement system. Increase participation of unemployed youth in individualised services. Increase considerably the availability of affordable and quality childcare facilities and services, with a focus on children up to three years old.</p>	<p>The Czech Republic has made some progress in addressing CSR 4 of the Council recommendation:</p> <p>Some progress has been made in strengthening the efficiency and effectiveness of the public employment service, with an increase in personnel capacity and funding for active labour-market policies; no progress has been made on setting up a performance measurement system.</p> <p>Some progress has been made on increasing participation of unemployed youth in individualised services, with positive steps taken under the Youth Guarantee in 2014.</p> <p>Some progress has been made on increasing considerably the availability of affordable and quality childcare facilities and services, with a focus on children up to three years old, through the adoption of the Act on Child Groups in 2014.</p>
<p>CSR5: Ensure that the accreditation, governance and financing of higher education contribute to improving its quality and labour market relevance. Accelerate</p>	<p>The Czech Republic has made limited progress in addressing CSR 5 of the Council</p>

<p>the development and introduction of a new methodology for evaluating research and allocating funding in view of increasing the share of performance-based funding of research institutions. In compulsory education, make the teaching profession more attractive, implement a comprehensive evaluation framework and support schools and pupils with poor outcomes. Increase the inclusiveness of education, in particular by promoting the participation of socially disadvantaged and Roma children in particular in early childhood education.</p>	<p>recommendation:</p> <p>Limited progress has been made in ensuring that the accreditation, governance and financing of higher education contribute to improving its quality and labour market relevance as the draft amendment to the Higher Education Act are still in the legislative process.</p> <p>Limited progress has been made in accelerating the development and introduction of a new methodology for evaluating research and allocating funding in view of increasing the share of performance-based funding of research institutions.</p> <p>Some progress has been made in making the teaching profession more attractive, including an increase in pay in 2014.</p> <p>Limited progress has been made in implementing a comprehensive evaluation framework and support schools and pupils with poor outcomes.</p> <p>Limited progress has been made in increasing the inclusiveness of education, in particular by promoting the participation of socially disadvantaged and Roma children in early childhood education, despite the government's adoption of a comprehensive strategy for education.</p>
<p>CSR6: Accelerate the reform of regulated professions, focusing on the removal of unjustified and disproportionate requirements. Step up the efforts to improve energy efficiency in the economy.</p>	<p>The Czech Republic has made limited progress in addressing CSR 6 of the Council recommendation:</p> <p>Limited progress has been made in accelerating the reform of regulated professions, focusing on the removal of unjustified and disproportionate requirements.</p> <p>Some progress has been made in stepping up the efforts to improve energy efficiency in the economy.</p>
<p>CSR7: In 2014, adopt and implement a Civil Service Act that will ensure a stable, efficient and professional state administration service. Speed up and substantially reinforce the fight against corruption by implementing the remaining legislative</p>	<p>The Czech Republic has made limited progress in addressing CSR 7 of the Council recommendation:</p> <p>Some progress has been made in ensuring a</p>

measures provided for in the anti-corruption strategy for 2013-2014 and by developing plans for the next period. Further improve the management of EU funds by simplifying implementing structures, improving capacity and tackling conflicts of interest. Increase transparency of public procurement and improve the implementation of public tenders by providing appropriate guidance and supervision.	<p>stable, efficient and professional state administration service due to the adoption of the Civil Service Act, although key elements of this legislation still need to be elaborated.</p> <p>Limited progress has been made in speeding up and substantially reinforcing the fight against corruption, despite the adoption of a new action plan.</p> <p>Some progress has been made in further improving the management of EU funds but conflicts of interest remains unaddressed.</p> <p>No progress has been made in increasing transparency of public procurement</p> <p>Limited progress has been made in improving the implementation of public tenders by providing appropriate guidance and supervision.</p>
Europe 2020 (national targets and progress)	
Employment rate target: 75 % by 2020	The employment rate continues to rise and reached 73.9% in the third quarter of 2014.
<p>R&D target (public expenditure only): 1 %</p> <p>R&D intensity (overall) in 2013: 1.88 % of GDP</p>	The Czech Republic is progressing towards the 1 % target: public R&D investment rose to 0.87 % in 2013, from just 0.53 % in 2007. It should be noted that this increase in public R&D investment has been largely driven by EU structural funding of R&D, which has grown significantly in the 2007-13 programming period. Based on recent trends, the Czech Republic is on track to surpassing this not-particularly-challenging target.
<p>Greenhouse gas (GHG) emissions national target: +9 % (compared to 2005 emissions, Emissions Trading Scheme (ETS) emissions not covered by this national target)</p>	According to the latest national projections and taking into account existing measures, non-ETS emissions will decrease by 7 % between 2005 and 2020. The target is therefore expected to be achieved with a margin of 16 pps.
<p>2020 Renewable energy target: 13 %</p> <p>Share of renewable energy in all modes of transport:</p>	With a 12.5% RES share in gross final energy consumption in 2013 (Eur'Observ'ER), the Czech Republic is on track to reaching the 2020 RES target of 13%. The share of renewables in all modes of transport peaked at

10 %	5.6 % in 2012 (Eurostat data).
National indicative energy efficiency target for 2020: CZ's 2020 energy efficiency target is 39.6 Mtoe expressed in primary energy consumption (25.3 Mtoe expressed in final energy consumption)	Primary and final energy consumption were on a slightly decreasing trend in 2003-13, reaching 40.1 Mtoe (primary consumption) and 23.7 Mtoe (final consumption) in 2012. If this trend is maintained, CZ will be on track to meeting its EE target. Additional efforts are needed to successfully implement the foreseen savings programmes.
Early school leaving target: 5.5 %	While early school leaving remains low and was 5.4% in 2013, it is particularly high among Roma people, which calls for targeted measures.
Tertiary education target: 32 %	The tertiary attainment rate has increased to 26.7% in 2013, reflecting a sharp increase over recent years and calling for efforts to ensure quality and labour-market relevance.
Target on the reduction of population at risk of poverty or social exclusion in number of persons: Maintaining the number of persons at risk of poverty or social exclusion at the level of 2008 (15.3 % of the total population), with efforts to reduce it by 30 000.	The number of people at risk of poverty or social exclusion has decreased by 58 000 since 2008, reaching 1 508 000 in 2013.

ANNEX B

Standard tables

Table AB.1: **Macroeconomic indicators**

	1996-2000	2001-2005	2006-2010	2011	2012	2013	2014	2015	2016
Core indicators									
GDP growth rate	1.8	3.9	2.5	2.0	-0.8	-0.7	2.3	2.5	2.6
Output gap ¹	n.a.	0.7	2.6	-0.5	-1.8	-2.9	-1.9	-0.8	0.1
HICP (annual % change)	6.5	2.0	2.6	2.1	3.5	1.4	0.4	0.8	1.4
Domestic demand (annual % change) ²	2.2	3.6	2.0	0.0	-2.2	-0.7	2.5	2.6	2.3
Unemployment rate (% of labour force) ³	6.6	7.9	6.2	6.7	7.0	7.0	6.1	6.0	5.9
Gross fixed capital formation (% of GDP)	31.3	29.0	28.1	26.6	26.1	24.9	25.1	25.4	25.4
Gross national saving (% of GDP)	28.1	25.9	24.9	22.4	24.1	22.8	24.6	25.6	26.0
General government (% of GDP)									
Net lending (+) or net borrowing (-)	-3.6	-4.8	-3.0	-2.9	-4.0	-1.3	-1.3	-2.0	-1.5
Gross debt	14.0	26.7	31.3	41.0	45.5	45.7	44.1	44.4	45.0
Net financial assets	35.6	13.4	6.2	-5.5	-11.0	n.a.	n.a.	n.a.	n.a.
Total revenue	37.5	39.1	38.5	39.6	39.8	40.7	40.2	40.1	39.7
Total expenditure	41.1	43.9	41.5	42.5	43.8	42.0	41.5	42.1	41.2
<i>of which: Interest</i>	1.0	1.0	1.1	1.3	1.4	1.4	1.3	1.3	1.2
Corporations (% of GDP)									
Net lending (+) or net borrowing (-)	-2.5	-0.9	-2.2	-1.9	-1.0	0.1	1.0	2.6	2.5
Net financial assets; non-financial corporations	-115.3	-95.6	-91.0	-89.1	-85.2	n.a.	n.a.	n.a.	n.a.
Net financial assets; financial corporations	3.8	-2.1	-3.6	-2.3	-2.7	n.a.	n.a.	n.a.	n.a.
Gross capital formation	22.3	19.9	18.9	17.9	17.9	17.1	17.7	17.6	18.1
Gross operating surplus	27.5	28.4	29.8	29.0	28.6	29.0	30.1	30.7	31.0
Households and NPISH (% of GDP)									
Net lending (+) or net borrowing (-)	2.4	1.9	1.9	1.8	3.8	1.2	1.7	1.6	1.4
Net financial assets	70.1	65.2	57.0	62.7	65.4	n.a.	n.a.	n.a.	n.a.
Gross wages and salaries	30.1	30.1	30.1	30.7	31.3	31.1	30.5	30.2	30.0
Net property income	4.9	3.8	3.6	3.3	3.2	2.9	2.7	2.2	2.2
Current transfers received	15.9	16.4	16.9	17.8	18.3	18.0	17.7	17.8	17.6
Gross saving	6.7	6.1	6.8	6.2	6.3	5.3	5.6	5.5	5.2
Rest of the world (% of GDP)									
Net lending (+) or net borrowing (-)	-3.7	-3.8	-3.3	-2.9	-1.2	0.0	1.4	2.2	2.4
Net financial assets	6.2	19.3	31.8	35.0	34.3	n.a.	n.a.	n.a.	n.a.
Net exports of goods and services	-2.3	-0.1	2.9	3.9	5.0	5.8	6.8	7.2	7.6
Net primary income from the rest of the world	-1.5	-3.7	-6.7	-7.7	-6.3	-7.1	-7.2	-7.2	-7.3
Net capital transactions	0.0	0.2	1.2	1.7	1.0	2.2	2.3	2.6	2.3
Tradable sector	54.4	53.6	51.9	51.2	51.4	50.9	n.a.	n.a.	n.a.
Non-tradable sector	36.8	37.6	38.8	39.2	38.6	38.8	n.a.	n.a.	n.a.
<i>of which: Building and construction sector</i>	6.6	5.9	6.0	5.6	5.2	5.0	n.a.	n.a.	n.a.

Notes:

¹ The output gap constitutes the gap between the actual and potential gross domestic product at 2010 market prices.

² The indicator of domestic demand includes stocks.

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

Source: European Commission 2015 winter forecast; Commission calculations

Table AB.2: **Financial market indicators**

	2009	2010	2011	2012	2013	2014
Total assets of the banking sector (% of GDP) ¹⁾	113.8	116.9	116.0	125.4	127.7	133.7
Share of assets of the five largest banks (% of total assets)	62.4	62.5	61.8	61.5	62.8	n.a.
Foreign ownership of banking system (% of total assets)	92.8	89.7	92.3	86.3	94.1	n.a.
Financial soundness indicators:						
- non-performing loans (% of total loans) ²⁾	4.6	5.4	5.2	5.2	5.2	5.7
- capital adequacy ratio (%) ²⁾	14.0	15.3	15.0	15.6	16.5	17.0
- return on equity (%) ²⁾³⁾	26.4	19.7	18.3	20.4	16.2	18.8
Bank loans to the private sector (year-on-year % change) ¹⁾	1.5	4.2	5.9	3.4	3.8	3.9
Lending for house purchase (year-on-year % change) ¹⁾	11.7	6.9	7.6	5.6	5.7	5.9
Loan to deposit ratio ¹⁾	74.7	74.8	75.4	73.8	72.6	72.8
Central Bank liquidity as % of liabilities ⁴⁾	0.0	0.0	0.1	0.0	0.0	0.0
Private debt (% of GDP)	66.0	68.1	68.6	70.7	73.8	n.a.
Gross external debt (% of GDP) ⁵⁾						
- public	9.8	12.3	11.8	14.3	15.2	14.7
- private	22.9	23.1	23.1	25.4	35.7	39.2
Long-term interest rate spread versus Bund (basis points)*	161.5	114.1	109.9	128.7	54.2	41.3
Credit default swap spreads for sovereign securities (5-year)*	136.4	87.3	97.9	103.8	55.7	47.2

Notes:

¹⁾ Latest data November 2014.²⁾ Latest data Q2 2014. Basel II.³⁾ After extraordinary items and taxes. Tier 1 capital. FSI Compilation Guide methodology from 2008 onwards; previous years may not be comparable.⁴⁾ Latest data September 2014.⁵⁾ Latest data June 2014. Monetary authorities, monetary and financial institutions are not included.

* Measured in basis points.

Source: IMF (financial soundness indicators); European Commission (long-term interest rates); World Bank (gross external debt); ECB (all other indicators).

Table AB.3: **Taxation indicators**

	2002	2006	2008	2010	2011	2012
Total tax revenues (incl. actual compulsory social contributions, % of GDP)	34.6	35.3	34.4	33.6	34.6	35.0
Breakdown by economic function (% of GDP) ¹⁾						
Consumption	9.6	10.3	10.3	10.9	11.4	11.7
of which:						
- VAT	6.0	6.4	6.8	6.9	7.1	7.2
- excise duties on tobacco and alcohol	1.0	1.3	1.1	1.4	1.6	1.7
- energy	2.1	2.3	2.2	2.2	2.3	2.2
- other (residual)	0.5	0.3	0.3	0.3	0.5	0.6
Labour employed	17.1	17.1	16.8	16.1	16.6	16.7
Labour non-employed	1.2	1.3	1.2	1.4	1.4	1.4
Capital and business income	5.8	6.0	5.4	4.5	4.6	4.6
Stocks of capital/wealth	0.8	0.7	0.6	0.6	0.7	0.7
<i>p.m.</i> Environmental taxes ²⁾	2.4	2.5	2.4	2.4	2.5	2.4
VAT efficiency ³⁾						
Actual VAT revenues as % of theoretical revenues at standard rate	41	53.3	57.5	53.5	55.0	56.6

Notes:

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

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

3. 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 scale of cross-border shopping (including trade in financial services) compared to domestic consumption also influences the value of the ratio, notably for smaller economies. For a more detailed discussion, see European Commission (2012), *Tax Reforms in EU Member States*, and OECD (2014), *Consumption tax trends*.

Source: European Commission

Table AB.4: Labour market and social indicators

	2008	2009	2010	2011	2012	2013	2014
Employment rate (% of population aged 20-64)	72.4	70.9	70.4	70.9	71.5	72.5	73.3
Employment growth (% change from previous year)	2.2	-1.8	-1.0	-0.3	0.4	0.4	0.3
Employment rate of women (% of female population aged 20-64)	62.5	61.4	60.9	61.7	62.5	63.8	64.3
Employment rate of men (% of male population aged 20-64)	82.0	80.2	79.6	79.9	80.2	81.0	82.0
Employment rate of older workers (% of population aged 55-64)	47.6	46.8	46.5	47.7	49.3	51.6	53.7
Part-time employment (% of total employment, age 15 years and over)	4.9	5.5	5.9	5.5	5.8	6.6	6.4
Part-time employment of women (% of women employment, age 15 years and over)	8.5	9.2	9.9	9.4	9.5	11.0	10.4
Part-time employment of men (% of men employment, age 15 years and over)	2.2	2.8	2.9	2.5	2.9	3.3	3.3
Fixed term employment (% of employees with a fixed term contract, age 15 years and over)	8.0	8.5	8.9	8.5	8.8	9.6	10.0
Transitions from temporary to permanent employment	36.3	37.6	37.0	38.4	32.6	33.1	n.a.
Unemployment rate ¹ (% of labour force, age group 15-74)	4.4	6.7	7.3	6.7	7.0	7.0	6.1
Long-term unemployment rate ² (% of labour force)	2.2	2.0	3.0	2.7	3.0	3.0	2.7
Youth unemployment rate (% of youth labour force aged 15-24)	9.9	16.6	18.3	18.1	19.5	18.9	15.9
Youth NEET rate (% of population aged 15-24)	6.7	8.5	8.8	8.3	8.9	9.1	n.a.
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	5.6	5.4	4.9	4.9	5.5	5.4	n.a.
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	15.4	17.5	20.4	23.7	25.6	26.7	n.a.
Formal childcare (from 1 to 29 hours; % over the population aged less than 3 years)	1.0	3.0	2.0	4.0	2.0	n.a.	n.a.
Formal childcare (30 hours or over; % over the population aged less than 3 years)	0.0	0.0	0.0	1.0	1.0	n.a.	n.a.
Labour productivity per person employed (annual % change)	0.5	-3.1	3.4	2.2	-1.2	-1.1	1.9
Hours worked per person employed (annual % change)	0.3	-0.6	1.2	0.3	-1.6	-0.7	0.4
Labour productivity per hour worked (annual % change; constant prices)	0.2	-2.5	2.2	1.9	0.4	-0.4	1.5
Compensation per employee (annual % change; constant prices)	2.0	-3.1	4.8	3.0	-0.1	-2.2	0.7
Nominal unit labour cost growth (annual % change)	3.4	2.2	-0.4	0.5	3.3	-0.1	n.a.
Real unit labour cost growth (annual % change)	1.5	-0.1	1.2	1.4	1.7	-2.0	n.a.

Notes:

¹ Unemployed persons are all those who were not employed, but 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. Data on the unemployment rate of 2014 includes the last release by Eurostat in early February 2015.

² Long-term unemployed are persons who have been unemployed for at least 12 months.

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

Table AB.5: **Expenditure on social protection benefits (% of GDP)**

	2007	2008	2009	2010	2011	2012
Sickness/healthcare	5.9	5.8	6.4	6.3	6.3	6.4
Invalidity	1.4	1.4	1.5	1.5	1.5	1.4
Old age and survivors	7.7	8.0	9.0	9.2	9.7	10.0
Family/children	1.6	1.4	1.4	1.3	1.2	1.1
Unemployment	0.6	0.6	1.0	0.8	0.7	0.7
Housing and social exclusion n.e.c.	0.1	0.1	0.1	0.1	0.1	0.2
Total	17.5	17.5	19.7	19.5	19.8	20.2
of which: means-tested benefits	0.6	0.4	0.4	0.4	0.4	0.4
Social inclusion indicators	2008	2009	2010	2011	2012	2013
People at risk of poverty or social exclusion ¹ (% of total population)	15.3	14.0	14.4	15.3	15.4	14.6
Children at risk of poverty or social exclusion (% of people aged 0-17)	18.6	17.2	18.9	20.0	18.8	16.4
Elderly at risk of poverty or social exclusion (% of people aged 65+)	12.5	11.7	10.1	10.7	10.8	10.4
At-risk-of-poverty rate ² (% of total population)	9.0	8.6	9.0	9.8	9.6	8.6
Severe material deprivation rate ³ (% of total population)	6.8	6.1	6.2	6.1	6.6	6.6
Proportion of people living in low work intensity households ⁴ (% of people aged 0-59)	7.2	6.0	6.4	6.6	6.8	6.9
In-work at-risk-of-poverty rate (% of persons employed)	3.6	3.2	3.7	4.0	4.5	4.0
Impact of social transfers (excluding pensions) on reducing poverty	55.0	52.0	50.3	45.6	45.5	48.2
Poverty thresholds, expressed in national currency at constant prices ⁵	98197.7	99800.2	101694.0	101507.3	101004.3	98529.5
Gross disposable income (households)	2053789.0	2124749.0	2131676.0	2130850.0	2159947.0	n.a.
Relative median poverty risk gap (60% of median equivalised income, age: total)	18.5	18.8	21.1	17.2	19.1	16.6
Inequality of income distribution (S80/S20 income quintile share ratio)	3.4	3.5	3.5	3.5	3.5	3.4

Notes:

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

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

³ Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

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

⁵ For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes)

⁶ 2014 data refer to the average of the first three quarters.

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

Table AB.6: Product market performance and policy indicators

	2004-08	2009	2010	2011	2012	2013	2014
Labour productivity ¹ in total economy (annual growth in %)	4.0	-3.8	3.9	2.3	-1.2	-0.9	n.a.
Labour productivity ¹ in manufacturing (annual growth in %)	10.1	-4.7	14.7	6.3	-2.2	-3.1	n.a.
Labour productivity ¹ in electricity, gas (annual growth in %)	9.1	-16.1	-4.0	-9.2	0.9	-4.8	n.a.
Labour productivity ¹ in the construction sector (annual growth in %)	1.9	-7.5	2.2	-1.6	-2.4	2.9	n.a.
Labour productivity ¹ in the wholesale and retail sector (annual growth in %)	6.9	-7.3	7.2	4.2	0.8	-0.9	n.a.
Labour productivity ¹ in the information and communication sector (annual growth in %)	2.2	-6.8	2.5	6.3	-4.1	-0.6	n.a.
Patent intensity in manufacturing ² (EPO patent applications divided by gross value added of the sector)	0.0	0.0	0.0	0.0	n.a.	n.a.	n.a.
Policy indicators	2004-08	2009	2010	2011	2012	2013	2014
Enforcing contracts ³ (days)	655	611	611	611	611	611	611
Time to start a business ³ (days)	28.2	20	20	20	20	20	19
R&D expenditure (% of GDP)	1.2	1.3	1.3	1.6	1.8	1.9	n.a.
Total public expenditure on education (% of GDP)	4.1	4.4	4.3	4.5	n.a.	n.a.	n.a.
(Index: 0=not regulated; 6=most regulated)	2008	2009	2010	2011	2012	2013	2014
Product market regulation ⁴ , overall	1.50	n.a.	n.a.	n.a.	n.a.	1.39	n.a.
Product market regulation ⁴ , retail	1.23	n.a.	n.a.	n.a.	n.a.	1.56	n.a.
Product market regulation ⁴ , professional services	2.48	n.a.	n.a.	n.a.	n.a.	2.36	n.a.
Product market regulation ⁴ , network industries ⁵	2.45	2.40	2.25	2.06	2.01	2.01	n.a.

Notes:

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

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

³ The methodologies, including the assumptions, for this indicator are presented in detail here: <http://www.doingbusiness.org/methodology>.

⁴ Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are presented in detail here: <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

⁵ Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators)

Table AB.7: **Green growth**

Green growth performance		2003-2007	2008	2009	2010	2011	2012
Macroeconomic							
Energy intensity	kgoe / €	0.44	0.37	0.36	0.37	0.36	0.36
Carbon intensity	kg / €	1.40	1.16	1.15	1.15	1.11	1.09
Resource intensity (reciprocal of resource productivity)	kg / €	1.81	1.59	1.52	1.40	1.46	n.a.
Waste intensity	kg / €	n.a.	0.21	n.a.	0.20	n.a.	0.19
Energy balance of trade	% GDP	-2.5	-4.3	-2.9	-3.4	-4.1	-4.3
Energy weight in HICP	%	13.7	14.6	13.5	13.4	14.0	14.2
Difference between energy price change and inflation	%	2.7	7.9	7.9	-1.9	3.8	5.0
Ratio of environmental taxes to labour taxes	ratio	13.5%	13.1%	14.1%	13.6%	13.7%	13.0%
Ratio of environmental taxes to total taxes	ratio	7.0%	6.8%	7.2%	7.1%	7.1%	6.7%
Sectoral							
Industry energy intensity	kgoe / €	0.33	0.23	0.24	0.24	0.22	0.21
Share of energy-intensive industries in the economy	% GDP	16.1	17.0	15.9	14.8	14.3	14.6
Electricity prices for medium-sized industrial users**	€ / kWh	n.a.	0.11	0.11	0.11	0.11	0.10
Gas prices for medium-sized industrial users***	€ / kWh	n.a.	0.04	0.03	0.03	0.03	0.03
Public R&D for energy	% GDP	n.a.	0.02	0.02	0.02	0.02	0.02
Public R&D for the environment	% GDP	n.a.	0.01	0.01	0.01	0.01	0.01
Recycling rate of municipal waste	ratio	19.4%	21.9%	23.5%	30.7%	35.1%	43.4%
Share of GHG emissions covered by ETS*	%	n.a.	56.5	55.0	55.2	54.8	52.7
Transport energy intensity	kgoe / €	0.89	0.90	0.93	0.86	0.90	0.86
Transport carbon intensity	kg / €	2.58	2.56	2.64	2.42	2.49	2.40
Security of energy supply							
Energy import dependency	%	26.3	27.9	27.1	25.5	27.7	25.2
Diversification of oil import sources	HHI	0.27	0.29	0.30	0.28	0.24	0.27
Diversification of energy mix	HHI	n.a.	0.29	0.28	0.28	0.28	0.27
Renewable energy share of energy mix	%	4.0	4.9	5.7	6.2	6.9	7.5

Country-specific notes:

2013 is not included in the table due to lack of data.

General explanation of the table items:

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 proportion of "energy" items in the consumption basket used for 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 for medium-sized industrial users: consumption band 500–2000MWh and 10000–100000 GJ; figures excl. VAT.

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

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

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

Environment Agency

Transport energy intensity: final energy consumption in transport activity (kgoe) divided by transport industry gross value added (in 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. consumption of international bunker fuels

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

Renewable energy share of energy mix: %-share of gross inland energy consumption, expressed in tonne oil equivalents

* European Commission and European Environment Agency

** 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.

Source: European Commission, unless indicated otherwise; European Commission calculation.