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Country Report Slovakia 2016

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EXECUTIVE SUMMARY

This country report assesses Slovakia's economy in the light of the European Commission's Annual Growth Survey published on 26 November 2015. The survey recommends three priorities for the EU's economic and social policy in 2016: re-launching investment, pursuing structural reforms to modernise Member States' economies, and responsible fiscal policies.

Slovakia's recovery from the crisis was one of the fastest in the EU. According to the Commission 2016 winter forecast, real GDP is expected to have increased by 3.5 % in 2015 due to solid household spending and surging investment activity. Investment benefited from intensified drawing of EU funds, as the possibility to make use of funding available under the 2007-2013 programming period came to an end. Household consumption was supported by an improvement in labour market conditions, solid wage growth, falling prices and favourable credit conditions.

Slovakia's economic expansion is set to continue, driven by the household sector. Real GDP growth is expected to exceed 3% in both 2016 and 2017. Accelerating private consumption is set to become the strongest driver of growth in 2016 and thereafter, buttressed by steady gains in employment, robust real wage growth, low credit costs and the continued fall in energy prices. Public investment expenditure is expected to moderate as the drawing of EU funds returns to more normal levels, but the impact on overall investment is likely to be offset by stronger private investment activity, mainly from abroad. Subdued external demand, including for the output of Slovakia's large automotive sector, represents the main downward risk to the medium-term outlook.

The labour market has witnessed a cyclical improvement. The unemployment rate fell to 11.5 % in 2015 and is expected to further decline below 10% in 2017 on the back of robust economic expansion. However, structural unemployment continues to represent a key challenge, reflecting pronounced geographical differences in labour market conditions, accompanied by low labour mobility. Low educational outcomes and inequalities linked to socio-economic background represent major obstacles to the improvement of human capital with potential knock-on effects for skill levels and growth potential.

While the Slovak economy is highly integrated into global value chains, production is concentrated in few sectors and regions. Slovakia is an internationally integrated economy, especially in the lower parts of value chains, as a large share of the car and electronics production is carried out by foreign-owned firms and exported. These sectors constitute a non-negligible part of domestic output and are concentrated mainly in the Western region. Lack of appropriate infrastructure restrains investment in other regions, which prevents their integration into global value chains and contributes to regional divergences. Although Slovakia has succeeded in attracting new investment from foreign companies, long-standing concerns about the quality of the business environment, public administration and judicial system have dented its non-price competitiveness. This deterioration is reflected especially in a low participation of the domestically-owned companies in the global supply chain. There have been no major efforts so far to diversify the economy into other industrial sectors and this exposes it to external demand volatility. Low innovation performance and business spending on R&D inhibit long-term growth prospects.

Slovakia has made limited progress in addressing the 2015 country specific recommendations (CSRs). Slovakia received recommendations in the areas of healthcare cost-effectiveness, tax collection, long-term unemployment, availability of childcare, attractiveness of the teaching profession, participation of Roma in mainstream education, issuance of land-use and building permits, and public procurement performance. There has been partial progress on several fronts. Measures to fight tax fraud have contributed to better collection of taxes, in particular of value added tax (VAT). The lowering in recent years of the tax wedge for the low-paid, in combination with the granting of in-work benefits for the long-term unemployed, could contribute to a reduction in long-term unemployment. The capacity of early childhood education and care facilities, in particular for children aged three years and above, is being expanded. Legislation aimed at reducing the proportion of Roma pupils in special schools with limited curricula was adopted in mid-2015. The

length of building permit procedures for large-scale investment and infrastructure projects has been reduced. Transparency of public procurement has improved somewhat through the introduction of the Electronic Contracting System and the mandatory use of the contract registry. Nevertheless, a number of areas have not been sufficiently addressed. Measures aiming to improve cost-effectiveness in healthcare have been taken but have not led to tangible improvements. Access to training for the jobseekers has improved, but individualised measures for long-term unemployed in this respect are still lacking. Teachers' education remains inadequate. Despite the efforts undertaken, competition in public procurement remains limited.

Regarding the progress in reaching the national targets under the Europe 2020 Strategy, Slovakia has made good progress towards its targets reducing greenhouse gases, increasing renewable energy, and reducing poverty, while more effort is needed to increase employment, R&D spending, improving energy efficiency, preventing early school leaving and increasing tertiary education.

The main findings of the analysis in this report, and the related policy challenges, are as follows:

- **The reduction in tax avoidance has been substantial, but an overall tax compliance strategy is still missing.** Measures to fight tax fraud have contributed to an increase in tax collection, but the VAT gap remains high, indicating an ongoing compliance challenge. This is mainly because improvements in collection have not been accompanied by an overall tax compliance strategy. A strong emphasis on VAT collection in recent years has lessened attention to other key functions of the tax administration, indicating scope to improve resource allocation.

- **The healthcare sector continues to face long-term sustainability challenges.** Healthcare expenditure is comparatively low, but will be the main driver of the projected increase in ageing-related costs. Although (non-binding) measures have been taken in the area of budgeting and process management, several public hospitals continue to be in poor financial shape, which may reflect continued weaknesses in healthcare procurement. Government efforts to better integrate healthcare services have continued, and forthcoming plans should be judged by their ability to safeguard accessibility and deliver efficiency gains. Progress on e-health and the introduction of the diagnosis-related group (DRG) system of payments has been slow. While Slovakia has recorded a substantial improvement in health status indicators, it still ranks low compared to other EU countries.

- **The improving labour market has not translated into significantly lower levels of long-term unemployed.** High and persistent long-term unemployment represents a policy challenge, particularly affecting the low-skilled and young, while large regional disparities persist. Roma participation in the Slovak labour market remains very low and progress in increasing their employment is slow. The employment of women is also below potential. The Central Labour Office has been reorganised, but the potential for individualised support to the long-term unemployed and vulnerable groups has not been realised yet. Although the risk of poverty or social exclusion has decreased, social safety nets remain relatively weak, in particular for the unemployed and families with children.

- **The education system is insufficiently geared towards increasing Slovakia's economic potential.** Educational outcomes are weak and inequalities appear high in an international comparison. The low attractiveness of the teaching profession is not supportive towards improvements in teaching quality. Recently adopted legislation aims at reducing the proportion of Roma pupils in special schools with limited curricula and the discrimination against Roma. Tertiary education attainment has stagnated at a low level and measures to improve quality are proving insufficient. Research & development (R&D) and innovation performance is hindered by a fragmented governing framework. Participants' demand for a newly introduced dual vocational training system is still limited.

- **The level of publication of contract notices is high, but the public procurement system still**

shows weaknesses. Competition remains limited because of frequent use of exceptional procedures without calls for tender or of tenders with tailor-made technical specifications. Insufficient focus on quality, as well as the frequent use of 'price-only' criteria, are common features of the system. Overall, implementation of strategic solutions seems to be hampered by fragmented policy design.

- **Despite policy efforts, administrative and regulatory barriers continue to harm the business environment.** The efficiency and effectiveness of public administration is limited by a lack of strategic planning, problems in human resources management and insufficient uptake of e-solutions. The enforcement of contracts and the use of insolvency procedures are hampered by lengthy and complicated judicial processes. Surveys consistently report grievances among Slovak and foreign companies about frequently changing and opaque legislation and complex administrative procedures, which may deter investment. However, tax compliance costs for businesses have declined and measures are being taken to improve the business environment and foster entrepreneurship.

- **The attractiveness of Slovakia's Central and Eastern regions for private investment is hampered by problems in the physical infrastructure.** A fragmented road transport network harms investment, especially in the Central and Eastern regions, and aggravates the regional economic divide. Foreign direct investment inflows tend to concentrate around Bratislava, while Central and Eastern regions do not attract even home-grown private investment.

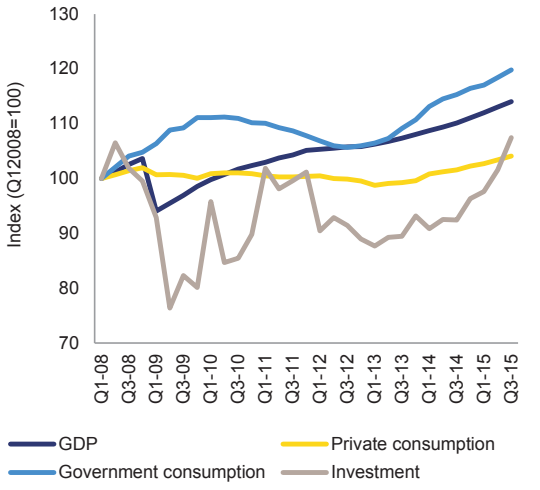
- **Low energy efficiency and under-pricing of environmental resources constitute a challenge.** Slovakia remains a highly energy-intensive economy. The waste management framework has a poor track record, in part due to under-pricing of landfilling, while water charges do not sufficiently reflect environmental costs. High electricity prices, which incorporate several subsidies, represent an important challenge to the Slovak industry.

1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

Growth performance

Slovakia's economic expansion was one of the strongest in the EU after the crisis and convergence is continuing, albeit at a slower pace. Economic output recovered quickly and rose above the pre-crisis levels in 2011 (Graph 1.1), but post-crisis growth rates have been weaker. Annual real GDP growth slowed to an average of 1.8 % in 2012-2014 from an average of 8.3 % in 2006-2008. Despite the sustained economic recovery, the output gap remained negative in 2015 and is forecast to close only in 2017. Real convergence towards more developed Member States is continuing, albeit more slowly than before the crisis. Real GDP per capita in Slovakia in 2014 was some 75 % of the EU (Graph 1.2).

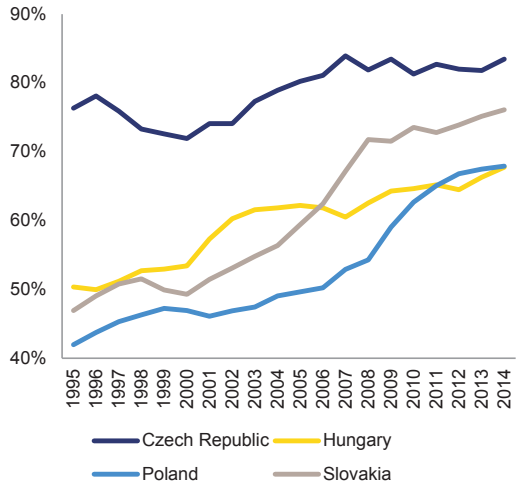
Graph 1.1: **Real GDP and its components**



Source: European Commission

According to the Commission 2016 winter forecast, real GDP growth increased to 3.5% in 2015, driven by a substantial pickup in investment activity and robust household consumption. Overall investment is estimated to have expanded by 12.7 % in 2015, boosted by intensified drawing on EU funds as funding available under the 2007-2013 programming period drew to an end. Non-residential investment in construction in particular received a substantial boost. Household consumption growth remained robust at 2.3 %, supported by positive labour market developments, wage growth and continued deflation. High consumer confidence and favourable credit conditions contributed to an increase in credit to households. Export growth was outpaced by accelerating imports, driven by buoyant investment.

Graph 1.2: **Nominal GDP per capita as a percentage of EU28**



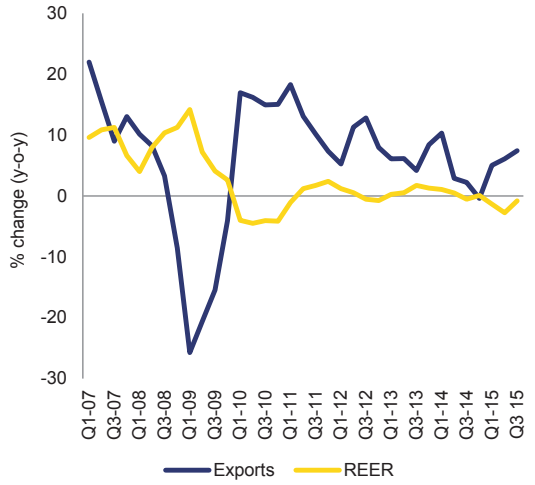
(1) Adjusted for purchasing power parity
Source: European Commission

Household expenditure is expected to buttress economic growth over the coming years. According to the Commission 2016 winter forecast, the Slovak economy is projected to expand by 3.2 % in 2016 and by 3.4 % in 2017. Household spending is expected to become the strongest driver of growth in the coming years, reflecting gains in real disposable income on the back of an improving labour market. A protracted fall in energy prices (by 7 % between the end of 2013 and 2015) is also strengthening household budgets, with the windfall gains expected to gradually feed through to consumption. Low interest rates and improving consumer confidence are set to provide a further boost to consumer credit and, consequently, to household spending.

Export growth is expected to have picked up to 6.4 % in 2015, supported by a weakening real effective exchange rate. The annual depreciation in the real effective exchange rate in 2015 was the first since 2011 (Graph 1.3) and is expected to further buttress the price competitiveness of Slovak exports in the short term (Section 2.4). However, faltering economic growth in emerging

markets is expected to restrain Slovak export growth in 2016, which would therefore only marginally outpace import growth in 2016; the latter is set to decelerate due to an expected slowdown in overall investment. In the medium term, a recovery in Slovakia's main trading partners is expected to boost export growth anew, while imports are likely to accelerate from 2017, as private investment activity strengthens. The trade surplus is expected to remain positive at around 2 % of GDP.

Graph 1.3: **Exports and REER**



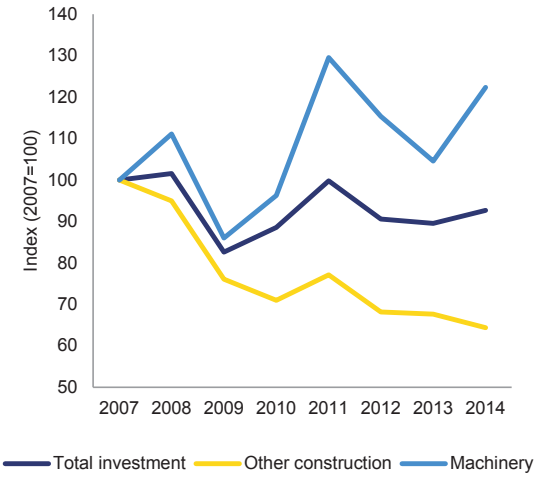
Source: European Commission

Investment

Investment growth is set to continue in the coming years, albeit at a slower pace. After the significant spike in investment in 2015, boosted by intensified drawing on EU funds, total investment is expected to grow by 3.8 % in 2016, according to the Commission 2016 winter forecast. Public investment is forecast to recede as the drawing of EU funds returns to more normal levels. The expected decline in public investment expenditure is likely to be partly offset by stronger private investment activity. In view of new planned investment projects in the automotive industry, foreign direct investment will once again be the main driver of investment growth in the coming years. However, a high dependence on foreign investment and the strong specialisation in the automotive sector increase the vulnerability of the Slovak economy to global economic fluctuations.

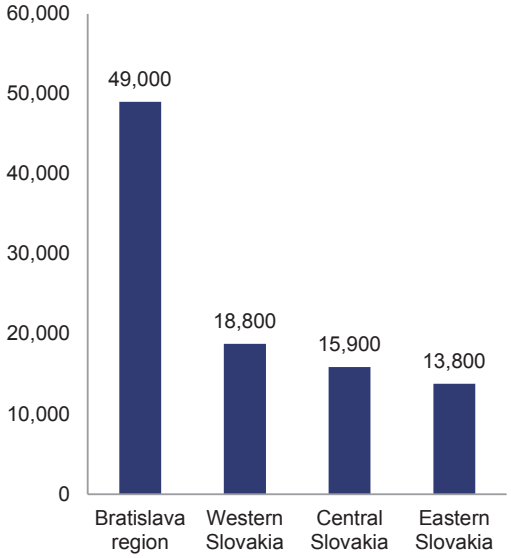
Slovakia's capital stock remains low and foreign investment flows predominantly into the Western part of the country. Slovakia's overall capital stock remains well below the EU average (see Box 1.1). Total investment accounted for more than 26 % of GDP before the crisis, but dropped to 21 % between 2012 and 2014. The inflow of foreign direct investment has been driven by expansion in the automotive industry; spending on machinery and equipment has exceeded pre-crisis levels since 2011 (Graph 1.4). Foreign direct investment is, however, unevenly distributed within the country, with Bratislava and Western Slovakia attracting by far the largest share of investment inflows. By contrast, the Central and Eastern regions have failed to attract foreign investors. Lack of sufficient interconnections and low quality of transport infrastructure exacerbate the regional divide which is also evidenced by regional income differences (Graph 1.5).

Graph 1.4: **Investment**



Source: European Commission

Graph 1.5: **GDP per capita in Slovakia´s regions (purchasing power standard, 2013)**

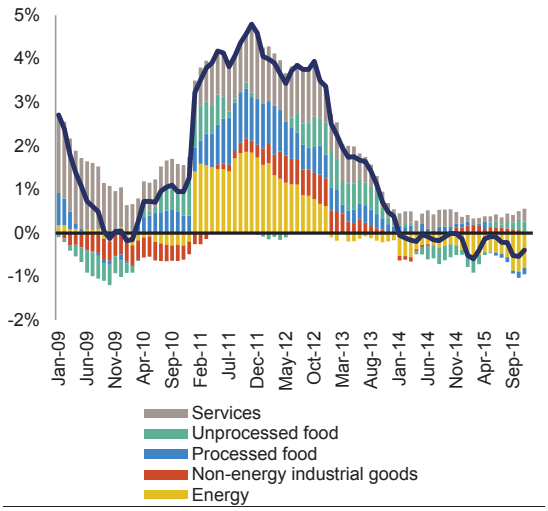


Source: European Commission

Inflation

Deflationary pressures observed in 2015 are expected to slowly dissipate, mirroring the pickup in household spending. Consumer prices declined by 0.3 % in 2015 on the back of falling energy prices, while core inflation remained positive at 0.3 % (Graph 1.6). Headline inflation is forecast to turn positive but remain close to zero in 2016, as renewed weakness in energy prices is expected to be offset by a recovery in the prices of services. In 2017, inflation should increase significantly from to the low base of the previous year.

Graph 1.6: **Inflation**



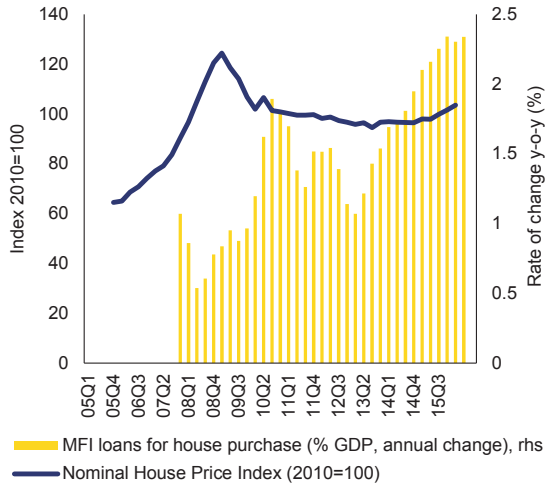
Source: European Commission

Credit growth and house prices

Strong financial deepening trends since Slovakia's EU accession continued in 2015 ([1]). While growth of credit to non-financial corporations declined in the wake of the financial crisis, credit to households continued to increase at double-digit growth rates. In particular, bank lending for house purchases rose at an average annual rate of almost 13 % between 2010 and 2014 and accounted for 77 % of total bank loans to individual households at the end of 2014 (Graph 1.7). In 2015, lending for housing purchases accelerated further to around 14 %, supported by low interest rates. Nevertheless, banks' aggregate portfolio of loans to households has shown no signs of deteriorating. With the share of non-performing loans having long recovered from a post-crisis peak of 6 %, hovering around 4 % since 2012, loan quality is now back at the pre-crisis levels of 2008. Growth of credit to non-financial corporations picked up in 2015. Bank profits grew by more than 13 % in 2015 suggesting a good condition of the banking sector as a whole. This is also confirmed by adequate levels of banks' capitalisation.

([1]) Peter Harvan, Anton Jevčák, Peter Pont'uch and Vladimír Solanič (2015): The Impact of Rapid Credit Growth on Slovakia's Housing Market; Economic Briefs 6 December 2015, Brussels.

Graph 1.7: **Loans of monetary financial institutions (MFI) for house purchases and house prices**



Source: ECB, European Commission

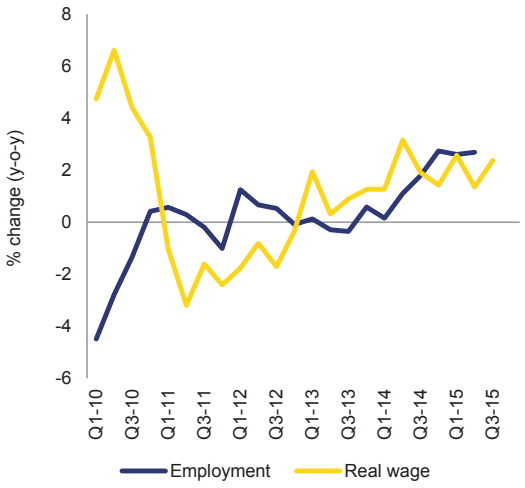
Despite rapid lending growth, household indebtedness remains relatively moderate and house price developments well contained. Outstanding loans to households for house purchases have increased markedly in recent years from below 10 % of GDP in 2006 to almost 25 % in the third quarter of 2015. Nevertheless, total mortgage debt remains far below the 2014 euro-area average of about 38 % of GDP, while total household debt amounted to 33 % of GDP in 2014, close to the levels of regional peers and well below levels in most euro-area countries. By end-2014, nominal prices still stood 17 % below their peak in 2008, reflecting a protracted cooling of the housing market. Since late 2014 a muted recovery in house prices has set in; they grew by 0.7 % in 2015, the first annual increase since 2009.

In the medium term, price pressures in the housing sector might pick up due to several structural factors. Potential demand for housing space is ample. Slovakia is among the countries with the lowest average number of rooms per person (1.1 in 2013) leading to overcrowded households (39.8 % of total population). In addition, more than half of young people (aged 25-34) still live with their parents. Slovakia's large share of prime age population (aged 25-40) and a rising number of single person households are expected to progressively boost demand for housing units. In this context, preferential treatment of capital gains from housing investment and a weak rental market, in combination with a slow housing supply response, are likely to further raise price pressures. Meanwhile, pronounced regional differences in property prices and rents persist, with both growing rapidly in Bratislava but only marginally in the rest of the country. High real estate prices foster incentives for residential and infrastructure investment in the region. However, high rents may inhibit labour mobility into those regions, especially from the Central and Eastern parts of the country.

Labour market

Employment rose markedly in 2015, and the labour market is set to improve further, in line with solid economic expansion. The unemployment rate fell to 11.5 % in 2015 and is expected to continue falling over the coming years to around 9.3 % in 2017. Nominal wages are expected to have increased by 2.1 % in 2015, providing a boost to real disposable income in a deflationary environment. Nominal wage growth is forecast to pick up to around 3 % in 2016 and 2017. Solid real wage growth, accompanied by steadily rising employment (Graph 1.8), is expected to substantially support household consumption.

Graph 1.8: **Employment and real wages**



Source: European Commission

Structural unemployment, also reflecting strong geographical disparities, still represents a key policy issue. Significant geographical differences in the labour market, fostered by low labour mobility, contribute to one of the highest long-term unemployment rates in the EU (Section 2.3). Integration of underrepresented groups (Roma, youth, women with young children, elderly and low-skilled) into the labour market is limited. The current system of labour taxation creates work disincentives for low wage earners and contributes to high unemployment, notwithstanding recent policy action. Social safety nets remain relatively weak, especially for the unemployed and families with children, but the risk of poverty or social exclusion has declined in recent years.

Public finances

The general government deficit is projected to decline gradually. In 2015, the deficit is expected to have improved only marginally to 2.7 % of GDP, falling further to 2.1 % of GDP in 2016. This is driven by a favourable economic outlook and envisaged savings in the healthcare sector, but also by public investment cuts. After a marked upward trend in government debt levels in the post-crisis period up until 2013, debt levels have broadly stabilised and are projected to decline moderately to around 51 % of GDP in 2017. Negative risks arise from the potential cost of the planned public-private partnership project to build a motorway ring around Bratislava. The assumed annual cost to the government of more than EUR 50 million represents a non-negligible burden for future budgets. In the longer term, rising ageing-related costs — particularly related to healthcare — may put Slovakia's relatively sound debt position under pressure([2]).

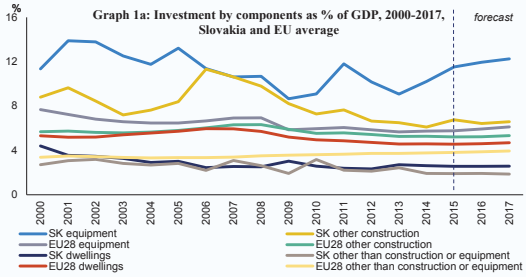
([2]) See European Commission (2016): Fiscal Sustainability Report 2015, *European Economy*, Institutional Paper 018.

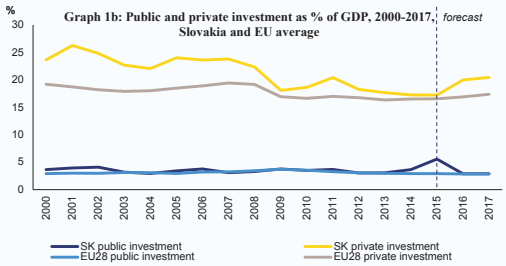
Box 1.1: Investment challenges

Macroeconomic perspective

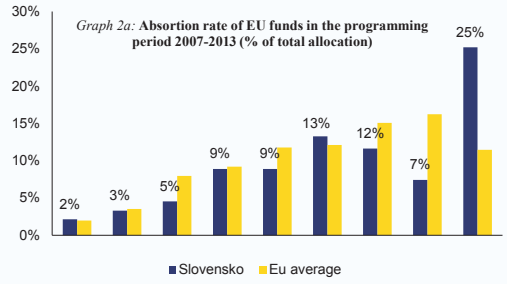
Cutbacks in both private and public investment expenditure since the crisis are exacerbating regional disparities and may endanger future economic convergence. Public investment contracted substantially as domestic financing was cut back to meet consolidation requirements and EU funding of almost all operational programmes came to a standstill in 2014, after irregularities were uncovered in public procurement and the evaluation and selection of projects eligible for EU funding. The uneven allocation of investment across regions deepens the regional divide.

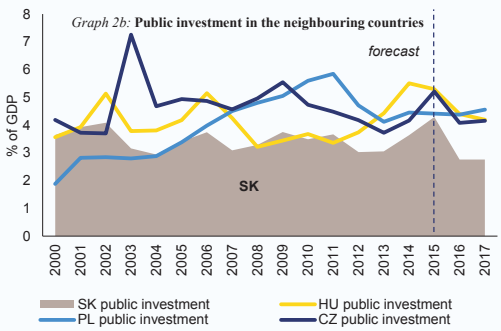
A breakdown by components shows equipment is the strongest driver of investment in Slovakia, reflecting the heavy weight of manufacturing in total output (Graph 1a). Investment in construction other than dwellings is in decline and the trend is forecast to continue. In the coming years, public investment growth is expected to lag somewhat behind GDP growth as the drawdown of EU funds is expected to slow down in the initial years of the 2014-2020 programming period. On the upside, private investment is projected to strengthen, thus partially offset the slowdown in public investment expenditure (Graph 1b).





EU structural and cohesion funds (including national co-financing) accounted for 86 % of Slovak public investment between 2011 and 2013. The utilisation of available EU funds can be measured by the absorption rate, which represents the ratio of actually paid funds over total allocation, and in Slovakia was around the EU average until 2009. Thereafter it fell behind (Graph 2a) due to complex procedures, weak administrative capacity and the absence of investment strategies. Financial corrections arising from the mismanagement of funds also hampered absorption, especially during the programme suspension of 2014. In 2015, the final year in which funding under the 2007-2013 programming period could be drawn, the Commission estimates that the absorption rate will reach close to 25 % of the total EU allocation bringing total absorption of funds during the programming period to around 85 %.





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Box (continued)

Inflows of foreign direct investment (FDI) decreased substantially in the wake of the global financial crisis and public investment in Slovakia has been historically lower than in regional peers. In the wake of the crisis, private investment declined more than public investment, especially for FDI inflows, which averaged 7.8 % of GDP between 2004 and 2008 but fell to 2.1 % of GDP between 2009 and 2014. Public investment in Slovakia averaged 3.5 % of GDP between 2000 and 2014, compared with 4.2 % in the neighbouring countries (Graph 2b). Faced with a deepening regional divide, Slovakia has scope to improve transport connections between the Western and the less developed Central and Eastern part of the country (Section 2.6).

Assessment of barriers to investment

To provide an overview of barriers to investment in Member States, the Commission recently published country specific profiles ([1]). This box complements the findings of the profile for Slovakia.

Investment bottlenecks in Slovakia arise mainly from regulatory barriers in the business environment (Section 2.4) and the low efficiency of public administration (Section 2.5). The level of digitisation of the public administration and the use of e-government services is low. Lengthy court proceedings for litigious civil and commercial cases, including insolvency procedures, harm the business climate. Weakness persists in the public procurement system and limits the competition. The level of perceived corruption remains high and the impact of anti-corruption strategies is limited by institutional shortcomings. These factors discourage smaller foreign companies from investing in Slovakia and affect investment decisions of local SMEs.

Other sector-specific investment barriers affect the business climate, requiring further efforts to realise Slovakia's economic potential. The low access to life-long learning and the weak responsiveness of the educational system to labour market needs translates into skills shortages that hold back growth and employment (Section 2.3). High levels of regulation in most network industries and environmentally harmful subsides translate into higher prices of inputs, notably electricity, for Slovak companies, thus undermining their competitiveness (Section 2.4 and 2.6). Improvements in the research and innovation framework have been achieved but are limited (Section 2.6). Procedures to obtain a construction permit have been streamlined for major investment only, posing a challenge for SMEs (Section 2.6). Transport investment needs appear considerable (Section 2.6), as despite ample funding opportunities progress towards closing the infrastructure gap has been slow. Low energy efficiency represents both an environmental and a competitiveness challenge for Slovakia (Section 2.6).

([1]) See "Member States Investment Challenges", SWD (2015) 400 final/2 (http://ec.europa.eu/europe2020/pdf/2016/ags2016_challenges_ms_investment_environments_en.pdf).

Box 1.2: **Contribution of the EU Budget to structural change**

Slovakia is a major beneficiary from the European Structural and Investment Funds (ESIF) and can receive up to EUR 15.3 billion for the period 2014-2020. This is equivalent to 2.6% of GDP annually and 64.7% of the expected national public investment in areas supported by ESIF.

To meet the ex-ante conditionalities, a number of strategies and legislation were put in place, for instance in the area of digital growth and next generation network, vocational education, human resources management or shift towards a low-carbon economy to ensure targeted and effective investments from the Funds. Reforms in areas such as public procurement, civil service and finalisation of the Transport Master plan are still pending and for completion by end-2016. Where ex ante conditionalities are not fulfilled by end 2016, the Commission may suspend interim payment to the priorities of the programme concerned.

Slovakia's ESIF programmes are strongly focused on priorities and challenges identified in the context of the European Semester (for instance some 90% of the European Social Fund allocation addresses country specific recommendations of recent years). Key investments areas include, improvements to education and training systems, making healthcare more sustainable, labour market measures for unemployed workers and disadvantaged groups, improving the business environment and significant investment in public administration reform (including judicial reform and more efficient public procurement). The Youth Employment Initiative (YEI) is integrated into the Slovak Operational Programme Human Resources as a dedicated priority axis. The activities under this priority axis will receive a total of EUR 194 million, out of which EUR 72 million from YEI. Regular monitoring of implementation includes reporting in mid-2017 on the contribution of the funds to Europe 2020 objectives and progress in addressing relevant structural reforms to maximise the use of EU financing (notably, in the R&DI, employment, education and health sectors and in the area of public procurement).

Financing under the new European Fund for Strategic Investments (EFSI), Horizon 2020, the Connecting Europe Facility and other directly managed EU funds would be additional to the ESI Funds. Following the first rounds of calls for projects under the Connecting Europe Facility, Slovakia has signed agreements for EUR 52 million for transport projects. For more information on the use of ESIF in Slovakia, see: https://cohesiondata.ec.europa.eu/countries/SK.

Table 1.1: **Key economic, financial and social indicators - Slovakia**

	2003-2007	2008	2009	2010	2011	2012	2013	2014	forecast 2015	2016	2017
Real GDP (y-o-y)	7.3	5.7	-5.5	5.1	2.8	1.5	1.4	2.5	3.5	3.2	3.4
Private consumption (y-o-y)	6.1	6.0	-0.5	0.4	-0.6	-0.4	-0.8	2.3	2.3	3.4	3.0
Public consumption (y-o-y)	3.5	6.7	6.0	1.8	-1.7	-2.6	2.2	5.9	3.7	1.4	2.3
Gross fixed capital formation (y-o-y)	7.2	1.6	-18.7	7.2	12.7	-9.2	-1.1	3.5	12.7	3.8	5.7
Exports of goods and services (y-o-y)	17.9	3.0	-16.8	15.7	12.0	9.3	6.2	3.6	6.4	4.6	5.7
Imports of goods and services (y-o-y)	14.8	3.6	-18.8	14.7	9.6	2.5	5.1	4.3	7.8	4.5	5.8
Output gap	1.3	7.2	-2.1	-0.4	-0.9	-1.8	-2.4	-1.9	-1.1	-0.7	-0.3
Potential growth (y-o-y)	5.2	5.4	3.5	3.4	3.4	2.5	2.0	2.0	2.6	2.8	3.0
Contribution to GDP growth:											
Domestic demand (y-o-y)	5.6	4.9	-4.0	2.2	2.1	-2.9	-0.3	3.1	4.6	3.0	3.4
Inventories (y-o-y)	0.1	1.2	-3.6	2.4	-1.0	-1.3	0.6	-0.2	-0.2	0.0	0.0
Net exports (y-o-y)	1.6	-0.5	2.1	0.5	1.7	5.7	1.2	-0.4	-1.0	0.2	0.0
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.3	0.8	0.7	0.6	0.6	0.4	0.3	0.4	0.4	0.5	0.5
Capital accumulation (y-o-y)	1.2	1.6	0.3	0.5	0.8	0.2	0.0	0.0	0.5	0.7	0.8
Total factor productivity (y-o-y)	3.7	3.1	2.5	2.3	1.9	1.8	1.7	1.6	1.6	1.6	1.7
Current account balance (% of GDP), balance of payments	-9.0	-6.4	-3.5	-4.7	-5.0	0.9	2.0	0.1	.	.	.
Trade balance (% of GDP), balance of payments	-3.6	-2.3	-1.1	-1.1	-0.4	4.0	4.7	3.9	.	.	.
Terms of trade of goods and services (y-o-y)	-0.7	-1.6	-1.1	-0.6	-1.3	-1.2	-0.5	0.0	-0.1	0.2	-0.1
Capital account balance (% of GDP)	0.3	1.2	0.8	1.5	1.3	2.0	1.4	1.0	.	.	.
Net international investment position (% of GDP)	-56.6	-56.1	-66.7	-62.1	-64.6	-62.0	-63.6	-69.0	.	.	.
Net marketable external debt (% of GDP)1	1.5*	-6.4*	-11.0*	-10.1*	-11.7*	-10.1*	-12.9	-16.7	.	.	.
Gross marketable external debt (% of GDP)1	51.5	41.3	61.7	62.0	60.8	58.0	65.1	73.4	.	.	.
Export performance vs. advanced countries (% change over 5 years)	.	72.1*	18.8	12.4	6.2	0.5	4.7	10.05	.	.	.
Export market share, goods and services (y-o-y)	6.5	-2.1	-7.2	-4.7	3.4	0.8	4.7	-0.8	.	.	.
Net FDI flows (% of GDP)	-7.2	-4.4	1.0	-0.9	-2.8	-3.2	0.3	0.2	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	0.9	0.8	2.3	4.7	2.9	1.7	2.9	3.8	.	.	.
Private credit flow (consolidated, % of GDP)	6.4	11.0	3.1	3.1	3.0	3.1	5.3	3.9	.	.	.
Private sector debt, consolidated (% of GDP)	51.3	65.3	69.9	68.1	71.0	71.3	74.8	76.2	.	.	.
of which household debt, consolidated (% of GDP)	12.0	20.9	23.8	24.8	26.5	27.8	29.7	31.6	.	.	.
of which non-financial corporate debt, consolidated (% of	39.3	44.4	46.1	43.3	44.5	43.5	45.1	43.8	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-3.0	-1.8	5.2	2.5	-0.1	5.8	4.2	1.5	1.3	-1.6	-2.0
Corporations, gross operating surplus (% of GDP)	26.7	28.0	24.7	26.7	26.4	26.9	26.7	25.7	25.5	25.5	25.7
Households, net lending (+) or net borrowing (-) (% of GDP)	-1.4	-1.6	0.1	1.8	0.4	0.2	0.7	1.4	1.2	1.4	1.5
Deflated house price index (y-o-y)	25.6	12.9	-12.8	-4.9	-5.2	-5.9	-0.4	1.6	.	.	.
Residential investment (% of GDP)	2.8	2.5	3.0	2.6	2.4	2.3	2.7	2.6	.	.	.
GDP deflator (y-o-y)	3.5	2.8	-1.2	0.5	1.6	1.3	0.5	-0.2	-0.3	0.6	1.5
Harmonised index of consumer prices (HICP, y-o-y)	5.0	3.9	0.9	0.7	4.1	3.7	1.5	-0.1	-0.3	0.3	1.7
Nominal compensation per employee (y-o-y)	8.3	6.6	2.6	5.5	2.0	2.6	2.6	1.8	2.1	3.0	3.1
Labour productivity (real, person employed, y-o-y)	5.9	2.4	-3.6	6.7	1.0	1.5	2.2	1.1	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	2.3	4.1	6.4	-1.2	1.0	1.1	0.3	0.7	0.6	1.1	0.9
Real unit labour costs (y-o-y)	-1.1	1.3	7.6	-1.6	-0.7	-0.2	-0.2	0.9	0.9	0.5	-0.7
Real effective exchange rate (ULC, y-o-y)	6.4	8.4	8.9	-3.2	0.5	-1.8	0.2	0.2	-1.8	0.4	.
Real effective exchange rate (HICP, y-o-y)	8.0	8.3	6.9	-4.2	1.0	0.1	0.9	0.3	-1.6	0.9	-0.4
Tax wedge on labour for a single person earning the average wage (%)	21.7	22.8	21.4	21.5	22.9	22.8	22.8	22.9	.	.	.
Taxe wedge on labour for a single person earning 50% of the average wage (%)	14.7*	15.8	12.9	13.1	15.9	15.7	15.7	15.9	.	.	.
Total Financial Sector Liabilities, non-consolidated (y-o-y)	6.5	8.7	6.3	4.1	0.4	1.2	3.5	5.1	.	.	.
Tier 1 ratio (%)2	.	21.9	20.9	19.2	16.9	16.3	17.3	16.6	.	.	.
Return on equity (%)3	.	3.8	6.7	8.6	-0.8	5.7	6.7	5.2	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	1.7	3.5	3.9	4.0	3.8	3.8	4.1	.	.	.
Unemployment rate	15.4	9.6	12.1	14.5	13.7	14.0	14.2	13.2	11.5	10.3	9.3
Long-term unemployment rate (% of active population)	10.8	6.7	6.5	9.3	9.3	9.4	10.0	9.3	.	.	.
Youth unemployment rate (% of active population in the same age group)	29.0	19.3	27.6	33.9	33.7	34.0	33.7	29.7	26.4	.	.
Activity rate (15-64 year-olds)	69.1	68.8	68.4	68.7	68.7	69.4	69.9	70.3	.	.	.
People at-risk poverty or social exclusion (% total population)	26.7	20.6	19.6	20.6	20.6	20.5	19.8	18.4	.	.	.
Persons living in households with very low work intensity (% of total population aged below 60)	6.4	5.2	5.6	7.9	7.7	7.2	7.6	7.1	.	.	.
General government balance (% of GDP)	-2.7	-2.3	-7.9	-7.5	-4.1	-4.2	-2.6	-2.8	-2.7	-2.1	-1.7
Tax-to-GDP ratio (%)	30.5	28.7	28.5	27.8	28.4	28.0	30.0	30.9	31.5	31.2	31.3
Structural budget balance (% of GDP)	.	.	.	-7.1	-4.1	-3.6	-1.7	-2.0	-2.1	-1.8	-1.6
General government gross debt (% of GDP)	35.4	28.2	36.0	40.8	43.3	51.9	54.6	53.5	52.3	51.9	51.2

(1) Sum of portfolio debt instruments, other investment and reserve assets
(2,3) domestic banking groups and stand-alone banks.
(4) domestic banking groups and stand alone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches.
(*) Indicates BPM5 and/or ESA95
Source: European Commission, winter forecast 2016; ECB

2. STRUCTURAL ISSUES

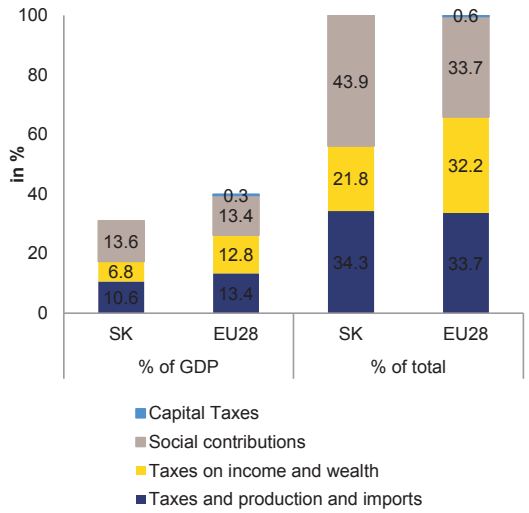
This section provides an analysis of Slovakia's structural economic and social challenges. Focusing on the policy areas covered in the 2015 country-specific recommendations, this section analyses the taxation system and healthcare sector, the labour market and education system, and the public administration, including public procurement.

2.1 TAX SYSTEM AND TAX BURDEN

Taxation

The tax burden in Slovakia is low, with social contributions constituting an important revenue source. With a tax-to-GDP ratio of 31 % of GDP, Slovakia is among the countries with the lowest tax burden in the EU. In 2014, taxes represented approximately 80 % of all revenues, one of the lowest shares in the EU. The composition of tax revenue has been relatively stable over time relying heavily on social contributions (Section 2.3), while receipts from taxes on income and wealth are comparatively low (Graph 2.1.1). Although taxes on production and imports (e.g. VAT) as a share of GDP are below the EU average, they are the second largest revenue source in Slovakia.

Graph 2.1.1: **Taxes in Slovakia in 2014**



Source: European Commission

Measures to fight tax fraud have contributed to an increase in tax collection. Under the action plan to fight tax fraud the government has implemented around 50 measures since 2012. The most important measures included a VAT control statement ([3]) and a compulsory down payment on VAT registration for high-risk applicants. The effective VAT rate has increased from a historic low in the -third quarter of 2012 and stabilised in recent quarters at around 14.5 %. The Ministry of Finance estimates that efficiency in VAT collection, mainly due to anti-fraud measures, yielded 1.2 % of GDP in additional VAT revenue in 2013-2014. A similar improvement is expected in 2015.

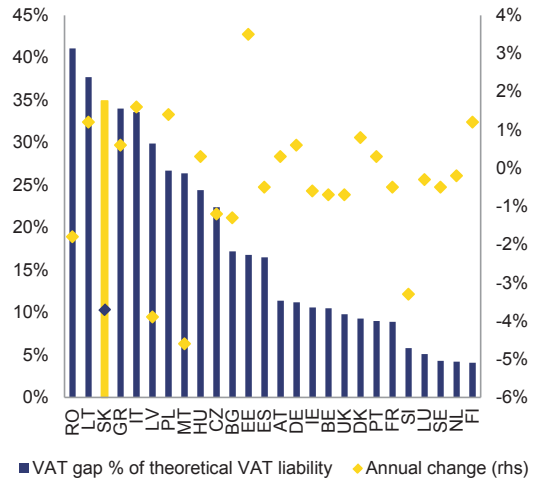
The continued high VAT gap indicates a VAT compliance shortfall. The relatively low VAT revenue ratio ([4]) (48.6 % in 2014) and the 'actionable' policy gap ([5]) (3 % in 2013) suggest that compliance is the main concern. This is confirmed by the VAT compliance gap ([6]) shown in Graph 2.1.2. While this declined in 2013, it remained among the highest in the EU. The Ministry of Finance estimates that the VAT gap declined further in 2014 but is expected to stabilise in 2015 ([7]).

Improvements in collection have not been accompanied by an improved tax compliance strategy. VAT collection has improved in recent years, although a full appraisal of collection performance should take into account both current

([3]) Control statements cover all VAT taxpayers' invoices enabling the tax authorities to cross-check transactions.
([4]) This is a ratio between the VAT actually collected and a theoretical situation in which VAT were levied at the standard rate on all consumption with perfect enforcement.
([5]) The 'actionable' policy gap measures the forgone VAT revenue due to existence of reduced rates and exemptions as percentage of theoretical revenue at standard rate, net of financial services, imputed rents and public goods
([6]) The compliance gap has two components. The assessment gap captures the difference between the potential tax and the assessed amount of tax due. The collection gap captures the difference between the amount of tax assessed as due and the actual collection.
([7]) The Ministry estimates that the VAT gap stood at 29.5 % in 2014, declining to 29.2 % in 2015 (*Daňový report Slovenskej republiky 2015*).

and arrears-related collection. A high level of VAT refunds could suggest the existence of refund fraud ([8]) and calls for a proper assessment of the underlying factors. Improving the overall tax compliance and VAT collection in the long term require strengthening both audit capacity and accuracy of assessment for future tax periods, in conjunction with raising taxpayers' voluntary compliance.

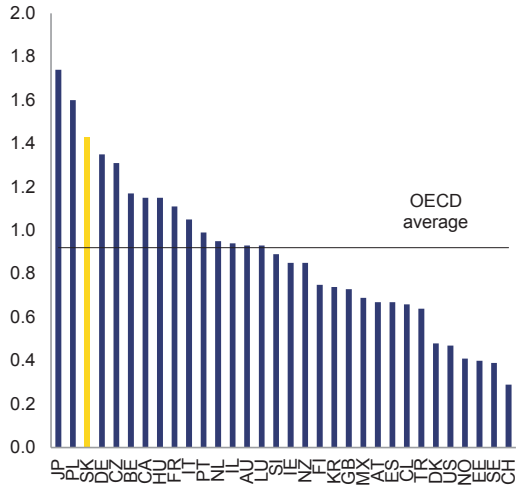
Graph 2.1.2: **VAT compliance gap (2013)**



Source: CASE and CPB (2015)

An updated anti-fraud strategy has been launched. In July 2015, Slovakia presented an updated strategy to fight tax fraud. Following a brief assessment of the original strategy launched in 2012, the new strategy presents 30 additional measures. They cover tax-related issues in the areas of criminal law (e.g. criminal liability of legal persons, introduction of undercover agents and companies), commercial law (e.g. electronic archiving of accounting books) and tax law (e.g. cancellation of permits for sole traders, a register of risky taxpayers). As the strategy does not include any quantitative targets, it may prove difficult to assess the impact of the measures and the strategy as a whole ([9]).

Graph 2.1.3: **Ratio of tax administration costs as a share of tax revenues (2013)**



Source: OECD (2015) Tax Administration 2015

The concentration of efforts and resources by the tax administration on VAT collection in recent years has paid off, but other areas may have been neglected. VAT-related audits have accounted for around 80 % of all inspections over several years. This, in combination with other measures, has led to a marked improvement in VAT collection. However, the overall efficiency of the Slovak tax administration has not significantly improved when assessed against several criteria ([10]). Based on latest available data, Slovakia has made little use of pre-filled tax returns, undisputed tax debts as proportion of net revenue are significantly above the EU average, and the ratio of administrative cost relative to net revenues is high (Graph 2.1.3). The Financial Administration has invested substantial resources ([11]) on IT systems which have not been integrated with other institutions (e.g. banks, police departments). This is planned in the updated

([8]) A high level of refunds could be also due to the high openness of the Slovak economy (i.e. exporters pay VAT on their purchases but no VAT is paid on exports). However, this is a less likely reason for large refunds given the large VAT gap.

([9]) According to estimates of the Ministry of Finance, the VAT gap declined by some 25% in 2014 compared to 2012, mainly due to the original strategy to fight tax fraud.

([10]) *Tax Reforms in EU Member States: 2015 Report,* European Economy, Institutional Paper 008, Directorate General for Taxation and Customs Union, Directorate General for Economic and Financial Affairs.

([11]) Slovakia is among OECD countries with relatively high shares of their expenditure dedicated to IT systems.

anti-fraud strategy. Risk analyses of taxpayers and the option of targeted tax audits appear to be underused. The tax administration assigns a relatively low share of its staff to the collection of tax debts. In 2013, only around 4 % of the tax administration staff worked on tax debt collection. The project to unify collection of taxes and social contributions – UNITAS – appears to be making little progress at present.

Establishing a well-defined corporate income tax base and targeting tax avoidance remain a priority. The tightening of tax rules on carrying forward losses in 2014 and the treatment of depreciation allowances in 2015 appear to have brought additional corporate income tax revenue. However, over half of all companies do not pay this tax ([12]). This suggests that there is scope to improve the taxation rules by introducing a sustainable regime of tax-deductible expenses and losses. This could be achieved through appropriate criteria for admissible business expenses and setting out tax loss channelling rules for restructuring. General anti-avoidance rules and thin capitalisation rules have been recently adopted. This could help prevent tax avoidance. Furthermore, despite the recent reform, the penalty regime does not include specific administrative penalties for tax avoidance and tax fraud.

Tax compliance costs for businesses have declined. Several measures appear to have reduced the time necessary to pay and file taxes, thus reducing compliance costs and mitigating the burden on businesses. Improving electronic filing and payment of VAT has led to a decrease in the time needed to comply with tax obligations by 20 hours. The number of payments necessary to pay VAT declined by half in 2014 ([13]). For all taxes, these indicators are now in line with the EU average. The cash method for paying VAT introduced in October 2015 has the potential to improve the cash flow of SMEs. Business taxpayers still report that the income and payroll tax system remains complicated, as it includes a high number of parameters, special schemes and exceptions. The data collection process appears also to be heavy for businesses ([14]).

Property taxation in Slovakia is low. The recurrent tax on immovable property is low, as applicable tax rates are low and are levied according to surface area. As market value is not reflected in the underlying tax base, taxation of residential property has failed to benefit from the strong price increases of 2005-2008. Hence property tax revenue is among the lowest in the EU. A system that would reflect the market value of taxed property could reduce the regressive character of this tax and, in the medium to long-term, provide resources to improve the growth-friendliness of the tax system. Furthermore, gifts and inheritance of property are not taxed. In contrast to investment in other financial assets, since 2011 capital gains from the disposal of immovable property are tax-exempt after five years of ownership.

Tax incentives to help meet environmental goals could be strengthened. The electricity price includes a levy to support production from renewable resources (Section 2.6). However, since 2005 it also includes a feed-in-tariff to support electricity production from domestic coal, which has a negative environmental impact. This tariff also drives up network costs and the end-price of electricity, affecting the competitiveness of domestic companies. The taxation system retains favourable incentives for the use of company cars, although Slovakia does not seem to be overly subsidising company cars compared to other OECD countries. However, given that the percentage used to calculate the taxable value of this employee benefit is low and that the tax does not reflect distance driven or emissions performance, the amount of foregone tax relative to the revenue received from taxation of company cars is one of the lowest in the OECD. ([15])

([12]) In the years 2004-2011, around 19 % of companies declared repeatedly zero tax liability and 11 % of all companies reported repeatedly a financial loss. Remeta, J. et al. (2015), '*Moving Beyond the Flat Tax – Tax Policy Reform in the Slovak Republic*', OECD Taxation Working Papers, No.22, OECD Publishing, Page 35.

([13]) PWC World Bank Paying Taxes 2016 and 2015 studies.

([14]) See The Slovak Spectator – 2 March 2015: http://spectator.sme.sk/c/20056231/changes-to-corporate-tax-make-slow-progress.html - referring to "unnecessary administrative work" and request by the administrations of "the same information from an entrepreneur twice".

([15]) Harding, M. (2014), 'Personal Tax Treatment of Company Cars and Commuting Expenses: Estimating the Fiscal and Environmental Costs', OECD Taxation Working Papers, No. 20, OECD Publishing.

2.2. FISCAL FRAMEWORK AND LONG-TERM FISCAL SUSTAINABILITY

Fiscal framework

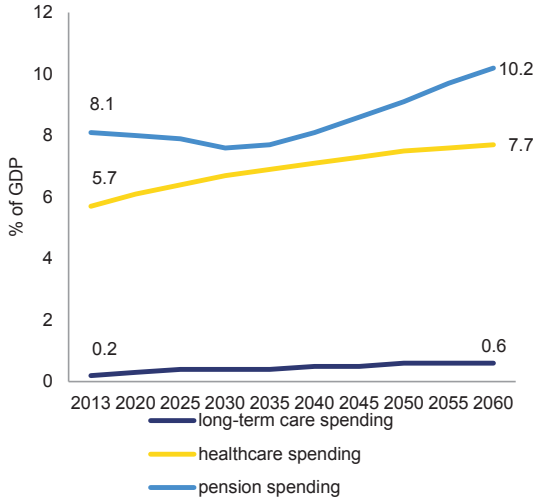
Medium-term budgeting remains a weak point of the fiscal framework. Slovakia has taken measures to strengthen its fiscal framework, notably in 2013 by adopting a balanced budget rule and reinforcing budgetary rules for local governments. However, this has not addressed the weaknesses in medium-term budgeting. The final years of the multi-annual budget are only indicative and the binding expenditure ceilings, which were envisaged by the constitutional law of 2011, have so far not been adopted. Fiscal targets for the general government are set by the central government without prior consultation with local authorities, whose involvement in the overall budgetary process is generally limited. In 2014 and 2015 the Parliament exceptionally and unilaterally adjusted official tax revenue projections initially prepared by the Institute for Financial Policy of the Ministry of Finance. The tax projections were approved by both the Tax Revenue Committee, established by constitutional law to improve transparency and public control of the budgetary process, and the Council for Budget Responsibility — the Slovak fiscal council. While recent parliamentary practice does not disregard current legislation, it risks reducing the relevance of the Committee in ensuring the transparency and rigour of the budgetary process ([16]).

The planned expenditure reviews have the potential to improve the quality of the budgetary process. In 2016 Slovakia plans to run pilot projects on spending reviews for primary and secondary schools, Financial Administration, labour offices and effectiveness of Active labour market policies, which would become a regular part of the budgetary process from 2017. The reviews are expected to identify inefficient spending in specific areas of public policy. This could free up public resources without the need for across-the-board cuts and could improve value for money in public spending.

Long-term sustainability of public finances

The sustainability of public finances in Slovakia remains a challenge in the long term. The long-term sustainability gap indicator (S2) ([17]) shows Slovakia at medium risk with respect to the long-term sustainability of public finances, in spite of a relatively low public debt level (53.5 % of GDP in 2014) and a favourable initial budgetary position. This result is driven by the projected growth of ageing-related costs, in particular healthcare and pension expenditure (Graph 2.2.1). The projected increase in Slovak pension spending up to 2060 is one of the highest in the EU and it is driven mainly by population ageing and low fertility rates. The share of the population aged 65 and over on the population aged 20-64 is projected to increase from 20 to 72 % between 2020 and 2060, according to the European Commission Ageing report 2015.

Graph 2.2.1: **Projected ageing-related public expenditures (% of GDP)**



Source: Ageing Report 2015

The statutory retirement age in Slovakia is comparatively low, partly due to life expectancy factors. The statutory retirement age for women and men has gradually converged since 2004, reaching 62 years for men and 58.3 years for women in 2013. The retirement age will be linked to life expectancy from 2017 and is projected to reach 62.8 for both sexes in 2020, considerably

([16]) Article 2 of the Statutes of the Tax Revenue Committee.

([17]) S2 determines the upfront structural adjustment required for the ratio of gross public debt over GDP to stabilise over an infinite horizon. Based on the Commission 2016 winter forecast, the S2 indicator for Slovakia is estimated at 3.1 % of GDP with contributions of healthcare and pensions components of 1.3 pps. and 0.9 pp., respectively.

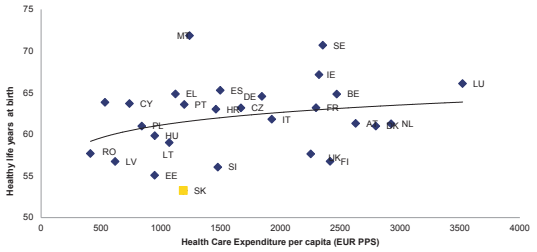
below the level of 65 years to be reached in most Member States. By 2030, it is projected to reach 64.1 years, thus remaining below the EU average.

The pension system saw several changes in 2015. In 2015 the second, private pension pillar was opened up for the fourth time, following which 160 000 pension savers opted to leave the private pension scheme ([18]). In July 2015, a minimum pension benefit entered into force, which improves the adequacy of pensions. The pension benefit was expected to apply to some 75 000 pensioners. According to information from the Ministry of Labour, pensions were increased to the minimum pension for more than 36 000 pensioners by November 2015. Nevertheless, in the long term, the adequacy of pensions is set to worsen. By 2060, the benefit ratio (average pension benefits divided by average gross wage) is projected to decline further in Slovakia than in the EU ([19]). This is due to the fact that the currently legislated indexation of pensions gives rise to a lower growth rate in the average pension than the projected growth in average gross wages. The replacement ratio (i.e. average newly-granted pension divided by the average wage) is projected to decrease only marginally, as newly granted pensions are currently linked to wage growth ([20]).

Healthcare expenditure is the main driver of the ageing-related costs. Public healthcare expenditure is projected to grow by 2 pps in the long-term, albeit from a comparatively low level (5.7 % of GDP in 2013 compared with 6.9 % in the EU). There seems to be significant scope to improve health outcomes by raising the cost-effectiveness of healthcare expenditure (Graph 2.2.2).

Despite some improvement, health status indicators remain low ([21]). Health status indicators are slowly improving but still do not compare favourably to those of many other Member States. Life expectancy at birth is below the EU average especially for men (72.9 years in Slovakia compared to 77.8 years on average in the EU; 2013 data), but also for women (80.1 years in Slovakia, 83.3 years in the EU). The average time people enjoy good health and are without disabilities (healthy life years) is the lowest in the EU for women and among the lowest for men. High mortality rates give rise to an estimated additional 1.4 pps reduction in Slovakia's potential workforce compared with the EU average. Indicators for access to healthcare including costs, distance and waiting times are around the EU average. However, the share of out-of-pocket payments in total healthcare expenditure is comparatively high (22 % compared to the EU average of 16 %) and under-the-table payments are widespread ([22]).

Graph 2.2.2: **Potential to improve years spent in good health**



(1) The methodology of the report has been applied to 2012 data.
(2) The relationship between the healthcare expenditure and life expectancy in the graph cannot be perceived as a causal relationship but as a statistical correlation. The healthcare outcomes also depend on factors other than healthcare expenditure.
Source: Heijink R. et al. (2015) Comparative efficiency of health systems corrected for selected lifestyle factors (Macelli report)

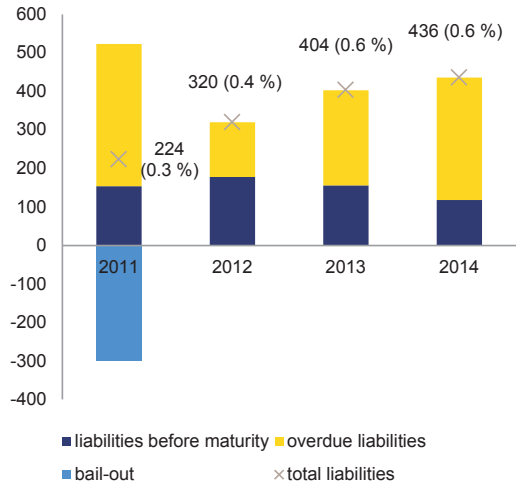
A number of public hospitals are still in an unfavourable financial situation, but steps have been taken to prevent a further build-up of debt by public hospitals. Hospitals managed by the central government continue to accumulate liabilities, which in the past were assumed by the government at irregular intervals (Graph 2.2.3). Reasons for high debt levels include inefficient utilisation of resources ([23]), soft budgetary

([18]) Almost EUR 580 million was transferred into the public pension scheme.
([19]) In the case of Slovakia the benefit ratio is projected to decline by some 12 pps. to 33.3 % in 2060 compared to an average decline in the EU by less than 9 pps. to 37.5 %.
([20]) 51.7 % in 2013 declining to 49.4 % in 2060, compared to a decline from 46.3 to 38.6 % in the EU.
([21]) Healthy life years increased by more than 4 years and life expectancy by more than 2 years for both genders between 2005 and 2013.
([22]) Special Eurobarometer 397 on Corruption, February 2014; ec.europa.eu/public_opinion/archives/ebs/ebs_397_en.pdf
([23]) Although it is on a steadily decreasing trend, the number of curative beds per capita remains high (424 beds per 100

constraints, lack of guidance and supervision in procurement ([24]) and payment systems linked to the quantity (rather than quality) of treatment ([25]). However, development plans have been prepared by state-owned hospitals in the course of 2015 to improve budgeting and spending processes with the aim to ensure balanced budgets. Comprehensive financial audits were completed in all public hospitals by October 2015 and the introduction of an information system providing economic, staff and clinical data began in autumn 2015. Furthermore, public hospitals have also prepared a comprehensive proposal for streamlining hospital care, including transforming acute care beds into long-term care beds. At this early stage of implementation, conclusions cannot be drawn on the effectiveness of the measures taken, although they have apparently reduced increases in hospitals expenditure. Further steps are likely to be needed in order to reverse negative expenditure trends. The rationalisation and restructuring of hospital capacities and the introduction of a prospective reimbursement system will be essential to this end. The pilot phase of a new reimbursement system for hospitals (the diagnosis-related groups payment system) ([26]) is anticipated for 2016 and the overall project is expected to be operational by 2017.

The weak gatekeeping role of general practitioners has an impact on recourse to more costly specialised care. The number of consultations per capita is one of the highest in the EU ([27]). Although some specialised competencies have been recently delegated to general practitioners ([28]) and new clinical guidelines are being issued, systemic incentives favour the quantity, rather than the quality of services. Ensuring an appropriate division of competences between general and specialist practitioners, as well as other healthcare professionals can contribute to the system's cost-efficiency.

Graph 2.2.3: **Liabilities of hospitals managed by the central government (EUR millions and % of GDP)**



(1) Data for 2014 is tentative
Source: Ministry of health

The government's efforts to introduce an integrated care model ([29]) continue. After round table discussions with stakeholders including association of doctors, nurses and the World Health Organisation in 2015, the government intends in 2016 to unveil the results of a cost-benefit analysis on the introduction of integrated health centres, and a 'master plan' for the distribution of services across the country. The success of this healthcare reform is likely to depend on ownership by the key stakeholders, particularly doctors, and on the capacity to ensure an efficient gatekeeping role of the general

000 inhabitants compared to 354 in the EU in 2013). The occupancy rate is also comparatively low (67 % in 2013 while it was 74 % in the EU).

([24]) See the European Commission's 2015 Country Report for Slovakia, p. 34.

([25]) Kovalčík J. and Tunega M., *Ako Slovensko zaplatí za neliečenie zdravotníctva*, INEKO institute, June 2015.

([26]) The Diagnosis- Related Groups Payment system classifies 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 (http://www.ncbi.nlm.nih.gov/mesh?term=DRGs).

([27]) In 2013, the number of reported per capita consultations of medical doctors in Slovakia was 11; the EU average is 6.7.

([28]) The competences to conduct basic pre-operative examinations, treatment of essential hypertension and lipoprotein disorders have been recently delegated. The re-organised system and policies of laboratory testing and measurement has been introduced.

([29]) Based on the definition of the WHO, integrated care is a concept of bringing together inputs, delivery, management and organisation of services related to diagnosis, treatment, care, rehabilitation and health promotion. Integration is a means to improve services in relation to access, quality, user satisfaction and efficiency.

practitioners as well as the integration of healthcare centres and hospitals (in particular for emergency services). Appropriate staffing is also key to the success of the reform. The share of general practitioners in the total number of doctors is currently low (14 %) and the number of nurses has been declining between 2000 and 2013. To address this issue, a residency programme is being implemented to attract and retain practitioners in the system.

The modernisation of procurement and service delivery is under way, but project financing deserves careful evaluation. Healthcare authorities started using electronic public procurement, and a price-mapping database of recurrent purchases of medical devices has been initiated. This is likely to improve procurement processes and costs. The government project for a new key hospital is financed through a public-private partnership.

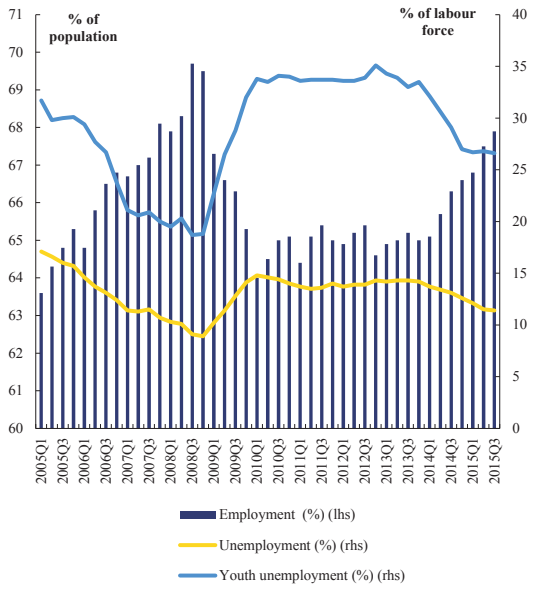
The long-delayed 'e-health' project is advancing slowly but has good potential to contain spending. A pilot project on 'e-health' information tools in four hospitals was launched in December 2015. The project includes electronic health records, e-prescriptions and e-referrals and aims to improve coordination between inpatient and outpatient care and limit overuse of services and pharmaceuticals. Growth in pharmaceutical expenditure has been largely contained thanks to the reference-based pricing reform in 2012; spending on prescribed drugs dropped by 0.1 % of GDP between 2011 and 2012. The planned introduction of e-health, including e-health records and e-prescriptions, is likely to reduce the current over-prescription of drugs.

The Slovak long-term care system is fragmented and lacks strategic planning. Public expenditure for long-term care is among the lowest in the EU (0.2 % of GDP in 2013) and availability of care services is particularly insufficient at community level. Consequently, care has to be provided by relatives — often women — with negative effects on their participation in the labour force. The Ministry of Health launched a policy dialogue on the draft long-term social and healthcare strategy in November 2015.

2.3. LABOUR MARKET, EDUCATION AND SOCIAL INCLUSION

The Slovak labour market has been improving on the back of an economic recovery but unemployment remains high. A sustained economic expansion has resulted in higher employment (20-64) growth and lower unemployment (15-64) (Graph 2.3.1). The unemployment rate has continued its gradual decline and in the Q3-2015 was down to 11.4 %, 1.6 pps. below the previous year's rate, while still ranking above the EU average.

Graph 2.3.1: **Labour market indicators (2005-2015)**



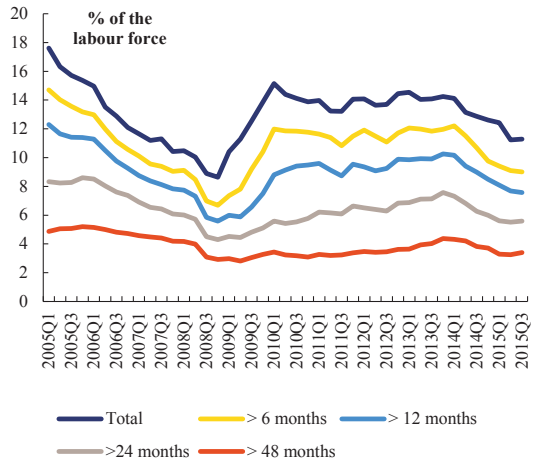
Source: European Commission

Slovakia's labour market performance poses challenges. While employment is relatively low and unemployment high, some groups are particularly vulnerable, such as the low-skilled, young workers, marginalised Roma and mothers with young children. Unemployment is also concentrated in central and eastern parts of the country. The low sensitivity of unemployment to real wage increases adds to concerns about the extent of structural unemployment.

Structural unemployment

Unemployment is often of a long-term nature. In 2014, the long-term unemployment rate (>12 months) was one of the highest in the EU (9.3 % vs. 5.1 % in EU28) (Graph 2.3.2). Among the unemployed, two thirds are long-term unemployed and most of the long-term unemployed have been so for more than two years, with a rate of very long-term unemployment at 6.6 % (more than twice the EU average). Moreover, persistency in long-term unemployment is also comparatively high in Slovakia. However, the most recent figures show a positive evolution. In the third quarter of 2015, long-term unemployment decreased to 7.6 % corresponding to a 1.4 pps. reduction during the past 12 months.

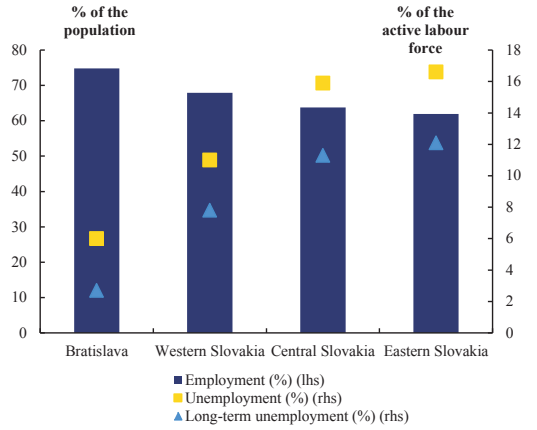
Graph 2.3.2: **Unemployment by duration (2005-2015)**



Source: European Commission

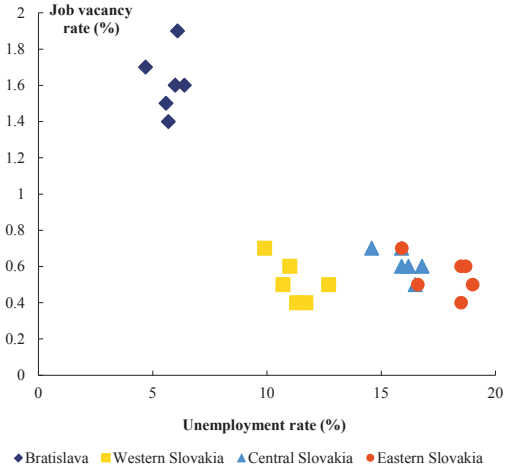
Regional disparities in unemployment are large. Despite some progress in closing the gap, unemployment in Bratislava (6.0 %) is still more than two times lower than in Eastern Slovakia (16.6 %) in 2014 (Graph 2.3.3). The main reasons for this phenomenon are the combination of low growth and job creation in the Central and Eastern part of the country, as well as and insufficient regional labour mobility to job-rich areas. Beveridge curves based on regional data show very low vacancy rates in most parts of the country, while in Bratislava the curve is very steep, indicating that unemployment could be lower if the existing job vacancies were filled (Graph 2.3.4). Factors hampering mobility include an insufficient transport infrastructure, high travel and housing costs relative to income, and an insufficiently developed rental market. This is compounded by poor infrastructure and a business climate which hinders investment and job creation (see section 3.5).

Graph 2.3.3: **Regional disparities in the labour market (2014)**



Source: European Commission

Graph 2.3.4: **Regional relations between the unemployment rate and the job vacancy rate (Beveridge curves, 2009-2014 data)**



Source: Eurostat

Prolonged unemployment is a major risk for low skilled and young people. Slovakia has the highest unemployment rate of low-skilled (20-64 years) in the EU (36.9 % vs. 16.3 % in the EU28 in Q3 2015). Moreover, low-skilled workers account for a high share of the long-term unemployed. In 2013, 24 % of the long-term unemployed were low-skilled compared to 4 % of low-skilled in the employed population. However, youth unemployment fell in 2015 to 26.6 % in Q3-2015, still well above the EU average of 20.1 % The share of young people neither in employment nor in education or training was also on the downward trend reaching 12.8 % in 2014 (12.5 % in the EU28). In addition, young workers (<25 years) constituted 17 % among the long-term unemployed (compared to 6 % in the employed population).

Roma participation in the Slovak labour market remains very weak. In 2014, the estimated Roma employment rate was 16 %, while unemployment reached 73 % and long-term unemployment 37 %. Low education, low skills and widespread discrimination are factors influencing poor employment outcomes for Roma ([30]). The majority of the Roma population has only a basic education (8 out of 10). Moreover, the situation of the fast-growing group of young Roma (16-24 years old) is alarming as almost half (43 %) are not engaged in education, employment or training.

A tailored approach could help address the weaknesses of the Slovak labour market. As labour market outcomes are strongly dependent on individual circumstances such as skill, age and ethnic background, policies targeting vulnerable groups appear promising, particularly if they are able to affect both the demand and supply of labour.

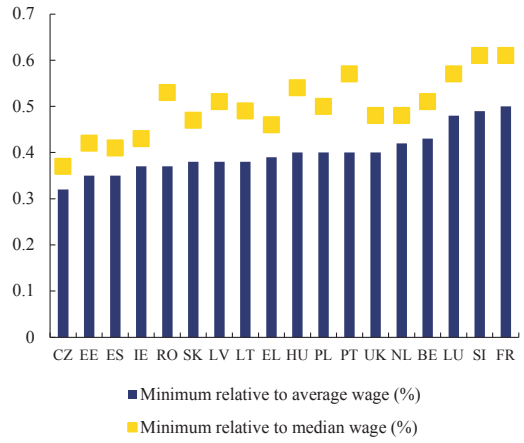
Minimum wages increased fast in 2015 and further in 2016. Overall, wages have increased moderately in 2015 (see Section 2.4). However, the minimum wage rose significantly by 8 % to EUR 380 per month. In comparative terms, the minimum wage as a percentage of average wage in Slovakia is low (35.4 % in 2014) compared with other EU countries (Graph 2.3.5), while only a small share of employees (3 % in 2014) are paid minimum wage level. Regional economic disparities also affect the ratio of the minimum wage over the (comparatively lower) average wage, which may hamper labour demand in the laggard regions with higher unemployment (Graph 2.3.5). In addition, the minimum wage can in principle also affect higher segments in the wage distribution ([31]).The impact of the 6.6 % increase

([30]) EG. IFP Report on employment, 2014; Kurekova, 2015, *Policy puzzles with Roma employment in Slovakia.*

([31]) The law defines six minimum wage levels, corresponding to skill levels as reported by the employer (unless covered by collective bargaining agreements). As there are no data available on minimum wage incidence by skill category, it

in the minimum wage in 2016 to EUR 405 requires careful monitoring for possible negative employment effects.

Graph 2.3.5: **Minimum wage relative to average wage and median wage in 2014**

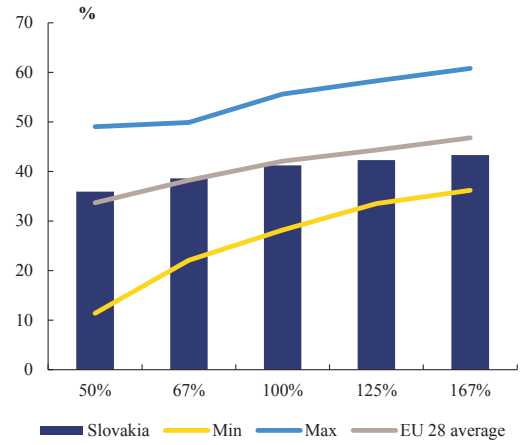


Source: OECD

The tax wedge on low-income earners remains relatively high in Slovakia. In 2014, the tax wedge for average-wage earners was in line with the EU average (at 41 % (SK) and 42 % (EU)). However, for low-wage earners the tax wedge is relatively high, e.g. for a single person earning 50 % of the average wage the tax wedge is 35.9 % in Slovakia, compared to an EU average of 33.7 % (Graph 2.3.6). Employer contributions make up a large share of the total wedge. The relatively high tax wedge may contribute to disincentives for both labour supply and demand, in particular for low-wage earners.

cannot be excluded that the minimum wage affects more than the 3 % paid at the bottom of the minimum wage grid.

Graph 2.3.6: **Tax wedge for a single household at different wage levels (% of the average wage) in 2014**



(1) Data on the EU28 do not include data on Bulgaria, Cyprus, Latvia, Lithuania and Romania
Source: Tax and benefits database of the European Commission

A lowering of social contributions in 2015 has helped to contain labour costs and provided incentives for low-wage earners to work. In order to offset the impact on labour costs of the minimum wage rise in 2015, employers' health insurance contributions for low wage employees — the so-called health contribution allowance' — were lowered. This also increased the net pay of low wage earners on the minimum wage by EUR 32 per month. As of October 2015, the number of beneficiaries of the allowance was relatively low, but is likely to increase in 2016 as beneficiaries renew their annual application. This measure complements other reforms in the tax and benefit system which create work incentives for low-wage earners and long-term unemployed, such as the temporary reduction of the tax wedge, and the granting of in-work benefits for long-term unemployed taking up low-wage employment.

The Central Labour Office has been reorganised, but the potential for individualised support to the long term unemployed and vulnerable groups has not been realised yet. A single point of contact for a range of benefits, employment and social services has been established. This represents a significant step towards improving the coherence of support**.** However, since 2014 individual action plans for the disadvantaged unemployed became optional (34 830 action plans in 2014) and only a very

small share of them received an individualised approach. The initial interview at registration is not followed up by further assessments when the unemployment spell becomes long and does not lead to a clear allocation of support. There are no specific measures for different categories of clients, according to their profile. Low staffing resources available for supporting the long-term unemployed restrict the scope for individual assistance. The use of partnerships with other public and private sector actors for providing comprehensive, individualised support to the long-term unemployed is still limited. However, a pilot project targeting 7 000 participants began in late 2015.

Expenditure on active labour market policy is low compared to the rest of the EU (0.17 % of GDP in 2013) and is not comprehensively evaluated. Implementation of active labour market policies lacks sufficient transparency and systematic impact assessment and evaluation, both of which would help policymakers and other stakeholders improve the efficiency and effectiveness of measures ([32]). The effectiveness of 'activation work' programmes ([33]), which still cover a high number of long-term unemployed, particularly the very long-term unemployed, has not yet been proven. A significant impact on activation rates and employment chances is not yet visible, and employment effects of these activation measures are not assessed. There has been recent progress on training, as access to training has improved through the RE-PAS programme offering jobseekers individual choice of training and requalification. Access to second-chance education has not improved, and low adult participation in life-long learning (3 % vs. 10.7 % EU average in 2014) hinders improving the skills base of the population and limits labour market prospects of the low-skilled.

Further steps were taken under the framework of the Youth Guarantee ([34]) to improve school-to-work transitions. Key measures taken concern in particular vocational education and training, subsidised first jobs, and job counselling delivered mostly via e-service. The offers focus mainly on jobs and less on training, and reached a total of 132 500 young people by the end of 2015. The revision of the Law on employment services extended the type of the workplaces that can host graduate practice to workplaces run by self-employed persons. However, successful delivery of those reforms will depend not least on the capacity of the public employment service to reach the youth furthest from the labour market, provide them with quality offers and develop local partnerships with schools and employers.

Progress in increasing Roma employment is slow. Given the scale of the integration challenge, innovative measures do not appear sufficiently exploited ([35]). The allocation of European Structural and Investment Funds earmarked for Roma inclusion for the period 2014-2020 has been increased, with the focus on, among others, supported employment, improving outreach services, increasing employment in social enterprises and promoting access to healthcare.

Measures addressing regional disparities and encouraging internal mobility have been strengthened. In 2015, Slovakia adopted a law on supporting high unemployment regions, which builds on existing policies for investment support, social housing and infrastructure development policies. In order to encourage internal labour mobility, Slovakia relaxed the eligibility conditions for a 'moving allowance' for unemployed persons finding jobs at least 70 km from their place of residence. These changes aim to increase the low uptake of the allowance (38 beneficiaries in 2014).

([32]) The INEKO survey among 18 economic analysts, 2015.

([33]) These are different schemes for the long term unemployed and recipients of the material need allowance (Slovak equivalent of a minimum income scheme) and consist of temporary employment projects (such as public space maintenance etc.) for municipalities or regions. There were 26 200 participants in 2014.

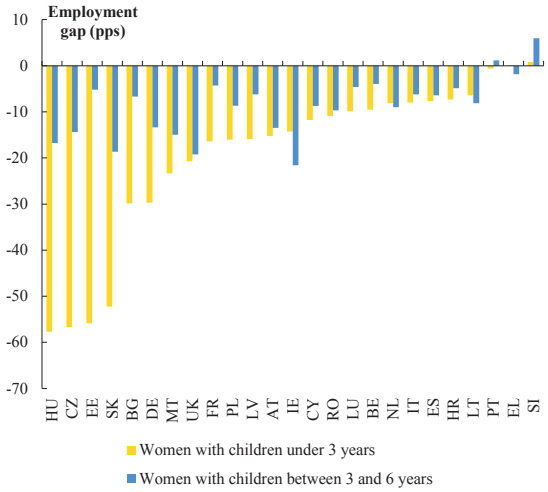
([34]) The Youth Guarantee is an approach to tackling youth unemployment which ensures that all young people – whether registered with employment services or not – get a good-quality, concrete offer within 4 months of them leaving formal education or becoming unemployed.

([35]) Such as policies fighting discrimination, usage of social considerations in public procurement, wider implementation of temporary equalising measures, enhancing social economy, supporting self-employment among Roma, etc.

Female employment

The employment rate for women (20-64) remains well below the employment rate for men (58.6 vs. 73.2 % in 2014). The gender employment gap is especially large for young women and reflects significant work disincentives for women with young children. The employment gap between women with a child under three and those without children amounted to 52.3 pps. in 2013, one of the highest in the EU (Graph 2.3.7). The low employment rate of women in childbearing age reflects a long parental leave (up to three years), a lack of childcare facilities, especially for children under the age of three, and high childcare costs for women who resume work. Overall, enrolment in public childcare facilities is low, in particular for children under three (4 % vs. 27 % in the EU; 2014 data). The gender pay gap remains above the EU average (19.8 % vs. 16.4 % in the EU; 2013 data) and is linked to gender inequalities in the labour market and longer career breaks. Low take-up of flexible working arrangements further contributes to these unequal outcomes.

Graph 2.3.7: **Employment impact of motherhood in 2013 (Difference in percentage points between employment rate of women, age 20-49, with young children and without children)**



Source: EU LFS microdata

Access to early childhood education and care is being improved, making remaining in work or returning to it easier for mothers. The number of childcare places for children under three (9 300 places) will be increased by 1 800 new places by 2020 and the capacity for children above three will be expanded by 5 000 places in 2016. Moreover, the recent increase in childcare benefits (from EUR 230 to 280 per month) and the simplification of how to claim them can further help to improve access to childcare. However, the Slovak government estimated that around 20 000 places for children above three will be still lacking in 2016 ([36]).

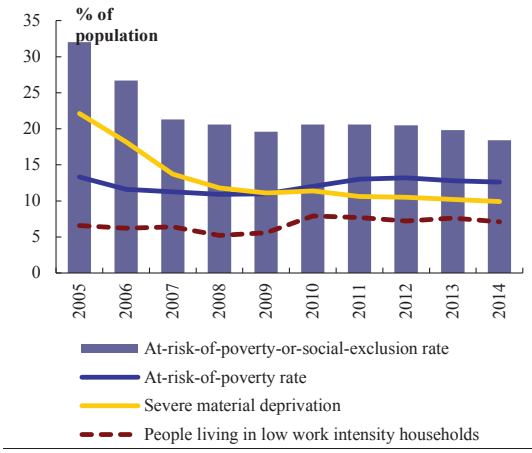
Social inclusion and poverty reduction

While the risk of poverty or social exclusion has fallen, a number of social challenges remain. In 2014 there were 151 000 fewer people at risk than in 2008 (Graph 2.3.8). However, the rapid increase in the poverty gap ([37]) reflects a higher intensity of poverty in Slovakia than in other EU Member States and may indicate shortcomings in the adequacy of the minimum income scheme**.** The non-indexed benefit in material need is set at a low level and has not been substantially changed for several years. Moreover, the income support scheme only partially factors in the number of children in a household.

([36]) Analysis of the situation at kindergartens – insufficient capacities (03/12/2014): http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=24095.

([37]) From 22.8 % in 2010 to 29 % in 2014 vs. 24.7 % in the EU. The poverty gap is calculated as a difference between the median equivalised income of persons below the at-risk-of poverty threshold and the threshold itself, expressed as a percentage of the at-risk-of poverty threshold.

Graph 2.3.8: **At-risk-of-poverty rate and its components**



Source: European Commission

Children face a far greater risk of poverty or social exclusion than the overall population. Poverty risk varies according to economic activity, household composition and age. The unemployed, single parents, children and marginalised communities such as the Roma face the highest risk. In 2013 the at-risk-of-poverty rate for children living in jobless households stood at 94.4 %, the highest level in the EU. Senior citizens, on the other hand, show a stable and relatively low risk of 6.2 % for those aged 65 years and over. The poverty rate among the unemployed is high (48.7 % vs. 47.4 % in the EU28) and rose by nearly 5 pps. in 2014. The short-term unemployed covered by unemployment benefits is estimated to be 18 %, 19 pps. lower than the EU average. Eligibility conditions are strict ([38]) and replacement rates after 6 months of unemployment are low compared to the EU average ([39]). Finally, indebtedness remains a serious problem among low-income households who take loans from the non-bank financial institutions under unfair lending conditions.

([38]) To be entitled to unemployment benefits an unemployed person needs to register in the local labour office and has to pay unemployment insurance contributions for at least 2 years during the last 3 years (4 years in case of temporary employment). This constitutes the longest contribution period required in the EU.

([39]) For instance, based on the OECD tax-benefit model, replacement rates after six months for a one earner couple (resp. single) with two children were at 8 % (resp. 35 %) around 50 pps. below EU average (resp. 25 pps. below EU average) in 2013.

In 2015 the Slovak Government adopted the second social package, consisting of 15 measures intended to benefit low-income households. Among other things, it includes a reduction in the VAT rate on selected basic foodstuffs from 20 % to 10 % and subsidised school trips for pupils. However, reduced VAT rates are often not an effective instrument for ensuring redistribution, as they are not targeted. The minimum pension (EUR 269.50) was introduced for people with a record of at least 30 years of pension insurance with a required minimum income. The protective limits for quarterly out-of-pocket payments for prescribed drugs have been reinforced and the coverage broadened for some patients, in particularly those with low income or children up to six years. In order to better protect consumers from abusive or unfair lending practices, supervision of non-bank financial institutions was further reinforced in 2015, and these are now licensed and regulated by the National Bank of Slovakia ([40]).

Education

Educational outcomes have deteriorated and inequalities linked with socio-economic background are high. The OECD 2012 Programme for International Student Assessment (PISA) study pointed to a high and rising share of low achievers in all areas surveyed, as well as a deterioration for all types of schools. Slovakia recorded the strongest impact of socioeconomic background on performance in mathematics ([41]). Evaluations and assessments of teachers' work do not sufficiently promote improvements. Teacher training on how to assess pupils' learning outcomes and adjust learning activities accordingly is underdeveloped, while quality and effectiveness control in education appears insufficient ([42]).

Inadequate teacher education and lack of appeal of the profession hinders improvements

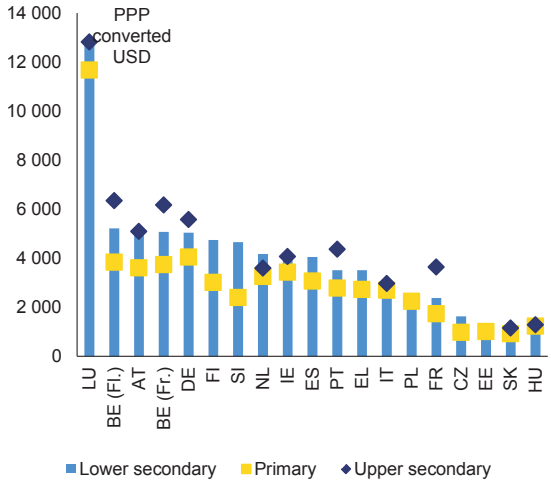
([40]) In 2012, the Commission launched infringement proceedings against Slovakia 'Unfair terms and practices in relation to consumer credit contracts' concerning the effective protection of consumers against the enforcement of claims which violate consumer law.

([41]) OECD, PISA 2012 results: What Students Know and Can do. Student Performance in Mathematics, Reading and Science (Volume I).

([42]) OECD Reviews of Evaluation and Assessment in Education, Slovak Republic 2014.

in educational outcomes. Despite recent salary increases and a further increase by 4 % in 2016 — which is not specific to teachers but concerns employees of the public sector — low pay remains one of the factors making teaching an unattractive career path for talented young people (Graph 2.3.9) ([43]). Initial teacher education does not dedicate a significant share of time to practical training. The proportion of teachers who took part in professional development activities was the lowest among the EU countries surveyed (73 % compared to an average of 84.7 %).

Graph 2.3.9: **Salary cost of teachers per student, by level of education (2013)**



Source: OECD (Education at a Glance 2015)

Capacities for early childhood education and care (ECEC) are being bolstered. Participation in ECEC has tended to be low (77.5 % in 2013, compared with the EU average of 93.1 %) and prevents improvements in educational outcomes; participation by children from marginalised communities, in particular Roma, is significantly lower still. However, ECEC capacities are being expanded by 5 000 new places at the cost of EUR 14.5 million. This could help to improve educational outcomes, in combination with new curricula being piloted in 2015-2016, which received positive feedback from stakeholders.

Early-school leaving remains low, but is on the rise and inequalities in educational outcomes are wide. Starting from the low level of 4.7 % in 2010, the rate of early school leaving has risen to 6.7 % in 2014, slightly above the Europe 2020 national target of 6 %, while regional variations are high. In particular, areas with high proportions of Roma in the population show high rates of early school leaving, and it is estimated that 83 % of Roma leave school early ([44]). As the country has the lowest employment rate in the EU for those not having attained upper secondary education (31.6 % compared to the EU average of 51.8 % in 2014), the cost of early school leaving is particularly pronounced in Slovakia.

Young Roma often attend special schools with limited curricula and experience discrimination in education ([45]). The Roma inclusion index ([46]) points to placement of more than half of Roma children in special and segregated schools or classes. Regrettably, the situation has deteriorated over the past decade, reducing chances for Roma to complete upper secondary and higher education and so hampering their opportunities on the labour market.

Although the phenomenon of special schooling of Roma pupils is being tackled, teacher training for multicultural settings remains insufficient. Anti-segregation legislation was adopted mid-2015 to eliminate the placement of socially disadvantaged students in special classes or schools, while further EU-funded projects to improve Roma children inclusion are planned. However, teacher participation in professional development related to teaching students with special needs or teaching in multicultural settings

([43]) The ratio of lower secondary teachers' salaries to the earnings of full-time workers with similar educational attainment are the second lowest among OECD. See: OECD Education at a Glance 2015.

([44]) European Union Agency for Fundamental Rights (FRA), Education – The situation of Roma in 11 Member States, 2014.

([45]) On 29 April 2015, the Commission launched infringement proceedings against the Slovak Republic concerning discrimination of Roma children in education in breach of Directive 2000/43/EC on Racial Equality. Following the first reply of the Slovak Republic of 17 August 2015 to the letter of formal notice, the Commission is currently waiting for additional information from the Slovak Republic after which the appropriate follow-up can be decided.

([46]) Decade of Roma Inclusion Secretariat Foundation, Roma inclusion index 2015.

is very low ([47]). This is likely to hinder the effective implementation of this new legislation.

Tertiary education attainment has stagnated at a low level (26.9 %, compared to the EU average of 37.9 %), **partly due to the narrow range of degree courses on offer.** In particular, only a very small proportion of students are enrolled in professionally-oriented undergraduate programmes with a close link to the labour market ([48]). This makes it harder to improve educational attainment, and increase the labour market relevance of higher education. Given the large share of manufacturing and industrial production in Slovakia's GDP, the low share of graduates in mathematics, science and technology is a concern. Many students prefer to study in the Czech Republic rather than in Slovakia. Graduate tracking and quality-based funding are lacking. However, a recent re-accreditation exercise has led to the closure of some low-quality programmes, while some higher education institutions were given one year to make improvements.

In 2015 Slovakia introduced a dual vocational education training system, but interest among potential participants remains limited. Against the background of employers reporting increasing skill shortages, a better implementation of apprenticeship system could facilitate meeting labour market needs ([49]). For the academic year 2016/2017, 298 employers were approved with 2 763 apprenticeships available. The bottleneck, however, is an apparent low level of interest from young people. This is to be addressed through a campaign on the benefits of the system, planned for 2016. As little data exists for assessing labour market relevance of vocational education and training, greater monitoring could improve policy development.

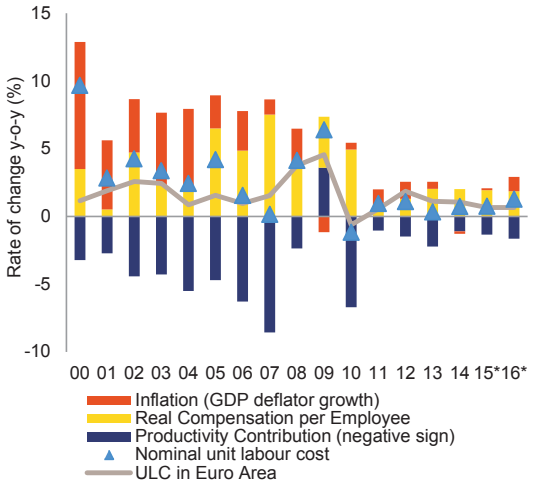
([47]) OECD, TALIS 2013 Results: An International Perspective on Teaching and Learning.
([48]) European Commission (2015), The European Higher Education Area in 2015: Bologna Process Implementation Report.
([49]) Manpower Group, 2015 Talent Shortage Survey.

2.4. COMPETITIVENESS

External competitiveness

Nominal unit labour costs have been well contained in recent years, with wage increases largely offset by labour productivity gains. Developments in unit labour costs relative to Slovakia's main competitors are an important indicator of changes in the country's price competitiveness, particularly in the medium term. The increase in Slovak unit labour costs has not outpaced the euro-area average (Graph 2.4.1), signalling that the observed real wage growth in Slovakia has not harmed its cost competitiveness.

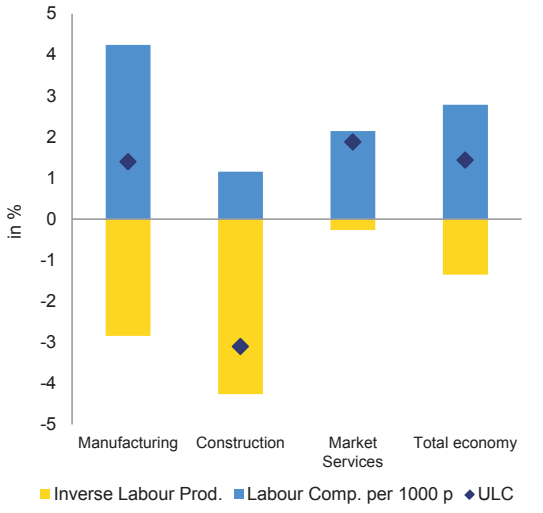
Graph 2.4.1: **Breakdown of nominal unit labour costs**



Source: European Commission

However, a sectoral breakdown shows that nominal unit labour costs in the manufacturing sector increased more than in the Czech Republic in the period 2010-2013. In the automotive sector, the major export industry in Slovakia, nominal unit labour costs increased annually by 4.2 % on average between 2010 and 2014, more than in the Czech Republic (3.4 %). This suggests a potential deterioration in price competitiveness over this period in the manufacturing sector. In the same period, unit labour costs in the market services sector increased annually by 1.9 % on average, while they fell by 3.1 % in the construction sector (Graph 2.4.2).

Graph 2.4.2: **Growth of nominal unit labour costs by sector (annual average 2010-2014)**



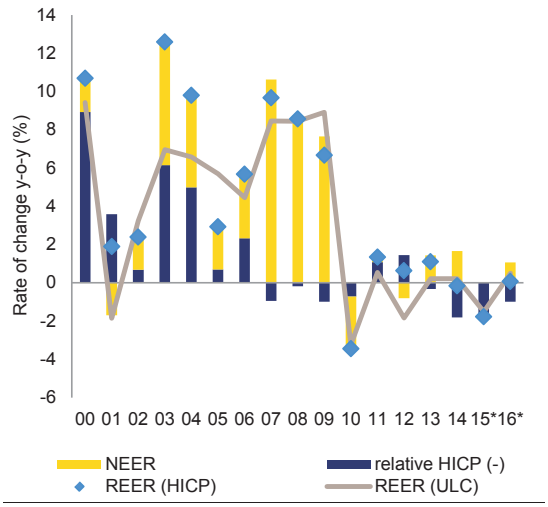
Source: European Commission

The real effective exchange rate has depreciated overall since 2010, helping the price competitiveness of Slovak exports ([50]). The real effective exchange rate strengthened considerably in the pre-crisis period, reflecting the economic convergence process (Graph 2.4.3). This situation reversed in 2010 and, since then, the real effective exchange rate has tended to depreciate. This is partly due to the deflationary pressures prevailing in the aftermath of the crisis.

Reflecting generally positive wage and exchange rate developments, Slovakia's export market share has increased since 2011, albeit with a small decline in 2014. This increase reverses the trend seen in the immediate post-crisis period, when Slovakia experienced significant losses in export market shares. The rising export market share recorded in recent years (except in 2014) suggests that despite the growth of unit labour costs in manufacturing, there has been an overall improvement in the export performance of the Slovak economy (Graph 2.4.4).

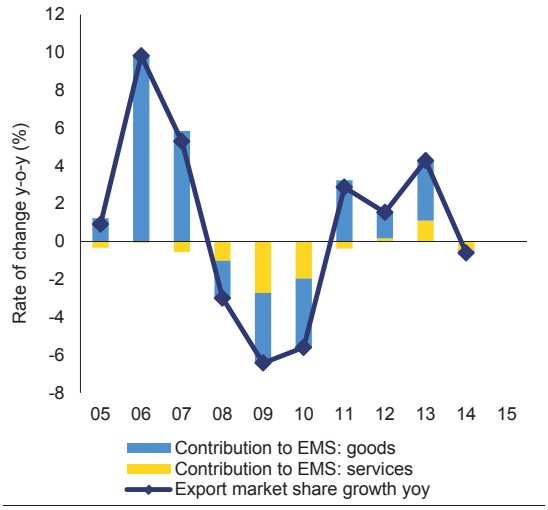
([50]) The effective exchange rate is an index that shows developments in a currency's strength relative to the currencies of trading partners on a trade-weighted basis. The real effective exchange rate is adjusted for relative price developments vis-à-vis the trading partners.

Graph 2.4.3: **Breakdown of real effective exchange rate**



Source: European Commission

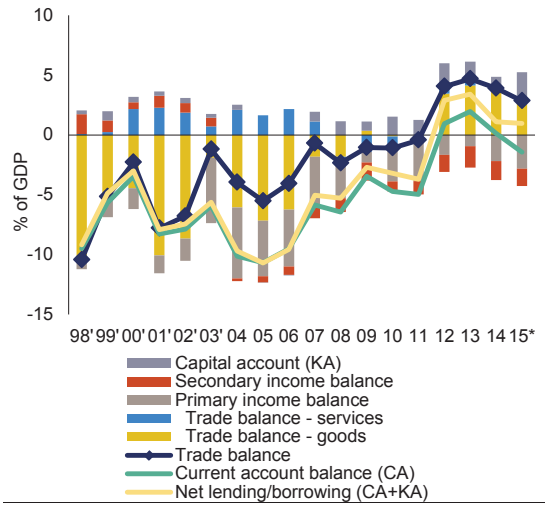
Graph 2.4.4: **Breakdown of export market share (EMS)**



Source: European Commission

Slovakia has recorded a trade surplus and a primary income deficit in recent years. Recent gains in Slovakia's export market share are reflected in an improvement in its trade balance, which has been in surplus since 2012. However, the primary income balance has remained negative (Graph 2.4.5) due to foreign-owned firms repatriating the profits of their Slovak-based units. The net international investment position has continued to deteriorate in recent years, reflecting the ongoing inflow of foreign direct investment, which is largely related to the automotive industry.

Graph 2.4.5: **Breakdown of external position**



Source: European Commission

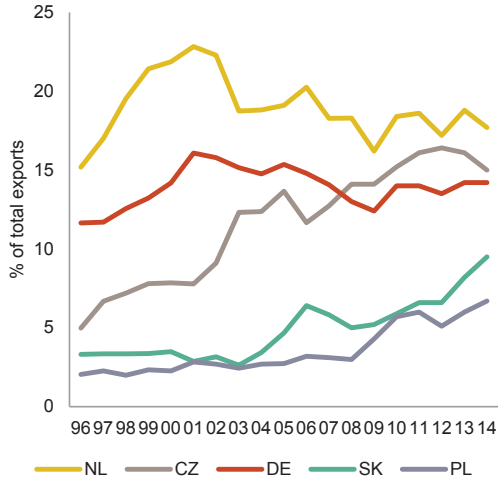
A further positive development is the rising proportion of high-tech products in Slovakia's exports. While this proportion is still relatively low compared with other countries in Central and Eastern Europe, it has been increasing quite rapidly in recent years (Graph 2.4.6). The composition of exports and the position of an export-oriented economy in the global value chain are essential factors for external competitiveness in the long term. Moving up the global value chain makes exports less price sensitive and reduces the economy's vulnerability to exchange rate fluctuations. At the same time, it increases medium-term potential growth and the prospects of further economic convergence with other EU Member States.

The Slovak economy is highly integrated into global value chains. The foreign value-added content of Slovak exports is the second highest in the EU after Luxembourg ([51]). This reflects the large share of foreign-owned exporting firms in the manufacturing sector. Slovakia's forward participation in global value chains is well below the EU average, pointing to the fact that the products of Slovak-based firms are used less

([51]) See OECD (2013), Interconnected Economies: Benefiting from Global Value Chains (http://www.oecd-ilibrary.org/science-and-technology/interconnected-economies_9789264189560-en). See OECD (2014) (http://www.oecd-ilibrary.org/economics/oecd-economic-surveys-slovak-republic-2014_eco_surveys-svk-2014-en).

frequently as intermediate inputs abroad. This is probably connected to the heavy reliance of the economy on final production of cars and a lack of diversification into other segments of manufacturing.

Graph 2.4.6: **Share of high-tech products exports**



Source: European Commission

Services sector competition and regulation

Barriers to competition in services and product markets could dampen competitiveness through their impact on pricing behaviour. The main non-cost factors that could be affecting competitiveness in Slovakia are the barriers to entry and the specific market structure in certain professional services and network industries (discussed in this sub-section), as well as the quality of the business environment (discussed in the following sub-section).

Although competition and regulation in services industries may not be of overall concern, some sectors face a relatively high regulatory burden. The level of regulatory restrictiveness in professional services is on a par with the EU average, as is the rate of company creation and destruction ([52]). However, barriers to entry and constraints on business practices are above the EU average for two out of four professional services sectors (architects and engineers) ([53]). Slovakia submitted a final national action plan to the European Commission in January 2016, outlining concrete actions to improve access to the regulated professions. Preliminary results indicate limited reforms on existing regulated professions.

There is some evidence of excessive regulation in network industries. OECD sectoral indicators on product market regulation in 2013 show an average or comparatively high regulatory burden in electricity, gas, telecom, post, rail and road transport. Empirical evidence shows a strong link between the level of regulation and price mark-ups ([54]). Electricity prices for industrial users are the highest in the region even though Slovakia has one of the lowest wholesale electricity prices in the EU. As a key input into most production processes, high prices may harm the competitiveness of Slovak (mainly industrial) companies vis-à-vis their competitors.

Lowering services sector mark-ups is likely to boost economic output. Estimated final mark-ups were around the EU average for most services sectors, but were relatively high for professional services and in the retail sector ([55]). Even if the estimated mark-ups are not excessively high in general, lowering them across the board would increase output and demand for all factors of production**.** This could be achieved by reducing regulatory and administrative barriers through stronger antitrust procedures and by strengthening business models in natural monopolies. If mark-ups in the services sector were substantially

([52]) The European Commission's overall restrictiveness indicator shows a score of 2.2 (SK) vs. 2.3 (EU); see http://ec.europa.eu/DocsRoom/documents/13328/attachments/1/translations/en/renditions/native; The aggregate churn rate, defined as the sum of birth and death rates of firms expressed as a percentage of the total number of active firms in the professional services, stood at 22.1 % in 2012 (latest data available), against an EU average of 20.0 %.

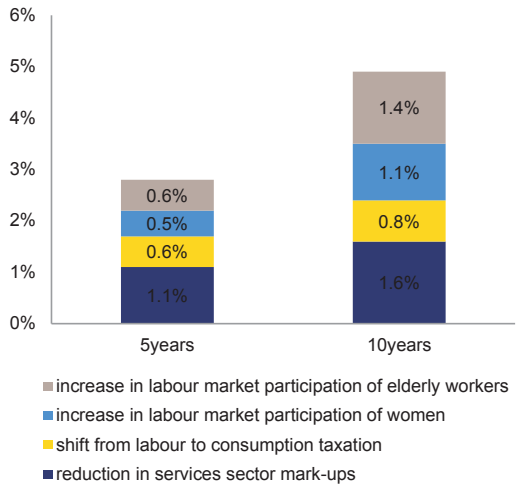
([53]) Restrictiveness scores for individual professions are as follows: accountants 0.46 SK vs. 1.51 EU; architects 2.56 SK vs. 2.30 EU; engineers 2.65 SK vs. 2.06 EU and legal professions 3.28 SK vs. 3.37 EU. Values span from 0 to 6 with a low value corresponding to a light regulatory burden.

([54]) Mark-ups refer to the difference between the cost and the selling price of a good or service. See Thum-Thysen, A. and E. Canton (2015): *Estimation of service sector mark-ups determined by structural reform indicators,* (http://ec.europa.eu/economy_finance/publications/economic_paper/2015/ecp547_en.htm).

([55]) *Ibid.* Estimated mark-ups for professional services were 21 % (SK) vs. 16.6 % (EU av.) and in the retail sector were 8 % (SK) vs. 6.6 % (EU av.).

reduced closing the gap against the average of the three best performing Member States by half, the country´s GDP would be boosted by up to 1.1 % within five years, model-based analysis by the Commission suggests (Graph 2.4.7).

Graph 2.4.7: **The contribution of selected reforms to GDP growth over 5 and 10 years**



(1) It is assumed that all Member States undertake reforms which close their structural gaps against the average of 3 best EU performers by half.
Source: Varga, J. and J. in´t Veld (2014): "The potential growth impact of structural reforms in the EU. A benchmarking exercise", European Economy, Economic Paper 541, European Commission

Business environment

Administrative and regulatory barriers harm the business environment, reducing external competitiveness and domestic economic activity. The weaknesses in Slovakia's business environment are regularly reflected in cross-country comparisons (Graph 2.4.8) ([56]). Typical reasons cited are frequent changes to legislation, the complexity of administrative procedures and burdensome requirements imposed by government regulations.

Despite improvements, the process of setting up and running a business in Slovakia remains relatively onerous. Slovakia's licensing system performs significantly better than the EU average in terms of speed and cost of issuing operational licences ([57]) and in 2015 the cost of start-up procedures was below the EU average, although it still exceeded the target in the Small Business Act. Electronic registration procedures took 10 days on average to complete, almost three times longer than the EU average of 3.5 days ([58]). Dealing with construction permits requires 10 different procedures and 286 days on average. The Construction Act was amended in October 2015 to reduce the length of procedures, but the change only applies to large-scale investment. Enforcing contracts is expensive since both the time (705 days) and costs (30 % of a claim) needed for enforcing a contract are very high; insolvency resolution is also costly (18 % of the debtor's estate) and the time needed to resolve a case is the highest in the EU (four years) ([59]).

Recent business surveys echo these findings while also pointing to other obstacles. Businesses reportedly draw attention to a number of long-standing shortcomings, including heavy administrative procedures and weak enforceability of contracts. They also point to frequent changes in legislation, as well as its general opacity, skill mismatches caused by a disconnect between the education system and the needs of the labour market and corruption ([60]).

While access to finance does not appear to be a general concern, equity and venture capital financing is used only marginally. There has been a perceived improvement in the availability

([56]) Although its ranking has improved compared to the previous year, Slovakia is among the worst performing EU Member States in the *World Economic Forum's Global Competitiveness Report 2015-16* (http://reports.weforum.org/global-competitiveness-report-2015-2016/), but it is 15th in the EU and 29th in global comparison in the *World Bank's 2016 Doing Business report*.

([57]) In 2014 this took 15 days in Slovakia compared to an average of 46 days in the EU, and cost EUR 221 against EUR 686 in the EU. Further research has confirmed Slovakia's sound performance in delivering business licenses (study on compliance by Member States on the time needed to obtain licenses and permits to take up and perform enterprise activities available at http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8293).

([58]) 2015 Small Business Act Fact Sheet for Slovakia

([59]) World Bank (2015): Doing Business 2016: Measuring regulatory quality and efficiency.

([60]) Information based on surveys conducted by the newspaper Hospodarske noviny (January 2015), the Business Alliance of Slovakia (Index of the Business environment) and the American Chamber of Commerce (Foreign Investor Survey).

of bank loans since 2014 ([61]) but access to public guarantees has deteriorated. In 2015, only 3 % of Slovak entrepreneurs saw equity capital as a relevant source of funding for their companies. The Slovak venture capital market is relatively small in terms of both nominal figures and its share on GDP ([62]). Slovakia is planning to make increased use of financial instruments amounting to EUR 550 million to deliver cohesion policy objectives through the Slovak Investment Holding.

Graph 2.4.8: **Ease of doing business in Slovakia**

(1) For each of the indicators of the World Bank Doing Business, Slovakia is ranked against other EU Member States (0 = best performer; 1 = worst performer).
Source: World Bank Doing business 2016

Slovakia is taking measures to improve the business environment and foster entrepreneurship. To improve support for entrepreneurship and start-ups, the government adopted a new strategy in summer 2015. The strategy includes measures to create a simplified joint-stock company, measures allowing companies to become operational much faster, various temporary exemptions from obligations to pay licences, and the opening of a National Business Centre in early 2016 that is to become a one-stop-shop for support to entrepreneurs. It is planned to establish regional offices later. However, the government has since postponed the adoption of the Small Business Act under its SME development strategy. The Centre for Better Regulation was set up in October 2015 to monitor the business environment, including the administrative burden ([63]).

([61]) Based on the Survey on the Access to Finance of Enterprises, only 8 % of Slovak entrepreneurs felt that access to finance was an issue for their companies in 2015, compared to an EU average of 10 %.

([62]) Venture capital is a subset of private equity (i.e. equity capital provided to enterprises not quoted on a stock market) and refers to equity investments made to support the pre-launch, launch and early stage development phases of a business.

([63]) By assessing the costs and benefits of policy options, the SME Test analyses the possible effects of EU legislative proposals on SMEs: http://ec.europa.eu/growth/smes/business-friendly-environment/small-business-act/sme-test/index_en.htm.

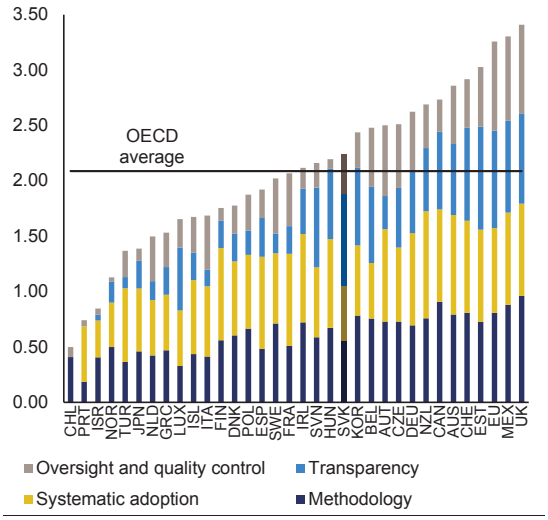
2.5. PUBLIC ADMINISTRATION

Weaknesses in Slovakia's public administration harm the business environment and the efficient allocation of resources. Despite the reform effort under way at the local level, the public administration remains hampered by inefficiencies ([64]).

The fragmented nature and rigid departmentalism of the public administration complicates strategic planning and coordination. The *2015 OECD Public Governance Review* points out that the Slovak public administration tends to be organised around strong ministerial silos. Ministries lead on their policy areas, supported by a wide range of advisory boards. The current set-up limits collaboration between ministries on complex reforms, preventing synergies across policy areas. In addition, interaction between the Government Office and three core ministries — the Ministry of Finance, the Ministry of Foreign and European Affairs and the Ministry of the Interior — appears to be limited. Coordination between central and local government is complicated by the very high number of municipalities (3 000), while their small size may lead to inefficiencies through the duplication of structures.

Policy objectives are not established, monitored and evaluated systematically. Quantifiable policy targets are rarely established at the stage when a policy is being adopted by the government. Use of performance indicators varies across ministries, but could help in identifying successful policies, by pointing to necessary changes to the allocation of resources or policy design. Where measurements are used, they tend to focus on inputs rather than outputs. Evaluation and in-depth *ex post* assessment of policies seem to take place sporadically.

Graph 2.5.1: **Regulatory Impact Assessment for developing primary laws (composite indicator)**



Source: 2014 Regulatory Indicators Survey results

The use of evidence-based analysis in policy-making is limited, though recently a number of initiatives have been taken to improve practices. According to the *2014 OECD Public Governance Review* ([65]), cost-benefit analyses seldom underpin policy decisions in Slovakia. The 'value-for-money' initiative of the Ministry of Finance is welcome in this respect as it encompasses important elements required for policy evaluation, such as establishing objectives and metrics to support specific decisions. In a similar vein, recent changes have been made to improve Slovakia's regulatory impact assessment system ([66]), which currently scores around the OECD average (Graph 2.5.1), and to strengthen analytical capacity in ministries. These mark an important step forward, although coordination of the impact assessment system remains weak as the new oversight committee lacks the power to block legislation where impact assessments are negative.

The introduction of state-of-the-art human resource management in the civil service, a long-standing objective, is now addressed in a

([64]) The World Bank Government Effectiveness Indicator captures the perceptions of the quality of public services, the capacity of the civil service and its independence from political pressures, and the quality of policy formulation. In 2014, the governance score of Slovakia for government effectiveness was 0.87 compared to the EU average of 1.13.

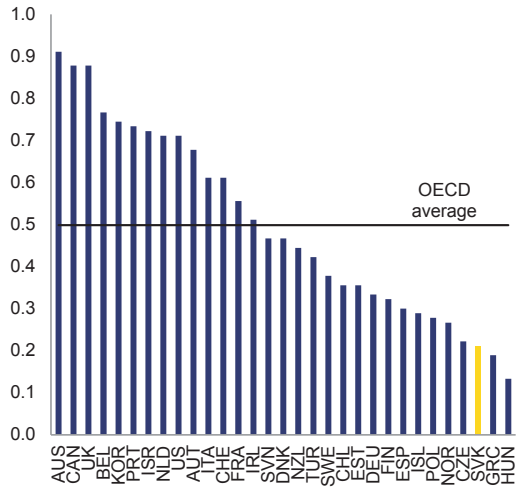
([65]) OECD Economic Surveys Slovak Republic, November 2014.

([66]) The government adopted the amendments to the methodology on regulatory impact assessments in January 2015 and a standing committee was created by the Government Office to oversee the entire impact assessment processes.

government strategy. Due to decentralisation of recruitment procedures and standards, there is a risk that equal opportunities criteria are not consistently applied in the recruitment of civil servants. Furthermore, the strategic management and coordination of further education and training of civil servants is limited (Chart 2.5.2). The civil service's salary structure is not transparent or merit-based. High turnover of public servants (including at the junior level) is in part related to electoral cycles, and reduces incentives to build up skills and qualifications. In October 2015, the government adopted a comprehensive Strategy on Human Resource Management in the Civil Service (2015-2020) which is a positive first step. However, the adoption of a new Act on Civil Service has been further postponed to January 2017.

The programme to reform the local public administration ('ESO reform') is ongoing. In 2013, the government started implementing the 'effective, reliable and open public administration programme'. The programme aims to make the public administration more efficient and better equipped to provide high quality, transparent and cost-effective services to the public. So far it has resulted in numerous regional offices, budgetary organisations and specialised local bodies being merged into more coherent structures. The reform is expected to continue until 2020, with a focus on merging more of the central administration's offices, opening one-stop shops for the public and businesses, and streamlining the central administration's processes and structures.

Graph 2.5.2: **Utilisation of strategic HRM practices in central government (2010)**



(1) 0 = low utilisation, 1 = high utilisation
Source: OECD (2011), Government at a Glance 2011

Slovakia is slowly advancing in the digitisation of the public administration, but the use of e-government services is still low, in spite of the potentially strong demand for digital services. The uptake of internet-based activities by the population is high ([67]) and 90 % of SMEs interact online with public authorities, which is above the EU average. However, according to the 2016 DESI (Digital Economy and Society Index), in 2015 only 16 % ([68]) of internet users have dealt online with the public administration, and the use of pre-filled electronic forms is still considerably below the EU average of 49 %. On the supply side, relevant indicators ([69]) suggest there is scope to modernise and digitise public services, including those offered by health systems (Section 2.2). E-government services for regular business

([67]) The number of regular internet users in Slovakia (76 %) grew slightly from the previous year and was just above the EU average in 2014. Almost 59 % of the Slovak population has at least basic digital skills. This equals to the EU average.
([68]) https://ec.europa.eu/digital-agenda/en/desi.
([69]) Slovakia scores 22nd out of 100 in the pre-filled forms indicator (measuring the extent to which data that is already known to the public administration is pre-filled in the forms that are presented to the user) and 46th out of 100 in the Online Service Completion indicator (measuring the extent to which the interaction with the public administration can be performed completely online). In the Digital Public Services dimension Slovakia scores 0.27, its weakest score among the five Digital Economy and Society Index 2015 dimensions, where Slovakia ranks 27th.

operations remain underdeveloped and the Point of Single Contact for service providers has not been developed into a comprehensive e-government portal. In 2015, information technology sector professionals launched the campaign *slovensko.digital* calling for more transparency, simplicity, interconnectedness and more standard prices in state IT tenders. This campaign hopes to improve the use of EUR 900 million EUR from the EU funds in the new 2014-2020 programming period, given the relatively modest results achieved during the previous one when the same amount was spent.

The government has taken several measures to tackle corruption, but their impact so far has been limited. A 2015 Eurobarometer survey suggested that more than half of business representatives found patronage and nepotism to be an issue for their company and 12 % of them reported having been asked or expected to pay a bribe for permits or services. Building permits are the most frequently mentioned type of permit affected ([70]).The 'Strategic plan for fighting corruption', approved by the government in 2011, includes preventive measures such as publishing state contracts. It also encourages greater transparency in court decisions and the establishment of clear provisions in public procurement. An updated plan, based on evaluations by the OECD Working Group for Bribery in International Business Transactions, was approved in 2014. An Act to protect whistleblowers entered into force in early 2015. However, Slovakia has a weak track record on launching criminal proceedings on corruption: the number of indictments for corruption-related offences was consistently low between 2011 and 2014 ([71]). While indictments of public officials on bribery charges resulted in convictions in between 80-90 % of cases, the proportion of suspended sentences remains high ([72]). High-profile cases that reach the courts remain rare exceptions.

([70]) FLASH Eurobarometer 428 Business attitudes towards corruption.

([71]) Criminal statistics submitted by the Slovak authorities: ÚŠP GP SR Pezinok, Kriminalita vo veciach korupcie, Ukončené trestné stíhanie osôb za vybrané prečiny a zločiny na rok 2012 – 1.12.2015.

([72]) Only 3 and 5 prison sentences in 2012 and 2013 respectively. Court statistics from EU Member States, including Slovakia, European Commission, Collection of official data on corruption offences http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=21215&no=2.

Judicial system

The justice system appears to be experiencing an increasing number of civil and commercial case backlogs. Enhancing the quality, independence and efficiency of the judicial system is a prerequisite for an investment and business friendly environment. Concerns about the independence of the judicial system, which is perceived as low ([73]), are raised by the on-going security screening of the suitability of judges ([74]). The length of court proceedings for litigious civil and commercial cases has been rising and clearance rates for litigious civil and commercial cases remain well below 100 % ([75]). These developments indicate increasing backlogs, which could potentially overload the judicial system ([76]). The trend has been reversed for administrative cases, where significant progress on reducing the length of proceedings has been made and the clearance rate has increased ([77]).

The government acknowledges the need to improve the effectiveness of the justice system. Slovakia adopted a national concept for the stabilisation and modernisation of justice in July 2015 ([78]). The Slovak Civil Procedural Law has been re-codified and will enter into force in July 2016. The existing Act on Arbitration has been amended and a number of information and communication technology projects have been adopted or announced which, if successfully implemented, should improve the efficiency of the justice system. As acknowledged in the national

([73]) World Economic Forum's Global Competitiveness Report 2015-16, Slovak country fiche.

([74]) See e.g. Council of Europe, Challenges for judicial independence and impartiality in the Member States of the Council of Europe, SG/Inf (2016)3 of 15 January 2016, p. 67. The constitutionality of the relevant law is currently subject to legal proceedings before the Constitutional Court.

([75]) This refers to the ratio of the resolved cases over incoming cases.

([76]) See Figures 5, 8 & 11 of the 2016 EU Justice Scoreboard (to be published). Representatives of the judiciary reported that in 2015, tens of thousands of cases had been filed related to unfair commercial practices.

([77]) See Figures 6, 9 & 12 of the 2016 EU Justice Scoreboard (to be published).

([78]) National Concept of Stabilisation and Modernisation of Justice of 13 July 2015.

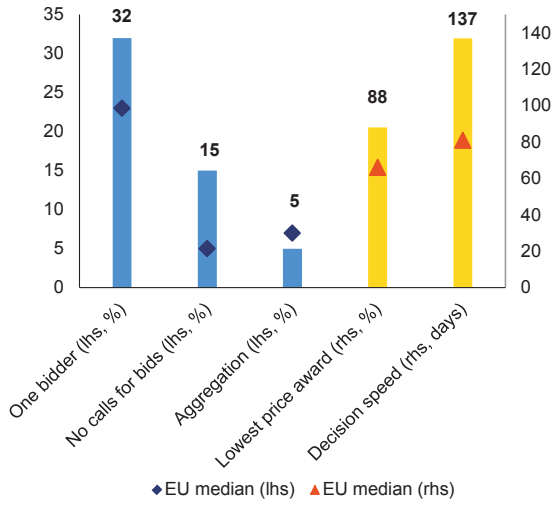
plan, further sustained reforms are required in the coming years. For this, Slovakia will mainly rely on funding from the EU funds, which play a vital role in this respect

Public procurement

The public procurement system still suffers from a number of weaknesses. Procurement lacks clear ownership and strategic inter-institutional coordination. In addition, procurement practises appear to be weakly professionalised. This is mirrored in lengthy procurement procedures: contracting authorities took on average 137 days to award a contract after the submission of tenders, compared to an EU average of 81 days. Moreover, the lowest price was the main award criterion in 88 % of the contracts awarded in 2015. Solutions to address insufficient strategic coordination are hampered by fragmented policy design. Procurement lacks clear ownership and inter-institutional coordination. When assessing performance in key aspects of public procurement according to indicators from the Single Market Scoreboard ([79]), in 2014 Slovakia was found to have a low ranking in 5 of 6 indicators ([80]). While these indicators offer a simplified picture, they nevertheless capture critical aspects of national procurement frameworks.

The high share of contracts awarded by negotiated procedure without publishing a call for tender limits competition. Surveys suggest that competition in tenders is limited by conflicts of interest, tailor-made tender specifications and a high level of perceived corruption ([81]). In 2015, 15 % of public contracts were awarded by negotiated procedure without a call for tender. This places Slovakia among the EU countries with the highest use of this exceptional procedure. The number of contracts awarded in tenders with only one bidder, on the other hand, decreased to 32 % in 2015 of all contracts from 41 % in 2013, although it remained well above the EU average of 23 %. Aggregation of public procurement at the central, local or sector-specific level can improve coordination and generate savings. To date, however, only 5 % of procedures in Slovakia have been aggregated, *i.e.* conducted jointly for more than one buyer. The new public procurement law passed in November 2015 will reinforce the holistic approach to public procurement increasing the focus on procurement preparation, use of quality criteria and life-cycle costing ([82]).

Graph 2.5.3: **EU Single Market Scoreboard Indicators for public procurement in Slovakia**



Source: EU Single Market Scoreboard 2016 (forthcoming)
See: http://ec.europa.eu/internal_market/scoreboard

From a sector-specific perspective, healthcare and information and communication technologies (ICT) are most affected by public procurement problems. Despite the high number of tailor-made overpriced procurements in healthcare in 2015, only few systemic measures have been adopted to address the shortcomings already identified in the previous Country Report. ICT procurement appears inefficient due to frequent use of non-transparent procedures for contract awards and amendments. This results in locked-in over-priced systems with limited functionality and integration. The Commission Guidelines for public procurement of ICT

([79]) EU Single Market Scoreboard 2014, (http://ec.europa.eu/internal_market/scoreboard/index_en.htm).

([80]) The 6th indicator refers to the quality of tender publications, where Slovakia ranks well below the thresholds.

([81]) FLASH EB 428 Business attitudes towards corruption http://ec.europa.eu/COMMFrontOffice/PublicOpinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2084 — question 7.5-7.6.

([82]) Life-cycle costs consider beyond the initial price also related maintenance and service costs.

systems ([83]) do not seem to be sufficiently implemented.

Slovakia is a leader in publication of contract notices and has improved the transparency of public procurement. In 2014, the publication rate rose sharply to 55 % of total expenditure on works, goods and services, significantly above the EU average of 26 %. This is mainly due to the continued use of the mandatory contract register since 2010.

The transition to fully-fledged e-procurement is being slowed down by delays in moving to e-government services. E-procurement platforms such as the Electronic Contracting System, once fully completed and extended to all types of procedures, are expected to increase efficiency and simplify public procurement procedures.

EU funds management

Slovakia faces long-standing problems in financial management and control. In 2014, payments for 9 out of 11 operational programmes financed from the EU structural and cohesion funds ([84]) were interrupted following audits of financial management and control systems. The most important errors identified by these audits related to public procurement and project selection procedures. Payments for all programmes resumed in December 2015 after financial corrections were applied and improvements in systems to prevent, detect and correct irregularities were made.

Despite the interruption of payments, the implementation of EU structural and cohesion funds increased substantially in 2015. Slovakia was examined by the European Commission's Task Force for Better Implementation with the aim of ensuring the best use of the investment opportunities offered by the structural and cohesion funds for the 2007-2013 programmes. As a result, implementation accelerated sharply in 2015 — the final implementation year — and the risk that some funding may have to be foregone due to the closure of the programmes has been considerably reduced. With an expected annual absorption of 25 %, 2015 stands out as the year with the highest absorption level during the 2007-2013 programming period (see Box 1.1).

A comprehensive assessment of the effectiveness of the funded measures in delivering the objectives of the programmes is still lacking. The experience of the 2007-2013 programming period revealed several weaknesses, such as insufficient administrative capacity, a lack of high-quality project proposals, a late start to implementation, complex programming and implementation architecture, and insufficiently effective instruments for monitoring and evaluation. Most of these shortcomings are expected to be addressed in the performance-oriented framework of the new programming period. Slovakia was allocated EUR 15.3 billion for the 2014-2020 period, with first calls launched in 2015.

([83]) http://cordis.europa.eu/fp7/ict/ssai/study-action23_en.html
([84]) The European Regional Development Fund, the European Social Fund and the Cohesion Fund.

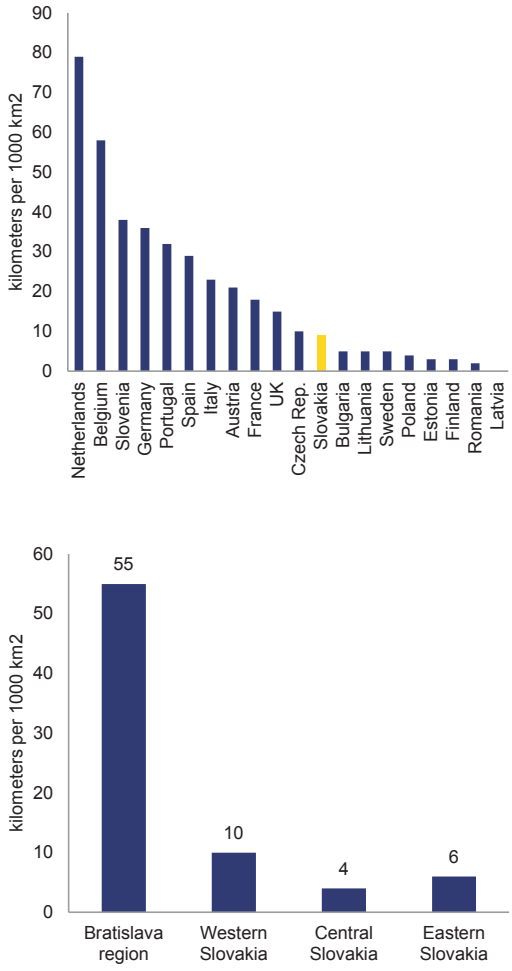
2.6. POLICIES FOR LONG-TERM GROWTH AND RESOURCE EFFICIENCY

Investment in transport infrastructure

Inadequate road infrastructure networks act as a drag on production and mobility, particularly at the expense of Slovakia's Central and Eastern regions. Given Slovakia's specialisation in export-oriented manufacturing — a sector with a high reliance on road transport networks — weak infrastructure can discourage investment and aggravate regional divides. The World Economic Forum's quality of infrastructure index (2015) shows that the perceived quality of road infrastructure was considerably below the EU average in 2013 ([85]). This reflects the fact that at 8.6 km per 1 000 km^2, the density of the motorway network is among the lowest in the EU (Graph 2.6.1). Furthermore, of the Member States with lower motorway density, all except Poland show a significantly lower population density as well, which may explain their thinner motorway networks. Regional imbalances are also notable within the existing motorway network, with the Central and Eastern regions showing a highly fragmented (Graph 2.6.1), single motorway axis. This favours the choice of production locations in the Western region, and thus exacerbates the regional economic divide ([86]).

Progress towards closing the road infrastructure gap has been slow and uneven. The length of the toll motorway network increased only marginally between 2011 and 2014 ([87]). In 2015 there was a construction surge due to accelerated drawing of EU funds in the final programme year, with 56 km constructed. This extended the length of the Slovak motorway network by 13 % ([88]). An additional 33 km are planned for 2016, financed from the new programming period (2014-2020). In the short term, addressing the weakness of the road infrastructure network is complicated by ineffective use of the funds available, high unit costs ([89]) for new projects, lack of proper planning, and complex land-use and construction permit processes.

Graph 2.6.1: **Comparison of density of road networks across Member States (2012) and among Slovak regions (2013)**



Source: EU Transport pocket book

The opportunities for funding investment in transport infrastructure appear to be ample. Total transport infrastructure investment as a

([85]) This is an index of satisfaction about road, rail and air transport infrastructure quality, part of the World Economic Forum Global Competitiveness Report. In 2014-2015, Slovakia scored 4.0 compared to an EU average of 4 on a scale from 1 to 7 (1 = extremely underdeveloped/ among the worst in the world; 7 = extensive and efficient/ among the best in the world).

([86]) The National Regional Development Strategy and the EU Regional Competitiveness Index 2013 cite the direct impacts of infrastructure on development of the region. .

([87]) More information on infrastructure statistics at (http://www.cdb.sk/sk/Vystupy-CDB/Statisticke-prehlady.alej).

([88]) National Highway Company (http://www.ndsas.sk/dialnice-d/44379s).

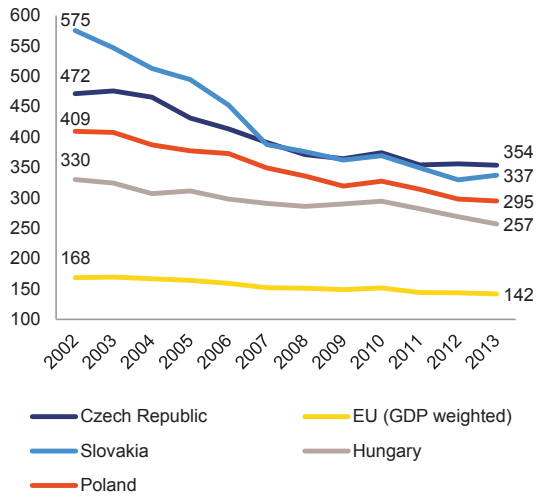
([89]) Price per kilometre of road or rail (see COWI feasibility study on the Zilina-Kosice-Cierna nad Tisou railway line, April 2014) projects.

percentage of GDP was slightly above the EU average in 2013 (0.9 % of GDP in Slovakia compared to 0.8 % in the EU) ([90]), and mostly financed by EU funds. However, Slovakia is investing significantly less in transport than it has done historically or than is typical of a converging economy. The identified financing needs for three core network corridors ([91]) are around EUR 11 billion. At this early stage of the implementation of the Investment Plan for Europe ([92]), several Slovak projects have already been identified as potentially suitable for financing. These include the completion of the D4 motorway, including the ring bypassing the capital Bratislava. However, annual costs to the government from this ongoing private-public project represent a non-negligible fiscal risk ([93]). Therefore, the project merits attention with respect to transparency, design and financial management in order to meet the region's road infrastructure needs in a cost-effective manner ([94]).

Energy and resource management

The trend in energy efficiency is positive but environmental and competitiveness challenges persist. The energy intensity ([95]) of the economy ranks among the highest in the EU and Slovakia continues to use more than twice as much energy for its production as the EU average (Graph 2.6.2). In 2014 both primary and final energy consumption decreased. Primary energy consumption stood at 15.3 compared to the (now slightly lowered) Europe 2020 target of 16.4 Mtoe and final energy consumption stood at 10.1 compared to the Europe 2020 target of 9.0 Mtoe. Although Slovakia is on track to meet the revised target, additional efforts are warranted to keep primary energy consumption in check and make future growth less energy-intensive at the margin. A further challenge will be to create investment conditions that can mobilise support for the energy services market, with the active engagement of financial institutions, and ensure an increased allocation and use of financial instruments (mostly EU funds for the programming period 2014-2020).

Graph 2.6.2: **Gross energy consumption divided by GDP (kg of oil equivalent per EUR 1 000 of output)**



Source: European Commission

EU funds will play a role in transitioning to a low-carbon economy. With a 11.6 % share of renewable energy in gross final consumption in 2014 (Graph 2.6.3), Slovakia met its indicative benchmark for progressing towards its target for 2020. To further improve on this target, investment seems essential in energy infrastructure, energy efficiency and renewable energy capacity. Some of these investment needs will be covered by EU funds in the 2014-2020 programming period with an overall allocation of EUR 1 billion.

([90]) These data refer to investment and maintenance spending on transport infrastructures (road, rail, sea ports and airports) as % of GDP. The data are currently only available up to 2013.

([91]) The Trans-European Transport Network (TEN-T) policy supports the completion of 30 Priority Projects, representing high European added value.

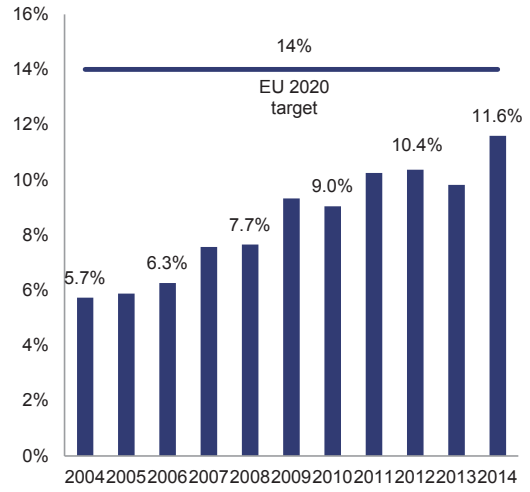
([92]) More details on the EFSI can be found online (http://ec.europa.eu/priorities/jobs-growth-investment/plan/index_en.htm).

([93]) According to the Eurostat new accounting methodology, the rules for classifying investments under private partnership projects as off the government balance sheet have been made more stringent.

([94]) INEKO study: *PPP obchvat Bratislavy môže byť predražený až o miliardu eur* (http://www.ineko.sk/clanky/publikacie).

([95]) Under some caveats, energy intensity can be used as proxy for energy efficiency. Energy intensity is defined as the amount of energy needed to produce one unit of GDP. This measure smoothens the effect of economic slowdowns (which automatically lead to lower energy consumption) and allows a decoupling of energy consumption and output growth.

Graph 2.6.3: **Share of renewables on energy sources in Slovakia**



Source: European Commission

Administrative and regulatory frameworks can also make a difference in the energy field. The complex and still opaque regulatory framework is hampering production and distribution renewable energy. Connection of new sources to the network is perceived as very difficult. The so-called 'stop status', an administrative decision taken in December 2013 by all three operators of regional distribution systems, stopped the connection of new sources to the network. To upgrade Slovakia's energy infrastructure, further electricity interconnections with Hungary, a gas interconnector with Poland and the Eastring gas pipeline to Romania and Bulgaria are planned.

Current policy instruments are insufficient to promote environmentally friendly behaviour in Slovakia. Slovakia remains among the countries with the highest landfilling rate (76.7 % of municipal waste deposited in landfills in 2012), with no sign of improvement ([96]). This is mainly due to a landfill gate fee that is too low to encourage recycling ([97]). A National Waste Act entered into force in January 2016, but it remains uncertain whether an effective waste management system will be put in place to reach the 2020 recycling target of 50 %. Slovakia's current non-compliance with EU air quality standards harms public health as well as the environment. While Slovakia has a system of air pollution taxes in place, the tax levels are relatively low. The current price of water in Slovakia does not reflect the full costs of distributing and treating it, so there is scope for greater cost coverage in water and wastewater tariffs. Lastly, a number of environmentally harmful subsidies remain ([98]). The electricity price includes several discretionary components such as a levy to support mining of domestic lignite, as well as a contribution to the nuclear decommissioning fund. A feed-in-tariff to support electricity production from domestic coal has a very negative environmental impact since it largely offsets the reduction in emissions thanks to renewable sources. The government has declared its support for the extraction of lignite and for its use in electricity production until 2030; this policy promotes the use of an environmentally harmful energy source and can act as a distortive subsidy.

Research and innovation

A stronger capacity to innovate can facilitate Slovakia's move up the value chain. Slovakia ranks well below the EU average in terms of innovation performance, a key determinant of growth potential. Research & development (R&D) is hampered by low public and private resources, a fragmented policy framework and inefficient public spending. Expenditure on R&D has gradually increased in recent years, albeit from a very low level, and is highly reliant on EU funds ([99]). Total R&D intensity rose to 0.89 % of GDP in 2014, almost double the level of 2008. This ratio, however, remains well below the EU average of 2 % (2014). The increase in public R&D expenditure has been more pronounced than that of the private sector (Graph 2.6.3), mainly due to the support received from EU Funds. Fifteen EU-funded strategic projects to create university parks and research centres were almost completed in

([96])http://ec.europa.eu/eurostat/web/environment/waste/database.

([97]) According to the 'Study on the use of economic instruments for waste prevention and management', April 2012, see: http://ec.europa.eu/environment/waste/use.htm, a minimum rate of €40 should be set gradually in place to start moving.

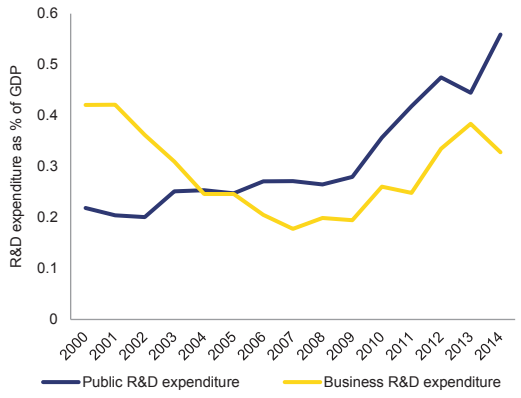
([98]) OECD (2013) Inventory of Estimated Budgetary Support and Tax Expenditures for Fossil Fuels 2013, pp. 307-314, dx.doi.org/10.1787/9789264187610-en.

([99]) This refers to project finance only, the institutional finance is provided by the Slovak Government.

2015 and will help to fill the gap in R&D infrastructure.

The innovation policy framework is highly fragmented. Cooperation between competent ministries is not optimal, and strategic quality control for R&D projects is encumbered by eight different government agencies being responsible for supporting R&D and innovation. The fragmented administrative framework and the lack of coordination and thematic concentration may partly explain the low levels of research performance ([100]) and the low participation of domestic firms in R&D.

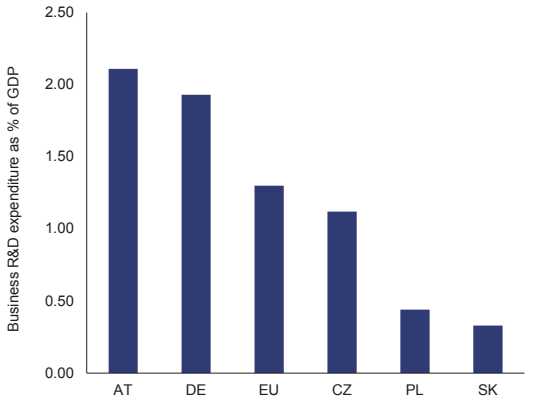
Graph 2.6.4: **Public and private R&D expenditure in Slovakia (% of GDP)**



Source: European Commission

Private R&D spending is comparatively low, which partly reflects Slovakia's business model. Private expenditure on R&D in the business sector was 0.33 % of GDP in 2014, compared to an EU average of 1.3 % of GDP (Graph 2.6.4). The Slovak economy is characterised by a high share of manufacturing output, which is usually R&D-intensive. However, low expenditure on R&D by the business sector reflects the fact that the manufacturing sector is dominated by a few large multinational companies, which tend to import most of their technology. Slovakia has so far not succeeded in attracting a sizeable volume of R&D investment from these companies. Furthermore, the overall share of high-tech products in exports remains relatively low compared to Slovakia's main competitors, even if the share has been increasing in recent years. There is only a very low number of Slovak SMEs innovating in-house (15 % in Slovakia against 28.7 % in the EU), and few of them collaborate with others (6.7 % in Slovakia against 10.3 % in EU) ([101]).

Graph 2.6.5: **Private R&D expenditure in selected Member States in 2014 (% of GDP)**



Source: European Commission

Policy efforts to bolster private R&D are underway. A law introducing tax deductions (25 %) for private companies investing in R&D entered into force in January 2015. An assessment will be available in March 2016 but discussion is already taking place to raise the ceiling. In addition, in June 2015 the government approved a 'concept paper' on support for start-ups and the development of the start-up 'ecosystem'.

Implementation of research and innovation framework initiatives is slow. There have been significant delays in implementing the complex strategic framework for research and innovation ([102]), which proposes a better governance structure, a set of policy measures and areas of specialisation. An action plan to implement this strategy is still pending, delaying effective

([100]) This performance is reflected in indicators such as the proportion of Slovak scientific articles among the 10 % most-cited articles worldwide. This share reached 4.4 % in 2010, which is well below the EU average of 11.4 %. Slovakia ranks in 23rd place among EU Member States according to this indicator.

([101]) Innovation Union Scoreboard 2015.

([102]) Research and Innovation Strategy for Smart Specialisation for the Slovak Republic was adopted in November 2013 with the objective to stimulate a structural change in Slovakia towards a growth based on increasing ability and excellence in research and innovation.

implementation of some measures under the Operational programme Research and Innovation (2014-2020). The foreseen transformation of numerous funding agencies has been slow. The Research Agency and the Technology Agency were created in 2015 through transformation of two existing institutions. The planned transformation of the Slovak Academy of Sciences from a state organisation into a public research institution to facilitate cooperation with the business sector has been postponed to 2016.

A low level of cooperation between academia and industry hinders the commercialisation of research outputs. However, the innovation vouchers system, launched in 2013, has shown some promise. In 2015, under the third call, 70 applicants received financial support totalling EUR 365 000. While the country has implemented a number of additional policy measures to stimulate knowledge transfers, these have mainly been focused on physical infrastructure. There has been less emphasis on improving framework conditions to create incentives for, and reward academics engaging in, cooperation with industry, or on providing support for the creation and development of spin-off companies. A National Office for Technology Transfer was established and will now work more intensively with offices located within universities. So far, researchers are predominantly evaluated on their publication record and teaching achievements, with the commercialisation of research outputs playing little role in their career advancement.

ANNEX A

Overview Table

Commitments	Summary assessment ([103])
2015 Country-specific recommendations (CSRs)	
CSR 1: Improve the cost-effectiveness of the healthcare sector, including by improving the management of hospital care and strengthening primary healthcare. Take measures to increase tax collection.	Slovakia has made **some progress** in addressing CSR 1: **Some progress** has been made on increasing the cost-effectiveness of the healthcare sector. Several measures are at various stages of implementation, such as the ongoing work on the reimbursement system for hospital care and on the integrated model of healthcare **Some progress** has been made to increase tax collection. The action plan to fight tax evasion was updated in 2015 and new measures announced.
CSR 2: Take additional measures to address long term unemployment by improving activation measures, second chance education and introducing high-quality training tailored to individuals' needs. Improve the incentives for women to remain in or return to employment by improving the provision of childcare facilities.	Slovakia has made **limited progress** in addressing CSR 2: **Limited progress** has been achieved in improving the activation measures for long-term unemployed. The reform of the public employment services is ongoing but the potential for individualised support to the long-term unemployed still needs to be realised. **Some progress** has been achieved towards increasing the provision of training tailored to individual needs of jobseekers (e.g. through the RE-PAS project). **No progress** has been made towards improving access to second-chance education. **Some progress** has been evidenced towards increasing the capacity of and access to early childhood education and care, particularly for the over threes. For children below three the childcare allowance was increased, but there was no progress in setting up a legislative

([103]) The following categories are used to assess progress in implementing the 2015 CSRs:
No progress: The Member State (MS) has neither announced nor adopted measures to address the CSR. This category also applies if the MS has commissioned a study group to evaluate possible measures.
Limited progress: The MS has announced some measures to address the CSR, but these appear insufficient and/or their adoption/implementation is at risk.
Some progress: The MS has announced or adopted measures to address the CSR. These are promising, but not all of them have been implemented and it is not certain that all will be.
Substantial progress: The MS has adopted measures, most of which have been implemented. They go a long way towards addressing the CSR.
Fully implemented: The MS has adopted and implemented measures that address the CSR appropriately.

	framework on childcare services.
CSR 3: Improve teacher training and the attractiveness of teaching as a profession to stem the decline in educational outcomes. Increase the participation of Roma children in mainstream education and in high-quality early childhood education.	Slovakia has made **limited progress** in addressing CSR 3: **No progress** was made in improving training of teachers. **Limited progress** has been seen on improving the attractiveness of the teaching profession by increasing teachers' salary further by 4 % in 2016.along the increase for other public employees. **Limited progress** has been made towards increasing the participation of Roma children in mainstream education and in high-quality early childhood education. The Desegregation legislation was adopted in 2015, but it still needs to be implemented.
CSR 4: To boost investment in infrastructure, improve and streamline the administrative procedures for obtaining land-use and construction permits. Increase competition in public tenders and improve supervisory mechanisms in public procurement.	Slovakia has made **limited progress** in addressing CSR 4: **Some progress** has been achieved towards improving and streamlining the administrative procedures for obtaining land-use and construction permits. A project (e-STAK) was launched in 2015 and an amendment to the Construction Act was adopted in September 2015. **Limited progress** was made to increase competition in public tenders and improve supervisory mechanisms in public procurement. The amendment to the Act on Public Procurement excludes companies which do not disclose their ownership structure from participating in public tenders. The electronic contracting system for tenders above the EU thresholds is being prepared.
Europe 2020 (national targets and progress)	
Employment: 72 %	After the sharp decrease in employment during the crisis and moderate recovery in 2014, the Slovak labour market slightly improved. The employment rate increased and reached 65.9 % in 2014 (Eurostat). However, despite these improvements, the labour market

	still performs worse than the EU average (for both men and women) and the overall employment rate remains significantly below the target to be achieved by 2020.
R&D: 1.2 % of GDP (where the private sector is to provide 2/3 of total expenditure)	R&D intensity increased significantly during the 2007-2014 period (from 0.46 % to 0.89 % of GDP (Eurostat). However, this was still well below the target, in particular due to an extremely low level of business expenditure on R&D (0.33 % in 2014; Eurostat).
Greenhouse gas emissions: 13 % (compared with 2005 emissions)	Based on the latest national projections, and taking into account existing measures, emissions from sectors not included in the EU emissions trading system are expected to decrease by 4 % in 2020 compared to 2005. Thus, the target is projected to be over-achieved by some 17 pps.
Renewable energy target: 14 %	Slovakia had a 11.6 % share of renewable energy in gross final consumption in 2014 (Eurostat). This was above the indicative goal for 2013/2014 of 9 % needed to stay on track towards its 2020 target.
Energy efficiency: 16.4 Mtoe expressed in primary energy consumption (9.0 Mtoe expressed in final energy consumption)	A decreasing trend in primary and final energy consumption continued in 2014 for both types of consumption. Primary energy consumption stood at 15.3 compared to the (now slightly lowered) EU 2020 target of 16.4 Mtoe and final energy consumption stood at 10.1 compared to the EU 2020 target of 9.0 Mtoe. Although Slovakia is on track to meet its target for 2020, additional efforts are warranted to keep primary energy consumption in check.
Early school leaving: 6 %	The percentage of early leavers from education and training increased from 6.4 % in 2013 to 6.7 % in 2014 (Eurostat) and is thus above the 6 % national target. It is particularly high for Roma, which calls for targeted measures.
Tertiary education: 40 %	The tertiary educational attainment rate remained at 26.9 % in 2014 (Eurostat), calling for efforts to ensure quality and labour market relevance of higher education. The 40% national target is at risk.

Poverty/social exclusion: Reduction of 170 000 persons between 2008 and 2020	In 2014 there was a decrease of 110 000 (Eurostat) giving a cumulative reduction of 151 000 from the 2008 baseline value.

ANNEX B
MIP scoreboard

Table B.1: **MIP scoreboard - Slovakia**

			Thresholds	2009	2010	2011	2012	2013	2014
External imbalances and competitiveness	Current account balance, (% of GDP)	3 year average	-4%/6%	-4.7*	-4.9	-4.4	-2.9	-0.7	1.0
	Net international investment position (% of GDP)		-35%	-66.7	-62.3	-64.9	-62.2	-63.8	-69.4
	Real effective exchange rate - 42 trading partners, HICP deflator	3 years % change	±5% & ±11%	26.9	10.9	3.4	-3.2	2.1	1.3
	Export market share - % of world exports	5 years % change	-6%	39.8*	31.3*	21.1*	3.2*	-3.6	3.2
	Nominal unit labour cost index (2010=100)	3 years % change	9% & 12%	11.0	9.5	6.2	0.9	2.4	2.2
Internal imbalances	Deflated house prices (% y-o-y change)		6%	-12.8	-5.0	-5.2	-5.9	-0.4	1.5
	Private sector credit flow as % of GDP, consolidated		14%	3.1	3.1	3.0	3.1	5.3	3.9
	Private sector debt as % of GDP, consolidated		133%	69.8	68.1	70.9	71.3	74.9	76.2
	General government sector debt as % of GDP		60%	36.0	40.8	43.3	51.9	54.6	53.5
	Unemployment rate	3 year average	10%	11.0	12.1	13.4i	14.1	14.0	13.8
	Total financial sector liabilities (% y-o-y change)		16.5%	-4.8	2.1	0.3	2.8	0.3	7.0
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)		-0.2%	-0.2	0.4	-0.1b	1.0	1.2	1.6
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)		0.5%	-3.8	1.0	2.6	2.9	0.7	0.0
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)		2%	0.6	13.3	14.4i	6.4	-0.2	-4.0

*BPM5/ESA95 figure.
b: break in time series.
i: see metadata.
Figures highlighted are those falling outside the threshold established in the European Commission's Alert Mechanism Report.
For REER and ULC, the first threshold applies to euro area Member States.

Source: European Commission

ANNEX C
Standard Tables

Table C.1: **Financial market indicators**

	2010	2011	2012	2013	2014	2015
Total assets of the banking sector (% of GDP)	86.3	82.4	82.5	82.7	85.0	88.5
Share of assets of the five largest banks (% of total assets)	72.0	72.2	70.7	70.3	70.7	-
Foreign ownership of banking system (% of total assets)	92.9	94.9	95.8	96.0	96.0	-
Financial soundness indicators:						
- non-performing loans (% of total loans)[1)]	5.8	5.6	5.2	5.1	5.3	5.2
- capital adequacy ratio (%)[1)]	12.7	13.4	15.7	16.5	17.3	17.4
- return on equity (%)[1)]	12.6	6.9	9.1	10.7	10.4	12.4
Bank loans to the private sector (year-on-year % change)	5.3	9.3	3.8	6.4	7.4	10.4
Lending for house purchase (year-on-year % change)	14.8	13.7	11.1	11.9	13.6	13.8
Loan to deposit ratio	86.9	90.3	87.2	87.9	91.2	91.5
Central Bank liquidity as % of liabilities	2.2	3.1	4.0	0.7	1.1	1.2
Private debt (% of GDP)	68.1	70.9	71.3	74.9	76.2	-
Gross external debt (% of GDP)[2)] - public	14.7	16.7	24.3	33.0	38.2	35.8
- private	27.1	27.4	28.3	32.2	30.9	31.6
Long-term interest rate spread versus Bund (basis points)*	112.8	183.9	305.8	161.8	90.8	38.9
Credit default swap spreads for sovereign securities (5-year)*	77.7	135.2	191.5	83.7	53.3	44.9

(1) Latest data Q2 2015.
(2) Latest data September 2015. 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); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Labour market indicators**

	2010	2011	2012	2013	2014	2015
Total assets of the banking sector (% of GDP)	86.3	82.4	82.5	82.7	85.0	88.5
Share of assets of the five largest banks (% of total assets)	72.0	72.2	70.7	70.3	70.7	-
Foreign ownership of banking system (% of total assets)	92.9	94.9	95.8	96.0	96.0	-
Financial soundness indicators:						
- non-performing loans (% of total loans)[1)]	5.8	5.6	5.2	5.1	5.3	5.2
- capital adequacy ratio (%)[1)]	12.7	13.4	15.7	16.5	17.3	17.4
- return on equity (%)[1)]	12.6	6.9	9.1	10.7	10.4	12.4
Bank loans to the private sector (year-on-year % change)	5.3	9.3	3.8	6.4	7.4	10.4
Lending for house purchase (year-on-year % change)	14.8	13.7	11.1	11.9	13.6	13.8
Loan to deposit ratio	86.9	90.3	87.2	87.9	91.2	91.5
Central Bank liquidity as % of liabilities	2.2	3.1	4.0	0.7	1.1	1.2
Private debt (% of GDP)	68.1	70.9	71.3	74.9	76.2	-
Gross external debt (% of GDP)[2)] - public	14.7	16.7	24.3	33.0	38.2	35.8
- private	27.1	27.4	28.3	32.2	30.9	31.6
Long-term interest rate spread versus Bund (basis points)*	112.8	183.9	305.8	161.8	90.8	38.9
Credit default swap spreads for sovereign securities (5-year)*	77.7	135.2	191.5	83.7	53.3	44.9

(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.
(2) Long-term unemployed are peoples who have been unemployed for at least 12 months.
(3) Not in Education Employment or Training.
(4) Average of first three quarters of 2015. Data for total unemployment and youth unemployment rates are seasonally adjusted.

Source: European Commission (EU Labour Force Survey)

Table C.3: **Social indicators**

Expenditure on social protection benefits (% of GDP)	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Sickness/healthcare	5.7	5.4	5.3	5.4	5.5	-
Invalidity	1.5	1.5	1.5	1.6	1.6	-
Old age and survivors	7.6	7.6	7.6	7.7	7.9	-
Family/children	1.7	1.7	1.7	1.7	1.7	-
Unemployment	1.0	1.0	0.8	0.7	0.6	-
Housing and social exclusion n.e.c.	0.0	0.0	0.0	0.0	0.0	-
Total	18.0	17.7	17.4	17.6	17.9	-
of which: means-tested benefits	0.9	1.0	0.9	0.9	0.9	-
Social inclusion indicators	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
People at risk of poverty or social exclusion[1] (% of total population)	19.6	20.6	20.6	20.5	19.8	18.4
Children at risk of poverty or social exclusion (% of people aged 0-17)	23.7	25.3	26.0	26.6	25.5	23.6
At-risk-of-poverty rate[2] (% of total population)	11.0	12.0	13.0	13.2	12.8	12.6
Severe material deprivation rate[3] (% of total population)	11.1	11.4	10.6	10.5	10.2	9.9
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	5.6	7.9	7.7	7.2	7.6	7.1
In-work at-risk-of-poverty rate (% of persons employed)	5.2	5.7	6.3	6.2	5.7	5.7
Impact of social transfers (excluding pensions) on reducing poverty	35.7	39.4	33.3	34.0	36.3	35.7
Poverty thresholds, expressed in national currency at constant prices[5]	3213	3434	3516	3710	3478	3465
Gross disposable income (households; growth %)	1.5	3.9	1.6	1.6	3.1	3.1
Inequality of income distribution (S80/S20 income quintile share ratio)	3.6	3.8	3.8	3.7	3.6	3.9

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in 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 EUR; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey referring to 2006 incomes)
Source: ESSPROS for expenditure for social protection benefits; EU-SILC for social inclusion

Table C.4: **Structural policy and business environment indicators**

Performance indicators	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Labour productivity (real, per person employed, y-o-y)						
Labour productivity in industry	-4.88	17.86	1.20	0.93	0.44	6.30
Labour productivity in construction	-6.25	-4.93	10.40	9.84	-7.81	7.96
Labour productivity in market services	-4.17	2.13	-1.88	1.92	1.11	3.25
Unit labour costs (ULC) (whole economy, y-o-y)						
ULC in industry	7.48	-14.77	3.28	4.99	3.61	-2.65
ULC in construction	1.39	9.25	-6.53	-8.09	10.75	-8.53
ULC in market services	3.58	1.23	6.68	-0.56	1.25	0.14
Business environment	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Time needed to enforce contracts(1) (days)	565	565	565	565	545	545
Time needed to start a business(1) (days)	17.5	17.5	17.5	17.5	13.5	18.5
Outcome of applications by SMEs for bank loans(2)	0.76	na	0.92	na	1.07	0.83
Research and innovation	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
R&D intensity	0.47	0.62	0.67	0.81	0.83	0.89
Total public expenditure on education as % of GDP, for all levels of education combined	4.09	4.22	4.06	3.05	na	na
Number of science & technology people employed as % of total employment	37	39	38	37	37	37
Population having completed tertiary education(3)	13	15	16	17	18	18
Young people with upper secondary level education(4)	93	93	93	93	91	91
Trade balance of high technology products as % of GDP	-2.92	-3.18	-4.94	-5.57	-5.34	-5.17
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)(5), overall				2.18	1.62	1.29
OECD PMR(5), retail				1.14	1.04	1.75
OECD PMR(5), professional services				na	na	2.90
OECD PMR(5), network industries(6)				3.33	2.28	1.88

(1) The methodologies, including the assumptions, for this indicator are shown in detail here: http://www.doingbusiness.org/methodology.
(2) Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or don't know.
(3) Percentage population aged 15-64 having completed tertiary education.
(4) Percentage population aged 20-24 having attained at least upper secondary education.
(5) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm
(6) 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); SAFE (for outcome of SMEs' applications for bank loans).

Table C.5: **Green growth**

Green growth performance		2009	2010	2011	2012	2013	2014
Macroeconomic							
Energy intensity	kgoe / €	0.36	0.37	0.35	0.33	0.34	-
Carbon intensity	kg / €	0.98	0.95	0.91	0.85	0.83	-
Resource intensity (reciprocal of resource productivity)	kg / €	1.55	1.45	1.46	1.25	1.17	1.13
Waste intensity	kg / €	-	0.19	-	0.16	-	-
Energy balance of trade	% GDP	-4.4	-5.7	-6.4	-5.9	-5.9	-4.3
Weighting of energy in HICP	%	16.28	15.68	15.40	18.91	16.48	16.18
Difference between energy price change and inflation	%	2.7	-4.0	4.7	1.8	-1.9	-2.0
Real unit of energy cost	% of value added	24.2	24.2	24.2	-	-	-
Ratio of labour taxes to environmental taxes	ratio	7.8	8.0	8.1	8.7	9.3	9.1
Environmental taxes	% GDP	1.9	1.8	1.8	1.7	1.7	1.8
Sectoral							
Industry energy intensity	kgoe / €	0.35	0.32	0.29	0.30	0.29	-
Real unit energy cost for manufacturing industry	% of value added	40.1	40.1	40.1	-	-	-
Share of energy-intensive industries in the economy	% GDP	15.21	15.06	15.08	15.44	14.52	15.65
Electricity prices for medium-sized industrial users	€ / kWh	0.14	0.12	0.13	0.13	0.13	0.12
Gas prices for medium-sized industrial users	€ / kWh	0.04	0.03	0.04	0.04	0.04	0.04
Public R&D for energy	% GDP	0.01	0.01	0.01	0.00	0.00	0.01
Public R&D for environment	% GDP	0.01	0.01	0.01	0.01	0.01	0.01
Municipal waste recycling rate	%	19.2	19.1	21.2	23.2	21.3	-
Share of GHG emissions covered by ETS*	%	48.3	47.8	49.7	49.0	50.0	49.3
Transport energy intensity	kgoe / €	1.05	1.11	1.01	0.85	0.87	-
Transport carbon intensity	kg / €	3.14	3.15	2.80	2.52	2.53	-
Security of energy supply							
Energy import dependency	%	66.2	62.9	64.0	59.9	59.6	-
Aggregated supplier concentration index	HHI	91.7	75.8	81.7	73.9	73.5	-
Diversification of energy mix	HHI	0.22	0.22	0.22	0.22	0.22	-

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2005 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

Weighting of energy 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)

Real unit energy cost: real energy costs as a percentage of total value added for the economy

Environmental taxes and labour taxes : from European Commission, '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)

Real unit energy costs for manufacturing industry: real costs as a percentage of value added for manufacturing sectors

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 500–20 00MWh and 10 000–100 000 GJ; figures excl. VAT.

Municipal waste recycling rate: 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 greenhouse gas (GHG) emissions covered by EU Emission Trading System (ETS): based on greenhouse gas emissions (excl land use, land use change and forestry) as reported by Member States to the European Environment Agency

Transport energy intensity: final energy consumption of 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

Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

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

* European Commission and European Environment Agency

Source: European Commission (Eurostat) unless indicated otherwise