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Country Report Bulgaria 2016

Including an In-Depth Review on the prevention and correction of macroeconomic imbalances

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EXECUTIVE SUMMARY

This report assesses Bulgaria'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: relaunching investment, pursuing structural reforms to modernise Member States' economies, and responsible fiscal policies. At the same time, the European Commission published the Alert Mechanism Report that initiated the fifth annual round of the macroeconomic imbalance procedure. The Alert Mechanism Report identified Bulgaria as warranting a further in-depth review.

The Bulgarian economy has been gradually emerging from the crisis, but a broad-based recovery is not yet in sight. The necessary fiscal consolidation moderates domestic demand and still prevalent risks deter private investment despite healthy net export growth and positive labour Given the still weak potential market trends. growth, a decline in EU fund absorption temporarily lowers GDP growth to an estimated 11/2 percent in 2016. Growth is expected to rebound to about 2% in 2017 as the implementation of EU projects gathers pace once more. The crisis has more than halved Bulgaria's rate of potential growth thus halting real income convergence with peer economies.

The resolution of outstanding labour market and education sector challenges would further underpin the recent improvement in potential growth. The gradual economic recovery has spurred job creation and decreased unemployment. Nonetheless, high long-term unemployment, low labour market participation and high skills mismatches point to considerable remaining challenges for labour market and education policies. Moreover, demographic issues, such as outward migration and shrinking working-age population, pose a risk to the long-term growth potential of the economy.

Despite its demonstrated resilience, the financial system still harbours risks. The banking sector withstood the first phase of the financial crisis without the need for additional capital support. Overall, the banking system has managed to accumulate considerable liquidity and capital buffers, benefitting also from large interest margins. Nevertheless, cases of imprudent business practices across the entire financial sector, coupled with inefficient supervision, have created an environment for imbalances to accumulate. The domestic banking crisis in June 2014 revealed vulnerabilities with potential implications for public finances and macrofinancial stability. The remaining financial sector imbalances impede the efficiency of financial intermediation and capital allocation in the economy. The completion of the recently launched reviews of the banking, insurance and pension fund sectors will be a major step towards strengthening the financial system and positioning it to support the nascent recovery.

The gradual unwinding of imbalances has been insufficient to restore private investment. The external position is gradually improving but net external liabilities and gross external debt remain large, reflecting the very high external imbalances at the onset of the crisis. In addition, still high nonfinancial corporate debt, persistent negative inflation, an unsupportive business environment and serious concerns about corruption further weigh on investment and growth. Weaknesses in the insolvency framework are an obstacle to deleveraging and to new lending, further limiting the appetite for investment. These factors, coupled with the perceived risks relating to the financial sector keep the country risk premium and thus the cost of capital high in the economy. Bulgaria will require further sustained reform efforts to restore its growth potential in a way that contains macroeconomic imbalances.

Overall, Bulgaria has made some progress in addressing the 2015 country-specific recommendations. On the fiscal front, some measures have been taken to improve the cost effectiveness of health care, including the preparation of a National Health Map. Tangible beneficial effects of this reform are expected later this year. The authorities have embarked on a set of wide-ranging financial sector reforms, although challenges remain. They have amended banking sector legislation, initiated improvements in banking supervision and launched а comprehensive asset quality review and stress test of the entire banking sector. Work has also begun on strengthening non-banking financial sector supervision and reviewing the balance sheets of insurers and the quality of private pension fund

assets. The legislative changes necessary to strengthen the supervision of pension funds have been initiated. The transposition of Solvency II regulation in the insurance sector was completed in late 2015 and thus will only be assessed by the European Commission this year. Labour market reforms have also progressed but an integrated approach for social groups that are marginalised in the labour market has yet to be developed. Moreover, a transparent mechanism for setting the minimum wage and minimum social security contributions still remains to be developed. The Pre-school and School Education Act was adopted by the Parliament in September 2015, introducing reforms in this area. However, the non-legislative barriers to increasing the participation of disadvantaged children, in particular Roma, in preschool and primary education are not yet addressed in a consistent manner. Improving the efficiency of insolvency procedures remains a challenge hindering banking sector reforms and dampening private investment. While legislative proposals are advancing, further steps are needed to improve the efficiency of courts in this area.

Regarding the progress in reaching the national targets under the Europe 2020 Strategy, Bulgaria appears already to be well ahead of its targets in regard to reducing greenhouse gas emissions and increasing the share of renewable energy, and progressing well in regard to energy efficiency. More efforts will be needed to reach the targets on the employment rate, early school leaving, tertiary education, poverty, and R&D.

The main findings of the in-depth review contained in this report and the related policy challenges are as follows:

• The performance of the financial sector as a whole has stabilised, but risks remain. Banking sector liquidity and profitability has improved, but a more robust assessment of the resilience of the sector can only be made based on the results of the upcoming asset quality review and stress test, which are expected towards late summer. Vulnerabilities in the non-banking sector have been identified by the authorities but have yet to be addressed.

- Risks stemming from high corporate debt and barriers to deleveraging remain. The persistent negative inflation makes deleveraging more difficult and puts additional pressure on the profitability of non-financial corporations. Moreover, debt accumulated in some sectors could be difficult to recover. Given the limited progress with reforms so far, the insolvency framework provides little scope to reduce a still high level of corporate indebtedness, without which new lending and corporate investment are expected to remain constrained.
- The external position of the country as a whole has improved further but risks remain. The improvement in the net external position has been mainly driven by a structural improvement in the current account and has led to a reduction in gross external debt, mitigating risks. However, the negative level of the net external position remains rather high and the increasing financing needs of the government create some new risks.
- Remaining weaknesses in the labour market continue to hinder growth and limit the adjustment capacity of the economy. The structural nature of long-term unemployment, a shrinking and ageing labour force, low labour market participation and skills mismatches hamper labour market adjustment, with particular impact on youth and long-term unemployed. Moreover, the persistently high share of undeclared work distorts the labour market and also reduces fiscal revenue. Despite progress with reforms of active labour market policies, further improvement in matching people with vacancies is hindered by poor prioritisation, targeting and sustainability of measures in this area. More broadly, outstanding challenges related to integration of Roma into the labour force, school-to-work unemployment transitions and benefits coverage hinder progress in this area.

Other key structural issues analysed in this report and pointing to particular challenges for Bulgaria are the following:

• The pension system is estimated to be on a sustainable path but almost one-half of the

elderly remain at-risk-of-poverty or social exclusion. The various pension reforms have made old-age pensions more dependent on individual contribution records. This makes labour-market reforms to support longer working lives crucial for future pension adequacy. Moreover, the number of persons on invalidity pensions continues to grow adding to the future pool of potentially vulnerable.

- The healthcare system faces major challenges, including limited accessibility, low funding, and poor health outcomes. Moreover, Bulgaria also faces the challenge of retaining qualified health professionals, who are enticed by more attractive alternative options. Long-term care services for the elderly and the disabled appear ill prepared for the rapid demographic change the country is currently undergoing.
- The education system has limited capacities to include vulnerable groups and equip learners with relevant skills. Children from families with lower socio-economic status, particularly from Roma families, appear not to enjoy equal educational opportunities, including early childhood education. This has longer-term implications on their social inclusion and employability. Participation in vocational education remains high but quality and cooperation with business and social partners appear insufficient. Newly-adopted legislation and strategies in education and training have not yet been translated into concrete measures.
- The high share of people living at-risk-ofpoverty or social exclusion remains a major economic and social challenge. The high-risk groups include children, the Roma and people living in rural areas. The social protection system (including the general minimum income) does not seem to provide adequate levels of support and the activation of people on social benefits remains low. The fragmentation of the agencies that support these groups continue to hamper an effective co-ordinated response to this challenge.
- Challenges persist regarding the business environment. An unstable legal framework

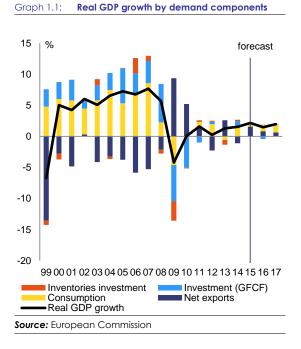
and low trust in the judicial system hinder private investment. Furthermore, corruption remains an important concern in Bulgaria and the response of the national authorities continues to be hampered by weak and fragmented institutions. The slow implementation of reforms in the areas of public administration and e-government prevents significant improvements in the environment. Furthermore, business the public outstanding weaknesses of the procurement system limit the use of the European Structural and Investment Funds. Insufficient access to finance and lack of appropriate framework conditions for R&D investment hamper innovation and competitiveness. Delays with critical structural reforms in key sectors such as energy could further impede competitiveness.

1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

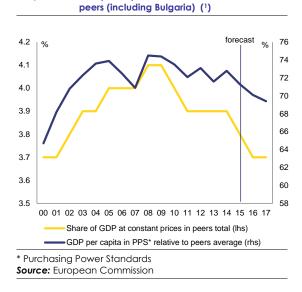
Graph 1.2:

Growth drivers and outlook

Growth is expected to pick up in 2017 after a dip in 2016, but the slack in the economy remains. Output grew by over 2% year-on-year in the first three quarters of 2015, supported mainly by a strong rise in net exports and public investment. According to the European Commission Winter Forecast 2016, real GDP is expected to have grown by 2.2% in 2015 and moderate to 1.5% in 2016 as EU-funded investment dip, before picking up to 2.0% in 2017. Household consumption is projected to continue to increase moderately in 2016 and 2017 supported by modestly improving labour market conditions and wages. Net exports are projected to support growth throughout albeit at a diminishing rate (Graph 1.1). Nevertheless, unemployment remains high and the economy stays below its potential throughout.



The recovery has not so far been strong enough to support economic convergence with regional peers. Compared with peer economies (¹), Bulgaria has significantly underperformed since the outbreak of the crisis in terms of both GDP growth and GDP per capita (Graph 1.2).



GDP per capita and total GDP relative to

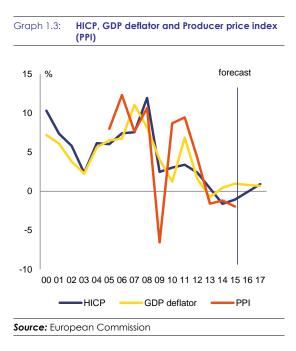
Income convergence can restart only if the growth potential is strengthened. The crisis hit the economy hard. It reduced the rate of potential growth significantly albeit probably from an unsustainably high level before the crisis. Capital accumulation, particularly in the corporate sector, declined significantly and total factor productivity Although plummeted. the still excessive indebtedness of the corporate sector is decreasing, private investment remains low and the banking sector has not yet fully addressed the problems it accumulated during the crisis. While activity rates are gradually improving, they cannot yet counterbalance the strong decline in the labour force. The potential growth rate is currently estimated at around 2%, well below what is needed for tangible income convergence and poverty reduction.

Prices

Inflation is still at a historic low. A deflationary trend has prevailed since the middle of 2013 as a result of declining international commodity prices, sluggish domestic demand and reductions in administered prices. Inflation is projected to stay negative throughout 2016 and below the EU average. However, a depreciated euro and the European Central Bank's quantitative easing, together with tight labour market conditions should provide some upward pressure, given that the currency is pegged to the euro. Despite strong deflation in consumer and producer prices, the

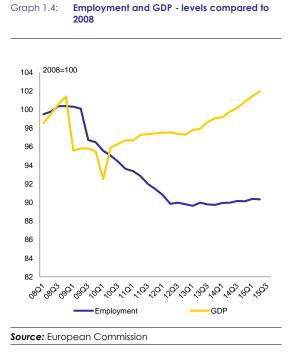
^{(&}lt;sup>1</sup>) BG;CZ;EE;LV;LT;HU;PL;RO;SI;SK.

GDP deflator increased in 2015, mostly due to the positive effect of terms of trade gains (Graph 1.3). Nevertheless, a low inflationary environment makes it more difficult for the private sector and the government to reduce their debt ratios because of slow nominal GDP and income growth (see Section 2.4).



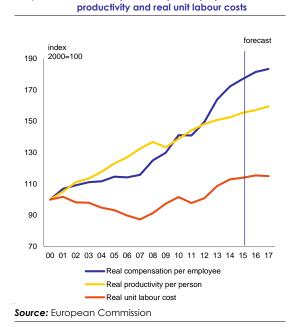
Labour market

The labour market recovery is stable but modest because of persistent structural problems (Graph 1.4). Following the initial labour shedding, the economy has not been able to absorb the available supply of labour because of structural issues, including the employability effects of long-term unemployment and skills mismatches. The incidence of long-term unemployment continues to grow despite overall employment gains. This points to its structural nature and the low activation capacity of labour market policies, hampered by their limited prioritisation and targeting. Youth unemployment and inactivity are particularly important challenges in this regard.



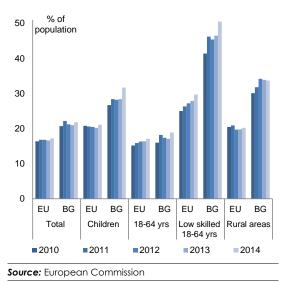
Rapid population ageing and substantial outward migration help to keep unemployment on a declining path but reduce growth potential and contribute to skills shortages. The unemployment rate fell to 9.6% over the first three quarters of 2015, slightly above the EU average. A continued modest increase in employment, projected to reach an annual 0.5% in 2017, together with an ongoing decline in the labour force is expected to further drive down the unemployment rate, to 8.8% in 2017.

Wage developments and tax policies have not helped faster job creation, particularly for lowskilled workers. Following a particularly steep rise in real compensation per employee in 2012-13, the increase in real wages stayed above productivity growth also in 2014 (Graph 1.5). In the absence of sufficient relative wage adjustment, labour shedding hit predominantly the low-skilled. Their situation was also aggravated by the fact that they were disproportionally employed in sectors or jobs most exposed to the crisis. This group is further disadvantaged by regressive labour taxation including social security contributions. The system of the minimum social security contributions thresholds is particularly binding for some lowskilled workers, driving their tax burden higher.



Real compensation per employee, labour

Graph 1.6: At-risk-of-poverty for total population and aroups



Poverty and social exclusion

Graph 1.5

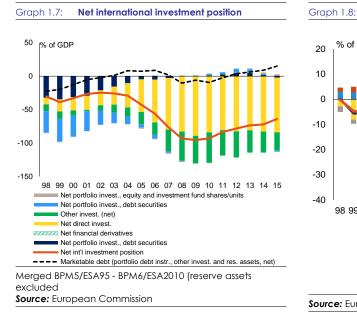
Bulgaria continues to face one of the highest levels of poverty and income inequality in the EU. Both have long term implications for welfare and economic prosperity, and risk negatively affecting health, educational attainment and employment prospects. Children, Roma, the lowskilled and residents of rural areas are among the groups most affected by poverty (Graph 1.6). Despite the continuously increasing minimum wage and rises in median incomes, the income of the richest 20% is almost seven times higher than that of the poorest 20%. In Bulgaria, the socioeconomic relationship between the background and educational performance of pupils is strong. In a context of high poverty and inequality, this may hinder human capital development. Improving the educational outcomes of Roma has macroeconomic importance, as they account for over 20 % of new labour market entrants $(^2)$.

External environment

External imbalances are diminishing, but given their extent before the crisis Bulgaria will need more time to fully work them off. The net international investment position relative to GDP improved further in 2015, reaching -64% in mid-2015, an improvement of over 30 percentage points since its peak in 2009 (Section 2.4).

The surpluses in current and capital accounts have been the main driving force behind this improvement. Economic growth has been largely export-driven, with sustained gains in export market shares. Moreover, non-financial corporations underwent a rapid shift from being large net borrowers to net lenders, reflecting the need to reduce their high indebtedness. Surpluses in the capital account, mostly reflecting the inflow of EU funds, also helped improve the net international investment position (Graph 1.7).

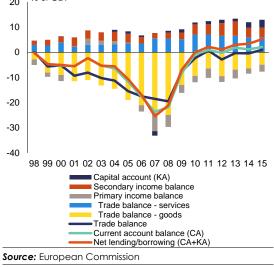
^{(&}lt;sup>2</sup>) Laat, J. and C. Bodewig, Roma Inclusion is Smart Economics - Illustrations from Bulgaria, Czech Republic, Romania and Serbia. ECA: World Bank, 2011.



The current account continued to improve in parallel with the gradual recovery since 2013, reflecting the structural nature of the improvement. The current account recorded a surplus in 2014, for the second consecutive year. Owing to lower international energy prices and fiscal consolidation constraining imports, the surplus is forecast to have increased to 1.9% of GDP in 2015. The projected positive terms of trade gains will supports a continuous improvement in the current account in 2016 and 2017 (Graph 1.8).

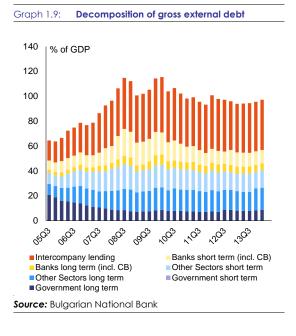


Current account developments



The improvement in the net international investment position was mostly driven by the reduction in net external debt. This declined from around 46% of GDP in 2009 to around 7% of GDP in mid-2015. Net foreign direct investments remained more stable, decreasing from 89% to 81% of GDP in the same period.

Gross external debt has also declined but remains high, particularly for non-financial corporates (Graph 1.9). The gross external debt to third parties of the non-financial corporate sector — relative to GDP — decreased from 32% in 2009 to 27% in 2015. Cross-border intra-company lending remained broadly stable, at around 39% of GDP. The reduction comes mainly from short-term debt. The reliance of commercial banks on foreign financing was however largely eliminated.



Public finance

The budget deficit deteriorated significantly in 2014, but started to improve in 2015. The sharp deficit increase in 2014, to 5.8% of GDP from 0.8% in 2013, was largely driven by the support to the financial sector related to the repayment of the guaranteed deposits in the Corporate Commercial Bank (KTB). The deficit is expected to have improved to 2.5% of GDP in 2015. The favourable fiscal developments in 2015 reflect higher revenues due to enhanced tax compliance and also some savings on the expenditure side. In 2016, the deficit is expected to improve further to 2.3% of GDP. The temporary fall in the absorption of EU funds and its adverse impact on investments is planned to be partly counterbalanced by public investments from one-off revenues related to the concession of the Sofia airport. The reliance on temporary one-off revenues however results in a deterioration of the structural deficit. In 2017, measures already adopted are projected to reduce both the headline and the structural deficit.

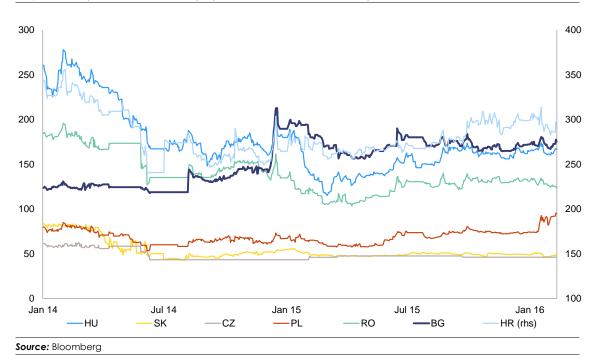
The general government gross debt is expected to increase from 18% of GDP in 2013 to above 30% in 2017. This significant increase reflects not only the financing of the still-sizeable budgetary deficit but also some one-off items. These include the debt issued to support the stabilisation of the financial sector via a liquidity scheme and the payout of guaranteed deposits in 2014.

Financial sector

The banking sector seems to have stabilised since the liquidity crisis in mid-2014. Public confidence in banks has strengthened, deposit flows have normalised and the profitability of the banking sector has improved. The liquidity of the banking sector increased significantly following the pay-out from the deposit insurance after the collapse of KTB bank in 2014, as people redeposited the money they received from the deposit insurance (some 4.3% of GDP). At the same time, regular deposit flows increased strongly and private sector lending stagnated. Remaining asset quality problems in certain parts of the system - particularly the lack of adequate diversification, connected lending and relatedparty transactions — continue to pose significant challenges to the supervisory authority. There remain similar problems in certain parts of the insurance and pension fund industries as well.

The authorities have taken decisive action to address the remaining challenges. The Bulgarian National Bank and the Financial Supervision Commission, in close cooperation with European institutions, have launched comprehensive thirdparty reviews of the banking, pension fund and insurance sectors. Conducting these reviews according to best international practices and, based on their results, taking the necessary follow-up actions are crucial to removing remaining systemic risks and helping the financial system to support the nascent economic recovery. Moreover, in response to the weaknesses identified by the joint IMF/World Bank Basel II Core Principles assessment, the Bulgarian National Bank has drawn up a plan to reform and develop supervision of banks, and has already taken important steps to implement it.

Despite these encouraging improvements, private sector lending continues to stagnate. Corporate credit growth has come to a halt since 2010 reflecting both supply and demand-side issues. The central bank introduced disincentives for banks to hold excess cash reserves, but in the absence of a significant pick-up in economic growth, private sector lending is expected to remain muted in the near-term. An unsupportive business environment and deleveraging pressures are a burden on corporate credit demand and limit borrowing.



Graph 1.10: 5-year Credit Default Swaps spread in selected countries, basis points

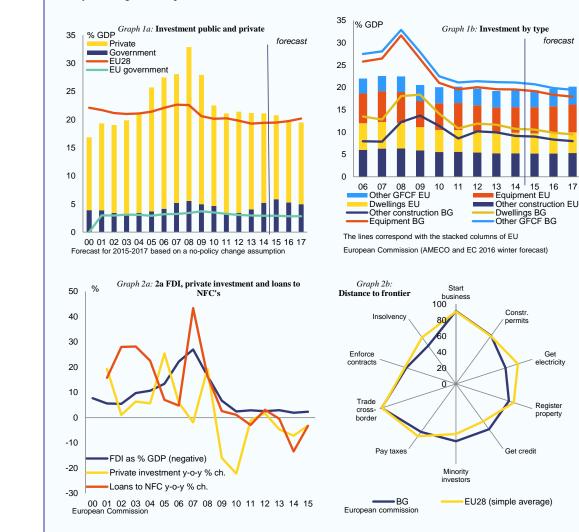
Vulnerability to shifts in investor sentiment has increased. The spreads on Bulgaria's Credit Default Swaps (³) are higher than those of most peers. This points to a relatively higher risk premium that investors charge, pushing up financing costs for financial and non-financial companies as well as for the government. Moreover, the volatility of the spreads has increased notably since mid-2014, implying an increased vulnerability to shocks and shifts in investor sentiment.

^{(&}lt;sup>3</sup>) A Credit Default Swap is a financial product that protects the buyer in case of non-payment by the debtor.

Box 1.1: Investment challenges

Section 1. Macroeconomic perspective

The investment share in GDP in Bulgaria is currently in line with ratios in other Member States that joined the EU since 2004, and with the EU average. However, it has declined substantially since the 2009 crisis, from a peak of 33.5% of GDP in 2008 to 21% by 2014, as all types of investment contracted. It is forecast to decrease further to 19.5% in 2017. Private investment has been the main driver of the post-crisis decline in gross fixed capital formation. This has been partially offset by an increasing share of public investment, mostly because of higher absorption of EU structural funds. Public investment is expected however to shrink in 2016-2017 as the old programming period of EU Structural Funds comes to an end and the new one will not yet have gathered speed.



Limited foreign direct investment inflows and bank lending are holding back the growth of private investment in Bulgaria. Uncertainty and a large amount of non-performing loans restrict banks' capacity to expand credit and are disincentives to investment. There is also limited demand for credit, mainly due to persistent weaknesses in the business environment.

(Continued on the next page)

Box (continued)

Section 2. Assessment of barriers to investment and ongoing reforms

The Country profile on investment challenges¹ published as part of the AGS presents the barriers to investment in Bulgaria. **The Bulgarian government adopted in August 2015 a report regarding the main obstacles to investment, and created 10 working groups to tackle them.** The obstacles recognised by the Bulgarian authorities cover to a large extent those identified by the European Commission in the Country profile on investment challenges. Bulgaria has taken some steps towards reforming the education and training systems, but the quality of education and training systems and their inadequacy with regard to labour market needs continue to hamper the supply of skilled workers to the economy, weighing against investment in some sectors.

In addition, significant barriers in Bulgaria persist in the areas of regulatory and administrative burden, judicial system and insolvency framework.

Bureaucracy, corruption² and policy instability are considered to be among the strongest obstacles to doing business. Procedures are complex, lengthy and relatively costly, in particular for enforcing contracts, trading across borders and connecting to the electricity grid. The frequently changing regulatory framework creates uncertainty as to the business environment.

A certain lack of stable and consolidated legislation leads to legal uncertainty and nontransparent and unpredictable procedures. Concerns about the independence, quality and efficiency of the judicial system, including a certain lack of predictability due to inconsistent rulings, may hamper investment.

Lengthy insolvency procedures lead to a loss of value for both debtors and lenders. Companies prefer to hold payables/arrears. This creates uncertainty and reduces the country's overall attractiveness to investors. Furthermore, the lack of procedures allowing national companies to directly transfer their registered office in and out of Bulgaria is an additional barrier to investment.

(²) 61% of private sector managers in Bulgaria (10 percentage points more than in 2013) say that corruption is a problem for them when doing business, compared to an EU average of 40%. Nearly 60% of companies, the highest percentage in the EU, say that corruption prevented them from winning a public tender or public procurement contract (up by 2 percentage points since 2013). Only 14% (the lowest percentage in the EU) say that Bulgaria applies measures against corruption impartially (down from 23% in 2013).

^{(&}lt;sup>1</sup>) Staff Working Document "Challenges to Member States' Investment Environments" SWD(2015) 400 final (http://ec.europa.eu/europe2020/challenges-to-member-states-investment-environments/index_en.htm)

Box 1.2: Contribution of the EU Budget to structural change

Bulgaria, through 10 national programmes, is a major beneficiary from European Structural and Investment Fund (ESIF) with EUR 9.9 billion available over the period 2014-2020. This is equivalent to 3% of the GDP of the country annually and is over 57% of the expected national public investments in areas supported by the ESI Funds for the period 2014-2016.

A number of reforms condition the efficient use of funds. Reforms in areas, such as the water, railway, education, health, R&DI and labour market sectors, as well as in judiciary, public administration and public procurement still need to be implemented rigorously by the national authorities in order to ensure the desired impact of ESI funds. A strong and sustained commitment of Bulgaria to deliver on action plans for ESIF ex-ante conditionalities is a prerequisite for successful implementation of cohesion policy in Bulgaria. Where ex-ante conditionalities are not fulfilled by end 2016, the Commission may suspend interim payment to the priorities of the programme concerned.

The programming of the Funds focuses on priorities and challenges identified in the context of the European Semester and the Country-Specific Recommendations. In particular the funds support measures related to active labour market policies vocational education and lifelong learning, social enterprise, better access to health and social services for children, quality of public administration high-quality research and innovation, e-government and the transparency of the judiciary. Bulgaria also benefits from EUR 55 million under the Youth Employment Initiative (matched by the same amount from the European Social Fund) supporting the provision of traineeships, apprenticeships, first job experience and start-up support for young people not in employment, education or training. Regular monitoring on 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.

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, Bulgaria has signed agreements for EUR 37 million in the energy field, and EUR 140 million for transport projects. For more information on the use of ESIF in Bulgaria, see: https://cohesiondata.ec.europa.eu/countries/BG.

Key economic, financial and social indicators - Bulgaria		2000		0010	0011	2017	0010	0011		forecast	A
	2003-2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Real GDP (y-o-y)	6.7	5.6	-4.2	0.1	1.6	0.2	1.3	1.5	2.2	1.5	2.0
Private consumption (y-o-y)	10.3	3.4	-4.5	0.3	1.0	3.3	-1.4	2.7	0.7	1.4	1.7
Public consumption (y-o-y)	4.0 15.9	-0.1 22.0	-9.5 -17.7	-1.9 -17.7	1.9 -4.4	-0.5 1.8	2.2 0.3	0.1	0.3 0.4	1.2 -2.1	1.3 0.5
Gross fixed capital formation (y-o-y)	13.5	22.0	-17.7	-17.7	-4.4	0.8	0.5 9.2	-0.1	0.4 5.7	-2.1	4.8
Exports of goods and services (y-o-y)	13.5	2.5 4.9	-11.7	4.1	8.5	4.5	9.2 4.9	-0.1	3.2	4.4 3.2	4.8
Imports of goods and services (y-o-y)	1.3	4.9	-21.5	-1.8	-0.4	-0.5	-0.1	-0.3	-0.2	-0.7	-0.8
Output gap							-0.1				
Potential growth (y-o-y)	6.2	4.9	1.8	0.0	0.2	0.4	0.9	1.7	1.9	1.9	2.0
Contribution to GDP growth:											
Domestic demand (y-o-y)	10.3	8.4	-10.4	-5.0	0.0	2.4	-0.5	2.5	0.6	0.6	1.3
Inventories (y-o-y)	0.8	-0.6	-3.1	-0.1	0.3	0.2	-0.8	0.2	0.0	0.0	0.0
Net exports (y-o-y)	-4.5	-2.1	9.4	5.2	1.4	-2.3	2.6	-1.1	1.6	0.8	0.6
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	2.0	0.4	-0.8	-1.6	-1.4	-1.3	-0.8	0.1	0.3	0.3	0.3
Capital accumulation (y-o-y)	2.1	4.0	2.4	1.3	1.2	1.2	1.2	1.2	1.1	1.0	0.9
Total factor productivity (y-o-y)	2.1	0.5	0.2	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.8
	22.5	21.0	0.0	0.0	0.0	0.2	1.0	1.0			
Current account balance (% of GDP), balance of payments	-23.7	-21.9	-8.3	-0.9	0.9	-0.3	1.8	1.2	•		
Trade balance (% of GDP), balance of payments	-18.5	-19.5	-7.7	-2.3	0.6	-2.9	-0.4	-0.5			
Terms of trade of goods and services (y-o-y)	2.9	1.1	2.3	1.1	3.9	-2.2	-0.5	1.2	1.3	1.0	0.4
Capital account balance (% of GDP)	-1.8	0.7	1.3	0.8	1.2	1.3	1.1	2.2			
Net international investment position (% of GDP)	-46.0*	-93.3*	-95.5*	-93.2	-83.4	-78.4	-73.5	-72.1			
Net marketable external debt (% of GDP)1	5.4*	-10.5*	-6.1*	-9.5	-2.5	3.6	6.3	8.9			
Gross marketable external debt (% of GDP)1	51.1*	63.3*	62.4*	66.9	58.9	59.5	57.4	62.4			
Export performance vs. advanced countries (% change over											
5 years)		50.5*	29.2*	25.5*	27.7*	15.3	13.4	13.95			
Export market share, goods and services (y-o-y)		5.3	-4.5	-2.6	11.5	-5.3	6.3	-2.4			
Net FDI flows (% of GDP)	-25.7	-15.9	-6.8	-2.5	-2.9	-2.6	-3.0	-2.0			
Savings rate of households (net saving as percentage of net											
disposable income)	-15.0	-10.9	-3.8	-6.1	-4.5	-9.8	-1.6				
Private credit flow (consolidated, % of GDP)	23.4	33.1	4.7	3.7	1.3	3.0	7.2	-0.4			
Private sector debt, consolidated (% of GDP)	76.7	130.8	134.1	134.3	125.3	125.7	132.2	124.3			
of which household debt, consolidated (% of GDP)	14.3	25.3	26.9	26.3	24.0	23.3	23.2	22.6			
of which non-financial corporate debt, consolidated (% of	62.4	105.5	107.2	108.0	101.3	102.4	109.0	101.7			
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-5.0	-16.0	1.9	6.2	7.0	5.9	6.2				
Corporations, gross operating surplus (% of GDP)	26.8	24.9	29.4	29.6	30.3	30.0	29.5				
Households, net lending (+) or net borrowing (-) (% of	20.0		27.4	29.0	50.5	50.0	27.5				
GDP)	-8.6	-7.0	-4.9	-4.2	-3.4	-5.1	-1.9				
- /									•		
Deflated house price index (y-o-y)	22.4	17.6	-21.0	-12.3	-9.6	-5.3	0.4	1.5			
Residential investment (% of GDP)	3.5	5.8	4.7	2.7	2.3	1.7	1.7	1.6			
GDP deflator (y-o-y)	6.4	8.2	4.0	1.2	6.9	1.6	-0.7	0.4	1.1	1.5	1.5
Harmonised index of consumer prices (HICP, y-o-y)	5.9	12.0	2.5	3.0	3.4	2.4	-0.7	-1.6	-1.1	-0.1	0.9
Nominal compensation per employee (y-o-y)	7.7	16.8	8.1	9.9	6.8	7.7	8.8	5.6	3.9	4.0	2.5
Labour productivity (real, person employee, y-o-y)	3.6	3.2	-2.6	4.1	3.9	2.8	1.7	1.2	5.9	4.0	2.5
Unit labour costs (ULC, whole economy, y-o-y)	4.0	13.2	10.9	5.6	2.8	4.8	7.0	4.4	2.0	2.9	. 1.1
Real unit labour costs (y-o-y)	-2.3	4.6	6.6	4.3	-3.8	4.8 3.2	7.8	3.9	0.9	1.3	-0.4
Real effective exchange rate (ULC, y-o-y)	2.8	9.6	8.6	3.1	4.4	1.4	8.3	4.4	-1.1	1.7	-0.4
Real effective exchange rate (HICP, y-o-y)	3.4	9.0 8.6	4.0	-2.9	1.0	-2.0	0.1	-0.7	-3.1	0.8	-1.7
								-0.7	5.1	0.0	-1./
Tax wedge on labour for a single person earning the average wage (%)	18.1	21.7	21.7	20.9	21.6	21.6	21.6	21.6			
0,1,2											
Taxe wedge on labour for a single person earning 50% of	9.7*	21.7	21.7	20.9	21.6	21.6	21.6	21.6			
the average wage (%)											
Total Financial Sector Liabilities, non-consolidated (y-o-y)	34.4	-1.4	1.1	-8.9	4.6	11.4	5.2	7.6			
Tier 1 ratio (%)2		13.0	17.5	16.5	14.9	14.6	15.0	18.5			
Return on equity (%)3		11.5	8.7	8.3	4.7	3.6	4.1	1.7			
Gross non-performing debt (% of total debt instruments and		4.8	11.5	17.9	19.7	19.8	18.6				
total loans and advances) (4)		4.0	11.0	11.7	1).1	19.0	10.0	•			•
Unemployment rate	10.4	5.6	6.8	10.3	11.3	12.3	13.0	11.4	10.1	9.4	8.8
Long-term unemployment rate (% of active population)	6.3	2.9	3.0	4.7	6.3	6.8	7.4	6.9			
Youth unemployment rate (% of active population in the		11.0									
same age group)	20.9	11.9	15.1	21.9	25.0	28.1	28.4	23.8			
Activity rate (15-64 year-olds)	63.5	67.8	67.2	66.7	65.9	67.1	68.4	69.0			
People at-risk poverty or social exclusion (% total	61.0	44.8	46.2	49.2	49.1	49.3	48.0	40.1			
Persons living in households with very low work intensity											
(% of total population aged below 60)	15.4	8.1	6.9	8.0	11.0	12.5	13.0	12.1			
General government balance (% of GDP)	1.1	1.6	-4.1	-3.2	-2.0	-0.6	-0.8	-5.8	-2.5	-2.3	-2.0
Tax-to-GDP ratio (%)	30.7	30.6	27.2	26.4	25.5	26.7	28.0	27.8	29.2	29.3	29.5
Structural budget balance (% of GDP)				-2.5	-1.8	-0.5	-0.8	-2.5	-2.3	-2.8	-1.7
General government gross debt (% of GDP)	28.6	13.0	13.7	15.5	15.3	17.6	18.0	27.0	28.2	29.7	30.7

(1) Sum of portoflio 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. Imbalances, risks, and adjustment issues

This section provides the in-depth review foreseen under the macroeconomic imbalances procedure (MIP) (⁴). It focuses on the risks and vulnerabilities flagged in the Alert Mechanism Report 2016. The section analyses the reasons behind the imbalances in the financial sector, looking into the banking sector, the private pension funds industry as well as the insurance industry, as these remain a source of macroeconomic risks. Secondly, it analyses the issues of corporate debt and deleveraging, as these are linked to vulnerabilities regarding private sector indebtedness. It also discusses the insolvency framework, given its adverse impact on corporate deleveraging and financial stability. Thirdly, the section covers the labour market issues which are limiting a balanced adjustment. Subsequently, it discusses external indebtedness as it remains a source of vulnerability. The section concludes with the MIP assessment matrix which summarises the main findings.

2.1 FINANCIAL SECTOR DEVELOPMENTS

Despite significant improvements since the liquidity crisis in mid-2014, the banking sector remains a potential source of macroeconomic risks and imbalances. Public confidence in the banking system appears to have recovered, while banks' liquidity and profitability has on aggregate improved. Nevertheless, issues related to the assetquality of certain parts of the system, particularly the lack of adequate diversification and the existence of connected lending and related-party transactions, continue to pose significant challenges to the supervisor. Similar problems persist in certain parts of the insurance and pension fund industries as well. To address these issues, the financial sector supervisors, in close cooperation with European institutions, have launched comprehensive third-party reviews of the banking, pension fund and insurance sectors. Conducting these reviews according to best international practices and taking the necessary follow-up actions thereafter are crucial to removing remaining systemic risks and strengthen the role of the financial system in supporting economic recovery. Going forward, banking and nonbanking supervision would need to be strengthened to address the potential areas where these reviews reveal major problems. The central bank has already taken important steps to beef up banking supervision. Similar efforts will be needed to strengthen non-banking supervision.

Banking sector developments

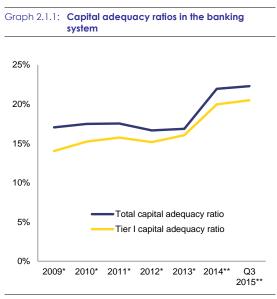
The capital adequacy of the banking system as a whole improved further in 2015, benefiting from sustained profitability. The Tier I capital adequacy ratio of the banking system reached 20.5 % of the risk-weighted assets at end-September 2015, some 0.5 percentage points higher than at the end of 2014 (see Graph 2.1.1). The size of the capital buffers is positively affected by growing pre-tax profits. Still, it should be noted that banks' performance in 2015 continued to be marked by notable heterogeneity: seven of the 28 banks reported losses for the year, while in nine others return on assets was less than half of the system average. Asset quality indicators also improved, as the ratio of non-performing loans fell over 2015 while the coverage of these loans by loan-loss provisions increased (see Graph 2.1.2), reflecting mainly developments in the corporate portfolio. Relatively high capital buffers and increased loanloss impairments provide some measure of comfort ahead of the system-wide asset quality review and stress test.

The banking sector seems to have stabilised since the liquidity crisis in mid-2014. Following the large deposit withdrawals that resulted in a liquidity crisis in the two biggest domesticallyowned banks (⁵), depositor behaviour has steadied. The authorities put forward an ambitious plan to address the significant supervisory shortcomings events revealed. Although that these the implementation of this plan is still in an early stage (see Banking supervision below), it has helped restore confidence. Household deposit inflows resumed, albeit at a slower pace than before. While depositor behaviour suggests that confidence in the banking system remains strong, there has been a notable increase in risk averseness, reflected in an increased preference for larger foreign banks. As a

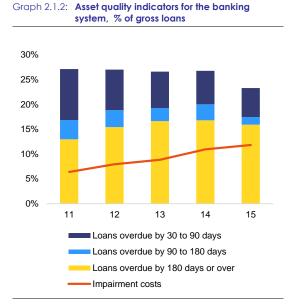
^{(&}lt;sup>4</sup>) According to Article 5 of Regulation (EU) No. 1176/2011.

^{(&}lt;sup>5</sup>) <u>http://europa.eu/rapid/press-release_IP-14-2124_en.htm</u>

result, the share in these banks in new deposits increased significantly, at the expense of domestic and Greek-owned banks (see Graph 2.1.3).

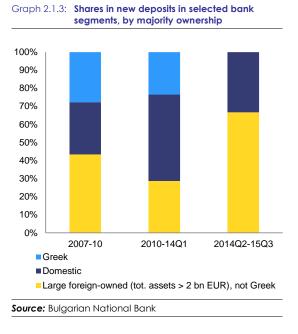


* Ratio according to the now repealed Ordinance 8 ** Ratio according to Regulation (EU) 680/2014 **Source:** Bulgarian National Bank



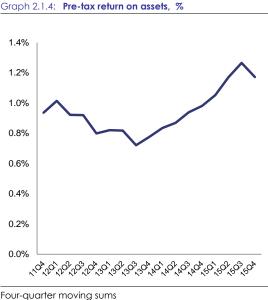
Figures exclude claims on the central bank. End-of-year data.

Source: Bulgarian National Bank



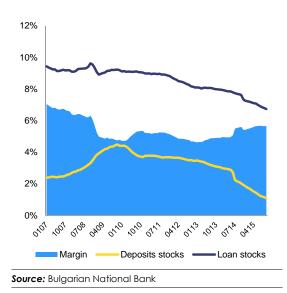
The profitability and liquidity of the banking sector as a whole has improved. The pre-tax return on assets reached 1.2 % in 2015, up from 1 % in 2014 (see Graph 2.1.4). Gross income increased by 6.9 % mainly due to higher net interest income, reflecting a significant decline in funding costs. The decrease in funding costs for banks resulted from a combination of the passthrough of the low-yield environment on markets, international increasing share of overnight deposits indicating preference by firms and households to achieve higher liquidity of their funds at the expense of a lower yield, and the revocation of KTB bank's banking license (see Graph 2.1.5) (⁶). The system-wide ratio of administrative costs to gross income remained relatively unchanged compared to 2014 at 44.3 %, just below the long-term average.

^{(&}lt;sup>6</sup>) KTB had employed an aggressive policy to attract deposits by offering high interest rates, which affected the market rates. The impact of KTB on the market is suggested by the sharp change in the deposit rate curve in Graph 2.1.2 after the bank was placed in special supervision and stopped accepting new deposits in June 2014.



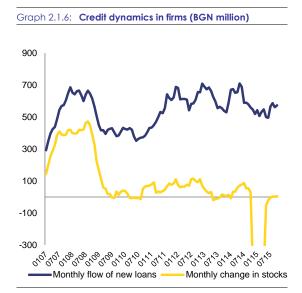
Source: Bulgarian National Bank

Graph 2.1.5: Effective interest rates and net interest rate margin for commercial banks



Private sector lending, however, continues to stagnate. Following a period of very rapid growth before the global financial crisis, the expansion of credit to both firms and households has come to a halt since 2010. This persisting trend reflects issues with accumulated excessive leverage and weak economic performance, weighing on credit demand, as well as increased risk averseness by banks, which have to deal with a significant stock of legacy non-performing loans in an environment of inefficient insolvency procedures. The flow of

credit to firms recovered relatively quickly to its pre-2009 level, while the flow to households is still in a process of very slow recovery (see Graphs 2.1.6 and 2.1.7). But the stock of credit has remained largely stable, indicating that — for the system as a whole — new loans have merely replaced or refinanced maturing loans.



Change in stocks reflects the removal of KTB from the statistics in November 2014 **Source:** Bulgarian National Bank

Graph 2.1.7: Credit dynamics in households (BGN million)

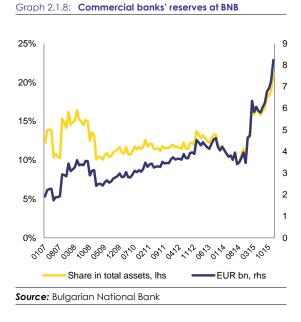


Change in stocks reflects the removal of KTB from the statistics in November 2014 **Source:** Bulgarian National Bank

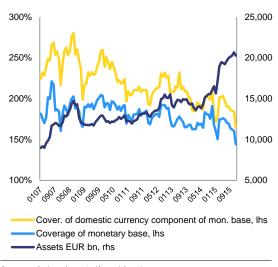
Since the end of 2014, the banking sector has been operating in an environment of

extraordinary liquidity. In addition to the resumption of the flow of retail deposits, the level of liquid assets in the banking system was boosted by the pay out of BGN 3.7bn guaranteed deposits following the declaration of insolvency of KTB. As domestic lending remained muted, the ratio of liquid assets improved to 36.7 % at end-2015, up from 29.9 % at end-2014 and 27 % at end-2013. (⁷) The extraordinary levels of liquidity were maintained across the board and, according to the BNB, all banks maintained liquidity ratios of at least 20 %, significantly higher than the effective regulatory minimum of 9.21 %.

The level of reserves held at the central bank reached record-high levels. Faced with limited domestic investment opportunities and decreasing returns on investment abroad, banks deposited their excess liquidity at the BNB. The trend was reinforced by the ECB setting an increasingly negative interest rate on its deposit facility. Moreover, macroprudential action by the BNB in the beginning of 2015 with a view to further reducing spill-over risks from instability in Greece (⁸) resulted in banks repatriating significant amounts of foreign assets, which was used mainly to repay foreign liabilities and to further increase reserves at the central bank. As a result, commercial banks' reserves expanded sharply and approached EUR 7bn or 14 % of the banking sector's gross assets by December 2015, while the level of excess reserves (over EUR 3.5bn in early December 2015) covered nearly two times the minimum reserve requirement (see Graph 2.1.8). Added to the impact of strong gains in currency in circulation and the government's fiscal reserve, the balance sheet of the BNB's Issue Department (⁹) increased to over EUR 20bn in the second half of 2015. The coverage of the domestic-currency component of the narrow-money aggregate M1 by the assets of the currency board thus rebounded to over 170 % in Q2 2015 before moderating to 161 % at end-November 2015 (see Graph 2.1.9). To protect its increased balance sheet from losses resulting from the depressed yield environment abroad, the BNB introduced a legal definition of excess reserves and a negative interest rate on these reserves when the European Central Bank's deposit facility rate is negative. While this action will decrease banks' incentive to store excess liquidity at the central bank, it is not likely to result in significant changes in banks' risk-taking behaviour, also in view of the upcoming assetquality review and stress test of the entire system.



Graph 2.1.9: Currency board assets and coverage



Source: Bulgarian National Bank

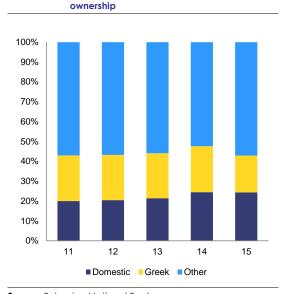
Consolidation started in the banking sector in 2015 and this process can be expected to

^{(&}lt;sup>7</sup>) Ratios expressed according to the BNB's Ordinance 11 on Liquidity Management and Supervision of Banks.

^{(&}lt;sup>8</sup>) See also Economic Review 2/2015, Bulgarian National Bank

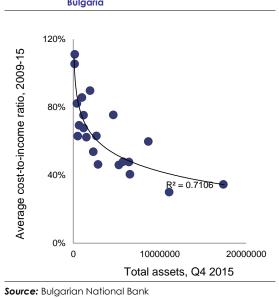
^{(&}lt;sup>9</sup>) Under the currency board arrangement, the Issue Department is mandated to hold the BNB's international reserves.

continue in the coming years. In the second half of 2015, the Eurobank subsidiary acquired the Alpha Bank branch, thus creating the fourth biggest bank in the country in terms of total assets. Further changes in the ownership structure of the banking sector can be expected to take place in the coming years. Banks with Greek ownership might be affected in light of developments in their parent institutions. In view of the significant size of the subsidiaries with Greek ownership (some 20 % market share in 2015), their divestment may pose supervisory challenges and result in significant changes to the structure of the banking sector. The BNB management has suggested that structural changes in the coming years may take the form of consolidation with bigger players taking over some of the smaller and less efficient ones (see Graphs 2.1.10 and 2.1.11).



Graph 2.1.10 : Market shares in terms of assets, by

Source: Bulgarian National Bank



Graph 2.1.11: Cost efficiency and size of banks operating in Bulgaria

Banking supervision

In response to the weaknesses identified by the joint IMF/World Bank Basel II Core Principles assessment, the Bulgarian National Bank has set up a plan to reform and develop supervision of banks. The list of measures, including a concrete timetable, has been adopted by the BNB and covers six specific areas: i) governance model; ii) reorganisation of the banking supervision department; iii) regulatory framework; iv) preventive supervisory measures and bank resolution; v) IT and communication support; and vi) coordination and information exchange $(^{10})$. In line with the proposed timing, some measures most notably the establishment of a fully-fledged Off-site Supervision Directorate - were already implemented in the final quarter of 2015. The plan to reform and develop banking supervision is an ambitious project and an important building block of the BNB's overall strategy of strengthening its credibility. An equally important part of that strategy is the asset-quality review and stress test for the banking sector, preparatory work for which has also started (see next section). In the second half of 2016, on the basis of the findings of the asset-quality review and stress tests, the IMF and

^{(&}lt;sup>10</sup>) The text of the Plan can be found on the BNB website: <u>http://www.bnb.bg/bnbweb/groups/public/documents/bnb</u> pressrelease/pr_20151005_1_a1_en.pdf.

the World Bank are to carry out a comprehensive assessment $(^{11})$ of the state of the banking sector.

In the area of governance, it has been decided in October 2015 that the internal rules and guidelines regulating the supervisory activities will be approved by the BNB Governing Council. The Governing Council will receive, on an on-going basis, quarterly reports on the supervisory monitoring of banks. In order to further improve the transparency of the supervisory process, an internal audit of the compliance with the rules and procedures will be submitted annually to the Council. Thus, the duty to enforce observance with the established procedures is carried collectively by the BNB Governing Council. The responsibility for applying these procedures, as well as for taking supervisory actions, remains, however, an exclusive prerogative of the Deputy Governor in charge of banking supervision.

The re-organisation of the supervision department aims at strengthening its capacity and independence. In addition to setting up a separate off-site supervision directorate, an internal advisory council has been established. The council will include senior management from the various directorates of the department, with the view to considering all aspects and implications of supervisory measures in a broader context. The newly created directorate will be staffed with 42 additional members, which will increase its capacity by approximately 50 %. In addition, the principle of automatic rotation of supervisory teams every two years has been introduced.

Legislative amendments to expand the powers for imposing supervisory measures are expected to be prepared by March 2016. Two new powers are being envisaged: the ability to replace senior management figures in the banks and the ability to replace banks' external auditors. The BNB will conduct a full review of ordinances, internal rules and guidelines and will bring them into compliance with the Basel principles by September 2016. In particular, it has been identified already that two separate guidelines, on off-site inspection and on special supervision, will need to be developed. In addition, a supervisory review and assessment manual, consistent with the decisions of the European Banking Authority on common procedures and methodologies, will be adopted by the same deadline.

In the area of preventive supervisory measures and bank resolution, a new Bank Resolution Directorate outside the Banking Supervision Department has been established. The BNB envisages specifying the requirements and processes of preparation and approval of banks' recovery plans by December 2015. Thereafter, the rules and procedures for early intervention are to be set up by March 2016. The Bank Recovery and Resolution and Deposit Guarantee Schemes Directives have already been enacted in national legislation. In this context, the special supervision intervention arrangement (conservatorship) remains available, but is completely reformed. Its duration is reduced to one month only, and is meant to be used as a very temporary measure before a bank is liquidated. Together with the new requirement to determine deposits' unavailability within five days, these legal changes should eliminate the likelihood that depositors lose access to their deposits for a long period of time, as happened in the case of the Commercial Cooperative Bank (12).

The IMF/World Bank Basel II Core principles found weaknesses in assessment the identification of risk associated with breach of concentration limits and related party transactions. Regarding related party transactions, the concept of relatedness has been expanded to economic, rather than exclusively legal, relations. While an escalation of supervisory measures has already been possible under the current regulatory framework, no changes are envisaged to strengthen the enforcement of compliance. The BNB prefers to retain discretion based on supervisory judgment rather than relying on automatically triggered penalties. Moreover, the expanded regulatory and supervisory powers will not include sanctions for banks that are systematically late in the publication of their audited accounts.

⁽¹¹⁾ Financial Sector Assessment Programme

^{(&}lt;sup>12</sup>) In 2014, more than five months elapsed between the decision to put the Commercial Cooperative Bank under special supervision and the activation of the deposit guarantee scheme.

Asset-quality review and stress test for banks

The authorities have taken the necessary procedural steps to launch the exercise. The BNB signed a contract with Deloitte Bulgaria to assist it in carrying out the asset-quality review, including the preparation of the methodology on the basis of the one used by the ECB in the 2014 Comprehensive Assessment, and the subsequent stress tests. The process so far follows the timeline laid out by the authorities in the 2015 National Reform Programme. The review of the assets of the individual banks has started and the findings are expected to be communicated to the public in August 2016.

Private pension funds industry

The private pension funds operating in the country are the largest non-banking segment of the financial sector. Mandatory contributions from all employees born after 1960 have been collected for over a decade, increasing the total assets of pension funds to around 10 % of GDP. Legislative amendments introduced in 2015 allow workers to transfer their individual accounts between a private pension fund and the national pay-as-you-go scheme. The future development of private pension funds' assets would strongly depend on the popularity of this newly introduced option. At present pension funds are one of the important institutional investors on the domestic capital market. They provide fresh financing to domestic businesses, assuming the respective benefits and risks of doing so.

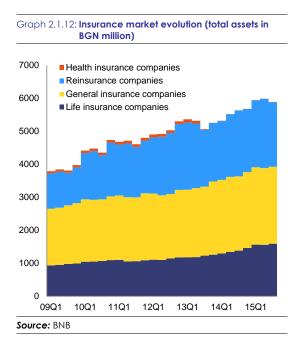
The main risks in the private pension funds industry are similar to those in the banking sector. Risks related to related-party transactions and concentration of investments can also be identified in the pension funds industry. The assets held by pension funds reveal different strategies employed by the pension insurance companies managing them. Some place the majority of their funds on the domestic market. In addition to government bonds, holdings include corporate stocks and bonds, mutual funds and special investment purpose companies. Given the low liquidity and limited free-float of the instruments listed on the domestic stock exchange, those investments carry a higher risk compared with more liquid financial markets. Also the value of such instruments, implied by the market quote, may not fully reflect the valuation, which could be achieved at an arm's length transaction. The rest of the funds focus on securities traded on the international capital markets. Those investments yield lower returns compared to the domestic ones. However, those lower returns are also accompanied by lower volatility in valuations.

Should the identified risks materialise, they could have important implications for public finances in the future. Bulgaria's pension funds industry is relatively young and significant payouts have not yet started. The first cohort of pensioners to rely on a private pension would only retire after 2020 and people who have contributed to the system for the full duration of their careers would retire only after 2040. Nevertheless, issues related to valuation of investments and the resulting volatility of net assets could lead to a situation where different funds are able to pay-out different amounts to pensioners, with some paying much lower amounts given the same contribution level. It should be noted that the system operates as a defined-contribution system and the risk of underperformance lies fully with those contributing to the funds. However, such a could have significant situation adverse implications for public finances, either directly through the need to replace pension income or indirectly through the need to provide from the public purse other social assistance and services to those affected.

The authorities have recognised the risks in the private pension funds sector and initiated an independent third-party review of the funds' assets. The pension funds supervisory authority has identified risks related to the existing definitions of related parties and control, as these do not fully capture relatedness in the economic sense, and has proposed changes to the definitions. The planned third-party review of assets - if it is completed by applying the highest international standards — could be helpful in revealing all possible risks stemming from relatedness, concentration and overvaluation of assets. The follow-up actions to the results of this review, expected in the second half of 2016, will be crucial for ensuring the sector's stability going forward.

Insurance industry overview

The Bulgarian insurance industry is growing rapidly and could be an important source of risk for the financial sector. The insurance sector is relatively underdeveloped as compared with other EU countries - assets of the insurance companies totalled EUR 3.1 billion (7 % of GDP) in mid-2015, while total (life and non-life) gross written premiums were just under 2 % of GDP in 2014 (see Graph 2.1.12). At end-October 2015, there were 38 registered non-life insurance companies, of which eight are branches of foreign insurers. There were 18 registered life insurance companies, including three branches. Despite the high number of firms, five big insurers hold half of the non-life market in terms of premiums written and the life insurance market is even more The large number of small concentrated. companies implies risks in terms of their ability to fully comply with the regulatory requirements and their ability to secure sufficient additional capital in line with those regulations. $(^{13})$



Rapid growth of the industry may have led to the build-up of imbalances, similar to those in other sectors in the pre-crisis period. The deepening and increased penetration of financial markets led to rapid growth of the insurance sector, as assets expanded by some 55 % between 2009 and mid-2015. In the pre-crisis period, the sector was dominated by general insurance, most notably motor vehicles and mandatory third-party liability insurance. The overall proportion of those two segments in general insurance is around 70 %. However, significant differences between insurers can be observed. Some diversify between motor and non-motor insurance, while others focus almost exclusively on motor insurance, and even on third-party liability insurance alone. Such differences imply different risk profiles and different market strategies, which could be an additional source of risk for the sector. The life insurance segment has grown more quickly in the post-crisis period, possibly reflecting the heightened risk perception of individuals.

Profitability of some insurance segments is low and could suggest some under-pricing practices. Some evidence of under-pricing could be found for the insurance of motor vehicles, with observed gross combined ratios of over one (1.39 for land vehicles and 1.02 for motor third party liability). (¹⁴) Other segments with high gross combined ratios include insurance for ships, travel assistance and legal expenses. The importance of these segments is limited compared with motor insurance.

The authorities have recognised the risks present in the insurance sector and have initiated an independent third-party review of market participants. Similar to the actions taken in the banking and pension funds sectors, the authorities have taken the first steps towards organising a review and stress tests of the balance sheets of insurers operating in the country. The results of this review, expected in the second half of 2016, would be followed up by actions envisaged in the Solvency II Directive and should ensure the stability and competitiveness of the insurance sector.

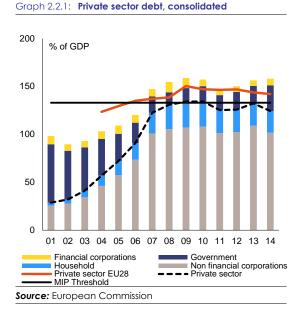
^{(&}lt;sup>13</sup>) Very small insurers fall outside the scope of the Solvency II regime. This is the case for insurers with gross annual premium income of less than EUR 5 million and technical provisions below EUR 25 million.

^{(&}lt;sup>14</sup>) The combined ratio is calculated by dividing the sum of incurred losses and expenses by the income received by premiums written. It measures the profitability of insurance segments, excluding the income received from investments in assets.

2.2. CORPORATE DEBT AND DELEVERAGING

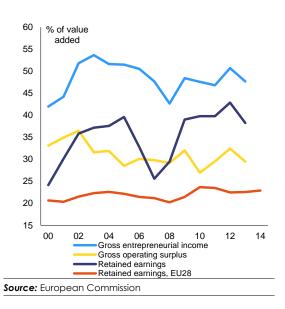
Corporate indebtedness

Non-financial corporate debt is the main source of vulnerabilities regarding private sector indebtedness. The debt of non-financial corporations stood just above 101 % of GDP in 2014 and is much higher than household debt of 23 % (Graph 2.2.1). Businesses rapidly expanded their balance sheets in the pre-crisis period, which lead to a considerable increase in their liabilities. Following some deleveraging in 2011-2012, corporate debt increased in 2013 but declined again in 2014. Given that a large portion of the expansion took place in the construction and real estate sector, the collapse in asset prices during the crisis is likely to have left some businesses overburdened by the debt they took on to expand. Inefficiencies of the insolvency framework, which are described in more detail in the section below, limit debt work-out and increase the uncertainties surrounding the assessment of corporate balance sheets.



Persistent negative inflation puts an additional burden on those non-financial corporations that need to reduce their over-indebtedness. As described in the scene setter above, inflation has been in negative territory since mid-2013. Consumer and producer prices have fallen as a result of both low international commodity prices and some country-specific factors like changes to regulated prices. Lower prices put pressure on corporate revenues and the ability to service debt. Gross operating surplus declined both nominally and as a proportion of value added and GDP in 2013 — the first negative inflation year — and recovered only slightly in nominal terms in 2014, while still decreasing as a share of value added (Graph 2.2.2). Bottom-line profitability of corporates also seems to be affected and is further hit by debt servicing costs.

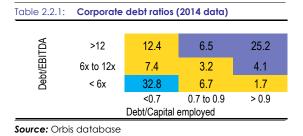




Firm- and industry-level data reveals pockets of vulnerability and risks to debt sustainability in parts of the corporate sector. A cross section of non-financial corporations by debt leverage and profitability (¹⁵) shows that a third of the Bulgarian

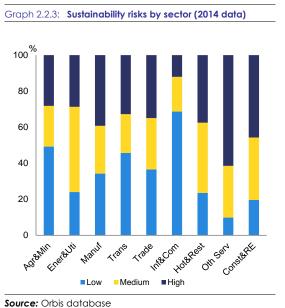
 $^(^{15})$ The results on the distribution of corporate debt are based on a firm-level dataset from the Bureau Van Dijk's Orbis database. The data refer to the fiscal year 2014, which on the date of the download (January 2016) were available in Orbis for a large majority of firms, but not for all. Subsidiaries of resident companies with consolidated financials were excluded to avoid double-counting Firms operating in finance and insurance, public administration, health and social services, and education, were excluded. Debt is defined as the sum of loans and non-current liabilities. Capital employed is the sum of debt and equity. before interest, taxes, depreciation and Earnings amortisation (EBITDA) are directly taken from the database. The thresholds for debt/capital employed (70 % and 90 %) and the debt/EBITDA (6x and 12x) are approximately equal to the 75th and 90th percentile across the pooled sample of firms from fifteen EU countries (which include vulnerable and core countries). Reported figures represent the share of debt held by firms in a given solvency bucket, as a percentage of the total amount of debt.

companies, included in the dataset, are vulnerable to adverse developments as they are both highly leveraged and not sufficiently profitable (see Table 2.2.1). Thus, capital appears to have been misallocated into unproductive undertakings. Additionally, creditors of those companies may not be able to fully recover the debt extended to those companies, which in turn could worsen the financial situation of the lenders. The industries facing the highest debt sustainability risks include construction, real estate, hotels and restaurants and other business services (Graph 2.2.3). Unsurprisingly, these industries saw the most significant inflow of investments in the pre-crisis period and so have the highest likelihood of capital misallocation. The risks identified above further highlight the need for a well-designed and wellfunctioning insolvency framework, to enable a smooth debt work-out process and minimise the destruction of value.



Weak credit demand seems to be an important driver of credit trends; however, in some sectors, credit supply could also be an issue. Lending rates have decreased throughout the postcrisis period. Nevertheless, credit demand has been very weak and mostly focused on refinancing of existing liabilities. New financing has been extended only in some export-oriented sectors, including manufacturing and professional services (linked to the expanding business process outsourcing sector). The weak demand for funding is in line with the slow overall economic recovery, weak domestic demand and the accumulated high debt stocks. Credit supply has been less affected as a robust deposit growth, linked to risk aversion and increasing remittances, has provided commercial banks with sufficient liquidity, as discussed in section 2.1. Still, pockets of the economy, including the small and medium enterprises sector, as well as the construction industry, could suffer from limited credit supply due to the overall high risk profile of the domestic economy. Banks'

lending requirements have tightened in the postcrisis period and are likely to tighten further following the banking sector troubles of 2014.



Developments in other economic sectors have been more benign but some risks are still present. Household debt increased quickly from 2 % of GDP in 2000 to 27 % of GDP in 2009. Although at a relatively low level in a peer comparison, it should be noted that the income distribution of Bulgarian households is rather dispersed. Thus, it is likely that some households face deleveraging needs in the post-crisis period, while others are able to bear the burden and even take on more debt. Financial corporations did not significantly increase their debt as a proportion of GDP in the pre-crisis period and have been able to reduce it further since. The public sector also kept its debt levels relatively stable. However, deficits incurred over 2014-2015 - together with one-off borrowing to provide liquidity support to banks and to lend funds to the deposit insurance - led to a rapid increase in government debt, from 18 % in 2013 to 30 % in 2015.

Liabilities of state-owned corporations could have important implications for the economy as a whole. State-owned enterprises in the energy and transport sectors have experienced financial difficulties in recent years. More specifically, the National Electricity Company, part of the Bulgarian Energy Holding, has generated significant losses and incurred liabilities towards the parent holding company. So far, the energy holding has been able to finance those, through profits generated in other companies, such as the nuclear power plant in Kozloduy and the Electricity System Operator, as well as through borrowing on international markets. However, in the last year, the energy holding has faced difficulties securing external financing to repay obligations of the electricity company. Creditors have demanded a state guarantee for their loans, which for the moment has not been provided. The state railway operator has also faced difficulties servicing its debt and a state guarantee has been activated by the creditors in order to recover their loans. Those two examples highlight the interconnectedness of economic sectors and the risks posed by contingent liabilities both to public finances and overall macroeconomic stability.

Insolvency framework

The main motivation for addressing insolvency frameworks at the current time is the high level of private sector debt. Insolvency frameworks could help to address the issues linked to high debt in a number of ways. First, by freeing up resources caught in unproductive activities, effective insolvency frameworks contribute to reducing the adverse effects of high private debt on economic activity. Second, they can mitigate deadweight costs linked to bankruptcies by providing a transparent and speedy process to resolving nonviable debt. Third, before the event, insolvency frameworks shape the incentives that govern decisions both to provide credit and to borrow to invest. Finally, after the event, once a debtor has become insolvent, the framework determines how much value is recovered for the creditor and how quickly debtors are released from their obligations.

The current Bulgarian insolvency framework has several weaknesses, notably the long time to process insolvency cases and the low recovery rate. In addition, there is a tendency for procedures to end in the liquidation of companies rather than restructuring. Under Bulgarian law, debtors do not have access to a preventive restructuring framework that would facilitate the rescue of companies outside formal insolvency proceedings. Bulgarian insolvency law only provides possibilities for restructuring after the insolvency proceedings have been opened. Although the sale of the business as a going concern — in the course of the insolvency proceedings and based on an approved restructuring plan — is explicitly allowed, prepack sales (i.e. arrangements under which the sale of all or parts of a company's business or assets is negotiated with a purchaser 'before' the appointment of an insolvency administrator) are not permitted. Moreover, the restructuring plan may only cover existing claims, but may not provide for new financing. At the same time, Bulgarian law does not provide for any discharge periods for entrepreneurs, as suggested in the 2014 Commission recommendation. (¹⁶) If an individual was declared insolvent entrepreneur and unsatisfied creditors remained after the termination of the insolvency proceedings, the entrepreneur would be subject to certain legal limitations for subsequent business activities.

Weaknesses are also present as regards consumer debt resolution. The concept of 'consumer over-indebtedness' does not exist and bankruptcy of individuals other than individuals who are registered as sole traders is not allowed. Although Bulgaria is considering introducing legislation that would allow individuals other than sole traders to be discharged of their debts, the progress in developing such new legislation is very slow. Hence, consumer debt deleveraging through personal insolvency tools is not possible in Bulgaria.

The authorities are aware of currently existing inefficiencies in national pre-insolvency and insolvency frameworks and of their adverse impact on corporate deleveraging and financial stability; they have presented various policy initiatives. They include: 1) introducing expedited restructuring proceedings through a fast-track pre-agreed approval procedure of court agreements; 2) introducing a sound framework providing out-of-court debt restructuring and preventive procedures; and 3) ensuring the interconnectivity between courts as regards the register of insolvencies, improving the data quality of the trade register and strengthening the supervision of auditing companies. Addressing

^{(&}lt;sup>16</sup>) Commission Recommendation 2014/135/EU of 12 March 2014 on a new approach to business failure and insolvency, OJ L 74, 14.3.2014, p. 65-70.

these challenges would also be essential for dealing with the new problem loans that the upcoming asset-quality reviews in the financial sector will reveal.

The authorities are currently working on the implementation of several initiatives. First, draft amendments to the Commerce Act, aiming to introduce a pre-court insolvency procedure for companies facing financial difficulties, are under preparation and expected to be submitted to the National Assembly shortly. Discussions focus on the key issue of addressing the rights of those creditors who decide not to enter the settlement agreement on a voluntary basis. Second, amendments to the procedure for selecting and overseeing the trustees in bankruptcy/insolvency cases have been prepared. Third, the authorities also envisage amendments to the regulations on court procedures in insolvency and bankruptcy cases.

Strengthening of the judicial infrastructure for insolvency cases is in progress but further steps are needed to improve the efficiency of courts in this area. The envisaged amendments to the Commerce Act will need to be complemented by improvements in the infrastructure of the judicial system. This is so as to effectively improve the speed and efficiency of the insolvency process. In October 2015, a new electronic system for random case allocation that takes into account the complexity of the cases and the workload of the judges was launched in all courts. It aims to provide a transparent, objective and efficient distribution of cases. Work is ongoing to complete the interconnectivity between the Commercial Registry and the document management systems of courts, enabling the automatic submission of all court acts in insolvency procedures. Further steps were taken on providing staff training and additional court space. However, congestion and inefficiencies in some of the biggest courts in the country call for swift action on increasing capacity and specialisation, and on balancing out the currently uneven workload of judges.

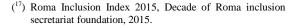
Efforts are also needed to improve the quality of the trade register and to strengthen supervision of auditing companies. The authorities are currently drafting new legislation on independent financial auditing, which will transpose Directive 2014/56/EC on statutory audits of annual accounts and consolidated accounts. Regarding data quality in the trade register, the authorities are developing additional functionalities of the trade registry to speed up the submission process of annual financial reports next year. The impact of administrative penalties for not submitting the annual financial reports remains to be assessed.

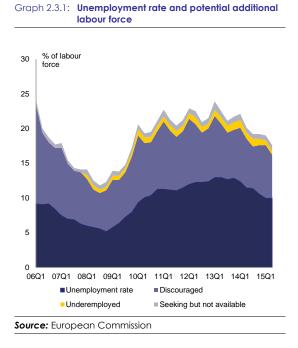
2.3. LABOUR MARKET

Labour market adjustment: employment and unemployment developments

Employment rate developments point to a gradual improvement in the labour market. The employment rate (aged 20-64) has increased by 1.6 percentage points. In 2014 to 65.1% and continued to rise during 2015, with 68.8% in the third quarter of 2015. Employment growth was primarily driven by the growth in the agricultural sector, together with a slight improvement for the services sector. This does not augur particularly well for future growth given the low and poor prospects for productivity in the agricultural sector. Overall, the employment gains have benefited population groups above 25 years old thus challenges remain regarding youth employment. At 22.6% in the third quarter of 2015, which is about 12 percentage points lower than the EU average, the youth employment rate remains particularly low. Employment rate challenges remain for other groups too, such as low-skilled older workers (31.5%), rural area residents (55%) and Roma $(22\%)(^{17})$. The employment prospects of these groups were severely hit during the crisis, and had already been low due to structural cumulated disadvantages. This is a structural challenge and threatens the effective labour market adjustment.

The unemployment rate fell and stood at 9.6 % over the first three quarters of 2015, just slightly above the EU average. Despite improvements, unemployment rates are not yet back to pre-crisis levels. The increase in employment together with the expected reduction of the labour force is projected to contribute to a further fall in the unemployment rate to 9.4 % in 2016 and 8.8 % in 2017. Important challenges, however, remain as a large proportion of the population remains on the edge or outside the labour market (see Graph 2.3.1).





The incidence of long-term unemployment continues to grow despite overall employment gains, pointing to its structural nature and the low activation capacity of labour market policies. This reflects reduced job creation, a decline in job finding rates, continuously low labour demand and very high skills mismatches. Long-term unemployment constitutes about 60 % of total unemployment (age group 20-64), one of the highest rates in the EU. Only about 14 % of those who were long-term unemployed in 2013 were able to find a job in 2014, whereas 60 % of them remained unemployed $(^{18})$. The latter share - persistent long term unemployment — is the third highest in the EU (after Greece and Slovakia). In 2014, every fifth long-term unemployed person was aged 55 or more, and every third was low-skilled. Close to 60 % of the long-term unemployed were men, highlighting a decline in economic activity in such sectors as manufacturing and construction, and the policy challenge ahead for reintegration into the labour market. This development points to limited activation measures. Big gaps in the coverage of long-term unemployed arise from the very low registration rates with the public employment

^{(&}lt;sup>18</sup>) European Commission (2016), Employment and Social Developments in Europe, 2015.

service (¹⁹) and the lack of structured cooperation and data exchange between employment and social authorities. Bulgaria is piloting Centres for Employment and Social Assistance, which is a new model of integrated social and employment services.

Bulgaria's labour productivity is the lowest in the EU and the gap between wages and productivity has reached its highest level in 2014. Real wages increased significantly faster than productivity in 2012 and 2013 and somewhat faster than productivity in 2014, in part due to negative inflation. Real productivity per person was on a steady but slow increase during the period. As a result of these trends, the gap between wages and productivity (see Graph 1.8) in 2014 was at its widest, pointing to the prevailing labour market tightness and hampering income convergence prospects. Productivity improvements are important in order to maintain competitiveness amidst a shrinking labour supply and pressures on wages.

The shrinking and ageing labour force and low labour market participation may challenge the adjustment capacity of the economy in the longrun. Bulgaria is expected to continue experiencing immense demographic pressures, leading to a projected decline of population by another 2.3 million by 2080 (²⁰). On top of that, the share of those aged 65 or more is forecasted to rise by approximately 50% over the next 45 years at the expense of those 15-64 years old. The rapidly ageing Bulgarian population is contributing to fewer people in the job market and a lower unemployment rate. The important outward migration, possibly coupled with brain drain, poses an additional challenge.

The available information suggests that the share of the undeclared economy in Bulgaria is high in comparison with other EU Member States. Undeclared work reduces fiscal receipts and generally keeps productivity low. Two government agencies are the main authorities fighting undeclared work. The General Labour Inspectorate is dealing with the application of labour legislation and the National Revenue Agency is responsible for state revenue collection. Measures to tackle undeclared work include enhancing the powers of supervisory bodies, increasing penalties, introducing one-day contracts, and improving risk assessment and data sharing. Separate and joint inspection campaigns have only led to temporary compliance at best. Efforts to foster voluntary compliance and change attitudes towards undeclared work remain limited in scope $(^{21})$.

Labour market adjustment: labour cost and productivity developments

Labour costs remain the lowest in the EU despite recent increases. In 2014, average hourly labour costs in the whole economy (excluding agriculture and public administration) were still at the lowest level recorded across the EU but saw an increase of 3% since 2013. The rise in the total labour costs is predominantly due to the rise in employer-paid social contributions and other employer-paid labour costs. While wages and salaries have also increased slightly, their share in total labour costs shrank to 84% in 2014. Labour costs grew most within the industry (except construction) sector, but remained constant for the services sector. This left the latter with the highest labour costs in the economy (not in itself a problem given its higher productivity).

Growth in nominal wages was stronger than predicted, based on economic fundamentals such as inflation, productivity and unemployment (see Graph 2.3.2 and 2.3.3) (²²). If the trend continues, this could indicate a possible risk balanced growth to and competitiveness. However, the faster-thanpredicted nominal wage growth could be partially explained by the presence of Balassa-Samuelson

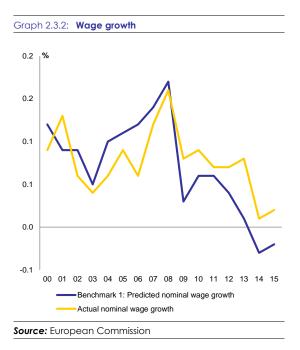
^{(&}lt;sup>19</sup>) Only 40 % of long-term unemployed were registered in 2014.

^{(&}lt;sup>20</sup>) BG has suffered one of the biggest population contractions in the world, falling from almost 9 million to around 7.2 million over a generation, with net birth and net migration both contributing roughly equally.

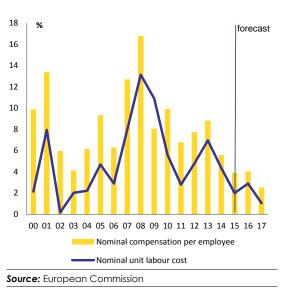
^{(&}lt;sup>21</sup>) Dzhekova R. and C. Williams (2014). Tackling the Undeclared Economy in Bulgaria. University of Sheffield.

^{(&}lt;sup>22</sup>) As measured by the wage benchmark calculation, with more details on methodology provided in Arpaia, A. and Kiss, A. (2015). Benchmarks for the assessment of wage developments: Spring 2015. Analytical Web Note 2/2015. DG Employment and Social Affairs, European Commission.

effects (²³), as productivity growth was still higher in tradable than in non-tradable sectors spurring income and wage convergence across the economy.

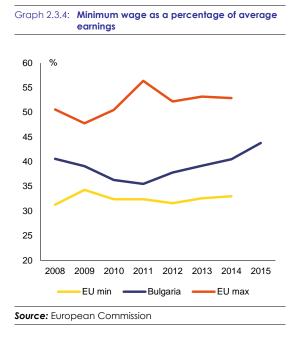


^{(&}lt;sup>23</sup>) The Balassa-Samuelson effect reflects on differentiated productivity growth during convergence with wage growth in tradable sectors spurring wages to grow faster than productivity in non-tradable ones. This leads to nominal ULC growth in non-tradable sectors and, consequently, the whole economy.1) IMF (2014). Central and Eastern Europe: New Member States (NMS) Policy Forum, 2014: Selected Issues. (2) Dubravko, M. and Klau, M. (2008). Catching-up and inflation in transition economies: the Balassa-Samuelson effect revisited. Bank for International Settlements.

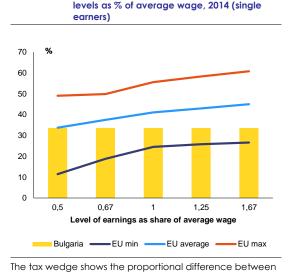


Graph 2.3.3: Yearly growth in nominal costs

The average wage dynamics mask important differences in overall wage distribution, with the coverage and level of the minimum wage increasing significantly. The level of the statutory minimum wage is decided by the Council of Ministers after (non-binding) consultations with social partners under the National Council for Tripartite Cooperation. As there are no rules or guidelines on the setting of the minimum wage, the frequency of updates varies considerably. From 2011 to 2016, the statutory minimum wage was on the rise. Nevertheless, it continues to be - both nominally and in terms of purchasing power standards — the lowest in the EU (Graph 2.3.4). In addition to increases in the level, its coverage has doubled, adding to the importance of raising the skills of workers. Preliminary (short-term) estimations by the Bulgarian authorities suggest that about 360 000 people will be covered by the minimum wage in 2016 or about 12 % of the labour force. This leads to compression of the wage distribution curve, given the continuously growing proportion of employees earning the minimum wage. The social partners have been consulted on a possible mechanism to set up the minimum wage, but there is wide disagreement among them as regards the relevant criteria. The government is considering the possibility of introducing, as of 2017 at the earliest, sectorspecific minimum wages to be negotiated by the social partners.



Increasing labour productivity growth would lead to further gains for the economy and employment. The steady but low increase in labour productivity is due to, among others factors, the untapped potential of various population groups (e.g. youth, older workers), a relatively high degree of skills mismatch in the labour market, a high share of employment in low productivity sectors and wider economy deficiencies. The financial crisis led to labour affected the low-skilled losses that disproportionately more, and also had an impact on rises in labour productivity. This gain will be reversed as employment rates rise again. Nevertheless, most employment gains in the last decade occurred in the lower productivity sectors of industry and services (24). Further productivity gains are feasible and necessary in these sectors.



Tax wedge in Bulggrig and the EU, income

the costs of a worker to their employer and the employee's net earnings.

Source: European Commission, OECD

Graph 2.3.5:

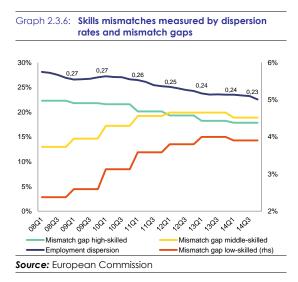
Hindrances to labour market functioning: Tax burden

Fiscal disincentives to work remain relatively low. However, minimum social security thresholds may lead to regressive taxation for some low-paid groups. The design of minimum social security thresholds could lead to cases of a de facto higher tax burden for low-wage earners, when actual wages are below the relevant minimum social security thresholds (Graph 2.3.5). Moreover, the maximum insurable income - on which social contributions is charged - of about EUR 1 300 (nearly 3 times the average wage) will continue to be maintained. Over the last years the minimum social security threshold were on the rise, broadly following but above average-wage growth rate, partially due to the statutory minimum wage rising faster than the average wage, as by default the threshold cannot be lower than it. The 10% flat income tax rate explains why the tax burden on labour (including social contributions) is considerably below the EU average and among the lowest in the Central and Eastern European EU Member States, especially for middle and high income earners. Due to such tax design and in combination with modest levels of social assistance, pecuniary disincentives to work are relatively low.

 $^(^{24})$ The World Bank (2015). Productivity in Bulgaria: Trends and Options.

Hindrances to labour market functioning: Skills mismatches

The ongoing high levels of skills shortages and mismatches hinder the adjustment capacity of the labour market. Participation of vulnerable groups in education is low and the share of early school leavers remains above the EU average. The rate of lifelong learning is one of the lowest in the Union. On the positive side, Bulgaria has made progress in raising its tertiary attainment rate (age group 30-34) in recent years, although it remains below the EU average (BG: 30.9% in 2014 versus EU-28: 37.9%). Bulgaria has the second highest skills mismatch in the EU (25), albeit gradually decreasing due to the change in the skill composition of the population. Employers are increasingly stating labour as a limiting factor $(^{26})$, which - among other aspects such as decreasing working age population or geographical allocation of the labour force – also points to the existing mismatch between skills and labour market needs. Low-skilled have experienced the highest rise in mismatches (Graph 2.3.6), as measured by the change in the demand-supply gap $(^{27})$. There have been no improvements in employment rates of lower-qualified individuals: older, less qualified people leaving the job market and being replaced by younger, more highly-qualified individuals. Employers report skills shortages in specific sectors. The main reason for bottleneck vacancies in high-skilled occupations is lack of available qualified workforce (IT personnel (²⁸), engineers, specialist doctors, nurses). This situation of demand outpacing the supply is further aggravated by outward migration. In lower skilled occupations. bottleneck vacancies occur particularly in the accommodation and food services activities. These bottlenecks are most likely to be driven by unfavourable conditions (including low wages) and inconvenient working hours.



Disparities in the labour market

Improving school-to-work transitions remains a key challenge, with almost three-quarters of the young NEETs (²⁹) being inactive. Bulgaria still faces a high NEETs rate (20.2%, well above the EU average of 12.4%). The inactive youth NEET rate in Bulgaria in 2014 was 14.4% as compared to 6% in the EU (see Graph 2.3.7). The proportion of NEETs (16-24) among Roma is very high (61%) $(^{30})$. Young people are often not eligible for unemployment benefits and therefore often not registered with the Employment Agency. The NEET phenomenon continued to be significant for young people with lower and medium educational levels. It potentially indicates the limited market relevance of the non-tertiary education systems. In parallel, the youth unemployment rate, while falling consistently for over 2 years, still stood at 21% in Q3-2015 and above the EU average of 20.1% (see Graph 2.3.8).

^{(&}lt;sup>25</sup>) Measured in terms of employment rate dispersion across education levels. Employment rate dispersion is a skills mismatch indicator commonly used to identify whether skills mismatch plays a role in explaining structural unemployment. For more information, see Kiss, A., Vandeplas, A. (2015) Measuring Skills Mismatch, DG EMPL Analytical Web Note 7/2015.

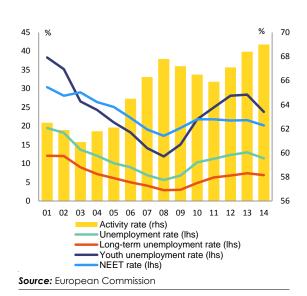
^{(&}lt;sup>26</sup>) European Commission Business and Consumer Surveys, http://ec.europa.eu/economy_finance/db_indicators/surveys /time_series/index_en.htm

⁽²⁷⁾ Measured in terms of proportions of the skills gaps in the supply for the corresponding skill levels weighted with the proportions of the low-, medium and high-skilled in the working age population (aged 15 to 74 years).

^{(&}lt;sup>28</sup>) The demand for software specialists is three times higher than the supply by educational institutions (2000 as against 6000 needed per year), with a trend to increase in medium and long term.

^{(&}lt;sup>29</sup>) Neither in employment nor in education or training

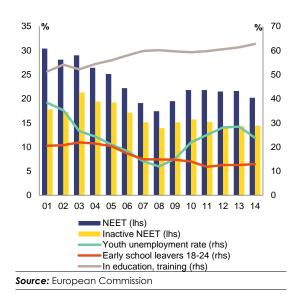
^{(&}lt;sup>30</sup>) Fundamental Rights Agency Roma Survey 2014



Activity, employment and unemployment, NEET and long-term unemployment rates

Graph 2.3.7:

Graph 2.3.8: Youth: in education and training, employment rate, unemployment rate, NEET



Bulgaria has taken steps to respond to the youth unemployment challenge in the context of the Youth Guarantee Implementation Plan, but much remains to be done, especially for the lowskilled. While 2014 was the first year of actual implementation of the Youth Guarantee, less than half of the young people participating received an offer in the first 4 months of their registration. Reaching out to the most vulnerable remains a challenge. Key measures adopted include a VET reform, traineeship legal framework, measures against early school leaving, higher education reform and local partnerships for enhancing outreach. The Public Employment Service (PES) has taken some measures to strengthen outreach to non-registered NEETs, by organising job fairs and working at local level with youth and Roma mediators. Results are still limited. The young NEETs registered with PES benefit from individual action plans. The PES is in contact with the educational establishment to identify young people in danger of dropping out of school and to support higher education graduates. However, most of the measures target young people with secondary or tertiary education, with less focus on low skilled youth. This is particularly worrying as the proportion of low-skilled Roma NEETs is high and targeted actions still remain limited.

Other groups, such as Roma, women and older workers face challenges on the labour market. Improving the employability of Roma is of macroeconomic relevance, as they account for over 20% of the new labour market entrants $(^{31})$. However, only 37% of Roma men and 25% of Roma women are employed $(^{32})$; the majority have unskilled jobs. Many of them work without a formal contract. Low qualifications, ethnic discrimination and the important role played by informal social networks in finding a job are the main barriers for Roma to access the labour market (³³). Furthermore, the limited inclusiveness of early childhood education and care hinders social inclusion and labour market prospects of children from ethnic minorities, in particular Roma. Childcare services remain underdeveloped, with only 11% of children less than 3 years old were cared for under formal arrangements for more than 30 hours a week, significantly below the Barcelona target of 33%. Therefore, parenthood has a significant impact on female employment, as the difference in employment rates between mothers with young children and those without the presence of children is 13.5% in 2014 (age group 20-49; as compared with the EU average of

^{(&}lt;sup>31</sup>) Laat, J. and C. Bodewig, Roma Inclusion is Smart Economics - Illustrations from Bulgaria, Czech Republic, Romania and Serbia. ECA: World Bank, 2011

^{(&}lt;sup>32</sup>) Roma from Romania, Bulgaria, Italy and Spain between social inclusion and migration. Comparative Study, EU Inclusive, 2012.

^{(&}lt;sup>33</sup>) World Bank Systematic Country Diagnostic, Bulgaria's Potential for Sustainable Growth and Shared Prosperity, 29 July 2015

13.2%). While steps were taken in the recent pension reform to increase and equalise the retirement age for men and women, the low effectiveness of active labour market policies for older workers hinders labour market participation and exacerbates the effect of the demographic developments in the country.

Big disparities remain between rural and urban areas in terms of the employment situation. Employment in agriculture is 19.4% (³⁴), the second highest in the EU after Romania, compared with an EU average of 5%. This, given the sector's low productivity, is clearly a major challenge. The gross value added of the agricultural sector as a percentage of the GDP is only 4.6%. The high agricultural employment share is in large part due to high level of subsistence farming and due to over 80% of the agricultural labour being family labour. The high level of agricultural employment may mask large risks of hidden unemployment and under-employment. The rural unemployment rate is currently twice as high in comparison to urban areas: 14% against 6.4%. There are also notable socio-economic disparities between regions.

Active Labour Market Policy (ALMP) and Public Employment Service (PES) reform

Adjustment is hampered by the limited prioritisation and targeting of ALMPs. The PES continues to face a challenge in delivering ALMPs, especially to the most vulnerable clients (young people, the long-term unemployed, the low-skilled and the Roma). In 2013, only 12.1% of registered unemployed (and 13% registered long-term unemployed were engaged in ALMPs. Furthermore, only 40% of long-term unemployed were registered in 2014. Very low registration rates and the lack of structured cooperation and data exchange between employment and social authorities create big gaps in the coverage of support for the long-term unemployed. They are mainly serviced by social authorities. Activation programmes are unevenly available on a programme basis, have limited continuity and are not sufficiently diversified. ALMPs are focused on employment subsidies rather than support for training, re-skilling and up-skilling. The PES performance management system also requires improvement, to better link resources to delivery and to provide more flexibility in delivering services where they are needed. Limited conditionality towards employers receiving wage subsidies may limit the positive effects on the long-term sustainability of the jobs.

National funding for ALMP is set to decrease as a share of GDP according to the 2016 budget, increasing the dependence on EU funding and affecting the policies' sustainability. ALMP financing remains highly dependent on the European Social Fund, as national contributions remain nominally flat at about EUR 37 million also for 2016. The ESF budget for the programming period 2014-2020 has however increased. Moreover, ALMP expenditure per unemployed is still below its pre-crisis level. In contrast, a stronger focus on ALMP can help to ensure sustainability of the government's policies, given the decreased adjustment capacity of the labour market due to the existing structural issues.

The PES has now produced a blueprint for organisational change. Changes in the Employment Promotion Act aim at activating the unemployed regionalisation through of employment programmes and the targeting of specific risk groups by regions. The reform envisages also individualised, better targeted and higher quality services for people with disabilities and other vulnerable groups.

The unemployment benefits coverage is particularly low, hindering the effectiveness of activation measures. Among the short-term unemployed (<12 months), 24 % received unemployment benefits in 2014 compared with an EU average of 37 %. This particularly reflects a relatively low maximum duration of benefits for those with short work histories (in 2015 around 16 weeks for someone who has worked for up to three years) and relatively strict eligibility conditions in terms of qualifying periods (a qualifying period of 9 months over the last 15 months). Preconditions are however weak with little, if any, job search requirement placed on people receiving benefit. This potentially risks missing opportunities to activate some of the most job-ready unemployed. The low coverage is also driven by high seasonal employment and the lack of a sufficient contributory period for the young unemployed.

 $^(^{34})$ According to the National Accounts data available on Eurostat.

The maximum duration of unemployment benefits is 12 months, restricting access for the long-term unemployed. The low coverage of unemployment benefits — and consequently in activation measures (35) — weakens the support available to the unemployed to come back to work.

Social dialogue

The principal level of collective bargaining is the company level, but the sectoral level also plays an important role. In 2012, Bulgarian union density (measured as a proportion of paid workers who are union members) was 17.5%, while the employer density was around 50%. Around 29% of employees were covered by collective bargaining in 2012 (³⁶). The importance of the social partners is most evident in the negotiations for setting up the minimum social security thresholds for around 85 economic sectors and 9 occupations. Agreed changes to the threshold are brought into force by government legislation. For activities where no agreement is reached, the government reserves the right to impose an administrative increase.

^{(&}lt;sup>35</sup>) In 2013, only about 7 % of those wanting to work participated in regular labour market activation measures.

^{(&}lt;sup>36</sup>) ICTWSS database, version 5, 2015.

2.4. EXTERNAL INDEBTEDNESS

International investment position

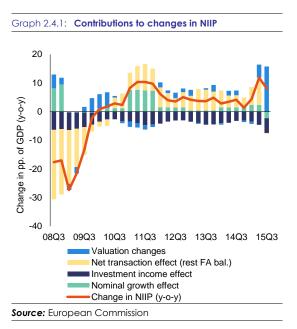
The net international investment position (NIIP) improved further in 2015. In the second quarter of 2015, Bulgaria's external liabilities exceeded its foreign assets by around EUR 28 billion (64 % of GDP, Graph 1.7 in section 1). This represents an improvement of the NIIP by 8 percentage points of GDP compared with the end of 2014 and by over 31 percentage points of GDP compared with the highest negative position, reached in 2009. Thus, overall external indebtedness has reduced substantially in the postcrisis period (Graph 2.4.1).

The NIIP improvement is mainly driven by a reduction in external debt but growing assets have also contributed. Net external debt has been the main explanatory factor for the changes in NIIP; it has been reduced from around 46 % of GDP in 2009 to around 7 % in Q2-2015. Net foreign direct investments have remained much more stable, falling from 89 % to 81 % of GDP in the same period. The main reason for their reduction is the slowdown in investment flows since 2009, outstripped by the nominal growth of GDP. On the assets side, reserve assets held by the central bank have gradually increased, reaching 44 % of GDP in mid-2015 compared with 34 % in 2009.

External assets are dominated by the reserves held by the central bank under the currency **board regime.** Bulgaria's external assets amounted to some 84 % of GDP in mid-2015. Reserve assets represent over 50 % of foreign assets and include the government's fiscal reserve, the excess of assets over liabilities of the currency board and the reserves of commercial banks held at the central bank. Banks' reserves more than doubled in the 12 months ending in November 2015, from 7 % to almost 15 % of GDP. This in large part reflects the extra liquidity of banks stemming from the payout of deposit insurance after the collapse of KTB bank (some 5 % of GDP) which was mostly re-deposited in the system and — in the absence of credit growth — ended up mostly as excess reserves. For more details on deposit and lending dynamics, see Sections 2.1. and 2.2.

External liabilities include a large share of foreign direct investments (FDI) but remain a

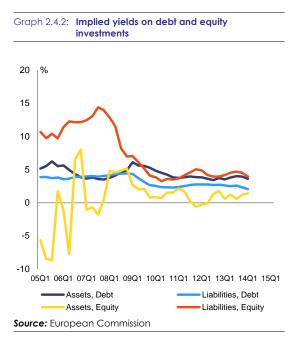
source of vulnerability. Bulgaria's gross external liabilities amounted to some 148 % of GDP in mid-2015, of which 60 % of it was accounted for by FDI. This indicates a lower risk of rapid capital outflows on this part of liabilities. FDI has been the main source of funding for economic growth and was also a factor in the asset-price inflation in the pre-crisis period. Since 2009, FDI inflows have slowed down noticeably but remain positive. Nevertheless, some sources of vulnerability remain: foreign portfolio investments, almost exclusively in debt instruments, have nearly tripled since 2010 and exceed 10 % of GDP. Also, foreign loans to the domestic economy amount to over 30 % of GDP.



Returns on both assets and liabilities have been broadly stable in the post-crisis period. Implied yields (³⁷) could reveal important information for the required return and risk perception of foreign investors in the country. Also, they give an indication of the attractiveness of investing abroad as compared to investing in the domestic economy for residents. Yields on domestic equity assets held by foreigners are more than double those on foreign assets held by residents (Graph 2.4.2). This is consistent with a higher risk perception of the

^{(&}lt;sup>37</sup>) Equity = Direct investment + Portfolio investment, equity securities. Debt = Portfolio investment, debt instruments + Other investment. Implied return computed as the sum of preceding four quarters flow figures divided by the stock of the previous period.

Bulgarian economy. The dynamics of yields on debt assets and liabilities are somewhat different, with the foreign debt holdings of residents yielding more than the domestic ones. This could be potentially explained by the different composition of debt assets compared to liabilities, where loans to the non-financial sector form a much larger share.

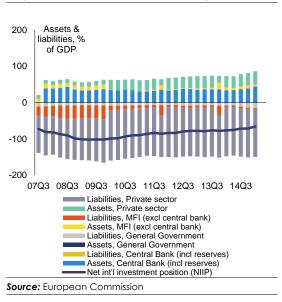


Sectoral composition of external liabilities

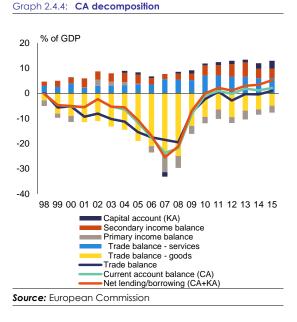
Government's increasing financing needs could be a source of risk. The increased government deficits in 2014 and 2015 together with the need to support the financial sector have increased the public sector's reliance on foreign financing (Graph 2.4.3). As a consequence, the gross external debt of the government has nearly doubled as share of GDP between 2009 and 2015 from around 7 % to 13 %. Although still low compared to EU peers, this ratio could further increase in the coming years if fiscal consolidation proves difficult to implement or in case further funding is needed by the financial sector. Debt servicing has not been significantly affected because of the favourable financing conditions presented by the low-interest-rate environment in the last few years. However, the situation could change in the medium term. An additional risk factor is the growing size of contingent liabilities related to the state-owned enterprises, most notably in energy and transportation sector.

Commercial banks reliance on foreign financing has diminished. Foreign deposits in monetary financial institutions, excluding the central bank, have diminished, both nominally and as a percentage of GDP, by more than 50 % since 2009. Furthermore, in mid-2015 commercial banks held liquidity in excess of the amounts required by the central bank. Thus, at least for the sector as a whole, banks' reliance on parent funding has diminished in the post-crisis period. For details on financial sector developments see Section 2.1

Non-financial corporates' liabilities remain high. Overall, the gross external debt of the nonfinancial corporate sector to third parties has also decreased as a proportion of GDP in the post-crisis period, albeit at a moderate pace, from 32 % in 2009 to 27 % in 2015. The reduction comes mainly from short-term debt, which implies reduced risks of swift capital outflows. Cross-border intracompany lending has remained stable, at around 39 % of GDP since 2009. It fell in 2015 only, following a shift form debt to equity exposure of around 2.5 % of GDP (Graph 1.9 in Section 1). This particular type of financing remains one of the main sources of funding for businesses in the country and as such deserves continued monitoring. Corporate indebtedness is further discussed in Section 2.2.



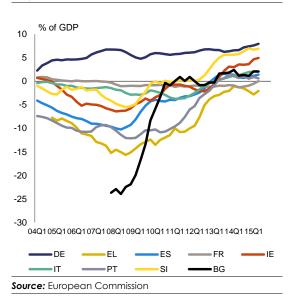
Graph 2.4.3: External assets and liabilities by sector



Current account correction path

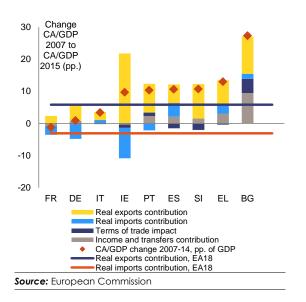
The current account has remained slightly positive in 2015, similar to previous years. The current account balance has been around or above zero since 2010. Growth in goods exports and a slowdown of goods imports, in light of weak domestic demand, have the main driving forces of the current account correction. This has helped the current account balance to improve from a deficit of some 20 % of GDP in 2008 — among the largest observed in the EU during the build-up of imbalances in the 2000s (Graphs 2.4.4 and 2.4.5). The trade balance in services has been much more stable and has remained positive between 5 and 7 % of GDP since 2007.

The primary income balance has remained negative, reflecting the high accumulated inflows of foreign investments during the boom period, as already described in the previous section. By contrast, the secondary income balance and the capital account have been positive, which is explained by the growth in grants and transfers from the EU following Bulgaria's accession in 2007, as well as the increase in remittances from an increasing number of Bulgarians working abroad. The secondary income and capital accounts contributed positively to the improvement of the country's external position.



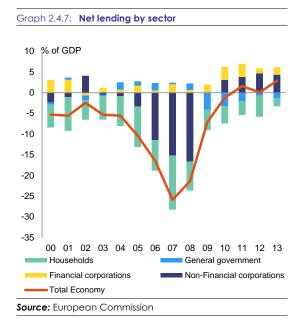
Graph 2.4.5: CA of selected member states

The current account correction reflects a structural shift in the economy. A certain cyclical element in the current account correction can be observed in the first years after the economic downturn in 2009, with the negative output gap closing swiftly at the same time. Nevertheless, since 2011, the economic growth has been largely export-driven, with sustained gains and export market shares (Graph 2.4.6). Domestic demand has remained very weak, as both private consumption and private investment remain subdued. Public consumption and investment have played a counter-cyclical role, especially in the last couple of years; with investment being strongly supported by EU structural and cohesion funds. In the future, the economy would benefit form a funding mix relying increasingly on market-based investments. The structural nature of correction is also supported by the in-house model for adjusting the current account, taking into account the output gap and real effective exchange rate movements.

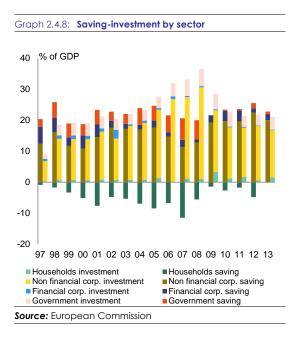


Graph 2.4.6: Contributions to current account change

The current account correction also reflects structural changes to the saving-investment balance in recent years. Two main structural changes can be identified in the saving-investment balance of the Bulgarian economy after 2008. Non-financial corporations undergo a rapid shift from being large net borrowers to net lenders (Graph 2.4.7). The causes for this shift could include deleveraging needs, lack of investment opportunities in a stagnating economy and changes in the risk perception and risk appetite of the business owners. Another shift is observed in the public sector, as the government becomes net borrower, following several years of surpluses. This shift is to be expected in the aftermath of the crisis as automatic stabilisers kick in and the government takes a counter-cyclical stance. However, the public sector continues to be a net borrower throughout the post-crisis period, which could signal a structural shift.



Households continue to be net borrowers, albeit to a smaller extent than in the boom years, which can be explained by the business cycle. The financial sector remains a net lender to the economy (Graph 2.4.8).



Overall, a further gradual improvement of the external position can be expected but some important risks related to the liabilities should be noted. Applying the tool developed by Commission services to assess NIIP sustainability reveals that, given current expectations, the NIIP can be expected to continue improving gradually. More specifically, small current account surpluses of around 1 % per year could help reduce the NIIP to the MIP threshold of -35 % of GDP within the next 10 years. Sustaining the NIIP at its current level should be possible even with small annual deficits of between 1 % and 2 % of GDP. Nevertheless, as already discussed above, the stilllarge stock of external liabilities should be monitored closely. In particular, this concerns the growing liabilities of the public sector as well as the liabilities of non-financial corporations.

Box 2.4.1: Specific monitoring

In the 2015 European semester cycle, Bulgaria was found to experience excessive imbalances which require specific monitoring and decisive policy action. To this end, in November 2015 the Commission presented a first specific monitoring report $(^1)$. This box concludes the specific monitoring cycle by summarising the findings on progress with reform implementation (see Annex A) focussing on the MIP relevant CSRs.

For Bulgaria, CSRs 1 (fiscal), CSR 2 (financial sector), CSR 3 (labour market) and CSR 5 (insolvency) were considered relevant under the Macroeconomic Imbalances Procedure. The policies contribute towards the following overarching objectives:

Ensure stable public finances. In 2015, the deficit target of 2.8% of GDP is ESA terms was likely to be slightly overachieved. The better than targeted execution mainly reflects revenue overperformance in view of enhanced tax compliance. Overall fiscal discipline also contributed to the budgetary consolidation. In 2016, the adopted budget aims at achieving further deficit reduction to 1.9% of GDP mainly in light of further improved tax administration and some savings on the expenditure side. The temporarily decreasing absorption of the EU-funds are planned to be partly off-set by investments from domestic resources, which would be financed also by the one-off revenue related to the concession of the Sofia airport. While the Commission's 2016 winter forecast also foresees the reduction of the deficit, the improvement is smaller since some deficit reducing measures have not been sufficiently substantiated yet. The deficit reduction is expected to be continued in 2017 in light of already legislated revenue increasing measures. At the same time, any further support for the financial sector could have a deficit increasing effect. Importantly, some progress is made related to the set-up of the independent Fiscal Council as its members were approved by the Parliament at the end of 2015.

Stabilise the banking and non-banking financial sector. The central bank has amended banking sector legislation, initiated improvements in banking supervision and launched the comprehensive asset quality review and stress test of the banking sector. The non-banking supervisor has completed the transposition of the Solvency II directive and taken first steps towards organising independent third-party reviews of the assets of pension funds and balance sheets of insurance companies.

Competitiveness, business environment and institutional capacity. Existing measures and active labour market policies are implemented and new ones planned, still without a methodology for monitoring those policies. The reform of the Public Employment Service is ongoing.

Overall, limited progress has been recorded.

This is broadly consistent with the findings in the first specific monitoring report. Nevertheless, since then additional progress has been made as regards public finances with the adoption of the 2016 budget, including an ambitions consolidation effort. No further progress was registered as regards the developing of transparent mechanism for setting the minimum wage and minimum social security thresholds and the strengthening of the insolvency framework despite expectations.

 $(^{i}) \ http://ec.europa.eu/economy_finance/economic_governance/documents/20160118_bg_imbalances_epc_report_en.pdf$

2.5. MIP ASSESSMENT MATRIX

This MIP assessment matrix summarises the main findings of the in-depth review in the country report. It focuses on imbalances and adjustment issues relevant for the MIP*.

	Gravity of the challenge	Evolution and prospects	Policy response
	Imbalances (unsustainable tr	ends, vulnerabilities and associa	ted risks)
Financial sector	Risks stemming from the banking and non-banking financial sector are related to credit quality concerns and the extent of imprudent business practices. The materialisation of these risks would pose a challenge for the efficiency of resource allocation in the economy and for public finances. Deterioration in asset quality could put a strain on financial institutions' capital ratios. Once private sector solutions are exhausted, this could weigh on public finances as well, either through direct support or potential need for providing bridge financing to the deposit insurance scheme to have sufficient funds to pay out guaranteed deposits. Restricting credit to the economy could further reduce private investment (at 15% of GDP in 2015, see p. 8) and subdue growth, creating a negative feedback loop with further deterioration in asset quality of the banks. Similar problems could emerge in pension fund and insurance companies, particularly for business groups, which operate companies in all those industries. There is a risk of contamination throughout the financial sector, which could pose risks to macro-financial	Materialisation of risks in the banking sector has led to the demise of the fourth largest bank. Sizeable bridge financing from the government was required to pay guaranteed deposits. Since the peak of the turmoil, banks' performance has stabilised and confidence appears to have returned, but the main risks remain to be addressed. The private pension funds and insurance industries show similar characteristics to those of the banking sector. Risks to macro- financial stability from this sector have recently increased with its increasing size	An independent asset quali review and stress test has bee launched in the banking sector order to obtain a clear picture the banks' capital positions ar restore credibility in the sector. Banking supervision needs to the strengthened to align it with be international practices. The authorities have put forward a pla which is being implemented. The authorities have transpose Solvency II directive to addrest regulatory gaps in the insurand sector. Amendments to the pensio funds regulation and supervisid are not yet fully adopted. A review of the balance sheets pension funds and insurand companies has been initiated an if conducted to a high standar would help reduce risks in the financial sector.
External indebtedn ess	stability. Bulgaria has high external indebtedness, as evidenced by the negative NIIP of over 60% of GDP (see p. 31) of which 7% is due to net external debt. The high external liabilities stock makes the external position vulnerable to adverse shocks.	The negative NIIP has improved notably from over 100% of GDP in 2009 to just above 70% of GDP in 2014. The improvement is forecast to continue, albeit at a slow pace. The two main reasons for the NIIP improvement have been the reduced liabilities of the financial sector towards parent companies as well as the increasing foreign assets of domestic companies (mainly pension funds but also banks).	No policy steps have been taken address risks to the external de issue as it is not identified as pressing one by the authorities this point.

Table (continued)

Corporate debt and deleveragi ng

A high debt stock accumulated in the run up to the global crisis (101% of GDP in 2014, see p. 13) and a high level of payables sustained in the post crisis period (104% of GDP) suggest possible need of deleveraging.

Deleveraging pressures may weigh on investment and growth in the short term, likely having effects on medium-term growth prospects. These effects may be amplified if the deleveraging is slow and protracted.

Private Debt has fluctuated around 135% of GDP since 2008. Most of it is on the nonfinancial corporate balance sheets.

Negative impacts of slow corporate deleveraging have been identified both on the demand and supply of bank lending. Deflation puts a further strain on debt servicing and could amplify problems in the economy. Policy steps are needed to improve the insolvency framework, including legislation, institutions and practices (see p. 18). The Government has initiated work on amending the insolvency-related parts of the Commercial Act. The focus should be on pre-court and out of court settlements as well as on accelerating court rulings.

Adjustment issues

Labour market	The Bulgarian labour market is weak with still low employment (65.1% in 2014, see p.23) and high unemployment rates (11.4% in 2014). Mismatches impair the functioning of the labour market, hampering a balanced adjustment. Long-term unemployment continues to grow in the post-crisis period, underlining the largely structural nature of unemployment. Minimum wage (MWS) and minimum social security thresholds (MSST) increases are decided without following a mechanism based on relevant macro- indicators The setting system doesn't ensure the right balance between the objectives of supporting employment and competitiveness and safeguarding labour income.	The number of people employed in 2014 was still about 13 % lower than it was at its peak in 2008. Unemployment has decreased but mainly as a result of shrinking workforce. LTU constitutes about 60% of total unemployment (age group 20-64), one of the highest LTU incidence in the EU. (see p.23). The average increase of MSST in 2016 for activities where no agreement was reached is in fact higher than for the sectors with agreement, lifted by the bigger increase of the MW in some sectors. This raises the pressure on the low-skilled and limits the options for labour market adjustment	Albeit modest improvements were implemented, important policy challenges persist. The policy gap remains in the area of MW and MSST setting, as transparent mechanisms have still to be developed. Over 2013-2014, the government kept the MSST unchanged for sectors where social partners did not reach an agreement. In 2015 and 2016 the government applied administratively an average increase of 4.2 % and 7.5 % to such sectors, without taking into account their macroeconomic impact (see p.30). The government has taken steps to optimise its ALMP; however it still lacks prioritisation and targeting. Expenditure on active measures was kept nominally flat for 2016.

Conclusions from IDR analysis

- Bulgaria is subject to stock imbalances related to fragilities in the financial sector and high corporate indebtedness. The
 adjustment is further complicated by labour market frictions. These imbalances create vulnerabilities to an adverse
 shock, which would have harmful effects on the functioning of the economy in the short-to-medium run.
- Some stabilisation of the banking sector occurred in 2015 together with returning confidence, but a comprehensive asset
 quality review is pending. Deleveraging in the corporate sector has been slow, leaving a large debt stock and rising
 payables in the corporate balance sheets. Long-term unemployment has continued to increase, while skill mismatches
 impair the on-going adjustment of the economy.
- Limited progress has been made on improving the resilience of the financial sector. The authorities have contracted external consultants to assist in reviewing the quality of assets and conducting stress tests in the banking sector and reviewing the balance sheet of the pension funds and insurance undertakings. A plan to reform and develop banking supervision has been adopted but is still in an early stage of implementation. Improving the efficiency of the insolvency procedure remains a challenge, with legislative proposals in preparation.

(*) The first column summarises gravity issues which aim at providing an order of magnitude of the level of imbalances. The second column reports findings concerning the evolution and prospects of imbalances. The third column reports recent and planned relevant measures. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs of the matrix summarise the overall challenges, in terms of their gravity, developments and prospects, policy response.

Source: European Commission

3. Additional structural issues

In addition to the macroeconomic imbalances and adjustments issues addressed in section 2, this section provides an analysis of other structural challenges for Bulgaria. Focusing on the policy areas covered in the 2015 country-specific recommendations, this section analyses issues related to the fiscal framework. Secondly, it covers the tax system and tax burden, given the persistent tax-compliance issues. It follows with an analysis of the challenges facing the pension, health and long-term care systems. Then it discusses education and skills in view of their importance for sustainable and inclusive growth. The issues of poverty and social exclusion are then analysed, because of their pertinence and magnitude. Finally, the section looks into the range of problems in connection with the unsupportive business and administrative environments.

3.1 FISCAL FRAMEWORK

The Bulgarian fiscal framework has been strengthened over the last few years, following national transposition of legally binding requirements at supra-national level, i.e. Council Directive 2011/85/EU on budgetary frameworks and the Treaty on Stability, Coordination and Governance (commonly called the Fiscal Compact), to which Bulgaria is bound. The new Public Finance Law that came into force in January 2014 introduced a great number of fiscal rules. These included a structural budget balance rule at the general government level, and an improved medium-term budgetary framework aimed at better guiding the budgetary process. As to the binding nature of the budgetary framework, which is particularly relevant in assessing its strength, Bulgaria is one of the EU's average performers. It shares this position with other countries in which the ceilings/targets can be changed in a number of situations provided for by legislation or other public administrative provisions and such changes need to be explained publicly.

Further progress was registered in 2015 with the adoption of secondary legislation defining the automatic correction mechanism and establishing the Fiscal Council. The Act on the Fiscal Council and the automatic corrective mechanism, which details certain provisions of the Public Finance Law, was approved by parliament only in April 2015, well after the deadline for transposing the Budgetary Frameworks Directive and the Fiscal Compact. This Act specifies the conditions under which the correction mechanism of significant deviations from the medium-term objective is to operate and stipulates the mandate and organisation of the Fiscal Council.

recently established Fiscal Council, The however, is not yet fully operational. The Fiscal Council was entrusted with a broad mandate that includes monitoring compliance with national fiscal rules. This mandate includes the structural budget balance rule and the automatic correction mechanism; issuing opinions and recommendations on official macroeconomic forecasts; and issuing opinions on risks to the sustainability of public finances. The Fiscal Council members were appointed by parliament at the end of 2015.

3.2. TAX SYSTEM AND TAX BURDEN

The overall tax burden is low in Bulgaria. In 2014, the tax-to-GDP ratio amounted to 27.8 %, which is the second lowest in the EU and much lower than the EU-28 average of around 40 %. However, it implies limited resources for public services. The tax system structure is growth-friendly, with consumption taxes representing 14.1 % of GDP in 2014, the sixth highest in the EU-28, with taxes on energy being a major budget revenue source. Nevertheless, as far as other growth-friendly taxes are concerned, reliance on recurrent property taxes is limited (0.3 % of GDP vs 1.6 % in the EU-28 in 2014) and tax rates for petrol and diesel are among the lowest in the EU (38).

The Bulgarian tax system is characterised by high compliance costs. Regarding time to comply with tax rules, Bulgaria still remains the worst performer in the EU, although it has recently come down from 454 to 423 hours per year, according to the latest available estimates (³⁹). Also, the cost of tax collection is high, standing in the upper range of the EU spectrum at 1.34 % of net revenue in 2011 (OECD, 2013). Importantly, Bulgaria scores rather poorly as regards the use of electronic filing of tax returns, in particular in the case of personal and corporate income taxes. This is mainly due to lack of legislation in place providing for compulsory electronic filing. Making the whole process of handling tax returns electronic could considerably reduce the tax collection and compliance cost since part of the return can be automatically pre-filled with taxpayer identity information or third-party information. Use of third-party information to pre-fill income tax returns is not obligatory in Bulgaria.

Improving tax compliance is still an important challenge. Efforts to improve tax compliance and tackle tax evasion are important for securing tax revenues, encouraging greater efficiency in tax collection, and promoting fairness. The value of the non-observed economy, which is a rough approximation of the compliance gap, was estimated to be as high as 13.4 % of GDP in 2011. The latest estimate of the VAT gap as a share of theoretical VAT liability is 17 % (2013), the 11th highest in the EU. Nevertheless, it represents a significant reduction from the 24 % recorded in 2011 (40).

In October 2015, Bulgaria adopted a Single Tax Compliance Strategy and an action plan for 2015-2017 to address challenges related to tax compliance. Agreements were also made to broaden exchange of information, and stricter verification requirements for excise goods were ensured. To tackle the shadow economy, the newly adopted strategy outlines various issues like the cash economy, and under-reporting of labour income and sales. It suggests various measures detailed in an annexed action plan. However, the lack of evaluation and impact assessment for antifraud measures is not identified as a problem and is not addressed. A comprehensive risk analysis to the most important tax collection identify shortages and the main reasons for them is lacking. In order to address the risk in a comprehensive manner, the analysis needs to cover the work of all tax collection authorities. In addition, measures suggested by the strategy to increase tax revenues do not appear to directly address some key issues, such as inadequate use of available technologies and information, instances of corruption and weak governance.

^{(&}lt;sup>38</sup>) On the other hand, the price levels of petroleum products without taxes are among the highest in the EU. As a result, in 2015 Bulgaria had the lowest relative proportion of taxes in the EU for Euro-Super 95 and Diesel and the second lowest for heating gas oil. From 2016, the tax rate for heating gas oil was increased by almost 1200 %.

^{(&}lt;sup>39</sup>) World Bank, 2015. Doing Business 2016: Measuring Regulatory Quality and Efficiency, Washington, DC: World Bank. DOI: 10.1596/978-1-4648-0667-4.

^{(&}lt;sup>40</sup>) Center for Social and Economic Research and Central Planning Bureau. (2015), 2013 Update Report to the Study to quantify and analyse the VAT Gap in the EU-27 Member States.

The pension system in Bulgaria is sustainable in both the medium and long-term perspectives but faces challenges as to the adequacy of pension benefits. When looking at fiscal sustainability indicators, the Bulgarian pension system is estimated to be on a sustainable path with respect to the expected demographic evolution in the coming decades. In both the medium and long-term perspectives, the pension component of the cost of ageing is below the EU average. Overall, Bulgaria is classified to be at low fiscal sustainability risk in the medium term.

According to the Bulgarian authorities, the deficit in the pension system financed by the state budget will diminish by 2037. The pension system is currently highly subsidised by the State Budget. With a view to reducing the deficit of the pension system, a recent pension reform has increased social contributions by 2 percentage points (by 2018). Moreover, as of 1 January 2016, the State will no longer participate as a 'third insurer' (12 % State contribution) but it will continue to intervene after the fact to cover any deficit in the system. According to the Bulgarian authorities, together with the legislated increase in retirement age (see next paragraph), the measure is expected to stabilise the pension system deficit by 2037.

A long-awaited pension reform increases the pensionable age to 65 years for men by 2029 and for women by 2037. The pension reform was adopted in July 2015 following extensive consultations with the social partners. Important measures include the raising and equalisation of pensionable ages and the rise in required contribution periods to 37 years for women and 40 years for men. Moreover, social contributions increase by 2 percentage points and the socially insured can choose more freely between the first and second pension pillar. The accrual rate for each working year will increase from 1.1 to 1.5, which has a positive impact on future pension entitlements for those who can meet the higher required contribution periods. While projections of future pension adequacy under the new legislation are not yet available, the various reform measures tend to make adequate old-age incomes more dependent on individual contribution records. Labour market measures to support the longer working lives of men and women will therefore be crucial to support future pension adequacy.

The number of personal invalidity pensions has grown significantly (⁴¹) in the last 15 years. The newly granted invalidity pensions grew by 3.4 % in 2014(⁴²). Furthermore, the proportion of expenses for invalidity pensions in the total expenses on pensions has grown consistently from 10.3 % in 2000 to 20.3 % in 2010(⁴³) and 20.6 % in 2014.While the eligibility criteria for invalidity pensions have recently been strengthened in terms of medical checks, the main problem remains the lack of effective control on the ground. The Bulgarian authorities have announced plans to reform the system to take better account of the remaining working capacity of individuals in working age.

Health system

The Bulgarian healthcare system faces major challenges, including limited access, low funding and poor health outcomes. It is estimated that 12 % of Bulgarians (who do not permanently live abroad) do not have health coverage. This lack of coverage is unevenly distributed across society. Income inequalities are reflected in access inequalities with the worst-off having the greatest problems in receiving services from the public system. In particular, the lack of health coverage is prominent among the Roma population.

Limited access to healthcare is illustrated by the high share of reported unmet medical needs, mainly due to costs. The Bulgarian healthcare system continues to be affected by low funding and its population is insufficiently protected against the financial risk of ill health. Public expenditure on healthcare was 4.52% of GDP in 2013 (well below the EU average). This is particularly striking as regards pharmaceuticals. Public spending on medicines in Bulgaria as a share of overall medicinal spending in the outpatient sector is the lowest in the EU (23.8% in 2013, as compared with an EU average of 58.4%).

^{(&}lt;sup>41</sup>) At the end of 2000, personal invalidity pensions numbered 323 517. This number had grown to 861 712 at the end of 2010 and reached 907 380 at the end of 2014.

^{(&}lt;sup>42</sup>) The total number of pensioners with newly acquired personal and hereditary invalidity pensions in 2014 was 36 894.

^{(&}lt;sup>43</sup>) World Bank, A short analysis of invalidity pensions for the period 2000 – 2010.

The publicly underfinanced healthcare system is not able to ensure appropriate access for the whole population. Bribery and informal payments are widespread in the health system, as is an ineffective distribution and use of resources.

Bulgaria also faces important challenges in terms of the health workforce, but lacks an overall strategy and policies to address this challenge. The economic crisis has extended these problems and the health system can soon be expected to face serious problems in terms of health workforce availability. Even though the number of medical doctors is slightly higher than in the EU on average, their mean age is 51. The number of nurses is the second lowest among Member States and their mean age is 49. Health professionals' emigration is driven mainly by higher remuneration in other Member States but also by the lack of appropriate opportunities for professional development in Bulgaria. Again this is partially caused by low health funding.

The Bulgarian healthcare system continues being affected by weak performance. Bulgaria ranks as the worst EU Member State in terms of child mortality (1-14 years), the second worst in perinatal mortality and the fourth worst in terms of amenable mortality. Life expectancy and mortality place Bulgaria at one of the lowest positions in the EU. Mortality from circulatory system diseases is the highest among all Member States. Poor health outcomes have a negative impact on the working age population. Mortality rates before the age of 65 are estimated to reduce the workforce in Bulgaria by 2.7% when compared with its potential estimated by using EU-average mortality rates (⁴⁴).

Problems of low effectiveness and efficiency of health service delivery are substantial. The Bulgarian health system is particularly hospitalcentred. Its hospital capacity widely exceeds the EU average (in 2013, there were 524 curative care beds in hospitals per hundred thousand inhabitants, compared with an EU average of 355). In contrast, outpatient and primary care are not sufficiently developed and there are problems of access to general practitioners, particularly in less densely populated areas. Inpatient facilities provide many services that — in other Member States — are accessible in outpatient care. The lack of selective contracting - i.e. the obligation of the National Health Insurance Fund to reimburse services provided by all hospitals in the country — add to the financial problems of the public purse. Measures to change this were taken quite recently. The National Health Map has been published for public consultation. It should become the basis for contracting health services as from April 2016. First results may be expected in a few months thereafter at the earliest. First steps to define clear rules of assessing costs of health services were taken in 2015, but the mechanism is not fully in place. There are sometimes huge dissimilarities between the costs of the same procedure in different hospitals, which adds to the pressure on the National Health Insurance Fund's budget.

Bulgaria could benefit from improving policies on pharmaceutical pricing and reimbursement. Bulgaria's pharmaceutical expenditure takes a disproportionate amount of the budget, at 38% of total health expenditure (45). The authorities recently made some initial changes to the system to consider the cost-effectiveness of medicines, but not in the case of clinical treatment guidelines. The use of health technology assessment is already a tool for decision-making. Greater uptake and use cost-effective medicines would of reduce expenditure and improve access to medicines for patients.

Recent reforms in the healthcare system envisage splitting the current coverage package into three packages — basic, additional and emergency. The reform will officially establish waiting times and introduce the possibility for voluntary health insurance for those who do not want to wait for services under the additional package. It is of paramount importance that the design and introduction of this reform does not further increase the inequities in access to necessary healthcare among the population.

^{(&}lt;sup>44</sup>) Source: European Commission calculations on impact of mortality on labour force size, measured as the number of potential working life years per birth cohort, standardised for population size and age cohort mix, based on Eurostat variable [demo_mlifetable], 2013 figures

^{(&}lt;sup>45</sup>) Ministry of Health of the Republic of Bulgaria & International Bank for Reconstruction and Development, Final Report with Recommendations for Reforming Bulgaria's Pharmaceutical Sector, May 2015

Long-term care

The steep demographic decline requires improved long-term care services, as the elderly population is more financially vulnerable and finds it harder to afford care (⁴⁶). The old-age dependency ratio of people over 65 years old in relation to 15-64-year-olds stood at 30.1% in 2015 and is projected to increase to 58.7% by 2060. As the need for long-term care continues to grow, so does the necessity to provide high-quality services at a lower cost in better adapted settings. The delivery of long-term care takes place under two different systems - the healthcare system and the system for provision of social services. Services are regulated by several different types of legislation. The fragmentation of legislation results in deficiencies in social service provision; hospitals are often forced to keep elderly patients for longer periods for social, rather than medical, reasons. The resulting significant costs for the health system further exacerbate the need for reform in the long-term care delivery.

Despite some progress, the deinstitutionalisation of people with disabilities and the elderly has been slow. The current level of coordination between the social and healthcare systems does not ensure the optimal quality of delivered services and efficient use of resources. With a view to address the challenges facing the delivery of long-term care, the Bulgarian government adopted in 2014 a National Strategy for Long-Term Care. However, the strategy's action plan is only expected to be adopted in 2017 at the earliest. Its main goal is the provision of accessible, high-quality and sustainable long-term care services for elderly people and people with disabilities. It includes measures aimed at deinstitutionalisation and the sustainable expansion of access to community-based and home services, and an overall improvement of the mechanism for coordination between the systems for social and healthcare. The Bulgarian authorities are currently undertaking a quality analysis of the existing 160 long-term care institutions.

The process of deinstitutionalising children has continued to be substantially supported by the European Structural and Investment Funds. Altogether, 179 centres for community-based services have been established in 78 municipalities and regions, while 2293 children have been in foster care. Work has started on updating the financial standards for the delivery of the newly-created community-based services. Despite the progress, this work needs to continue to ensure the effective delivery, the good quality and financial sustainability of all new services on the ground.

^{(&}lt;sup>46</sup>) World Bank, Health Sector Diagnosis Policy Note Bulgaria, 2013.

3.4. EDUCATION AND SKILLS

Improving human capital is crucial to raising productivity and growth and tackling poverty and social exclusion. Enrolment rates have recently decreased at all levels of education except higher education. This casts a shadow on future growth prospects, and on the capacity of the education system to include vulnerable groups and equip learners with relevant skills.

Vulnerable groups such as Roma and pupils from poor families continue to face significant obstacles in accessing and completing education, especially in rural areas. Pupils from disadvantaged backgrounds tend to concentrate in low-performing schools with limited resources, while well-off pupils generally attend highperforming schools. This indicates a close connection between socioeconomic status and educational opportunity. The Roma level of enrolment at all levels of education is significantly lower in comparison with non-Roma, including all other minority groups (47). Around 26% of Roma children receive education in de facto segregated schools, as defined in the Roma Inclusion Index (2015). Considering the promising results of health and labour mediators, educational mediators could play an important role in involving local communities with a significant Roma population, but results so far are very limited due to inadequate training and lack of institutional support. The new Strategy for Educational Integration of Children from Ethnic Minorities (2015-2020) and the corresponding action plan have been approved recently. However, it is important to sustain and scale-up successful initiatives and projects, ensure coherence with the new educational standards, in particular as regards financing and inclusiveness.

The reform of preschool and school education is moving forward. The Preschool and School Education Act, was adopted by parliament at the end of September 2015 (⁴⁸). The Act provides a

consolidated legal framework for improving the quality and equity of education at primary and secondary levels. All the subsequent educational standards are planned to be designed and adopted by August 2016.

Despite a recent drop, the enrolment rate in preschool education (children aged 3 to 6) has shown an overall increase of over 10 percentage points since 2000/2001. Although preschool education is now mandatory for all children aged 5 and 6, the participation of disadvantaged children is still limited due to poor infrastructure, lack of trained staff and hidden educational costs (⁴⁹). This situation has a direct impact on educational outcomes (⁵⁰).

The early school leaving (ESL) rate increased from 11.8% in 2011 to 12.9% in 2014, reversing the previous downward trend. As for many other indicators, there are substantial regional differences, with the ESL rate 2 to 4 times lower in the South West region, which includes the capital city Sofia, than in the other five regions. Furthermore, the ESL rate remains significantly higher for Roma and pupils from rural areas. Data from the 2011 national census show that 93% of Roma do not complete upper secondary education, compared with 30 per cent of ethnic Bulgarians, and that almost a quarter of Roma children aged 7remain outside the educational system 15 altogether. The major factors for the high ESL rate among the Roma are poor living conditions, unequal opportunities at school and highly ineffective social protection and incentive systems. Bulgaria's national strategy on reducing ESL (2013-2020) was accompanied by an action plan for 2014-2015, including prevention, intervention and compensation measures. Some support measures included in the national ESL strategy and the 2015 National Reform Programme, such as the

will develop criteria and indicators for school inspection, will conduct assessments in schools, and will provide guidance and analyses on the quality of school education.

^{(&}lt;sup>47</sup>) Only 38% of Roma children aged 3-5 are in preschool, less than half the rate for non-Roma (82%), and the regions with the highest share of Roma population have the lowest preschool enrolment rates.

⁽⁴⁸⁾ The Act introduces a new structure of school education, based on four levels: initial primary education (1st to 4th grade), upper primary education (5th to 7th grade), primary gymnasium (8th to 10th grade) and upper gymnasium (11th and 12th grade). It also introduces state subsidies for private kindergartens and schools, subject to certain conditions, and it creates a National Inspectorate for Education, which

^{(&}lt;sup>49</sup>) World Bank Group (2015)

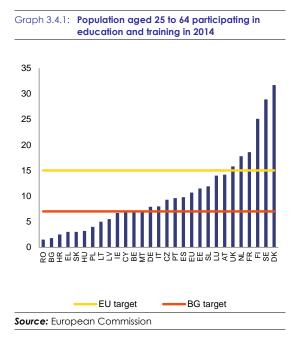
^{(&}lt;sup>50</sup>) For instance, attending at least a 2-year pre-primary education program has been shown to increase PISA math scores by an average of 7 points relative to attending one year or none at all. The effect is even greater for children of low socioeconomic status (10 points on average) and students such as Roma who speak a different language at home (19 points).

introduction of all day schooling, additional training for children at risk of dropping out, and support for the reintegration of early school leavers, are currently under way. However, inclusive support mechanisms — targeting not only vulnerable pupils but also to parents and teachers — remain to be strengthened.

Participation in vocational education and training (VET) at upper secondary level is above the EU average. Employment and activity rates of upper secondary VET graduates are better than the ones for upper secondary graduates as a whole (⁵¹). Modernisation efforts in vocational education and training include an action plan 2015-2017 for the VET strategy, recently adopted amendments in the VET legislation, and bylaws/ordinances. Their aim is to ensure quality of vocational education and training, to introduce work-based learning, to adapt VET curricula to labour market needs and to embed a system for validation of non-formally and informally acquired learning outcomes. Further development is necessary for institutional capacity, cooperation with social partners and mainstreaming of pilot project results in the educational system.

In higher education, the new national strategy still needs to be translated into concrete measures in order to address quality issues, systemic inefficiencies and limited labour market relevance. While Bulgaria's tertiary education attainment rate among 30-34 year-olds has increased by 3.6 percentage points over the past three years to 30.9% in 2014, the employment rate of recent tertiary graduates decreased in 2014 to 74.5%, six percentage points below the EU average. Bulgaria is among the EU Member States with the highest percentage of 20 to 34 year-olds with tertiary education who have jobs that would not traditionally require this level of qualification. (⁵²) The higher education strategy was adopted in February 2015. Several amending acts, concerning for instance the revision of academic quality standards, the system of performance-based public funding and the identification of 'protected' specialisations (specialisations that are important for socioeconomic development but currently not very attractive for applicants) have been further proposed, but there are delays in their adoption and implementation.

Adult participation in lifelong learning is the second lowest in the EU, at 1.8 % in 2014, compared with the average of 10.7 %. The annual action plans of the 2014-2020 lifelong learning strategy envisage concrete measures in order to increase the rate of adult participation to 7 % by 2020 and to widen its coverage, including a focus on disadvantaged groups (see Graph 3.4.1).



Despite the growth in importance of digital skills for the workforce and for society at large, digital skills in the overall population are particularly low. Only 31% of Bulgarians have basic digital skills compared with 55% in the EU (53). According to the latest Eurostat data, in 2015, Bulgaria had almost the lowest percentage of regular Internet users in the EU (55% vs 76% in the EU), and still 35% of the population has never used the internet (vs 16% in the EU). (54).This means that more than one-third of the population

^{(&}lt;sup>51</sup>) Institute of Market Economy (2015), Vocational education and employment - Advantages, Weaknesses, Opportunities, Threats.

^{(&}lt;sup>52</sup>) European Commission (2012), EU Youth Report 2012, <u>http://ec.europa.eu/youth/library/reports/eu-youth-report-2012_en.pdf</u>

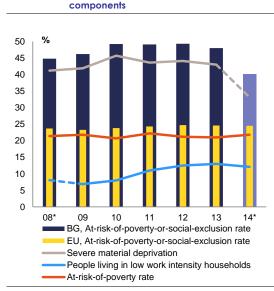
^{(&}lt;sup>53</sup>) <u>http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard</u>

^{(&}lt;sup>54</sup>) In addition to the lack of skills, the low up-take could also be partially explained by costs and lack of access to broadband services in rural areas.

cannot partake on the possibilities offered by the Internet, nor can they contribute to the digital economy. Furthermore, digital skills are nowadays needed in every corner of the workforce and the fact that only 54% of the workforce (vs 72% in the EU) possesses basic or above basic digital skills will become an important barrier to the country's economic development.

3.5. POVERTY AND SOCIAL EXCLUSION

The high share of people at-risk-of-poverty or social exclusion (AROPE), as well as high inequality, remains a major challenge. The AROPE rate dropped in 2013 and 2014 (Graph 3.5.1), but due to a break in time series in 2014 regarding information on severe material deprivation (⁵⁵) it cannot be yet seen as an actual improvement. Moreover, the AROPE rate of 40.1% in 2014 was still among the worst in the EU. The share of people living in low intensity households decreased, however both the share of people in monetary poverty and the poverty gap (⁵⁶) increased for all groups but the elderly (Graph 3.5.2). In 2014, 21.8% of the population lived below the poverty line of BGN 323.75 (EUR 165). Assessment of the at-risk of poverty rate by household type shows that poverty was concentrated in single adult households, single people with dependent children and households with three or more children. Bulgaria experiences one of the highest income inequality rates in the EU. On average, in 2014, the richest 20% of the population earned 6.8 times more than the poorest 20% (S80/S20 indicator). The social protection system (including the general minimum income) does not lead to adequate levels of income support, with implications on inequality and poverty.

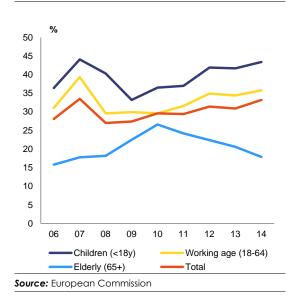


Graph 3.5.1: At-risk-of-poverty-or-social-exclusion and its

 * marks a break in times series (a component with a dashed line)

Source: European Commision

Graph 3.5.2: At-risk-of-poverty gap, by age group



Many elderly remain at-risk-of-poverty or social exclusion. 47.8% of the population above age 65 were at-risk-of-poverty or social exclusion in 2014, which is the highest rate in the EU (EU: average is 17.9%). Monetary poverty of the elderly decreased year-on-year to 22.6% in 2014 (EU: 13.8%), and the share of pensioners receiving minimum pensions out of the total number of pensioners also decreased slightly from 21.1% in

^{(&}lt;sup>55</sup>) The break in series of severe material deprivation is due to a change in the interview(er)s training, with special attention paid by interviewers on the proper understanding of the questions, i.e. capacity to afford paying of one week annual holiday.

^{(&}lt;sup>56</sup>) The poverty gap shows how poor are the poor. It 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 atrisk-of poverty threshold.

2013 to 20.4% in 2015. In fact, those in old age were the only group that witnessed a decrease of the depth of poverty from 20.6% in 2013 to 17.9% a year later (EU: 16.5%). Substantial gender differences persist among the elderly. These are reflected in a comparably high gender pension gap (23% in 2014) and a higher at-risk-of-poverty and social exclusion rate among women aged 65 and over (51.5% of women, compared with 42.3% of men).

The risk of poverty or social exclusion for children is high, despite some recent progress. The AROPE rate for children (0-17) fell to 45.2% in 2014 but still remains well above the EU average (27.7%). Income poverty increased and affected almost one third of children in 2014. The poverty gap for children increased to 43.4% and the severe material deprivation rate stood more than three times higher than the EU average. The effect of the level of educational attainment of parents on the transmission of inter-generational poverty to children increased for parents with low and medium qualifications and decreased for the highly qualified.

At 87 %, the at-risk-of-poverty rate is especially high among the Roma (⁵⁷). The high number of Roma living in separated locations and dwellings lacking basic amenities further exacerbates their isolation and limits the chances to breach the poverty circle (⁵⁸). Considering the need for crosssectoral implementation and monitoring of the Roma Integration Strategy, National the administrative capacity, resources and the mandate conferred to the National Roma Contact Point remain below standard. Although first steps to build a monitoring system for the Roma integration strategy are ongoing, its effectiveness to measure the impact on final beneficiaries will be an important element $(^{59})$.

The risk of poverty or social exclusion is much higher in rural areas. This is reflected by a high severe material deprivation rate of 40.6% in rural areas against 25.9% in urban areas in 2014. The risk of poverty is particularly high for sparsely populated rural areas, reflecting the dependence on very low incomes.

One of the main reasons for the high risk of poverty is the limited expenditure and poor effectiveness of the social protection system in reducing market income inequalities. In 2013, total social protection expenditure in Bulgaria stood at 18.5% of GDP, which is well below the EU average (29.8% of GDP in 2012) $(^{60})$. Spending on unemployment benefits (0.6% of GDP vs. 1.6% for the EU) and social exclusion/housing benefits (0.3% of GDP vs. 1.1% for the EU) is particularly low and reflected in comparably poor social outcomes. The low spending levels are exacerbated by the low effectiveness of social transfers in reducing poverty (Bulgaria is the state with the third-least effective social transfers system in the EU) and the overall low access to quality social services.

The general minimum income (GMI) provides very limited levels of support and limited outreach to the inactive population. The basic monthly allowance is equal to EUR 33, well below the poverty line. The benefit level has not been increased in line with average wage and minimum wage development. The coverage of GMI is also low $(^{61})$, with estimates of up to 60 % of intended beneficiaries not receiving benefits, and Roma being underrepresented. The low take-up may be caused by the following factors: a rather strict means test; the required registration with the Labour Office for at least six months; and the requirement to work without remuneration for four hours a day 14 days a month in community work programmes. As a result, a growing number of people are eligible neither for unemployment benefits nor for GMI. For 49 % of adults in poor

^{(&}lt;sup>57</sup>) According to the 2011 Fundamental Rights Agency (FRA) pilot survey.

^{(&}lt;sup>58</sup>) Roma households lacking at least one of the basic amenities — 76 % (in comparison with 34 % for non-Roma); Roma households experiencing severe material deprivation — 82 % (non-Roma 38 %). Source 2011 FRA pilot survey.

^{(&}lt;sup>59</sup>) Building a robust monitoring system by the end of 2016 is also an obligation in order to meet the precondition linked to the use of Investment Priority 9.2 — Socio-economic integration of marginalised communities such as the Roma.

^{(&}lt;sup>60</sup>) Total social protection expenditure per inhabitant were at 2.133 purchasing power standard (PPS) units (converted as to account for price level differences between countries) in BG in 2012, which is more than three times less than the EU-28 average of 7,272 PPS units.

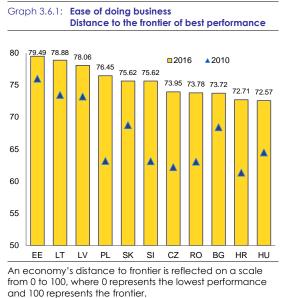
^{(&}lt;sup>61</sup>) Tasseva, I. 'Evaluating the Performance of Means-Tested Benefits in Bulgaria,' Institute for Social and Economic Research (2012-18), 2012.

and jobless households, social benefits represent less than 10% of the household equivalised income. It is reflected in the high poverty gap and severe material deprivation rates for the working age population. Low GMI coverage hinders the activation of the inactive population.

The provision of effective activation support to beneficiaries of social assistance is impeded by the limited cooperation between agencies that provide benefits/social assistance and labour market integration services. Vulnerable population groups are served by various agencies the Employment Agency, the Agency for Social Assistance and the National Social Security Institute. Appropriate institutional cooperation between the various offices, however, is often weak and not focused on an integrated approach aiming at labour market inclusion. The high and increasing caseload of PES staff affects the provision of quality support to people on social assistance, despite the requirement of monthly visas by the Employment Agency. The newlydeveloped Social Services Act, which will aim at integrating the provision of all social services in one legislative act, is expected to be prepared for discussions and adoption by summer 2016.

3.6. BUSINESS AND ADMINISTRATIVE ENVIRONMENTS

The business environment has not improved significantly in recent years. Public administration is less supportive of SMEs in comparison with the rest of the EU $(^{62})$. Implementation of important measures is still behind schedule. According to the World Bank's 'Doing Business' report 2016, Bulgaria ranks 38th in ease-of-doing business (Graph 3.6.1). The country moved to the low-range of geographical peers due to the slower pace of reforms. No changes in the main policy indicators have been observed in 2015. The lengthy and burdensome procedures for paying taxes, getting electricity, enforcing contracts and resolving insolvency remain. Despite some improvements, the country continues to have one of the weakest results in the EU with regard to government effectiveness and regulatory quality and ranks last for the rule of law (as understood in this context) and prevention of corruption (⁶³).



Source: World Bank, Doing Business Report 2016

Institutional shortcomings and concerns about corruption affect key sectors of the economy (⁶⁴). Corruption remains a serious concern among

businesses and hence has a negative impact on investment and the overall business climate. In a 2015 study, 61% of private sector managers (10 percentage points more than in 2013) said that corruption is a problem for them when doing business, compared with an EU average of 40%. Only 14% (the lowest percentage in the EU) say that Bulgaria applies measures against corruption impartially (down from 23% in 2013) (⁶⁵). The World Economic Forum Global Competitiveness Report 2015-2016 ranks corruption among the most problematic factors when doing business in Bulgaria (⁶⁶). The World Bank governance indicators ranked Bulgaria 28th in the EU for combating corruption in 2014 data (⁶⁷). Bulgaria has the highest perceived level of corruption in the EU according to the Transparency International's 2015 Corruption Perceptions Index, which measures the perceived levels of public sector corruption $(^{68})$.

The institutions with responsibility for preventing and combating corruption remain weak and fragmented. In April 2015 a comprehensive anti-corruption strategy was proposed by the government, containing concrete measures to address the problems. However, this faced a major set-back in September, when Parliament failed to adopt a new law establishing a unified anti-corruption authority and reforming the system concerning conflicts of interest and asset declarations for public officials. Convictions for high-level corruption remain few in number, partly due to judicial processes being hampered by procedural and legal obstacles $(^{69})$.

Public administration

Bulgaria has adopted an adequate strategic framework towards reform and modernisation of public administration but the initiated reforms still do not bear fruit. According to the 2015 Sustainable Governance Indicators (⁷⁰), Bulgaria has a relatively weak governance with

^{(62) 2015} SBA Fact-sheet, Bulgaria

^{(&}lt;sup>63</sup>) The Worldwide Governance Indicators, 2015 Update

⁶⁴) According to the Global Competitiveness report of the World Economic Forum the main obstacles to competitiveness are the corruption, bureaucracy, access to financing and unstable policies. http://www3.weforum.org/docs/WEF_GlobalCompetitiven essReport_2014-15.pdf

^{(&}lt;sup>65</sup>) 2015 Flash Eurobarometer 428.

⁽⁶⁶⁾ http://www3.weforum.org/docs/gcr/2015-2016/BGR.pdf

^{(&}lt;sup>67</sup>) info.worldbank.org/governance/wgi/index.aspx#home

^{(&}lt;sup>68</sup>) https://www.transparency.org/cpi2015

^{(&}lt;sup>69</sup>) CVM report, January 2016: COM(2016) 40.

⁷⁰) Bertelsmann Stiftung 2015, Sustainable Governance Indicators for 41 countries (EU MS and OECD members), http://www.sgi-network.org/2015/.

low overall ranking (36 out of 41) in the area of executive capacity and executive accountability (rank 32). Strategic planning has been focused on EU membership requirements, while implementation and coordination of policies are often weakened by the reversal of decisions, as witnessed by reforms launched in the public security sector. Monitoring of institutional arrangements mainly takes place after problems emerge.

Steps are being taken to follow up on strategic planning, but progress is slow and often reform decisions are postponed. After adoption of the strategies for development of public administration and for e-government in March 2014, certain follow-up steps have been undertaken in particular related to e-government. However, the outcome will depend on the speed and quality of implementation of the proposed legislative and structural changes. The government has approved a proposal for the creation of a dedicated egovernance agency for strategic and budgetary planning of e-government policies across the state administration. Follow-up of these decisions remains crucial.

Frequent changes of the legal framework affect predictability and create uncertainty for businesses. Stakeholders are involved at a relatively advanced stage of the policy making process and are given short time for reaction. Impact assessment of new legislation is prepared only sporadically and specific impacts on SMEs are not considered during the legislative process. Legislative amendments aiming to overcome these shortcomings and improve the policy making process have been proposed by the government, but they are still pending the adoption of the parliament. Enforcement of legislation also remains a problem.

In spite of the implemented regulatory reforms, the need for reducing the administrative burden and cutting red tape remains significant. In 2013-2014 three reform packages for reducing the regulatory burden on businesses and citizens were adopted with practically no progress in 2015 (in total 59 out of 138 measures were implemented). In addition, three action plans for administrative burden reduction were adopted for the period 2010 – 2017. As of September 2015 104 measures (62%) of the second action plan and 9 measures (7%) from the third action plan have been implemented.

The civil service needs modernisation. Amendments to the Civil Service Act have been proposed to improve the transparency of selection via centralised competitions and merit-based career development of civil servants. The performance-based remuneration for civil servants introduced in 2012 produces controversial results and in many cases only intensifies the deficiencies in the human resources management system primarily due to non-functioning appraisal system and diverging practices.

Progress in strengthening the role of the administration and efficiency at local level has been limited, despite the support of the European Social Fund. The legal base for complex administrative services has been created, but practical implementation is lagging behind. The introduction of shared services across administrations is on the level of a developed concept.

Public procurement

Persistent difficulties with public procurement are a major stumbling block for the effective use of European Structural and Investment Funds in Bulgaria. Systematic court appeals significantly delay works on the ground, irregularities lead to interruption of payments and financial corrections, management and control systems often fail to detect and prevent tendering errors. Bulgaria remains one of the Member States which use the most the negotiated procedures without prior publication (8%) and award contracts mainly on the basis of the lowest price criterion (63%). These problems ultimately affect the quality of public services and the economy, jeopardising the lasting impact of EU funds invested in the country.

Bulgaria has launched an ambitious public procurement reform process but many elements still need implementation. The most tangible result so far of the National Strategy on Public Procurement is the recently adopted law on public procurement. It can be beneficial only if implemented together with other decisive changes ranging from the adoption of accurate implementing regulatory measures, the

streamlining of consistent ex-ante and ex-post controls, improved efficiency of the appeal system, standardisation of procedures, increasing the administrative capacity of relevant public bodies.

The lack of transparency in the bidding process is partly due to the still incomplete process of installing the full range of e-procurement platforms. More than a half of the Bulgarian companies consider that corruption prevented them from winning a public tender or public procurement contract $(^{71})$. The gains deriving from the switch to e-platforms could improve overall public procurement administrative efficiency by cutting the duration of the purchase-to-pay cycle, reducing the administrative burden and improving traceability. These, in turn, would reduce the risk of corruption and fraud while leading to lower prices and better quality, by stimulating competition.

Judicial system

Continuous deficiencies regarding the judicial system raise concerns for businesses and have an impact on the economy. Despite the adoption of a comprehensive judicial reform strategy in 2014 and its endorsement by the National Assembly in January 2015, Bulgaria saw only limited tangible results in 2015 in terms of addressing deficiencies. existing These deficiencies concern primarily the quality of the justice system and the independence of the judiciary, with a negative impact on economic investor activities and relations, business engagement. The main concrete step taken in 2015 was the adoption in December of a new Law Amending and Supplementing the Constitution. The constitutional amendments aim at a reform of the structure of the Supreme Judicial Council, while at the same time strengthening the judicial inspectorate, with a view to improving the independence and integrity of the judiciary. The amendments still need to be implemented and are expected to be accompanied by the adoption of other flanking legislation covering other aspects of the judicial reform strategy. All in all, few tangible results based on the reform plans are yet in place $(^{72})$.

At the end of June 2015, parliament adopted amendments to the Civil Procedure Code to bring rules in civil proceedings in line with EU legislation. This should facilitate the cross-border recognition and enforcement of certain civil law decisions.

While random allocation of cases has in theory existed in Bulgaria for some time, in practice this has continued to be a point of controversy. This has implications for the independence of the judiciary, as random allocation is an important instrument to safeguard the independence and impartiality of judges. After several postponements, in October 2015, the Supreme Judicial Council launched an updated IT system for random allocation of court cases. However, the positive impact of this measure still needs to be proven after a sufficient length of satisfactory application in practice $(^{73})$.

Important elements to enhance the quality of justice are still missing (⁷⁴). In Bulgaria there is no regular evaluation system in place. ICT systems for communication between courts and parties (e.g. for the submission of claims) can contribute to reducing delays and costs and to facilitating the access to justice. In Bulgaria, however, the use of ICT for communication between courts and parties is still limited compared to other EU MS. Other elements that can enhance the quality of justice continue to be missing or are only provided to a limited extent. For example, the promotion of and incentives for Alternative Dispute Resolution for civil and commercial cases is very limited in Bulgaria, although these could represent an important means of reducing workload at courts.

The trend appears positive as regards some aspects of the efficiency of the judicial system, in terms of time needed to resolve certain cases and the capacity of courts to deal with their work load, at least in some circumstances (⁷⁵), although the availability of detailed statistics on the judicial

^{(&}lt;sup>71</sup>) Flash Eurobarometer 428: 60% of the Bulgarian companies say corruption prevented them from winning a public tender or public procurement contract.

^{(&}lt;sup>72</sup>) CVM report, January 2016: COM(2016) 40.

^{(&}lt;sup>73</sup>) CVM report, January 2016: COM(2016) 40.

 $^(^{74})$ 2016 EU Justice Scoreboard (to be published soon).

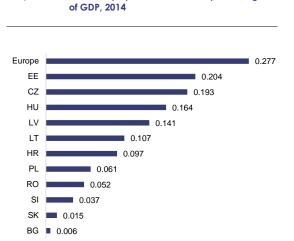
^{(&}lt;sup>75</sup>) 2016 EU Justice Scoreboard.

system remains an issue. There are important differences in workload between courts, with larger courts in general facing a higher workload.

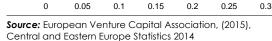
As mentioned in section 2.2, the duration of insolvency proceedings continues to be a challenge. In the past four years there has not been any progress in reducing the length of these proceedings, the duration of which remains among the worst four Member States in the EU (76). This means that the time for creditors to recover their credit is unduly excessive and could prevent them from re-investing their money in other economic activities. This again has a negative impact on the overall economic recovery of the country and shows once more the necessity to improve the justice system as a key building block for an investor-friendly business environment.

Access to finance, SMEs, research and innovation

Access to finance remains a challenge for SMEs in Bulgaria. The combination of balance sheet repair, banking system reform, more efficient supervision and consolidation will give a muchneeded boost to financial sector stability, contributing to better financing conditions in the longer term. Alternative financial instruments providing support to start-ups are developing, but still largely dependent on the public support (Graph 3.6.2). The first angel investment network was established in September 2015 and is expected to finance the first projects in 2016. In October 2015, the European Commission adopted an Operational Programme worth €102 million from the European Regional Development Fund to improve access to finance for small and mediumsized enterprises. Investments under this programme, in the form of bank guarantees, are expected to generate between €400 million and €600 million of fresh loans for SMEs, thanks to the leverage effect of private investment.



Graph 3.6.2: Private equity investments as a percentage



The Points of Single Contact (PSC) in Bulgaria do not provide sufficient sector-specific information and do not present information in a user-friendly way. Due to the low availability of e-procedures, it is currently not possible for businesses to complete procedures online. Esignatures from other Member States are not always accepted and recognized by the competent authorities' websites. Technical issues limit the usability of the PSC portal.

The Bulgarian R&I system suffers from inefficient governance structures. fragmentation, weak long-term financial commitment, very deficient incentives for high quality research, absence of communication between public and private sector research, and a weak human resources base. It is also characterised by a lack of predictability and transparency, and is insufficiently relying on performance criteria to allocate its public R&I funding. Overall, this does not create the necessary framework conditions for stimulating investments in business R&D activities and for innovation to flourish. The Bulgarian economy is characterised by a low level of innovation and all indicators of innovation output and commercialisation of innovations are well below the EU average $(^{77})$. Bulgaria also has low venture capital investments

^{(&}lt;sup>76</sup>) Data contained in the 2016 EU Justice Scoreboard.

^{(&}lt;sup>77</sup>) According to the Innovation Union Scoreboard 2015, patent applications per billion GDP (in PPS €) in BG (0.50) is the sixth lowest in the EU (EU-28 average 3.78).

coupled with a recent decline in performance (⁷⁸). However, starting from the lowest level in the EU, the country's innovation performance seems to be improving, in particular regarding business R&D expenditures (⁷⁹).

Far reaching improvements of the current R&I system are required if performance is to be enhanced – from the level of research performers to that of funding bodies. This includes the need independent, robust and coordinated for management of national and European R&I funding programmes and instruments with enhanced leverage of business investments. (80) Recent policy responses such as the newly established Council for Smart Growth and the government intention to create a professional agency for research and innovation are steps in the right direction and require swift and ambitious implementation.

Consumers

Consumers' trust in institutional and market conditions and retailers' compliance with consumer rules are among the weakest in the EU (⁸¹). Bulgaria is one of the Member States doing worst in terms of overall markets' performance, as evaluated by consumers (⁸²). Confidence issues $(^{83})$ are reflected in Bulgaria having the second lowest share of population (18% vs 53% EU28) that ordered goods or services over the internet in 2015 in the EU and a below average share of retailers that sell online to final consumers (32% vs 41% EU28). In addition, only 6% of Bulgarian SMEs sold online in 2015 (second lowest in EU, 16% for the EU) (⁸⁴).

Construction sector

Bulgaria stands out as having one of the most restrictive regulatory frameworks for construction services. On the one hand, there are burdensome authorisation procedures in place and on the other, the mutual recognition principle is mostly inoperative, due to the absence of mutual recognition procedures (Graph 3.6.3). In some cases the mutual recognition principle itself is not in place. In practical terms, this represents a barrier for foreign service-providers who need to undertake once more authorisation and licensing procedures, since the ones obtained in their Member State of origin are not recognised in Bulgaria. From an administrative point of view, the procedures are complex and full electronic handling of the application is not possible.

^{(&}lt;sup>78</sup>) According to the Innovation Union Scoreboard 2015, venture capital investment in Bulgaria (0.002% of GDP) is the second lowest in the EU (EU-28 average 0.62% of GDP).

⁽⁷⁹⁾ Innovation Union Scoreboard 2015

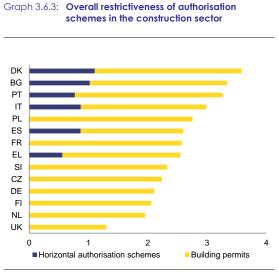
^{(&}lt;sup>80</sup>) The Bulgarian authorities requested in December 2014 an evaluation of their research and innovation (R&I) system using the Horizon 2020 Policy Support Facility (PSF). The PSF panel of high-level experts published in October 2015 a report with Policy Messages, supported by operational recommendations on how to improve the performance of Bulgarian R&I.

^{(&}lt;sup>81</sup>) Bulgarian consumers have the lowest level of trust in organisations among EU consumers and are the most likely to report illicit practices (unfair contract terms and extra charges). At the same time the proportion of retailers reporting unfair commercial practices is the second highest in the EU and retailers' assessment of compliance with consumer legislation is the third lowest in the EU. 'Consumer Conditions Scoreboard 2015'

^{(&}lt;sup>82</sup>) The 'Market Monitoring Survey 2015' outlines the performance of 42 markets as assessed by consumers. It shows that Bulgaria is ranked among the 5 worst performing countries in the EU for the 13 goods markets assessed and below EU average for 21 out of the 29 services markets surveyed (to be published in the upcoming "Consumer Markets Scoreboard 2016")

^{(&}lt;sup>83</sup>) 'Consumer Conditions Scoreboard 2015'. Both consumers' and retailers' confidence in online commerce are the second lowest in the EU. Moreover, 62% of Bulgarian online consumers still use cash on delivery for their online purchases (highest in EU, 18% EU28), whereas only 31% make use of a credit card (2nd lowest in EU, 52% EU28)

^{(&}lt;sup>84</sup>) Eurostat Community Survey on ICT usage in households and by individuals, 2015 (isoc_ec_ibuy), Consumer Conditions Scoreboard 2015', Eurostat ICT usage by enterprises, 2015 (isoc_ec_eseln2)



The least restrictive countries are associated with low scores, and the most restrictive with high scores. **Source:** Ecorys (2015), Simplification and mutual recognition in the construction sector under the Services Directive, a study carried out for the European Commission, DG GROW.

Railway sector

The state-owned railway operator continues to face financial and restructuring difficulties. In the first quarter of 2015, its share in the rail freight market dropped below 50 %; total rail freight, however, increased. The development of passenger transport by rail has been suffering from the absence of other operators and the state not using competitive tendering for public service contracts. In the same period, the number of passengers dropped by more than 15 %, given that 35 passenger services were cancelled following a reduction in state compensation payments. Railway undertakings complain about late information on line possessions for the purpose of line maintenance or construction.

Energy sector

For a long time urgent reforms in the electricity sector have been delayed by a combination of complex problems. These include overcapacity of power generation, expansion of renewable energy sources based on generous public support schemes; long-term power purchasing agreements; delays in phasing out power plants that are non-compliant with the Large Combustion Plants Directive; and a weak and politically dependent energy regulator. Bulgaria remains the most energy and carbon intensive economy in the EU $(^{85})$.

The lack of reforms in the past exacerbated the problems in the energy sector. Previous country reports have pointed out the main shortcomings, including: gas import dependency from a single supplier and a single route, lack of day-ahead market for electricity and natural gas revenues from the regulated end-consumer-tariffs set below corresponding costs of electricity utilities; low consumer satisfaction and very limited or inability to switch suppliers in gas and the supply of electricity to households and small businesses (⁸⁶).

Bulgaria has taken measures to improve the functioning of the energy sector. Bulgaria has set up an Electricity System Security Fund to guarantee the financial stability of the system. The Fund is to be provisioned from sales of ETS allowances and contributions from power generators amounting to 5% of the monthly revenues of these companies. An important step in the liberalisation of the power market was concluded in January 2016 with the start of operation of the electricity day-ahead segment of the Bulgarian Independent Energy Exchange. Further efforts will be needed to ensure deep and liquid trading volumes, as well as the possibility to trade electricity on the forward segment and the introduction of gas contracts. Adequate protection mechanisms for vulnerable consumers and amendments to the single buyer status of the National Electric Company (NEK) remain to be prepared.

Other measures addressing the financial stability of the energy system will be assessed in the coming months as new data emerges. These include the commitment to reduce administrative costs in the companies of the Bulgarian Energy Holding (BEH); the renegotiation of the power purchasing agreements between BEH and the thermal power generators(⁸⁷) and the take-up of recommendations from the 2016 World Bank

⁽⁸⁵⁾ Eurostat 2015, tsdec360

^{(&}lt;sup>86</sup>) Despite an improvement since 2013, the electricity market in Bulgaria is still assessed by consumers as the worst amongst such markets in the EU, whereas the gas market is in the fourth worst position amongst other EU Member States 'Consumer Markets Scoreboard 2016'.

^{(&}lt;sup>87</sup>) Conditional on the capacity of BEH to pay its arrears.

analysis of the financial situation of the energy sector. The Bulgarian Government has also taken steps to increase the resilience of the natural gas system. In 2015 Bulgaria has started works on the expansion of the underground gas storage facility, refurbished several compressor stations and expanded the internal high pressure grid. A final investment decision was signed for the Interconnector with Greece. However, actual construction of critical gas interconnectors with Greece, Serbia and, Turkey has not started and the operation of the link to Romania was delayed.

Bulgaria has also set out a political goal to develop a regional gas hub. There are a number of essential prerequisites before this objective can be achieved, in particular: 1) access to diversified gas sources; 2) development of infrastructure connecting Bulgaria to neighbouring countries and/or gas sources, 3) a stable regulatory framework; and 4) a well-developed trading environment.

Bulgaria has a significant energy-saving potential that can be achieved through the full and effective implementation of the energy efficiency legislation (Energy Efficiency Directive, Energy Performance of Buildings Directive, buildings codes, energy market rules). The most important challenges remain in energy renovation of multi-flat family buildings; the modernisation of the district heating networks and the energy intensity of industry and SMEs.

Resource efficiency

Bulgaria's resource productivity in 2014 - in terms of value produced per kg of resources used - was EUR 0.2912 /kg, well below the EU average of EUR 1.9492 /kg ⁽⁸⁸⁾. Improving resource efficiency could stimulate investment, with both short-term and long-term benefits for the economy, environment and employment.

^{(&}lt;sup>88</sup>) Source: Eurostat (<u>http://ec.europa.eu/eurostat/web/europe-</u>2020-indicators/resource-efficient-europe)

ANNEX A

Overview Table

Commitments

Summary assessment(⁸⁹)

2015 country-specific recommendations (CSRs)	
CSR 1 Avoid a structural deterioration in public finances in 2015 and achieve an adjustment of 0,5 % of GDP in 2016. Take decisive measures to improve tax collection and address the shadow economy, based on a comprehensive risk analysis and evaluation of past measures. Improve the cost-effectiveness of the healthcare system, in particular, by reviewing the pricing of healthcare and strengthening outpatient care and primary care.	 Bulgaria has made some progress in addressing CSR1 (this overall assessment of CSR 1 does not include an assessment of compliance with the Stability and Growth Pact). Some progress in addressing the part of CSR1 on tax collection. Bulgaria made stricter the control requirements for excise goods, collected more revenues form excise duties and signed agreements to broaden exchange of tax information. Nevertheless voluntary tax compliance remained a problem, including the time to comply with tax legislation. Bulgaria adopted a Single Tax Compliance Strategy indicating a more holistic tax policy approach but the Strategy lacks assessment of previous anti-fraud measures and a comprehensive risk analysis which identifies the most important tax collection shortages. Some progress in addressing CSR1 in the part on healthcare. The Bulgarian government made the National Health Map mandatory for the signing of contracts between the National Health Insurance Fund and hospitals. This is expected to improve the efficiency of spending in healthcare; however the Map is expected to be used as from April 2016, therefore results of its implementation are to be seen in coming months at the earliest. 25 out of 3,000 hospital procedures will soon be authorised to be provided in outpatient facilities. This may lower costs of health care system's functioning and be a first step of putting more emphasis on ambulatory care.
CSR 2 By December 2015, complete a system-wide independent asset-quality review and a bottom-up stress test of the banking sector, in close cooperation with European bodies. Perform a portfolio screening for the pension funds and insurance sectors. Review	Bulgaria has made some progress in addressing CSR2. Some progress in completing a system-wide asset quality review and stress test of the banking sector. A contract has been signed with an independent consultant to assist the central bank in conducting

^{(&}lt;sup>89</sup>) The following categories are used to assess progress in implementing the 2015 country-specific recommendations of the Council Recommendation: No progress: The Member State has neither announced nor adopted any measures to address the country-specific recommendation. This category also applies if a Member State has commissioned a study group to evaluate possible measures. Limited progress: The Member State has announced some measures to address the country-specific recommendation, but these measures appear insufficient and/or their adoption/implementation is at risk. Some progress: The Member State has announced or adopted measures are promising, but not all of them have been implemented yet and implementation is not certain in all cases. Substantial progress: The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the country-specific recommendation. Fully addressed: The Member State has adopted and implemented measures that address the country-specific recommendation appropriately.

and fortify banking and non-banking financial sector supervision, including by strengthening the bank- resolution and deposit-guarantee frameworks. Improve corporate governance in financial intermediaries, including by tackling concentration risk and related-party exposures.	 the exercise and the review of the quality of the banks' assets has been launched. Limited progress in performing a portfolio screening for the pension funds and insurance sectors. A contract with an independent consultant should be signed as soon as possible in order to prepare the methodology and launch the technical part of the exercise.
	Some progress in fortifying banking supervision, while strengthening corporate governance and tackling concentration risk and related-party exposures. In particular, a plan to reform and develop banking supervision has been published, building on recommendations by the IMF and the World Bank, and is being implemented. Moreover, the authorities have introduced legislation to transpose the Bank Recovery and Resolution Directive and the Deposit Guarantee Schemes Directive into national law.
	Limited progress in tackling concentration risk and related-party exposures in the non-banking financial sector. The reviews of both bank and non-bank financial intermediaries should be performed in a way that is useful for the identification of such practices. This will allow the authorities to make the necessary adjustments to both the relevant legislation and supervisory practices.
CSR 3	Bulgaria has made limited progress addressing CSR3.
Develop an integrated approach for groups at the margin of the labour market, in particular older workers and young people not in employment, education or training. In consultation with the social partners and in accordance with national practices, establish a transparent mechanism for setting the minimum wage and minimum social security contributions in the light of their impact on in-work poverty, job creation and competitiveness.	Limited progress in developing an integrated approach for groups at the margin of the labour market. The Public Employment Services are hiring youth mediators to reach and activate youth NEETs. The overall effect of the measure is still limited. In the first nine months of 2015, 71 000 individual plans for youth registered with the PES were prepared. From September 2014 to September 2015, 43 000 people over 50 years old started work on the primary market, additional 16 000 started subsidised employment.
	Limited progress in the part on minimum wage and minimum social security thresholds. The government plans to establish the criteria for the mechanism for setting up minimum wages towards the end of 2016. Minimum wages per economic sectors should start being negotiated between the

	social partners from 2017.
CSR 4 Adopt the reform of the School Education Act, and increase the participation in education of disadvantaged children, in particular Roma, by improving access to good-quality early schooling.	 Bulgaria has made some progress addressing CSR 4. Substantial progress in addressing CSR4 in the part on the adoption of the School Education Act. The School Education Act was adopted in October 2015. All the subsequent educational standards are planned to be designed and adopted by August 2016. Limited progress addressing CSR4 in the part on improving access to good-quality early schooling for disadvantaged children.
CSR 5	Bulgaria has made limited progress addressing CSR 5.
With a view to improving the investment climate, prepare a comprehensive reform of the insolvency framework drawing on international best practice and expertise, in particular to improve mechanisms for pre-insolvency and out-of-court restructuring.	Limited progress in improving the mechanisms for pre-insolvency and out-of-court restructuring

Europe 2020 (national targets and progress)

Employment rate target: 76%	65.1% in 2014.
Early school leaving target: 11%	12.9% in 2014.
Tertiary education target: 36%	30.9% in 2014.
At risk of poverty target in numbers of persons:	1 578 000 in 2014.
Decrease by 260 000 (baseline 2008: 1 632 000)	
Greenhouse gas (GHG) emissions target: 20% in 2020 compared to 2005 (in non-ETS sectors)	According to the latest national projections submitted to the Commission and taking into account existing measures, it is expected that the target will be achieved: -5.5% in 2020 as compared with 2005 (by a margin of 25 percentage points).
	Non-ETS 2014 target:13%
	The change in non-ETS greenhouse gas emissions between 2005 and 2014 was 1%. The non-ETS emissions in 2014 were 12 percentage points below

	the 2014 target set by the Effort Sharing Decision.
2020 Renewable energy target: 16%	With a renewable energy share of 18% in 2014, Bulgaria is already above its 16% target for 2020.
	With 5.3% share of RES in transport in 2014, Bulgaria is half-way towards reaching the binding 10% RES target in transport.
Energy efficiency target. Bulgaria's 2020 energy efficiency target is 16.9 Mtoe expressed in primary energy consumption (8.6 Mtoe expressed in final energy consumption.)	Bulgaria updated its 2020 energy efficiency target in 2014. If the trend in primary and final energy consumption observed in the period 2005-2013 continues up to 2020, Bulgaria will meet its national target
	Preliminary 2014 Eurostat data indicates that the primary energy consumption in Bulgaria stood at 17.2 Mtoe and the final energy consumption was 9.0 Mtoe.
R&D target: 1.5% of GDP	0.8% (2014)
	R&D intensity increased from 0.65% of GDP in 2013 to 0.8% in 2014, but remains the fourth lowest in the EU. The increase in R&D intensity is mainly driven by an increase in business R&D intensity (investments by foreign companies in R&D services, and clinical trials in particular). In 2014 R&D intensity in Bulgaria was composed of 0.27% public R&D intensity, 0.52% business R&D intensity and 0.01% private non-profit R&D expenditure.

ANNEX B

MIP scoreboard

Table B.1: The	MIP scoreboard for Bulgaria							
		Thresholds	2009	2010	2011	2012	2013	2014
	Current account balance, (% of GDP) 3 year average	-4%/6%	-18.4	-10.6	-2.9	-0.1	0.8	0.9
	Net international investment position (% of GDP)	-35%	-101.8*	-95.6	-85.2	-79.8	-75.0	-73.4
External imbalances and competitiveness	Real effective exchange rate - 42 trading partners, 3 years % change HICP deflator	±5% & ±11%	18.3	9.7	1.9	-4.0	-1.0	-2.6
	Export market share - % of world exports 5 years % change	-6%	18.3*	14.9*	16.6*	3.5	4.4	6.7
	Nominal unit labour cost index (2010=100) 3 years % change	9% & 12%	35.5	32.5	20.4	13.8p	15.3p	12.5p
	Deflated house prices (% y-o-y change)	6%	-21.0e	-12.3p	-9.6p	-5.3p	0.4p	1.5p
	Private sector credit flow as % of GDP, consolidated	14%	4.7	3.7	1.4	3.0	7.3	-0.3
Internal imbalances	Private sector debt as % of GDP, consolidated	133%	134.1	134.3	125.2	125.7	132.2	124.3
	General government sector debt as % of GDP	60%	13.7	15.5	15.3	17.6	18.0	27.0
	Unemployment rate 3 year average	10%	6.4	7.6i	9.5	11.3	12.2	12.2
	Total financial sector liabilities (% y-o-y change)	16.5%	1.3	-5.4	5.4	10.2	4.3	7.2
	Activity rate - % of total population aged 15-64 (3 years change in p.p)	-0.2%	2.7	0.2	-1.9b	-0.1	1.9	3.1
New employment indicators	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)	0.5%	-2.0	0.7	3.4	3.8	2.6	0.6
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)	2%	-3.2	7.7i	13.1	13.0	6.6	-1.2

Flags: *: BPM5/ESA95 figure. e: estimated. p: provisional. "Note: 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: 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)	106.3	103.0	108.9	113.1	110.8	110.6
Share of assets of the five largest banks (% of total assets)	55.2	52.6	50.4	49.9	55.0	-
Foreign ownership of banking system (% of total assets)	80.5	75.0	73.0	69.6	75.5	-
Financial soundness indicators:						
- non-performing loans (% of total loans)	11.9	15.0	16.6	16.9	16.7	-
- capital adequacy ratio (%)	17.4	17.6	16.6	17.0	21.9	-
- return on equity (%)	7.8	5.7	6.3	5.7	7.2	-
Bank loans to the private sector (year-on-year % change)	1.6	3.8	3.5	1.1	2.2	-0.4
Lending for house purchase (year-on-year % change)	3.7	1.3	1.0	-0.8	-1.7	-0.7
Loan to deposit ratio	117.4	107.6	102.4	94.1	86.0	77.5
Central Bank liquidity as % of liabilities ¹⁾	0.0	0.0	0.0	0.0	0.0	0.0
Private debt (% of GDP)	134.3	125.2	125.7	132.2	124.3	-
Gross external debt (% of GDP) ²⁾ - public	7.6	6.8	8.3	8.1	14.1	13.1
- private	72.1	66.7	66.5	66.1	65.4	55.9
Long-term interest rate spread versus Bund (basis points)*	326.2	274.8	300.3	190.3	218.4	199.6
Credit default swap spreads for sovereign securities (5-year)*	254.2	248.6	227.7	102.1	119.4	153.8

Notes: 1) Latest data October 2015. 2) Latest data October 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).

	2010	2011	2012	2013	2014	2015 (4)
Employment rate	64.7	62.9	63.0	63.5	65.1	66.8
(% of population aged 20-64)	04.7	02.9	05.0	05.5	05.1	00.8
Employment growth	-3.9	-2.2	-2.5	-0.4	0.4	0.4
(% change from previous year)	-3.9	-2.2	-2.5	-0.4	0.4	0.4
Employment rate of women	60.8	59.8	60.2	60.7	62.0	63.6
(% of female population aged 20-64)	00.0	57.0	00.2	00.7	02.0	05.0
Employment rate of men	68.6	66.0	65.8	66.4	68.1	70.0
(% of male population aged 20-64)	00.0	00.0	05.0	00.4	00.1	70.0
Employment rate of older workers	44.9	44.6	45.7	47.4	50.0	52.1
(% of population aged 55-64)	11.2	11.0	15.7	17.1	50.0	52.1
Part-time employment (% of total employment,	2.4	2.4	2.4	2.7	2.7	2.4
aged 15 years and over)						
Fixed term employment (% of employees with a fixed term	4.5	4.1	4.5	5.7	5.3	4.7
contract, aged 15 years and over)						
Transitions from temporary to permanent employment	36.7	38.6	40.9	24.5	29.2	-
Unemployment rate ⁽¹⁾ (% active population,	10.3	11.3	12.3	13.0	11.4	9.6
age group 15-74)	1010	11.0	1210	1010		210
Long-term unemployment rate ⁽²⁾ (% of labour force)	4.7	6.3	6.8	7.4	6.9	5.9
Youth unemployment rate	21.9	25.0	28.1	28.4	23.8	21.7
(% active population aged 15-24)	21.9	25.0	20.1	20.4	23.0	21.7
Youth NEET ⁽³⁾ rate (% of population aged 15-24)	21.8	21.8	21.5	21.6	20.2	-
Early leavers from education and training (% of pop. aged 18-24						
with at most lower sec. educ. and not in further education or	13.9	11.8	12.5	12.5	12.9	-
training)						
Tertiary educational attainment (% of population aged 30-34	27.7	27.3	26.9	29.4	30.9	
having successfully completed tertiary education)	21.1	21.5	20.9	29.4	50.9	-
Formal childcare (30 hours or over; % of population aged less	6.0	7.0	8.0	11.0	-	
than 3 years)	0.0	7.0	0.0	11.0	-	-

Notes:

Table C.2:

Notes:
(1) Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.
(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)

Labour market and social indicators

Cable C.3: Labour market and social indicators (continued)									
Expenditure on social protection benefits (% of GDP)	2009	2010	2011	2012	2013	2014			
Sickness/healthcare	3.7	4.1	4.2	4.2	4.4	-			
Invalidity	1.3	1.3	1.2	1.2	1.4	-			
Old age and survivors	8.1	8.6	8.1	8.1	8.6	-			
Family/children	1.9	1.9	1.8	1.7	1.8	-			
Unemployment	0.5	0.6	0.6	0.6	0.5	-			
Housing and social exclusion n.e.c.	0.0	0.0	0.0	0.0	0.0	-			
Total	15.6	16.8	16.1	16.1	17.0	-			
of which: means-tested benefits	0.7	0.8	0.7	0.7	0.7	-			
Social inclusion indicators	2009	2010	2011	2012	2013	2014			
People at risk of poverty or social exclusion ⁽¹⁾ (% of total population)	46.2	49.2	49.1	49.3	48.0	40.1			
Children at risk of poverty or social exclusion (% of people aged 0-17)	47.3	49.8	51.8	52.3	51.5	45.2			
At-risk-of-poverty rate ⁽²⁾ (% of total population)	21.8	20.7	22.2	21.2	21.0	21.8			
Severe material deprivation rate ⁽³⁾ (% of total population)	41.9	45.7	43.6	44.1	43.0	33.1			
Proportion of people living in low work intensity households ⁽⁴⁾ (% of people aged 0-59)	6.9	8.0	11.0	12.5	13.0	12.1			
In-work at-risk-of-poverty rate (% of persons employed)	7.4	7.7	8.2	7.4	7.2	9.2			
Impact of social transfers (excluding pensions) on reducing poverty	17.4	23.6	19.0	18.1	21.3	20.1			
Poverty thresholds, expressed in national currency at constant prices ⁽⁵⁾	2755	2869	2690	2553	2549	2875			
Gross disposable income (households; growth %)	0.8	0.9	8.0	2.4	3.2	#N/A			
Inequality of income distribution (S80/S20 income quintile share ratio)	5.9	5.9	6.5	6.1	6.6	6.8			

Notes:

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

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

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

(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20% of their total work-time potential in the previous 12 months.
 (5) For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes)

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

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	6.92	4.30	9.77	4.27	2.85	1.28		
Labour productivity in construction	20.84	0.75	8.38	0.35	4.81	-1.92		
Labour productivity in market services	-0.30	6.18	2.75	0.74	2.48	1.38		
Unit labour costs (ULC) (whole economy, y-o-y)								
ULC in industry	4.48	7.89	-4.57	1.37	3.63	5.57		
ULC in construction	-0.91	4.26	-1.28	3.24	2.34	11.81		
ULC in market services	10.15	3.16	5.90	9.40	2.09	5.36		
Business environment	2009	2010	2011	2012	2013	2014		
Time needed to enforce contracts ⁽¹⁾ (days)	564	564	564	564	564	564		
Time needed to start a business ⁽¹⁾ (days)	49.0	18.0	18.0	18.0	18.0	18.0		
Outcome of applications by SMEs for bank loans ⁽²⁾	1.38	na	0.59	na	0.86	0.97		
Research and innovation	2009	2010	2011	2012	2013	2014		
R&D intensity	0.51	0.59	0.55	0.62	0.65	0.80		
Total public expenditure on education as % of GDP, for all levels of education combined	4.58	4.10	3.82	3.68	na	na		
Number of science & technology people employed as % of total employment	28	28	29	29	30	32		
Population having completed tertiary education ⁽³⁾	19	19	20	21	22	24		
Young people with upper secondary level education ⁽⁴⁾	84	84	87	86	86	86		
Trade balance of high technology products as % of GDP	na	na	na	-3.53	na	-2.56		
Product and service markets and competition				2003	2008	2013		
OECD product market regulation (PMR) ⁽⁵⁾ , overall				na	na	1.57		
				na	na	0.20		
OECD PMR ⁽⁵⁾ , retail								
				na	na	na		

Notes:

(1) The methodologies, including the assumptions, for this indicator are shown in detail here:

 (1) the methodologies, including the assumptions, for this indicator are shown in defail 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).

Green growth performance		2009	2010	2011	2012	2013	2014
Macroeconomic							
Energy intensity	kgoe / €	0.66	0.67	0.71	0.67	0.61	
Carbon intensity	kg / €	2.08	2.17	2.33	2.15	1.94	
Resource intensity (reciprocal of resource productivity)	kg / €	4.38	4.32	4.71	4.62	4.44	4.55
Waste intensity	kg∕€	-	5.99	-	5.67	-	
Energy balance of trade	% GDP	-5.0	-5.8	-6.3	-6.9	-6.2	-5.7
Weighting of energy in HICP	%	13.16	14.08	11.94	13.67	15.01	14.05
Difference between energy price change and inflation	%	3.2	-3.7	-0.4	6.5	-2.9	-1.3
Real unit of energy cost	% of value added	34.1	34.1	34.1	-	-	
Ratio of labour taxes to environmental taxes	ratio	3.2	3.1	3.1	3.2	3.3	3.6
Environmental taxes	% GDP	2.9	2.8	2.7	2.7	2.8	2.7
Sectoral							
Industry energy intensity	kgoe / €	0.48	0.51	0.50	0.46	0.47	
Real unit energy cost for manufacturing industry	% of value added	99.1	99.1	99.1	-	-	
Share of energy-intensive industries in the economy	% GDP	12.47	12.34	13.09	13.14	13.01	
Electricity prices for medium-sized industrial users	€/kWh	0.06	0.07	0.07	0.07	0.08	0.08
Gas prices for medium-sized industrial users	€/kWh	0.03	0.03	0.03	0.04	0.04	0.03
Public R&D for energy	% GDP	0.01	0.00	0.00	0.00	0.00	0.00
Public R&D for environment	% GDP	0.00	0.01	0.01	0.01	0.00	0.00
Municipal waste recycling rate	%	19.9	24.5	26.2	25.0	30.1	
Share of GHG emissions covered by ETS*	%	55.5	55.6	60.6	57.4	58.5	58.5
Transport energy intensity	kgoe / €	1.92	1.77	2.09	2.20	1.89	
Transport carbon intensity	kg / €	5.41	4.94	5.82	6.03	5.05	
Security of energy supply							
Energy import dependency	%	45.1	39.6	36.0	36.1	37.8	
Aggregated supplier concentration index	HHI	57.1	69.9	68.3	72.9	68.0	
Diversification of energy mix	HHI	0.26	0.27	0.29	0.27	0.25	

General explanation of the table items:

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