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Country Report Bulgaria 2019
Including an In-Depth Review on the prevention and correction of macroeconomic imbalances

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK AND THE EUROGROUP

2019 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011

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EXECUTIVE SUMMARY

Bulgaria's strong growth momentum and the soundness of government finances offer an opportunity to tackle its remaining structural challenges and raise growth potential. Levels of poverty, social exclusion and income inequality are still among the highest in the EU. As the population ages and skilled workers become progressively scarcer, adequately addressing these challenges and accelerating economic growth will increasingly depend on Bulgaria's capacity to implement structural reforms. Investment in improving people's skills, in infrastructure and in research and innovation would support productivity and help Bulgaria catch up with the rest of the EU. This would also help to bolster the resilience and competitiveness of Bulgaria's open economy, especially given the increasing international risks. Building on past progress, the authorities have made further efforts to tackle the identified macroeconomic imbalances by strengthening financial supervision and taking steps to address financial sector vulnerabilities ([1]).

Economic growth remains robust and the labour market continues to perform well. Real Gross Domestic Product (GDP) (adjusted for inflation) grew by an estimated 3.2 % in 2018 and is expected to increase by 3.6 % in 2019 and 2020, driven by domestic demand. Real wage growth will continue to support consumer spending, while investment is increasingly spurred by EU funding. The unemployment rate (5.2 % in Q4-2018) stands below its pre-crisis level. Long-term unemployment has decreased and youth unemployment has fallen below the EU average.

Despite its relatively good overall economic performance, Bulgaria has been slow to catch up with the rest of the EU. GDP per head, at 50 % of the EU average in 2017, has grown only slightly faster than the EU average since 2011**.** Potential GDP growth has strengthened over recent years. This has been driven mainly by improvements in total factor productivity([2]) while the contributions of capital and labour have been modest. The growth potential may be hampered by negative demographic trends and the increasing scarcity of skilled workers, as well as by increasing regional disparities. Labour shortages and planned government wage increases are expected to drive wage growth above productivity growth until 2020, potentially leading to losses in Bulgaria's cost-competitiveness.

Budgetary developments remain positive. The government achieved a budget surplus equivalent to 1.1 % of GDP in 2017 due to improved tax collection and higher-than-projected nominal (non-inflation-adjusted) growth. On the spending side, public investment started to recover and public sector wages increased. The supportive overall economic situation and a generally prudent approach to government finances are expected to lead to sustained budget surpluses until 2020.

Investment in skills, social cohesion, infrastructure, and research and innovation is needed to support competitiveness, productivity and the process of catching up with the rest of the EU. Insufficient investment is holding back the modernisation of the economy. Bulgaria's considerable labour and skills shortages warrant investments in training and reskilling; addressing the lack of digital skills; improving the quality and inclusiveness of education and aligning it to the needs of the labour market; and improving the capacity of public employment services. Investments in transport, energy and water infrastructure will improve the conditions for attracting foreign direct investment and will strengthen companies' competitiveness. More investment in research and development (R&D) is needed to boost productivity gains, as well as strengthened links between businesses and research institutions and a better integrated research and innovation system. Key priorities for support by the European Regional Development Fund, the European Social Fund Plus and the

([1]) This report assesses Bulgaria's economy in light of the European Commission's Annual Growth Survey published on 21 November 2018. In the survey, the Commission calls on EU Member States to implement reforms to make the European economy more productive, resilient and inclusive. In so doing, Member States should focus their efforts on the three elements of the virtuous triangle of economic policy — delivering high-quality investment, focusing reforms efforts on productivity growth, inclusiveness and institutional quality and ensuring macroeconomic stability and sound public finance. At the same time, the Commission published the Alert Mechanism Report (AMR) that initiated the eighth round of the macroeconomic imbalance procedure. The AMR found that Bulgaria warranted an in-depth review, which is presented in this report.

([2]) A measure of productivity accounting for effects in total output not caused by traditionally measured inputs of labour and capital.

Cohesion Fund over 2021-2027 are identified in Annex D, building on the analysis of investment needs and challenges outlined in this report.

Overall, Bulgaria has made some progress in addressing the 2018 country-specific recommendations.

There has been substantial progress in:

- taking measures to follow up on the financial sector reviews;

There has been some progress in:

- improving tax collection and public spending, including by stepping up enforcement of measures to reduce the extent of the informal economy;
- implementing supervisory action plans in the financial sector and ensuring adequate valuation of assets, including collateral held by banks;
- making disadvantaged groups more employable by strengthening measures to get them into work or training and improving their skills;
- providing quality and inclusive mainstream education (however, measures to address the particular situation of Roma and other disadvantaged groups are lagging behind).

There has been limited progress in:

- upgrading the governance framework for state-owned enterprises in line with international good practices;
- completing the reform of the insolvency framework and promoting a functioning secondary market for non-performing loans;
- improving access to health services, reducing 'out-of-pocket' payments and addressing shortages of health professionals;
- introducing a transparent scheme to revise the minimum income and improving its coverage and adequacy.

Regarding progress towards its national targets under the Europe 2020 strategy, Bulgaria is expected to achieve its target for reducing greenhouse gas emissions and increasing the share of renewable energy. It has taken measures to improve energy efficiency but energy consumption remained above the indicative national targets. Bulgaria has made progress on employment, early school leaving and tertiary education rates, but has yet to meet its targets. The situation has worsened regarding poverty reduction. There was no progress towards the R&D intensity target.

Bulgaria faces challenges on a number of indicators of the Social Scoreboard supporting the European Pillar of Social Rights. Bulgaria still has one of the highest shares of people living at risk of poverty or social exclusion, as well as high levels of income inequality. Social transfers have a low impact on poverty reduction. Major challenges for the education and training system remain, including providing quality inclusive education and tackling early school leaving. The population's level of digital skills remains very low. Despite improvements in the labour market, the low-skilled, the Roma and people with disabilities still face significant difficulties in finding work.

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

The banking sector has been strengthened overall, but some vulnerabilities remain. Banks have addressed the recommendations arising from the 2016 asset quality review, with one exception. New initiatives in 2018 included new rules for large exposures and the identification of connected clients; improved policies in several banks for making provisions for potential loan losses: an increase in the counter-cyclical capital buffer rate([3]); and macro-prudential([4]) tools for borrower-based measures. Measures to be completed include addressing valuation issues, implementing regulatory initiatives and strengthening the framework for resolving banks in an orderly way.

The reform of non-bank supervision has continued. Follow-up measures to the insurance and pension funds reviews are being implemented.

([3]) A variable capital requirement that aims to make credit growth less cyclical and the banking system more resilient.

([4]) Macroprudential regulation aims to mitigate risks to the financial system as a whole (or ‘systemic risk’).

Remaining steps include fully implementing an action plan to establish a proper risk-based, forward-looking supervisory process, and adequately following up on outstanding issues highlighted by the non-bank financial sector reviews, including valuation practices and group-level supervision. Concerns that have recently emerged in the car insurance sector also remain to be addressed. These include the rudimentary pricing model and the effectiveness of the National Bureau of Bulgarian Motor Insurers, as well as the lack of a harmonised methodology for compensations set by judges.

The private sector is reducing its debt, but the level remains high. The high debt of non-financial corporations continues to present a challenge, although it has been decreasing over the last few years, partially due to robust nominal GDP growth. While slowing the reduction in private sector debt, the recent increase in lending activity could support higher investment and growth. Levels of non-performing loans have been falling, in part due to a recovery in credit flows and a more dynamic secondary market, but still remain well above the EU average. Deficiencies in the insolvency framework are slowing the reduction in private sector debt and the work-out of non-performing loans.

The labour market has improved, supported by economic growth. The employment rate reached 71.3 % in 2017, the highest since Bulgaria joined the EU in 2007. Despite low take-up, better-targeted policies to help people into work or training are starting to yield results, supported by economic growth. Nonetheless, some groups (the low- skilled, young people, the Roma, people with disabilities) continue to face challenges. A shrinking working-age population as well as skills shortages and skills gaps continue to be of concern.

Other key structural issues analysed in this report, which point to particular challenges for Bulgaria's economy, are the following:

The social protection system is insufficient to tackle the significant social issues. Wide income inequalities and the high number of people at risk of poverty point to the need for 'active inclusion' policies designed to enable every citizen to work and participate fully in society. These challenges also point to the need for targeted support to vulnerable groups, as well as better availability and quality of integrated social and healthcare services and housing. The adequacy and coverage of the minimum income remain limited and there is no objective mechanism for regularly updating it. The impact of taxes and benefits on reducing poverty and inequality is significantly lower than the EU average. This reflects the low level of social spending, the uneven availability of social services across the territory and the limited redistributive effects of the taxation system.

The education system is being modernised at all levels but significant challenges remain. Persistently high rates of early school leaving and low educational outcomes highlight the need for significant investment in education. This is particularly relevant for addressing the challenges of quality and equality of opportunity in early childhood education and care, school education and vocational education and training. Despite ongoing efforts, higher education is insufficiently aligned with the needs of the jobs market. The rate of participation in adult learning is one of the lowest in the EU. Inclusion of Roma in education and the high impact of socio-economic status on educational outcomes remain problematic.

Many Bulgarians still face significant obstacles in accessing healthcare. Public expenditure on healthcare remains very low, with formal and informal out-of-pocket payments([5]) covering almost half of healthcare costs — one of the highest shares in the EU. The strategy for long-term care is under way, but implementation of the National Health Strategy action plan is considerably delayed.

Public administration reform continues to be slow and is yielding insufficient improvements while the business environment remains weak. Institutional shortcomings, regulatory uncertainty and corruption remain among the main obstacles to investment. There has been little progress in the provision of public services and the perception of their quality remains low. Notwithstanding the generally good progress in programming and implementing EU funding, administrative capacity remains a challenge. The design and implementation of public policy, as well as

[5] On-the-spot payments to healthcare providers.

capacity-building at all levels of public administration, would benefit from strengthening. The practical benefits of the ongoing reforms to public procurement are limited; aggregated purchases have advanced only at the central level and the uptake of electronic procurement has been delayed. On a positive note, the provision of digital public services for businesses has improved significantly and the introduction of e-government is advancing.

The fight against corruption remains a challenge. In 2018, Bulgaria adopted a comprehensive reform of its anti-corruption legislation and established a new unified anti-corruption agency, but results have yet to be seen. Significant progress has been made towards reinforcing the independence of the judiciary. Still, a number of challenges remain, in particular to strengthen the accountability of the prosecution service and public trust in it, and to rebalance the workload among courts. In recent years, Bulgaria has been addressing deficiencies in its anti-money laundering framework, but a number of concerns remain. These include the effective transposition of the European Union's legal framework and the use of financial information in the investigation and prosecution of financial crime and high-level corruption.

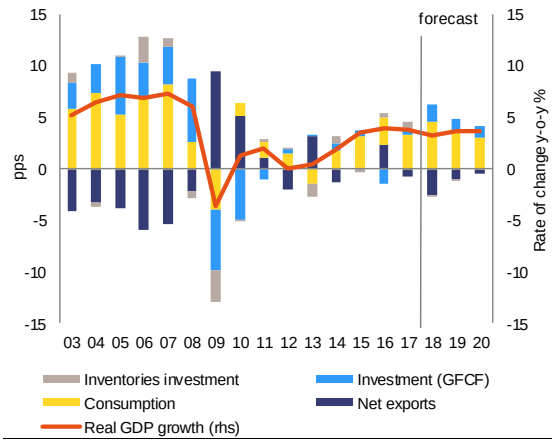
State-owned enterprises suffer from weak corporate governance. The situation of state-owned enterprises reflects to some extent their management and supervision, as well as restructuring challenges. A reform of the corporate governance framework is being prepared, which would help to address current weaknesses.

1. ECONOMIC SITUATION AND OUTLOOK

GDP growth

The economy continued to grow robustly. Real GDP grew an estimated 3.2 % in 2018, driven by domestic demand. Rising real wages increased households' income and confidence, spurring private consumption. Both public and, to a lesser extent, private investment contributed to the GDP growth. Public consumption growth also increased, mainly reflecting higher spending on wages and intermediate consumption. The growth of exports slowed down due to one-off events and a decline in exports to Turkey, while the strong domestic supported high imports growth. Overall, foreign trade had a significant negative contribution to growth. Robust growth led to a positive output gap in 2018, which is projected to further expand in 2019 and 2020, to 0.6 % and 1.0 %, respectively.

Graph 1.1: **Real GDP growth by demand components**

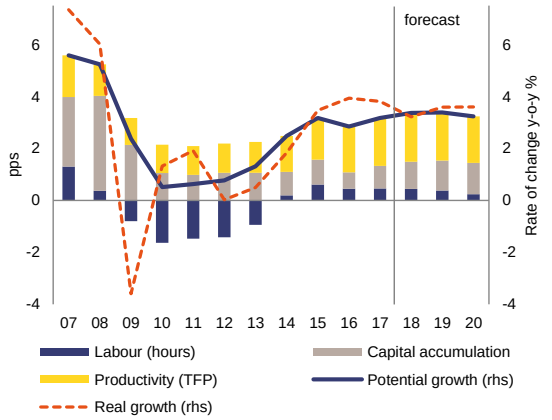


2018-20: Winter forecast 2019 for real GDP growth, otherwise Autumn forecast 2018
Source: European Commission

Wage growth and EU-funded investment are expected to continue to drive economic growth. Bulgaria's growth momentum is expected to remain strong, mainly driven by solid domestic demand. Real wage growth will continue to stimulate private consumption. High demand, increased capacity utilisation and EU funding are set to boost investment, while imports should outpace exports, leading to a further reduction in the current account surplus. Overall, real GDP growth is expected to strengthen to 3.6 % % in 2019 as well as in 2020 (see Graph 1.1).

Potential growth has benefited mostly from gains in total factor productivity. Potential GDP growth has strengthened in recent years, reaching above 3 % in 2017 (see Graph 1.2). It was driven by total factor productivity, which has constantly increased since 2014. The contribution of capital accumulation has shrunk over the last 10 years and reached its lowest level in 2016-2017, which coincided with the beginning of a new EU funding period (see Graph 1.2). Labour supply has made a relatively small contribution to potential growth and is expected to contribute even less in the medium to long term due to adverse demographics and the increasing scarcity of skilled workforce.

Graph 1.2: **Potential growth breakdown**



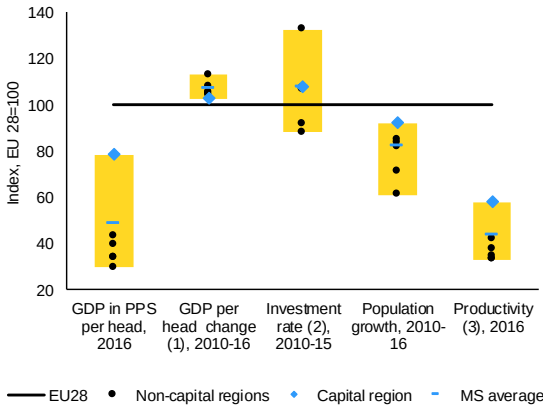
2018-20: Winter forecast 2019 for real GDP growth, otherwise Autumn forecast 2018
Source: European Commission

Regional disparities

Convergence with the EU has been slow. GDP per head has grown faster than the EU average since 2011, but it has reached only 50 % of the EU average in 2017. Regional disparities are growing and hampering the competitiveness of the country. Output and incomes across Bulgaria are very uneven, as shown by a coefficient of variation of 49 % in the 2016 GDP per capita. Moreover, five of Bulgaria's six planning regions are among the 20 poorest in the EU. Although it accounts for just 18.8 % of the population, the Sofia region generates nearly half of the country's GDP (Graph 1.3). As a percentage of GDP, investment is below the EU average, with significant regional discrepancies. Sofia attracts more than half of non-financial foreign direct investment. Other major

recipients of foreign direct investment are the larger urban centres, particularly in the south of the country, boosting the economic performance of these regions (NSI, 2018a). Labour productivity has been increasing steadily since 2008 (ECB, 2018b) but is still well below the EU average. It is particularly low (below 40 % of the EU average) in the three northern planning regions and in one region in the south.

Graph 1.3: **Regional disparities**



Yellow areas represent the range of disparities across regions
(1) Difference in index points
(2) Percentage of GDP
(3) Gross value added per person employed
Source: European Commission

The southern regions provide better conditions for doing business. There are considerable regional differences in economic output, socio-economic indicators as well as in unemployment and employment rates ([6]). This likely reflects a concentration of investment and better infrastructure. The growing capital attracts skilled people to high value added sectors, while in the rest of the country gains in employment are concentrated in lower value added sectors, also in the context of outward migration (see section 4.3. and 4.4).

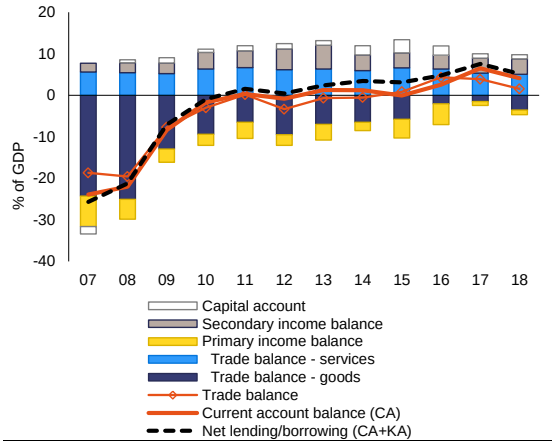
Investment

Investment is set to grow, mainly as a result of a public investment recovery. As of 2018, total investment seemed to be slowly recovering from its downward trend of the previous years. Public investment is increasing as more projects co-financed by the EU get underway and some national investment initiatives, e.g. in the transport sector, are being put into effect. Public investment is estimated to have increased by 57.8 % in 2018 and is expected to grow by around 20 % and 10 % in 2019 and 2020, respectively. Private investment, whose contribution to growth has been negative for several years, has also improved and is expected to continue increasing by around 4 % annually.

External position

The current account balance is positive though decreasing. It is estimated at around 3.6 % of GDP in 2018, significantly lower than its 2017 peak of 6.5 % of GDP (see Graph 1.4). This is mainly the result of a slowdown in export growth due to the strong base effect, some one-off events and a decline in exports to Turkey. At the same time, strong domestic demand spurred imports resulting in a negative contribution of net exports to GDP growth. This negative contribution is also set to decrease in 2019. Current account balance remains well above the deficit of 1.1% that the structure of the economy could warrant (current account norm) ([7]).

Graph 1.4: **Current account developments**



Source: European Commission, 2018 data are estimates based on quarterly data

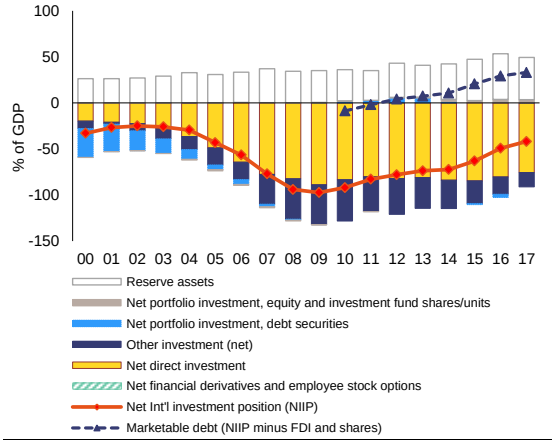
The net international investment position (NIIP) continued to improve. In 2018, the NIIP

([6]) Respectively, from 2.8 % in Sofia to 11.3 % in the North-West, and from 74.6 % in Sofia to 57.9 % in the North-West (NSI, 2018b).

([7]) For details on this methodology see Coutinho, L., Turrini, A, Zeugner, S., "Methodologies for the Assessment of Current Account Benchmarks", European Commission Discussion Paper 086/September 2018.

improved a further 6.3 pp compared to end-2017 to reach -35.5 % of GDP. The structural improvement is mainly related to an increase in reserve assets, the reduction of bank liabilities to parent companies and higher holdings of foreign assets by domestic companies (mainly pension funds, but also banks). The less negative NIIP has also benefited from strengthening nominal growth and continuous current account surpluses, combined with a capital account surplus (see Graph 1.5). The NIIP, however, remains above the prudential level of 35.2 % of GDP indicating that further improvement could lead to safer levels of international debt ([8]) .

Graph 1.5: **Net international investment position**



Source: European Commission

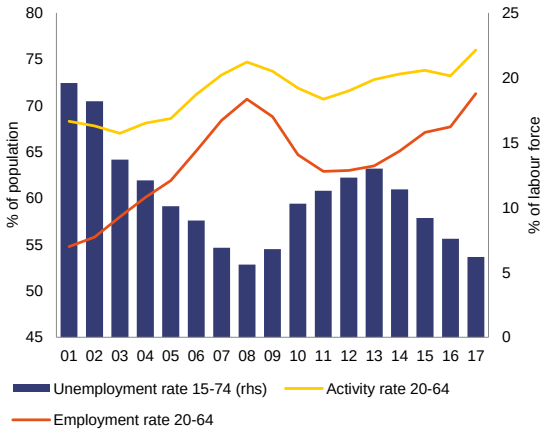
Inflation

Inflation, mainly driven by oil prices, is expected to moderate in 2019 and 2020. Annual HICP inflation was 2.6 % in 2018. Price pressures increased due to a steep rise in oil prices, second round effects on food prices and increases in unprocessed food prices following a weak summer harvest. Administered prices also rose significantly over the same period. In the coming years, inflation is expected to decrease somewhat, to 2.0 % in 2019 and 1.8 % in 2020. The strong base effects from energy prices are expected to push down inflation growth, while an increase in core inflation due to a rise in real disposable income and household consumption will act in the opposite direction.

Labour market, poverty and social exclusion

Labour market conditions continue to improve alongside strong economic growth. The unemployment rate decreased for the fifth consecutive year (see Graph 1.6) and is now well below the EU average (5.3 % v 6.5 % in Q3-2018), while the employment rate reached a higher level than before the crisis (71.3 % in 2017 vs. 70.7 % in 2008). Despite these positive developments, adverse demographic trends and intensifying skills shortages pose an increasingly serious challenge to future growth.

Graph 1.6: **Labour market indicators**



Source: European Commission

A tightening labour market is exerting upward pressure on wages. Nominal compensation per employee grew by 10.5 % in 2017 and are estimated to have further increased by 8 % in 2018. This is faster than developments in labour productivity, prices and the unemployment rate would predict. Wage discrepancies across regions and sectors are relatively high, depending on where labour shortages are more acute. Moreover, the shortage of professionals in key public policy domains, such as education and healthcare, is limiting the delivery of services.

Some population groups are not fully integrated into the labour market. Despite the overall positive developments, structural challenges

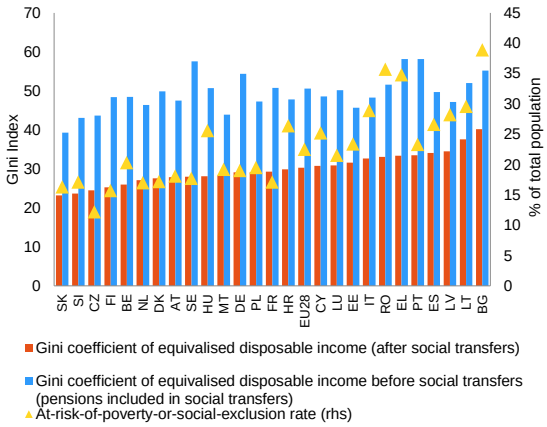
([8]) The country-specific prudential threshold denotes the NIIP level beyond which an external crisis becomes likely. The NIIP level explained by fundamentals represents the NIIP that would result if a country had run its current account in line with fundamentals since 1995. For details regarding the estimation of NIIP benchmarks see Turrini, A, and Zeugner, S. (2018), "Benchmarks for net international investment positions", European Commission Discussion Paper, forthcoming.

persist. In 2017, the long-term jobless still represented 55 % of the unemployed, while the rate of young people not in employment, education or training remains above the EU average (15.3 % v 10.9 %). There are also significant discrepancies between inactivity and employment rates depending on education levels and across regions. Those living in rural areas and small cities, the low-skilled and the Roma have lower levels of activity and employment. While the targeting of active labour market policies has improved, the level of resources allocated to training is still insufficient and the share of participants in activation measures remains very low.

The rate of people living in poverty is still very high and income inequality is growing. Despite a slight decrease, the rate of poverty or social exclusion in 2017 was 38.9 %, well above the EU average of 22.5 % ([9]) (see Graph 1.7). Income inequality has increased continuously in recent years, driven by a steady rise in earnings at the top end ([10]) as well as a gradual erosion of the income share of the poorest households. In 2017, the income of the richest 20 % of population was over eight times higher than that of the poorest 20 %. Market outcomes were only slightly more unequal than in other EU countries, but the impact of taxes and benefits on reducing poverty and inequality is significantly lower in Bulgaria. This reflects the low level of social spending, the uneven availability of social services and the limited redistributive effects of the taxation system.

Inequality of opportunities remains a key challenge. Children's educational outcomes and poverty are highly correlated with the socio-economic background of their parents. The poverty rate for children of parents with low qualifications is 77.5 % compared to 3.1 % for parents with high qualifications. This divide is also reflected in the self-reported unmet need for medical care, which was 6.3 % for the poorest households compared to 0.9 % for the richest ones. Access to social services is characterised by large discrepancies between rural and urban areas and among regions. Moreover, the low quality of the services hampers the social inclusion of the most vulnerable groups. The family income in densely populated areas is 141 % of the average equalised disposable income for the country, while Roma families with children living in thinly populated areas are at only 36 % of the average income.

Graph 1.7: **Level of income inequality**



Source: European Commission

Financial sector

Economic growth helped the banking sector to further strengthen its capital and liquidity ratios. In September 2018 commercial banks' total assets were 8.5 % up on the previous year. Funding appears relatively comfortable, driven mostly by a significant increase in deposits ([11]), while the loan-to-deposit ratio declined to 72.7 % in June 2018. Both households and non-financial corporations continued to place deposits mainly in domestic currency, signalling a sustained confidence effect. Profitability remained relatively high in the first half of 2018, while capital positions were broadly stable. The total capital ratio marginally decreased from 22.2 % in June 2017 to 20.8 % in June 2018 (ECB, 2018c).

([9]) Income data from the European Union Statistics on Income and Living Conditions refer to the previous year for all Member States except from Ireland and UK.

([10]) S80/S50, which measures the share of income of the richest 20 % compared to the middle income population, increased from 2.3 in 2012 to 2.9 in 2017. S50/S20, which measures the share of the middle income compared to the poorest 20 %, increased from 2.7 to 2.8 over the same time period.

([11]) As compared to one year earlier, household deposits grew by 7.8 % in September 2018, while those of non-financial corporations grew by 11.8 % (BNB, 2018a).

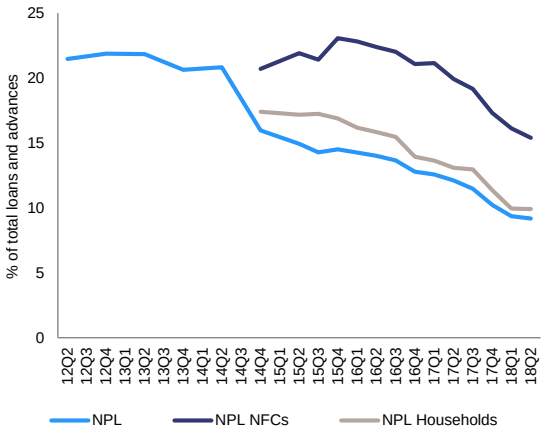
Table 1.1: **Financial soundness indicators, all banks in Bulgaria**

(%)	2010	2011	2012	2013	2014	2015	2016	2017
Non-performing loans	-	-	-	-	16.0	14.5	12.8	10.2
o/w foreign entities	-	-	-	-	-	15.8	12.7	9.5
o/w NFC & HH sectors	-	-	-	-	-	23.4	20.5	16.4
o/w NFC sector	-	-	-	-	20.7	23.1	21.1	17.3
o/w HH sector	-	-	-	-	17.4	16.9	13.9	11.4
Coverage ratio	42.0	44.4	49.4	53.0	48.9	50.1	51.3	50.6
Return on equity	6.4	4.7	4.7	4.4	7.2	8.0	11.3	10.2
Return on assets	0.8	0.6	0.6	0.6	0.9	1.0	1.5	1.3
Capital adequacy ratio	17.4	17.6	16.6	17.0	21.5	21.6	21.5	21.8
CET 1 ratio	-	-	-	-	19.1	19.5	19.8	20.2
Tier 1 ratio	15.2	15.7	15.1	16.0	19.6	19.9	20.3	20.6
Loan to deposit ratio	-	-	-	-	82.7	73.4	72.4	72.6

Source: European Central Bank, Consolidated Banking Data; European Commission calculations; annualised data

Despite improvements, non-performing loans by non-financial corporations remain high. The overall ratio of non-performing loans declined to 9.2 % in June 2018 from 12.1 % a year earlier (see Graph 1.8). Non-performing loans by non-financial corporations also decreased but still topped 15.4 % of total loans and advances (v 19.9 % a year earlier). These levels are well above the EU averages in June 2018 of 3.4 % overall and 6.7 % for non-financial corporations. Progress with restructuring has been slow. In Q1-2018 the share of forborne loans, most of which are non-performing, decreased only slightly, to 5.6 % of total loans.

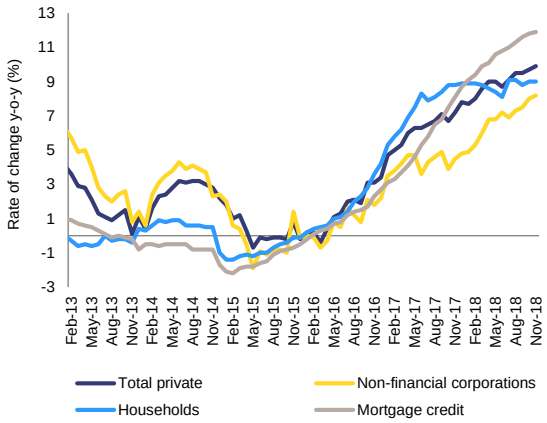
Graph 1.8: **Non-performing Loans, share of total loans and advances— total, households and NFCs (1)**



(1) Data from 2014 onwards based on FINREP sample, data prior to 2014 recalculated based on full sample
Source: European Central Bank

Credit continued to expand at an elevated pace. In September 2018, credit to non-financial corporations grew by 7.6 % year-on-year, and that for households by 8.8 % (ECB, 2018d) (see Graph 1.9). Housing loans also accelerated. They grew by 11.6 % year-on-year, driven by the improved economic environment and increases in household income.

Graph 1.9: **Domestic credit growth - Households and NFCs**



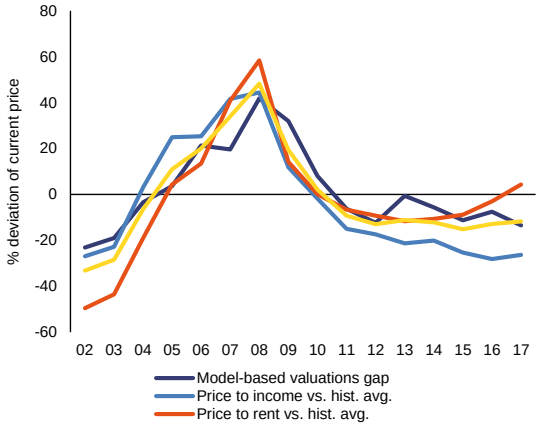
Based on index of notional stocks
Source: European Central Bank

House prices continued to grow strongly. House prices, which have been increasing since summer 2016, grew by 7.5 % year-on-year in Q2-2018. Regional differences remain substantial. The largest increases were recorded for existing housing in Plovdiv, up 14.5 %, while prices in Sofia rose 8.3 %. The recovery in real estate prices appears to be supported by rising real wages, higher consumer confidence and low bank interest rates. Furthermore, supply is not yet catching up with demand, although the continued improvement

in the construction confidence indicator is a positive signal. The growth of residential building investment is increasing but its share of GDP is still below the EU average.

Despite the strong increase in house prices, there is no indication of overvaluation. Although recovering, the price-to-income ratio is still below the long-term average (Graph 1.10), while the price-to-rent ratio is back to the long-term average. The resulting aggregate valuation gap estimates shows that Bulgaria is recovering from undervalued house prices. Strong price increases are occurring from below-equilibrium levels and the undervaluation is a legacy of the previous house price boom and bust cycle. Nonetheless, the recent strong increase suggests that the pace of recovery should be closely monitored, especially for those regions that have seen the highest growth rates recently.

Graph 1.10: **Overvaluation gap with respect to price/income, price/rent and fundamental model valuation gaps (1)**



(1) Overvaluation gap estimated as an average of the price/income, price/rent and fundamental model valuation gaps. Long-term values are computed over 1995-2016.
Source: European Commission

Public finances

Budgetary developments remained positive. The general government budget recorded a surplus of 0.8 % of GDP in 2018. On the expenditure side, public investment started to recover, despite the slower than expected progress with implementing EU-funded projects. Public sector wage increases were another major contributor to the expenditure rises. On the revenue side, taxes and social security contribution revenues increased as a result of both the favourable macroeconomic environment and improvements in tax collection. This is especially the case for indirect taxes such as value-added tax and excise duties (see also section 4).

Medium-term budget projections point to sustained surpluses and low debt. Public expenditure on wages and investment is forecast to increase further in 2019 and 2020. These increases, however, are expected to be partly offset by higher revenue from taxes and transfers. Further improvements in tax collection, if realised, could add to the available fiscal space. The overall positive fiscal and macroeconomic outlook is contributing to a fast reduction in public debt, which is forecast at below 20 % of GDP by 2020. In addition, according to the Commission Debt Sustainability Analysis and the fiscal sustainability gap indicators, Bulgaria faces low risk in the short, medium and long term([12]).

([12]) See Annex B for details.

Table 1.2: **Key economic and financial indicators - Bulgaria**

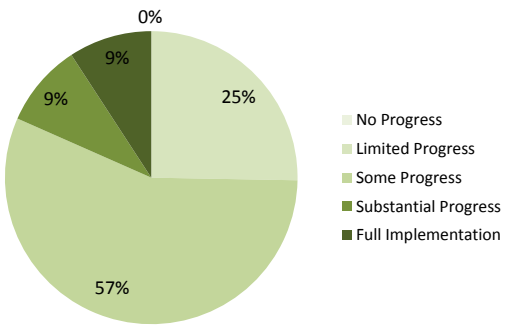
	2004-07	2008-12	2013-15	2016	2017	forecast 2018	forecast 2019	forecast 2020
Real GDP (y-o-y)	6.9	1.1	1.9	3.9	3.8	3.2	3.6	3.6
Potential growth (y-o-y)	6.0	1.9	2.3	2.8	3.2	3.4	3.4	3.2
Private consumption (y-o-y)	9.5	1.0	1.5	3.6	4.5	.	.	.
Public consumption (y-o-y)	2.4	-0.4	0.7	2.2	3.7	.	.	.
Gross fixed capital formation (y-o-y)	16.5	-4.3	2.1	-6.6	3.2	.	.	.
Exports of goods and services (y-o-y)	15.0	2.9	6.1	8.1	5.8	.	.	.
Imports of goods and services (y-o-y)	19.7	-1.1	5.0	4.5	7.5	.	.	.
Contribution to GDP growth:								
Domestic demand (y-o-y)	10.8	-0.6	1.5	1.2	3.9	.	.	.
Inventories (y-o-y)	0.7	-0.7	-0.2	0.4	0.6	.	.	.
Net exports (y-o-y)	-4.6	2.2	0.6	2.3	-0.8	.	.	.
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	1.8	-1.0	0.0	0.4	0.5	0.4	0.4	0.2
Capital accumulation (y-o-y)	2.1	1.8	1.0	0.6	0.9	1.0	1.2	1.2
Total factor productivity (y-o-y)	2.1	1.1	1.4	1.8	1.8	1.9	1.9	1.8
Output gap	1.7	0.4	-1.5	-0.5	0.1	0.3	0.6	1.0
Unemployment rate	9.5	9.3	11.2	7.6	6.2	6.0	5.8	5.7
GDP deflator (y-o-y)	7.5	4.1	0.6	2.2	3.4	2.6	2.4	2.2
Harmonised index of consumer prices (HICP, y-o-y)	6.8	4.6	-0.8	-1.3	1.2	2.6	2.0	1.8
Nominal compensation per employee (y-o-y)	8.6	9.8	6.7	5.8	10.5	8.0	7.6	6.3
Labour productivity (real, person employed, y-o-y)	3.8	2.7	1.8	3.4	2.0	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	4.5	6.9	4.8	2.3	8.4	4.8	4.0	2.8
Real unit labour costs (y-o-y)	-2.7	2.6	4.1	0.1	4.8	2.2	1.6	0.6
Real effective exchange rate (ULC, y-o-y)	2.8	4.6	4.4	0.9	9.2	5.0	1.6	0.1
Real effective exchange rate (HICP, y-o-y)	3.4	1.6	-1.4	-0.3	0.7	3.7	-0.8	-1.1
Savings rate of households (net saving as percentage of net disposable income)	-11.9	-2.6	-1.1	-1.8	-0.8	.	.	.
Private credit flow, consolidated (% of GDP)	26.6	9.2	2.0	4.1	6.2	.	.	.
Private sector debt, consolidated (% of GDP)	86.1	129.4	122.1	104.8	100.1	.	.	.
of which household debt, consolidated (% of GDP)	16.2	25.0	22.7	20.9	20.4	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	69.9	104.4	99.4	83.9	79.6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	3.3	14.7	15.3	11.2	9.0	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-8.1	-0.6	6.2	9.4	7.4	3.1	2.4	2.5
Corporations, gross operating surplus (% of GDP)	27.1	28.7	29.7	30.3	31.3	26.3	26.4	26.9
Households, net lending (+) or net borrowing (-) (% of GDP)	-7.8	-2.8	-0.2	-2.2	-1.5	3.1	2.8	3.3
Deflated house price index (y-o-y)	24.8	-6.8	1.2	7.1	6.2	.	.	.
Residential investment (% of GDP)	3.9	3.4	1.6	2.7	2.9	.	.	.
Current account balance (% of GDP), balance of payments	-23.9	-6.5	0.8	2.6	6.5	3.6	3.1	3.3
Trade balance (% of GDP), balance of payments	-18.7	-6.7	-0.1	4.3	3.9	.	.	.
Terms of trade of goods and services (y-o-y)	2.8	1.2	0.7	3.4	0.2	0.2	0.5	0.5
Capital account balance (% of GDP)	-1.8	1.1	2.2	2.2	1.0	.	.	.
Net international investment position (% of GDP)	-51.5	-88.8	-69.6	-49.2	-41.8	.	.	.
NIIP excluding non-defaultable instruments (% of GDP) (1)	.	.	13.0	29.3	33.1	.	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	.	.	58.4	54.6	48.1	.	.	.
Export performance vs. advanced countries (% change over 5 years)	59.3	25.7	10.9	5.1	14.0	.	.	.
Export market share, goods and services (y-o-y)	.	.	1.6	8.4	5.0	.	.	.
Net FDI flows (% of GDP)	-25.9	-6.1	-2.8	-1.3	-2.1	.	.	.
General government balance (% of GDP)	1.4	-1.6	-2.5	0.2	1.1	0.8	0.6	0.6
Structural budget balance (% of GDP)	.	.	-0.9	0.3	1.1	0.7	0.4	0.3
General government gross debt (% of GDP)	25.0	14.8	23.5	29.6	25.6	23.3	21.3	19.5
Tax-to-GDP ratio (%) (3)	30.9	27.2	28.6	29.0	29.5	30.0	30.2	30.2
Tax rate for a single person earning the average wage (%)	20.5	21.5	21.6	.	.	.	.	.
Tax rate for a single person earning 50% of the average wage (%)	12.1	21.5	21.6	.	.	.	.	.

(1) NIIP excluding direct investment and portfolio equity shares
(2) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(3) The tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation
Source: Eurostat and ECB as of 31-1-2019, where available; European Commission for forecast figures (Winter forecast 2019 for real GDP and HICP, Autumn forecast 2018 otherwise)

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Since the start of the European Semester in 2011, 75 % of all country-specific recommendations addressed to Bulgaria have recorded at least 'some progress". ([13]) 25 % of these country-specific recommendations recorded 'limited' or 'no progress' (see Graph 2.1). Measures have been taken in several policy areas subject to country-specific recommendations, but further efforts are needed for implementation of the reforms to have more tangible results.

Graph 2.1: **Overall multiannual implementation of 2011-2018 country-specific recommendations to date (1), (2), (3)**



(1) The overall assessment of the country-specific recommendations related to fiscal policy excludes compliance with the Stability and Growth Pact
(2) 2011 annual assessment: Different country-specific recommendations assessment categories
(3) The multiannual country-specific recommendations assessment looks at implementation from the first year of adoption up until the 2019 Country Report.
Source: European Commission

Labour market conditions continue to improve. Policy efforts and measures implemented since 2012 to help disadvantaged groups access the labour market are bearing fruit. Despite this, labour shortages appear to have reached an historical peak in 2018, intensified by emigration and adverse demographic trends.

Challenges remain in healthcare and education, in combating poverty and in promoting social inclusion. There has been limited progress in improving access to health services and in reducing out-of-pocket payments, as well as in addressing the shortages of health professionals. There are also outstanding issues with introducing a transparent revision scheme for the minimum income and improving its coverage and adequacy. There has been some progress in the area of education but major challenges related to quality and equity remain at all levels. The inclusion of the Roma and the impact of socio-economic status on educational outcomes remain problematic.

Some progress has been made in dealing with a number of fiscal structural challenges. Bulgaria addressed, albeit with some delay, the recommendation to adopt a comprehensive strategy to improve tax collection and reduce the extent of the informal economy. It officially expired in December 2018 but the challenge remains, so a number of measures and initiatives to improve tax collection and combat undeclared work are continuing. To improve the efficiency of public spending, the authorities launched a spending review project with the World Bank. The government also put in place a project to improve the corporate governance framework for state-owned enterprises.

Some progress was achieved over 2015-2018 in strengthening banks and other financial sector undertakings and improving financial sector supervision. Policy action and positive macroeconomic developments helped strengthen balance sheets and reduce macro-financial risks stemming from the financial sector. The supervisory action plans have mostly been implemented, with some measures still underway. The consolidation of recent progress will depend on fully implementing the reforms to the supervision and governance of banks and other financial corporations.

There has been some progress in tackling the deficiencies of the insolvency framework since 2014. A procedure for business restructuring entered into force on 1 July 2017 but measures are needed to ensure it fulfils its purpose. The reforms came to a standstill in 2018, with no further steps taken even though some elements of a functioning insolvency framework are still lacking. More positively, in 2018 Bulgaria requested assistance to help advance the insolvency reform. This project will produce a roadmap addressing the identified gaps.

([13]) For the assessment of other reforms implemented in the past see, in particular, Section 4.

Bulgaria has made some progress in addressing the 2018 country-specific recommendations([14]). There has been substantial progress in taking follow-up measures resulting from the financial sector reviews. There has been some progress in tax collection and public spending, in implementing supervisory action plans in the financial sector and ensuring adequate valuation of assets, in increasing employability of disadvantaged groups and providing quality inclusive mainstream education. There has been limited progress with the governance of State-owned enterprises, insolvency framework, secondary market for non-performing loans, reforms in the healthcare sector and with minimum income coverage, adequacy and setting mechanism.

([14]) Information on the level of progress and actions taken to address the policy advice in each respective subpart of a country-specific recommendation is presented in the Overview Table in the Annex.

Table 2.1: **Assessment of 2018 CSR implementation**

Bulgaria	**Overall assessment of progress with 2018 CSRs: Some progress**
CSR 1: *Improve the efficiency of tax collection and public spending, including by stepping up enforcement of measures to reduce the extent of the informal economy. Upgrade the State-owned enterprise corporate governance framework in line with international good practices.*	**Some progress** • **Some progress** in improving the efficiency of tax collection • **Some progress** in improving the efficiency of public spending • **Some progress** in stepping up enforcement of measures to reduce the extent of the informal economy • **Limited progress** in upgrading the State-owned enterprise corporate governance framework in line with international good practices
CSR 2: *Take follow-up measures resulting from the financial sector reviews and implement the supervisory action plans in order to strengthen the oversight and stability of the sector. Ensure adequate valuation of assets, including bank collateral, by enhancing the appraisal and audit processes. Complete the reform of the insolvency framework and promote a functioning secondary market for non-performing loans. (MIP relevant)*	**Some progress** • **Substantial progress** in taking follow-up measures on the financial sector reviews • **Some progress** in implementing the supervisory action plans • **Some progress** in ensuring adequate valuation of assets • **Limited progress** in completing the reform of the insolvency framework • **Limited progress** in promoting a functioning secondary market for non-performing loans
CSR 3: *Increase the employability of disadvantaged groups by upskilling and strengthening activation measures. Improve the provision of quality inclusive mainstream education, particularly for Roma and other disadvantaged groups. In line with the National Health Strategy and its action plan, improve access to health services, including by reducing out-of-pocket payments and addressing shortages of health professionals. Introduce a regular and transparent revision scheme for the minimum income and improve its coverage and adequacy.*	**Limited progress** • **Some progress** in increasing the employability of disadvantaged groups by upskilling and strengthening activation measures • **Some progress** in provision of quality inclusive mainstream education, however measures to address the particular situation of Roma and other disadvantaged groups are lagging behind • **Limited progress** in improving access to health services and reducing out of pocket payments as well as in addressing shortages of health professionals • **Limited progress** in introducing a transparent revision scheme for the minimum income and in improving its coverage and adequacy

(1) This overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact.
Source: European Commission

Box 2.1: EU funds and programmes contribute to addressing structural challenges and to fostering growth and competitiveness in Bulgaria

EU funding provides a significant contribution to Bulgaria's public investment. The financial allocation from European Structural and Investment Funds to help Bulgaria tackle reform challenges amounts to EUR 11.7 billion in the 2014-2020 multiannual financial framework, potentially representing around 2.8% of GDP annually. EUR 9.87 billion of this total is from the EU and EUR 1.85 billion from national co-financing. By the end of 2018, around EUR 7.27 billion (74% of the total allocation) had already been allocated to specific projects. In addition, over EUR 400 million had been allocated to specific projects on strategic transport networks through a dedicated EU funding instrument, the Connecting Europe Facility. Furthermore, numerous Bulgarian research institutions, innovative firms and individual researchers benefited from other EU funding instruments, notably Horizon 2020 which provided around EUR 65 million.

EU funding has helped to address various challenges identified in the 2018 country-specific recommendations. By the end of 2018, European Structural and Investment Funds had a significant social impact. Investments in emergency care are giving access to faster and more modern medical aid to citizens across Bulgaria, including those in remote regions. Vulnerable children and those with special needs, once in state-owned institutions, have been reintegrated into society through the establishment of new family-type centres. Integrated support to vulnerable groups has been strengthened to cover the whole country's territory with the support of the European Social Fund. In addition, European Structural and Investment Funds contributed to actions to improve competitiveness and the business environment; to promote job creation; to improve the employability of vulnerable groups, including through skills acquisition; and to strengthen the labour market relevance of education and training. Thousands of small and medium-sized enterprises and start-ups in priority sectors such as information and communication technology, e-health and engineering benefited from grants, loans and equity investments. In environmental services, millions of people were linked to more efficient waste-management systems and hundreds of thousands gained access to modern water treatment and supply services, all amounting to a cleaner and healthier environment for citizens. In transport, new road and rail sections of the Trans-European Transport Network are being developed alongside the expansion of the Sofia Metro and projects for improving navigability and safety along the Danube River and in the Black Sea.

EU funding is helping to mobilise private investment. European Regional Development Fund grants for enterprises alone have mobilised additional private capital of about EUR 113 million. In addition, 5.2 % of the European Regional Development Fund and the Cohesion Fund are earmarked for delivery via financial instruments in areas like research, development and innovation, small and medium-sized enterprises and entrepreneurship, energy efficiency, urban development and environmental management. These resources will raise a further EUR 247 million of public and private investment.

In addition, the Commission can provide tailor-made technical support upon a Member State's request via the Structural Reform Support Programme to help Member States implement growth-sustaining reforms to address challenges identified in the European Semester process or other national reforms. Bulgaria, for example, is receiving support to develop a digital tool designed to help small and medium-sized enterprises comply with legislation and to enhance its capacity to prepare sound Private Partnership Projects. The Commission is also assisting Bulgaria's tax authorities in their efforts to improve the control of e-commerce. In addition, in 2018, work has started to help prepare a review of the insolvency framework, improve the governance of state-owned enterprises and improve the administrative capacity of the Inspectorate of the Supreme Judicial Council.

The volume of operations approved by the European Investment Bank, backed by the European Fund for Strategic Investments, totals EUR 438 million. This is set to trigger a total of EUR 2.2 billion in additional private and public investments (February 2019). Bulgaria ranks second on the overall volume of approved operations as a share of GDP. Six projects involving Bulgaria have so far been approved under the infrastructure and innovation window of the Fund. They amount to EUR 302 million in total financing, which

should, in turn, generate EUR 769 million in investments. Under the small and medium-sized enterprises component, 13 agreements with intermediary banks have been approved for a total of EUR 136 million, which should mobilise around EUR 1.5 billion of total investment. An estimated 9 606 small and medium-sized enterprises and mid-cap companies are expected to benefit from this support. 'Biovet' is a notable example of such projects in Bulgaria. Biovet is a global animal health company with several production facilities. The European Investment Bank is providing a EUR 100 million loan to finance a boost in production levels and research and development. The European Fund for Strategic Investments project includes setting up two new facilities, in Peshtera and in Razgrad.

EU actions strengthen national, regional and local authorities and civil society. Over EUR 690 million from the European Structural and Investment Funds have been allocated to strengthen the capacity of public administration at different levels by prompting close cooperation with stakeholders.

More information at: https://cohesiondata.ec.europa.eu/countries/BG

3. OVERALL FINDINGS REGARDING IMBALANCES, RISKS AND ADJUSTMENT ISSUES

The 2019 Alert Mechanism Report concluded that a new in-depth review should be undertaken for Bulgaria to assess the persistence or unwinding of the imbalances (European Commission, 2018k). In spring 2018, Bulgaria was identified as having macroeconomic imbalances (European Commission, 2018l). They related in particular to vulnerabilities in the financial sector coupled with high indebtedness and non-performing loans in the corporate sector, in a context of incomplete labour market adjustment. This chapter summarises the findings of the analyses carried out as part of the macroeconomic imbalances procedure in-depth review that is contained in this report([15]).

3.1. IMBALANCES AND THEIR GRAVITY

The banking sector has been addressing the shortcomings identified in 2016. Following the asset quality review and stress tests conducted in 2016, banking supervision resources, governance tools and supervisory legislation have been strengthened. Banks' capital and liquidity buffers have increased, provisioning policies have been enhanced and credit-granting practices have improved. Pending concerns include addressing valuation issues, completing the strengthening of banking supervision and enhancing the resolution framework.

The non-banking financial sector is being reformed but new challenges have emerged. Following reviews of the sector concluded in 2017, the solvency and liquidity of insurance companies have improved. The reviews have been followed by legal and administrative changes strengthening the supervisor and developing a risk-based forward-looking supervision system. Some actions are still pending and new elements are of concern. The latter include the sustainability and liquidity of the motor vehicle insurance segment and trust in and the stability of the Green Card system, which supports compensation-payments in case of cross-border road traffic accidents. Other concerns are the systematic appealing of the decisions by the Financial Supervision Commission and the unpredictability of court decisions. Group-level supervision remains a challenge.

The levels of non-performing loans and private sector debt have been decreasing but remain high. Despite the reduction of non-performing portfolios and de-risking of balance sheets, non-performing loans remain well above the EU average. In June 2018, non-performing loans by non-financial corporations were 15.4 %, well below the level registered a year earlier (19.9 %) but more than twice the EU average (6.7 %). Private sector debt has also decreased, from 132 % of GDP in 2013 to 100 % of GDP in 2017. This is mainly due to non-financial corporations, as the households' debt ratio remains among the lowest in the EU. The corporate debt burden could hurt investment and growth over the medium term.

Strong economic growth has led to a solid labour market recovery. The activity rate continued to increase, helping to compensate for a shrinking working age population. As a result, employment rates are above pre-crisis levels. Despite improvements, some groups are still not fully integrated into the labour market, including those with low education, the Roma, the young and people with disabilities.

3.2. EVOLUTION, PROSPECTS AND POLICY RESPONSES

The overall robustness of the banking sector has further improved, with some important actions ongoing. Strong economic growth, alongside the banks' response to the regulator's recommendations, has helped to strengthen capital and liquidity ratios. Some actions are still ongoing, including those to strengthen corporate governance and risk management. New initiatives in 2018 included new rules for large exposures and the identification of connected clients, improved provisioning policies in several banks, an increase in the counter-cyclical capital buffer rate and macroprudential tools for borrower-based measures. Revision of supervisory review and assessment manual of Banking Supervision Department has already been finalised and adopted by decision № 279 on 14 November 2018 by the Governing Council of Bulgarian National Bank.

([15]) Analyses relevant for the in-depth review can be found in section 4.2 on the financial sector.

Measures to be completed include addressing valuation issues, implementing regulatory initiatives and strengthening the resolution framework for banks.

The impact of on-going reforms to non-bank supervision rests on their full implementation. Follow-up measures to the reviews of the insurance and pension funds sectors are being implemented. Remaining steps include the full implementation of an action plan to establish a proper risk-based forward-looking supervisory process and the adequate follow-up to remaining issues highlighted by the non-bank financial sector reviews. While the authorities have introduced relevant legal and regulatory provisions, their concrete implementation will be crucial.

New challenges for the non-banking financial sector emerged in 2018. Supervision of the car-insurance sector is being strengthened and premiums substantially increased, but the sector's sustainability requires continued monitoring. Furthermore, risks stemming from some of the undertakings' business models and strategies may have implications beyond the motor third-party liability. Additionally, challenges have recently emerged, including uncertainty over the extent of motor third-party liability claims, following a ruling by the Supreme Court. Another emerging challenge concerns increased doubts over the liquidity of the 'Green Card Bureau', which have been triggered in December 2018 by the announcement that the International Council of Bureaux had initiated formal monitoring. The financial stability of the Green Card system would benefit if its liquidity and governance issues were addressed promptly.

There is scope to further reduce non-performing loans and debt levels in the non-financial corporate sector. High levels of debt and non-performing loans mostly reflect the situation of non-financial corporations. Both have been decreasing thanks to robust economic growth and a more dynamic secondary market. The authorities have announced their intention to comply with the European Banking Authority guidelines for non-performing loans, which are to be applied as of 30 June 2019. Improvements to the legal framework for the valuation of collateral would help accelerate the reduction of non-performing loans.

Completing the insolvency reform would further help to reduce corporate indebtedness. In October 2018, Bulgaria asked for assistance to continue the reform of the insolvency framework. Some missing elements reduce the efficiency and effectiveness of the framework. At the same time, the absence of adequate monitoring tools prevents a proper analysis of current and new procedures.

Improvements in the labour market have been supported by active labour market policies and economic growth. Unemployment decreased for the fifth consecutive year, to 5.3 % in Q3-2018, while long-term and youth unemployment have also dropped. The latter more than halved between 2013 and 2017, from 28.4 % to 12.9 %. The employment rate reached 71.3 % in 2017, the highest since EU accession. However, Bulgaria continues to face adverse demographics. Despite the slow take up, better targeted active labour market policies are starting to make a positive impact, alongside economic growth.

3.3. OVERALL ASSESSMENT

Positive macroeconomic developments and policy action resulted in a further unwinding of imbalances. Important steps were taken towards reducing potential macro-financial risks stemming from the banking and non-banking sectors. Together with strong economic growth, they helped making the Bulgarian financial sector more robust. Deleveraging continued in the private sector, also benefitting from the strong growth momentum, even if non-performing loans and debt levels for non-financial corporations remain relatively high.

Remaining fragilities in the financial sector combined with still relatively high corporate debt suggest that vulnerabilities still exist. Measures to address vulnerabilities in the financial sector are ongoing. Full implementation and monitoring of the recent reforms to the supervision and governance of banks and other financial corporations will be crucial to complement and consolidate recent efforts. The insolvency framework reform is still missing important elements which would improve the efficiency of procedures and proceedings. New risks in the motor vehicle insurance market need to be addressed. Overall, imbalances have abated but

some fragilities in the financial sector and the still high corporate debt require further monitoring.

Table 3.1: **MIP assessment matrix**

	Gravity of the challenge	Evolution and prospects	Policy response
	Imbalances (unsustainable trends, vulnerabilities and associated risks)		
Financial sector	The banking sector strengthened its capital and liquidity ratios, supported by strong economic growth. In June 2018, the overall capital ratio was 20.8 % and the loan-to-deposit ratio 72.7 %. Total assets were in September 2018 8.8 % up on one year earlier. The overall ratio of non-performing loans is still well above the EU average despite a further decline to 9.2% in June 2018. Non-performing loans by non-financial corporations dropped substantially but at 15.4% of total loans and advances remain very high. Credit continued to expand. It increased 7.5% for non-financial corporations and 8.8% for households, your-on-year, by September 2018. Shortcomings identified during asset quality reviews and stress tests in 2016 are being addressed, but important actions are still to be handled. Pending concerns include addressing valuation issues, completing the strengthening of banking supervision, enhancing the resolution framework and ensuring moderate non-performing loans ratios across the economic cycle. The pension funds and insurance sectors continue to present significant vulnerabilities, which increases the need for a strong risk-based forward-looking supervision. In particular, the motor third party liability line of business faces a number of challenges, including poor pricing policies, uncertainty around compensations and threats to the financial stability of the 'Green Card' system. Group-level and cross-border supervision and resolution remains a challenge. Additionally, the pension funds and insurance companies review completed in early-2017 highlighted the importance of identifying related parties and the difficulty of valuing investments in illiquid markets and instruments.	Banking supervision has improved in terms of resources, governance and tools. The resolution framework is also being strengthened. The banking sector capital and liquidity buffers have increased, provisioning policies were enhanced, and credit-granting practices have improved. An increase in the counter-cyclical capital buffer rate and macroprudential tools for borrower-specific requirements can further contribute to a reduction of systemic credit risk. After the 2016 AQR and stress tests, the central bank has addressed follow-up recommendations and asked two banks to boost their capital buffers, but concerns remain regarding risks from large and related-party exposures and the need to improve corporate governance and risk management in some banks. In July 2018 Bulgaria applied for close cooperation with the ECB, as a part of the commitments made ahead of the intended application to join the ERM II. In this context, the European Central Bank will undertake a comprehensive assessment of six Bulgarian banks (comprising an asset quality review and a stress test). The Bulgarian National Bank is supporting this process. Non-banking supervision is being reformed. The impact of the changes will depend on full implementation of adopted measures, including the action plan to establish a proper risk-based forward-looking supervisory process and legal and regulatory provisions to improve supervisory practices over valuation methods for the insurance and pension funds sectors, related-parties transactions for the pension funds sector, and group-level supervision for the insurance sector. Balance sheet de-risking has improved.	Banking supervision is being aligned with good international practices, benefiting from feedback from a Financial Sector Assessment Program review by the International Monetary Fund. This included legislation for supervising related-party exposures and the revision of the supervisory review and assessment manual. The plan to reform banking supervision needs to be finalised. The full impact of the measures (adopted or announced) will depend on their complete implementation. The recommendations of the 2017 insurance balance sheet review have been addressed. The legislation for the non-banking regulator has been amended and new internal rules have been adopted. The Social Insurance Code has been amended, including a broader definition of related parties. The Financial Supervision Commission adopted guidelines/methodical instructions for valuation of assets (non-liquid assets) and liabilities in the non-banking sector and is developing a risk-based system of supervision in accordance with the Solvency II Directive.

(Continued on the next page)

Table (continued)

Corporate debt and deleveraging	The accumulation of private sector debt in the pre-crisis years resulted in significant deleveraging needs. Non-performing loans ratios have been decreasing but remain among the highest in the EU, in particular for non-financial corporations. This may constrain credit demand and supply, weighing on investment and limiting the growth potential of the economy. The ineffectiveness of the insolvency framework is slowing the reduction in private sector indebtedness and the work-out of non-performing loans. Procedures are lengthy and the recovery rate is low in comparison to EU averages.	High private debt (100 % of GDP), mostly held by non-financial corporations (four fifths of the total), is decreasing but remains well above fundamentals. The share of non-performing loans by non-financial corporations is also well above the EU average (15,4 % end-June 2018, compared to 6.7 % in the EU, despite a gradual decrease (19.9 % one year earlier) due to robust nominal GDP growth and a more active secondary market. The latter remains, nonetheless, limited in size and scope. Credit flows are increasing (in September 2018, loans to non-financial corporations grew by 7.5 % y-o-y), which could support higher private investment and stronger potential growth. Further policy steps are needed to improve the insolvency framework, including implementing newly adopted legislation and improving institutions and practices. A new pre-insolvency restructuring procedure in force since July 2017 had so far a weak take-up.	The authorities have announced their intention to comply with the European Banking Authority guidelines for non-performing loans, which are to be applied as of 30 June 2019. The authorities have adopted amendments to the Law on Credit Institutions implementing a legislative framework for borrower-based macro-prudential measures. The authorities committed to identify shortcomings and obstacles in the insolvency framework and address weaknesses identified.

Conclusions from IDR analysis

- Positive macroeconomic developments and policy action towards reducing potential macro-financial risks stemming from the banking and non-banking sectors resulted in a further unwinding of imbalances. However, remaining fragilities in the financial sector combined with still relatively high corporate debt suggests that vulnerabilities still exist. New challenges emerged in 2018 require decisive action, namely to ensure the financial stability of the 'Green Card' system and to ensure that risks from some motor-vehicle insurance undertakings' business models are reduced.
- The deleveraging process in the private sector continued, also benefitting from the strong growth momentum, but debt levels and non-performing loans for non-financial corporations remain relatively high. The insolvency framework reform is still missing important elements which would improve the efficiency of procedures and proceedings.
- Overall, imbalances have abated but some fragilities in the financial sector and still high corporate debt require further monitoring.

Source: European Commission

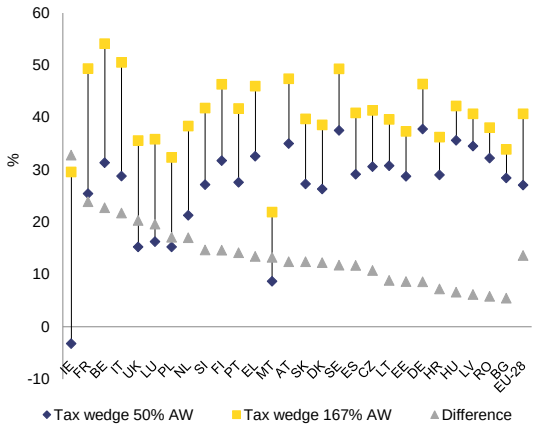
4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

4.1.1. TAX POLICY

The tax system is relatively growth-friendly, but has a limited redistributive effect. The overall tax burden in Bulgaria (29.5 % of GDP in 2017) is one of the lowest in the EU. The tax structure mainly relies on consumption taxes, like Value Added Tax and excise duties, and generates relatively high revenue from environmental taxes (2.7 % of GDP). This characteristic tends to result in a relatively growth-friendly tax structure. However, the Bulgarian tax and benefit system has little power to reduce inequalities and to promote policies to reduce poverty, which is the highest in the EU (see Section 4.3.). This is partly a result of inefficiencies in the social benefit system and in the design of labour taxation, which is the least progressive in the EU; the difference between the relative tax burdens for low- and high-income earners is the lowest in the EU (Graph 4.1.1).

Graph 4.1.1: **Degree of progressivity of labour income taxation in EU Member States, 2017**



(1) The indicator is based on tax wedge data for a variety of family compositions. The tax wedge is defined as the sum of personal income taxes and employee and employer social security contributions net of family allowances, expressed as a percentage of total labour costs (the sum of the gross wage and social security contributions paid by the employer).
Source: European Commission based on OECD data

Despite the relatively simple tax structure, tax compliance costs remain high. Bulgaria applies a standard Value Added Tax rate (20 %), which is close to the EU average, and one reduced rate (9 %) on a relatively limited range of products and services. The personal and corporate income tax rates are both flat at 10 % and are among the lowest in the EU. Nevertheless, Bulgaria has consistently ranked low on paying taxes in the World Bank's 'Doing Business' index, especially on compliance requirements for labour taxes and social security contributions. In 2018, Bulgaria dropped from the 90th to 92nd place (World Bank, 2018).

The shadow economy remains a challenge. Estimates indicate it is bigger than in many other EU countries (European Commission, 2018a). Undeclared work is one of the most prominent signs of the problem in many industries, such as trade, restaurants, tourism, construction and agriculture. It is estimated to account for about one fifth of labour and of gross value added in the private sector (European Commission, 2018n), while the number of people declaring that they worked without a contract increased from 55 900 in 2016 to 62 700 in 2017 (NSI, 2018c). Other widespread practices are bogus part-time work and under-reporting of wages. Illicit trade is another significant form of the shadow economy. According to a recent study (CSD, 2018), illicit trade in tobacco products and VAT fraud have shrunk, but the black market in fuel has expanded to BGN 600-700 million (EUR 300-350 million).

A number of measures have been taken to tackle the shadow economy and improve tax collection. To combat undeclared work, measures such as one-day flexible contracts in agriculture and the exclusion from public procurement of companies convicted for undeclared work (in the last 3 years) were taken. The General Labour Inspectorate has agreed with the trade unions a joint initiative against undeclared work, while the National Revenue Agency applies a number of measures to improve compliance in high-risk sectors, including undeclared work. To increase voluntary compliance the Agency has launched information campaigns and implemented projects to increase electronic services to taxpayers. Other particularly successful measures were checks of the cash declared by companies and the introduction of tax controls on the movement of

high-risk goods. Many of the above measures were included in the 'Single National Strategy for improving tax collection, tackling shadow economy and reducing compliance costs'. The strategy and its latest action plan were in effect until the end of 2018. The authorities intend to maintain the most effective measures and mechanisms of inter-institutional cooperation introduced with the strategy.

The measures to improve tax compliance have yielded some positive results. This is particularly the case for consumption taxes such as VAT and excise duties, and for corporate income tax. VAT revenue collection increased as of 2015, and especially in 2016 and 2017 they rose to above their tax base. The Value Added Tax gap ([16]) decreased from 20.6% in 2015 to 13.6% in 2016 remaining, however, slightly above the EU average of 12.3% (CASE, 2018). Revenues from other consumption taxes, especially excise duties, developed in a similar way. On income taxes, the progress is mixed. Collection of corporate income tax has been improving almost every year since 2012. However, for labour taxes the results are less positive as they increased slower than the compensation of employees, indicating some deterioration in compliance. This is yet another sign of the challenges related to undeclared work.

4.1.2. PUBLIC EXPENDITURE

The government has taken steps to improve the effectiveness of public expenditure. Even though their needs are still high, expenditure in areas such as social protection, health and education is relatively low. At the same time, effectiveness could improve in areas with relatively high spending such as infrastructure (see European Commission, 2018a). In 2018, some policy initiatives to improve efficiency were completed. A spending review by the World Bank covering a number of public institutions (ministries and municipalities) was one of them. The Bank finished two pilot studies, on policing and firefighting and waste water and delivered a manual for future reviews by the government. The government has not yet announced follow-up measures or additional spending reviews. Another government initiative in this area was the introduction of a new set of performance indicators per policy area in the medium-term fiscal strategy. The main innovation is that the ad hoc indicators used until now were updated and finalised. They will serve as a basis to assess the impact of spending in the different policy areas over time and to inform the budget evaluation and planning.

4.1.3. FISCAL FRAMEWORK

The Bulgarian Fiscal Council has made some progress in rolling out its activities. Based on its broad mandate, the Council has established a system for releasing its mandatory monitoring reports on the annual and medium-term fiscal plans as well as on budgetary execution and compliance with all the numerical rules laid down in the Public Finance Act. With the recent strengthening of its staff, the analytical underpinning of its reports is expected to improve. Moreover, to bring the domestic fiscal framework into full compliance with the budgetary frameworks directive ([17]), the Fiscal Council's mandate was extended to encompass the regular and comprehensive *ex post* evaluations of the government's macroeconomic and fiscal forecast.

4.1.4. STATE-OWNED ENTERPRISES

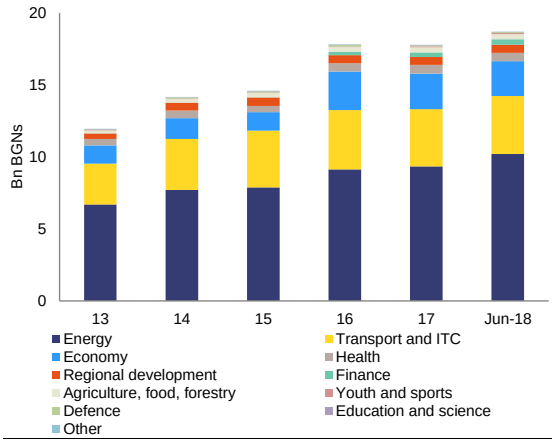
State-owned enterprises form an important part of the economy. In Bulgaria there are more than 900 State-owned enterprises of all sizes at national and local level. Of these, about 220 companies, under the control of the central government, represent more than 90 % of the asset value and more than 70 % of total employment. According to Ministry of Finance data for 2017, these 220 State-owned enterprises contribute 5 % of total employment and their turnover corresponds to about 13.5 % of GDP. The presence of State-owned enterprises is more prominent in the energy, transport, water and mining sectors.

([16]) The VAT gap is a difference between the estimated VAT revenues (VAT Total Tax Liability) and the amount of VAT actually collected. It estimates revenue loss due to fraud and evasion, tax avoidance, bankruptcies, financial insolvencies and miscalculations.

([17]) Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States.

State-owned enterprises' profitability is relatively weak in all sectors of the economy. Their return on equity is systematically lower than in private companies and the difference in Bulgaria is higher than in most regional peers. This applies to all sectors except mining (see Bower, 2017). In energy, transport, water and other sectors (including agriculture), the private sector outperforms the State-owned enterprises by a wide margin. Part of this difference could be explained by the objectives of those enterprises and the role they often play in the economy, including providing non-commercial goods and services.

Graph 4.1.2: **Size of liabilities of State-owned enterprises by policy area (ministry)**



Source: European Commission based on Bulgarian Ministry of Finance data

The economic situation of some State-owned enterprises can entail fiscal risks in the absence of restructuring plans. Fiscal risks are elevated in systematically loss-making companies and in those which are prohibited by law from becoming insolvent — meaning that the state must always bail them out if they fail. About half of the BGN 18 billion (EUR 9 billion) in State-owned enterprises' liabilities come from companies that made losses in more than 3 of the last 5 years. For example, the loss-making railway sector, with liabilities of more than BGN 3 billion (3 % of GDP) in 2017 and 2018, received BGN 197 million of reimbursable financial contribution to BDZ Holding for repayment of debts. In 2017, a state aid of BGN 223.4 million in the form of a cancellation of debts in favour of BDZ Holding was authorised([18]). So far there is no clear restructuring plan to improve the operational performance in any of the sector's four companies (BDZ freight transport, BDZ passenger transport, BDZ holding and National Railways Infrastructure Company). BDZ Holding seems to count on a subsidy from the proceeds of Sofia's airport concession, which has not been contracted yet([19]).

The financial situation of the energy State-owned enterprises has somewhat improved but investment in the sector remains a challenge. The Bulgarian Energy Holding, NPP Kozloduy and the Mines in the Maritsa Basin (Mini Maritsa Iztok) have significantly improved their financial results (from Q3-2017 to Q3-2018), but the financial situation of National Electrical Company and especially Thermal Power Plant Maritsa East 2 has deteriorated. Both companies registered net losses over the last year, mainly linked to increased operational costs fuelled by rising prices of emission allowances. Low profitability and resource efficiency combined with weak corporate governance are hurting investment, which in turn might hamper the stability and reliability of the system. Investment in energy decreased from 4.1 % of GDP in 2012 to 0.7 % in 2017.

A reform of the corporate governance framework is being prepared. The economic results of Bulgarian State-owned enterprises partly reflect challenges related to their management, supervision and restructuring (European Commission, 2018a). The government has recognised these challenges and has taken the initiative to (i) review and assess the legal, regulatory and operational framework for State-owned enterprises and (ii) revise and align Bulgaria's legislation with the Organisation for Economic Co-operation and Development (OECD) guidelines on corporate governance of State-owned enterprises. The initiative is part of the government's action plan to prepare for applying to participate in the Exchange Rate Mechanism. A technical assistance project with the European Commission and the OECD was launched in August 2018. The adoption of the new framework is expected by July 2019.

([18]) Decision of the European Commission of 16.06.2017 on the state aid SA.31250 – 2011/C (ex 2011/N).

([19]) Holding BDZ - Main volume and economic indicators for Q2 2018, http://www.minfin.bg/bg/1281

4.2. FINANCIAL SECTOR

Bulgaria has started preparing for membership of the Exchange Rate Mechanism (ERM II). In July 2018, Bulgaria announced its intention to apply for ERM II membership and the Banking Union in July 2019. At the same time, Bulgaria announced a set of commitments to improve the economy's resilience in areas of high relevance for a smooth transition to participation in ERM II. The commitments cover both the banking sector (close cooperation with the Single Supervisory Mechanism and development of the macro-prudential framework) and the non-banking financial sector. They also include measures to strengthen institutional quality and governance, namely the insolvency framework, combating money laundering, and governance of the State Owned Enterprises (Ministry of Finance, 2018a).

4.2.1. Banking sector

Most recommendations from the 2016 asset quality review have been addressed, but a few important points remain to be tackled. The asset quality review conducted by the Bulgarian National Bank in 2016 (European Commission 2017a, 2018a) has led to several follow-up actions. These include a strengthening of capital buffers, provisioning policies, credit-granting practices and corporate governance; the reduction of non-performing portfolios; and de-risking of balance sheets, e.g. by selling-off repossessed collateral. As regards actions outstanding, one of the two banks found in need of replenishing its capital buffers has finally achieved the required levels organically, but has not yet raised fresh capital as initially recommended with an agreed deadline by April 2017. Attracting new *bona fide* investors could further strengthen credibility and improve governance (see also IMF, 2017). Following up on legislative initiatives on related-party exposures and sustained supervisory efforts to limit loans to related parties and penalise infringements of collateral provisions are also crucial to support sound business practices.

Bank supervision has been strengthening despite some delays in making the changes operational. Institutional decision-making has been strengthened by an amendment of the Bulgarian National Bank Law transferring competences over banking and payment supervision from the Deputy Governors in charge to the Bulgarian National Bank Governing Council. Furthermore, delayed actions for improving banking supervision from the 2015 plan are being completed. In addition, new information and communications technology tools are available to the banking supervision department. They include an upgraded data warehouse for banking supervision, automated update of key risk indicators and regularly updated data point model to verify the quality of data reported by banks. In November 2018 the Bulgarian National Bank adopted a revised supervisory review and assessment manual.

Several other important regulatory initiatives are being implemented. Amendments to the Law on Credit Institutions adopted in December 2017 strengthened the definition of bank related-party exposures (Article 45). A decision of the Bulgarian National Bank adopted in April 2018 implements the European Banking Authority guidelines on large exposures and identification of connected clients as of the beginning of 2019 and it introduced a reporting template for related-party lending. The adoption of Ordinance 37 of the Bulgarian National Bank in July 2018 defined the scope of banks' internal rules and procedures, rules for calculating exposures and reporting requirements to the supervisor. Banks were requested to implement their internal rules and procedures within a six-month period; therefore it is too early for an assessment of the effectiveness of these measures.

The new International Financial Reporting Standard (IFRS 9) is improving provisioning policies. IFRS 9 was phased in by around half of Bulgaria's banks as of the beginning of 2018. The supervisor expects this to result in increased loan-loss provisions in some banks, something which could be verified once the remaining banks have phased in IFRS 9 (European Commission, 2018b). At the same time, the implementation of IFRS 9 is coinciding with a cyclical upturn. This poses a challenge for banks to correctly estimate risk during future unfavourable economic developments, namely from the reduced capacity of borrowers to service their debt.

Issues with the valuation of collateral limit the incentive to dispose of non-performing loans. A range of hard-to-value assets still exist, notably related to immovable property. Examples include

real estate collateral in the banking sector, receivables and real estate holdings in the insurance sector, as well as stocks, bonds, real estate and other financial instruments in the pension funds sector. In addition, the uneven quality of auditing affects the valuation of illiquid instruments traded on stock exchanges, as well as non-traded assets, including receivables, minority equity stakes and subsidiaries.

New macro-prudential tools would further support financial stability. The Bulgarian National Bank set the level of the counter-cyclical capital buffer rate at 0.5 % as of October 2019. It will also be applied in Q1-2020. This level is more prudent than implied by economic developments under strict adherence to the applicable methodology([20]) and constitutes an important signal to the market. In addition, the authorities have adopted amendments to the Law on Credit Institutions implementing a legislative framework for borrower-based macro-prudential measures. The Bulgarian National Bank may activate part or all of these macro-prudential tools, thereby responding in a flexible and proportionate way to potential risks to financial stability. An impact assessment will permit to verify the effect and appropriateness of the new tools before their activation. These tools would complement the existing capital-based measures in limiting the accumulation of risks in the banking sector.

4.2.2. COMBATING MONEY LAUNDERING

Bulgaria has been addressing deficiencies of its anti-money laundering framework. In 2013, Bulgaria was placed in regular follow-up in the context of the 4th round evaluation process of the Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism, or Moneyval([21]) (Moneyval, 2013). Bulgaria has since made substantial progress to address the identified deficiencies. , In December 2017, Moneyval concluded that deficiencies remained, despite the positive steps taken, in particular regarding some aspects of criminalising terrorist financing, as well as confiscation and provisional measures (Moneyval, 2017). In July 2018, however, Bulgaria was removed from the follow-up process of Moneyval, having passed legislation to further address the deficiencies previously identified (Moneyval, 2018).

The transposition of the 4th Anti-money Laundering Directive still needs to be completed. Bulgaria notified transposition measures for Directive EU/2015/849 in April 2018 and December 2018 (the 4th Anti-money Laundering Directive), and is working towards a fully conform transposition. Additionally, an inter-institutional working group is assessing residual gaps and preparing the early adoption of transposition measures for the 5th Anti-money Laundering Directive. However, Bulgaria has still not finalised and notified its National Risk Assessment, which is a cornerstone to devising adequate national policies to combat money laundering and terrorist financing. The risk of corruption needs to be better addressed as it is a predicate offence to money laundering([22]). In particular, authorities need to show a stable record of effectively investigating and prosecuting high-level corruption cases, including involving politicians.

Potential financial crimes are not appropriately investigated([23]). Two thirds of the suspicious transaction reports sent by financial institutions to the Financial Intelligence Unit([24]) involve domestic politically exposed persons but those cases have not been given the appropriate follow-

([20]) The primary objective of the counter-cyclical capital buffer is to protect the banking sector from periods of excess aggregate credit growth, which have often been associated with the build-up of system-wide risk. In line with Ordinance 8 of the Bulgarian National Bank, the setting of the counter-cyclical capital buffer rate will take into account the deviation of the credit-to-GDP ratio from the long-term trend as a reference indicator. According to the Bulgarian National Bank, the value of the reference indicator at the end of Q2-2018 was negative (-42.7 pp.), which would have corresponded to maintaining the capital buffer at zero.

([21]) Permanent monitoring body of the Council of Europe assessing compliance with international standards in countering money laundering and financing of terrorism.

([22]) The European Commission supported the authorities in analysing the structural and functional model of the Bulgaria's Prosecutors Office. The Executive Summary of the study is available at: http://www.mjs.bg/Files/Executive%20Summary%20Final%20Report%20BG%2015122016.pdf

([23]) See previous footnote for details

([24]) A central, national unit that is responsible for receiving and analysing information from private entities on financial transactions which are considered to be linked to money laundering and terrorist financing.

up by law enforcement. No significant progress has been made so far in examining obstacles that prevent the investigation of such cases and turning them into evidence for prosecution. The use of financial investigation and financial profiling is limited, which prevents effective asset recovery in organised crime and corruption cases.

There are risks linked to the Citizenship by investment scheme. The scheme does not require that an individual needs to spend a significant amount of time in Bulgaria to obtain Bulgarian citizenship. As such, the new citizen may not become a tax resident and his income would not be taxable in Bulgaria. This creates potential for misuse, as personal identification documents issued by Bulgaria can be used to hide assets held abroad from reporting. On 30 January 2019 the Council for Development debated draft amendments to the Bulgarian Citizenship Act that aims at repealing the Citizenship by investment scheme as well as shortening the deadlines and clarifying the criteria for granting Bulgarian citizenship. The applicants for citizenship due to origin shall be required to have knowledge of Bulgarian as well as occupation and income in the country.

4.2.3. NON-BANKING

Supervision

Non-bank supervision is being reformed. The Financial Supervision Commission adopted an action plan for reforming non-bank financial supervision in September 2017, in cooperation with the European Insurance and Occupational Pensions Authority. The action plan draws upon the shortcomings identified during independent pension funds' assets review and insurance balance sheet review as well as the findings of the Financial Sector Assessment performed by the World Bank, all published in 2017([25]). The full and timely implementation of the action plan, still on-going, will contribute to an adequate supervision of the non-banking financial sector.

([25]) The Financial Sector Assessment was conducted jointly by the International Monetary Fund (banking) and the World Bank (non-banking).

Legislative changes aimed at improving non-bank financial supervision have been adopted. Firstly, in the area of pension funds, amendments to the Social Insurance Code, which were adopted by Parliament in November 2017 and entered into force in November 2018, include a broader definition of related parties in line with international standards. Secondly, legislative amendments introduced in 2017 strengthened the Financial Supervision Commission by providing it with sufficient funding and staff and expanding its supervisory capacity (European Commission, 2018a). The adopted risk-based supervisory framework, once tested and assessed to be fit, will support the improved supervisory capacity.

The non-bank supervisor faces new challenges in 2018. The head of insurance supervision in the Financial Supervision Commission resigned in August 2018, in the aftermath of the failure of Olympic Insurance (see below). Despite announced plans to designate a successor, no formal steps have been taken so far. The announced change in the Financial Supervision Commission chair in March 2019 could generate further uncertainty. It is important in both cases to ensure the timely appointment of professionals who duly fulfil fit-and-proper requirements.

Concerns over legal proceedings are still present. The frequent appeals by non-banking financial companies against the decisions of the Financial Supervision Commission remain a challenge. The undertakings regularly succeed in having the regulator's decisions overturned. The unpredictability of the courts' decisions may suggest the need to expand technical expertise among judges and other judicial practitioners.

Insurance and pension funds

Insurance companies' solvency has improved since the completion of the sector's reviews. According to the Financial Supervision Commission, all recommendations of the independent balance sheet reviews of insurance companies and pension funds were fully implemented by April 2017. At the end of 2017, all but one insurer satisfied solvency capital requirements without the application of long-term guarantee and transitional measures. However, some insurers' solvency ratios are close to 100 %, which could indicate potential weaknesses that

should be closely monitored. In 2017, the Financial Supervision Commission withdrew the licences of two insurers for a number of reasons, including their failure to comply with capital requirements. Both companies have appealed this sanction. The decision is still pending before the administrative higher court.

Some issues related to valuation require further monitoring. According to the Financial Supervision Commission, auditors have not identified any particular problem with the clean-cut reinsurance contracts. However, concerns over their supervisory treatment remain to be addressed ([26]). The issue of hard-to-value assets, including non-traded assets and traded securities with low liquidity and low free float, has been identified in the reviews of both the banking and non-bank financial sectors but has not yet been fully addressed. Amendments to secondary legislation are in place, aiming to improve the valuation rules and their application. For this application to be fully effective, however, they would also benefit from changes to the rules governing the work of valuation practitioners.

Group-level supervision remains a challenge for adequate risk-based insurance supervision. The group-level assessment of two insurance groups was never completed. In one case group supervision is no longer applicable due to restructuring. In the other case, the Supreme Administrative Court revoked the decision of the authority to identify it as a group. The authorities' approach following the court's decision will have to consider the requirements under the transposed Solvency II Directive stipulating that group-level supervision is to be applied at the ultimate parent level.

The failure of Olympic Insurance illustrates the difficulties with cross-border supervisory and resolution arrangements. Bulgaria's branch of Olympic, a non-life insurer based in Cyprus, represented a relatively large share of the Bulgarian motor third-party liability market. However, the exchange of supervisory information between the two national supervisors did not appear optimal. Further, it is unclear which guarantee fund, if any, will cover Olympic's liabilities in Bulgaria.

Motor vehicles insurance

Supervision of the car insurance sector is being strengthened. In November 2017, the authorities started to automatically match information from car registration databases with motor third-party liability contracts in order to combat fraud. The Financial Supervision Commission has also taken further measures to ensure that victims of car accidents receive proper compensation, particularly in cases of cancelled insurance contracts, and that all Bulgarian insurers have a network of claims representatives in all EU Member States, as required by the Motor Insurance Directive. As expected under the 2017 action plan, the Financial Supervision Commission has published a report on the level of motor third-party liability premiums. Nevertheless, significant challenges regarding the business model and business strategy of market participants remain a concern, with potential spillovers beyond the sector itself.

Motor third-party liability premiums have increased significantly, but the sustainability of this line of business is not yet ensured. Following a period of low premiums and in some cases negative margins, insurers have been increasing their premiums since the beginning of 2018([27]). However, a recent ruling by the Supreme Court has extended the scope of beneficiaries of motor third-party liability claims to include family members and relatives. They will be entitled to claim moral (non-material) damages in court. The ruling concerns both future claims and those incurred over the last 5 years. The possible impact on the insurance sector is still unknown but could be significant, although the Financial Supervision Commission believes that the recently increased premium levels may be enough to absorb the losses. To mitigate the risks, on 22 November 2018 the National Assembly adopted an

([26]) The valuation of the coverage provided to insurers by clean-cut reinsurance contracts had been overestimated for certain insurers, as the supervisor has allowed a less conservative approach than the one clarified by the European Insurance and Occupational Pensions Authority in the Questions & Answers. The supervisor is expected to adequately implement the more conservative approach, based on the insurers' reporting in 2018.

([27]) The average motor third-party liability premium was €98 in 2013, €101 in 2017, €119 in May 2018 and €170 in October 2018.

amendment to the Insurance Code imposing ceilings on the amount of compensation to be awarded to those entitled to it under the recent Supreme Court ruling.

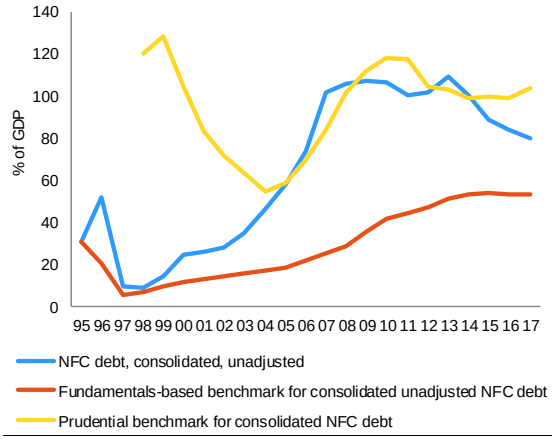
A methodology for claims and improved pricing methods would contribute to the stability of the sector. Well-specified rules on compensation would facilitate a more harmonised approach by judges when deciding on individual cases. In the longer term, such a methodology would help to reduce costs, volatility and underwriting risk in the motor third-party liability line of business. The sustainability of the sector would also benefit from improved pricing, which is still largely rudimentary. In contrast to most developed markets in other Member States, motor third-party liability pricing in Bulgaria does not take into account the clients' driving history, the best predictor of future claims. The Financial Supervision Commission has proposed a bonus-malus system, which is undergoing broad public debate. If well designed, the system could significantly improve the pricing of motor third-party liability policies and positively influence the driving behaviour of policyholders. Its prompt implementation would contribute to the stabilisation of this line of business.

The liquidity of the 'Green Card Bureau' has raised substantial concerns. In early 2018, the International Council of Bureaux initiated informal monitoring of its Bulgarian member, the National Bureau of Bulgarian Motor Insurers (or 'Green Card Bureau'), due to the non-payment of claims by two Bulgarian insurers. This resulted in a higher guarantee required by the International Council, which translates into increased contributions by the whole Bulgarian sector. The situation worsened in December 2018 when the International Council initiated formal monitoring and required a sector-wide reinsurance contract, together with monthly reporting in order to safeguard the Bulgarian bureau's membership. The market impact of those additional requirements is yet to be fully assessed but could prove substantial. The liquidity of the Green Card Bureau is benefiting from ongoing on-site inspections and specific provisions of the new Insurance Code. These measures should be promptly and fully implemented, while the potential remaining governance issues should also be tackled to ensure the trust and participation of member insurers.

4.2.4. PRIVATE INDEBTEDNESS

The debt of non-financial corporations has been rapidly decreasing. In 2017, private sector debt fell to 100 % of GDP, from a peak of 134 % of GDP in 2009. At end-2017 four fifths of the debt was linked to non-financial corporations as households have much lower debt levels than the EU average. At 80 % of GDP in 2017, non-financial corporations debt levels are still well above fundamentals, but increasingly below the prudential benchmark (Graph 4.2.1)([28]).

Graph 4.2.1: **Fundamental-based and prudential benchmarks and NFC debt**

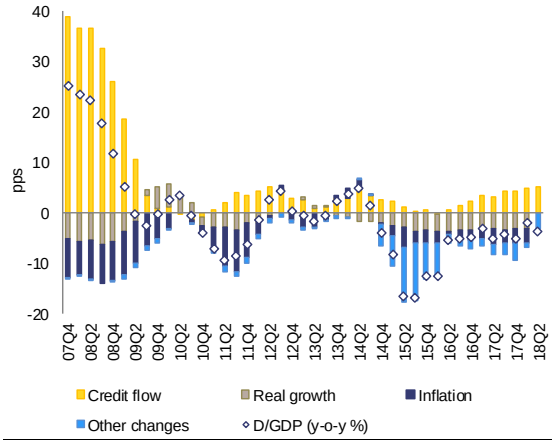


Decomposition of the gap between changes of nominal household debt stocks and benchmarks for changes (in percent of GDP). Methodology to compute the fundamentals-based and the prudential benchmarks based on Bricongne et al. (2017).
Source: European Commission

Robust economic growth has been the main driver of debt reduction, together with a modest pick-up in inflation, valuation changes and write-offs (see Graph 4.2.2). However, the pace of deleveraging has slowed down recently.

([28]) For an explanation of the benchmarks, see European Commission, 2017d.

Graph 4.2.2: **Breakdown of y-o-y changes in debt-to-GDP ratios of NFCs (1)**



(1) Quarterly non-consolidated data
Source: European Commission

Tools to address the still high levels of non-performing loans have not yet been developed. Increased lending activity and a more dynamic secondary market contributed to the decline in the share of non-performing loans, but levels remain well above the EU average (see Section 1). However, tools to deal with the current stock, mainly the legacy of the pre-2009 credit boom, are still to be developed. Earlier plans to introduce the European Central Bank's guidelines have not been pursued (European Commission 2018a, 2018b). Instead, the authorities have announced their intention to comply with the European Banking Authority's guidelines for non-performing loans, to be applied as of 30 June 2019.

Other factors could further accelerate the reduction in non-performing loans. Improvements in the valuation of collateral should substantially improve the clearing of non-performing loans, while comfortable capital buffers in the banking system provide space for a balance sheet clean-up (see Section 4.2.1). The improved recent dynamism of the secondary market is helping reduce non-performing loans. Stronger legal framework for foreclosure would further accelerate this process (see Section 4.2.4 and European Commission, 2018b).

Credit flows have rebounded driven by the improved macroeconomic environment, lower interest rates and the accommodative European Central Bank monetary policy. In September 2018, loans to non-financial corporations grew by 7.5 % year-on-year. Given the strong capital and liquidity positions of the banking sector, declining non-performing loans and strong deposit growth, this is set to continue. Accordingly, the decrease in private sector debt is set to decelerate, but increased lending activity could in turn support higher investment expenditure, which is yet to recover from its post-crisis slump, as well as stronger potential growth.

4.2.5. INSOLVENCY FRAMEWORK

Insolvency proceedings are slow and costly and produce unsatisfactory results. The length (3.3 years compared to the EU average of 2) and cost of insolvency proceedings mean they usually result in very low recovery rates for creditors (35 % v the 65 % EU average (World Bank, 2017c). They also create a very heavy workload for the 28 district courts that hear insolvency cases. Between 2010 and 2017, on average 1 200 insolvency cases were lodged with the district courts annually (Institute for Market Economics, 2018). At the same time, about 900 cases per year remained unresolved. In the same period, 49 % of insolvency cases were settled within 3 months while 51 % of cases took longer. There were also large regional differences in terms of courts' workloads. For 2010-2017, the District Court in Vratsa had an annual average of 88 bankruptcy decisions per 10 000 companies, which is almost three times the national average and well above the District Court in Montana that came in second. Measures designed to improve the efficiency and effectiveness of the insolvency framework, in combination with appropriate flanking policies, could help to reduce the high outstanding private sector debt and the still high share of non-performing loans (see section 4.2.3).

Reform of the insolvency framework is still incomplete, with important legislative elements lacking. The pre-insolvency restructuring procedure entered into force on 1 July 2017, but its take-up has been weak. The new framework could benefit from further streamlining and less complexity, also by encouraging out-of-court settlements, less court involvement and administration and lower voting thresholds for the adoption of restructuring plans. Functioning rules for granting a second chance to consumers and entrepreneurs in a reasonable timeframe following a bankruptcy are still missing. In 2018, Bulgaria

asked for assistance to help it advance the reform of the insolvency framework. This project will produce a roadmap addressing the identified gaps.

The weak regulatory and institutional set-up does not support timely and cost-effective conduct of insolvency proceedings. The share of successful reorganisation plans is very low and there is a problem with constant reopening of insolvency proceedings. Cumbersome requirements for commencing insolvency, inefficient rules and processes for recognising creditors' claims, and weak adherence by market participants and courts to the prescribed deadlines are some of the major impediments to cost-effective and timely access to insolvency proceedings. There is also a lack of adequate rules on the protection of post-petition financing that would enable debtors to meet their ongoing business needs by facilitating access to commercially sound forms of financing upon commencement of the insolvency procedure. Rules on the stay of enforcement actions also need an overhaul. Moreover, a diverse interpretation of rules on avoidance actions causes legal uncertainty and prevents an orderly distribution of funds to creditors. Insufficient training in the field of insolvency and restructuring for both trustees and judges further exacerbates all these problems.

Insolvency proceedings are not perceived as an effective collection mechanism. There is a lack of electronic access to insolvency files and insufficient transparency in the cashing-out process carried out by trustees. Combined with the lack of effective control of asset appraisals, this has led to sales of assets within the insolvency estate at exceptionally low prices or in ways that are very disadvantageous to many creditors.

A lack of adequate monitoring tools makes it difficult to assess the efficiency of insolvency and restructuring proceedings. This is also the case for intercompany debt analysis and enforcement in general. Within the judicial system, data are available on the number of pending and completed cases, the average length of proceedings and the terms for issuance of court acts, but they are mainly used to report on the workload of courts. The Supreme Judicial Council and the National Statistical Institute also gather data on insolvency and restructuring proceedings, but they are also not used for analytical purposes.

4.2.6. ACCESS TO FINANCE

Access to finance for small and medium-sized enterprises in Bulgaria is in line with the EU average and has further improved, backed by EU measures. Access to finance is the most important concern for only 6 % of Bulgarian small and medium-sized enterprises compared to 7 % at EU level (ECB, 2018). Small and medium-sized enterprises have benefited from the overall improvement in the banking environment but also from EU funding through programmes such as Innovation and Competitiveness (EUR 1.27 billion) and Small and Medium-sized Enterprises Initiative (EUR 102 million). The centrally managed banking instruments of the Investment Plan for Europe were successfully used by Bulgarian banks and provided further support (EUR 256 million under the COSME Loan Guarantee Facility) ([29]). The equity funds selected by the European Investment Fund in 2007-2013 gave an impetus to the start-up ecosystem in Sofia, particularly in the information and communication technology sector. However, the rest of the county is lagging behind. The EU financial instruments provide a good alternative to grants for investment in both innovation and technical modernisation, but the awareness of these types of funding opportunities is still low.

Venture capital and business angels' financing are still limited. The small size of the market is an obstacle to attracting large equity investors, hence public support has played a decisive role for developing this ecosystem. The Fund Manager of Financial Instruments in Bulgaria (the Fund of Funds) is in charge of implementing all the EU-funded innovation and competitiveness financial instruments. Despite some delays, positive developments from the previous programming period are expected to continue. At the end of 2018, the Fund of Funds signed the first operational agreement for the management of a Seed/Acceleration and Start-Up Fund. The deployment of the remaining EU-funded equity instruments of the Fund of Funds remains crucial for the venture capital market. In addition, the focus of financing needs is shifting from the early stage towards scale-up financing.

([29]) Committed amount to final recipients as of 30.6.2018 under Competitiveness of Enterprises and SMEs - Loan Guarantee Facility (COSME LGF).

4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

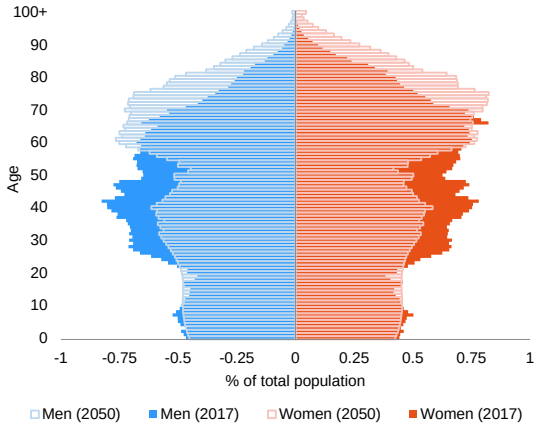
4.3.1. LABOUR MARKET

Sustained economic growth is having a positive impact on the labour market, although labour and skill shortages are increasing. The employment rate reached 73.5 % in Q3-2018, 2.8 pp. above its highest level before the crisis (70.7 % in 2008). The unemployment rate fell to 5.2 % in Q4-2018, below its pre-crisis level (Q4 2008) and below the EU average of 6.8 %. In absolute figures, however, the labour force has 200 000 fewer people than in 2008. This decline of the active population and the scarcity of skilled workforce are tightening the labour market. Meanwhile, some disadvantaged groups still face difficulties in entering employment, and the education and training systems are not well equipped to respond to evolving labour market needs. Prioritising investment in training, upskilling and reskilling and in better aligning education to labour market needs would support long-term growth.

Regional disparities in the labour market remain significant. The most densely populated regions, South-West and South-Central, also had the highest employment rates in 2017, of 76.7 % and 71.3 % respectively. By contrast, since 2013 the regional dispersion of wage levels has been decreasing. The median value of the wage gap relative to Sofia fell by 2 pp. (from 57.7 %) in 2017. However, in some regions (Vidin and Blagoevgrad) wages are still less than half of the Sofia levels and the catching-up process is weak. There are also considerable divergences in the unemployment rate — from 3.3 % in the South-West to 11.3 % in the North-West in 2017. This divide points to a need for more comprehensive economic development policies and coordinated measures to support balanced internal mobility.

Demographic developments are having a strong impact on the labour market. Bulgaria is one of the few Member States in which the rates of natural population change and of net migration are both negative([30]). It is estimated that the low birth rates coupled with the highest mortality rates in Europe and negative migration flows will reduce the population to 5.424 million in 2050, or by 0.8 % annually (UN, 2017). The working-age population (aged 15 to 64) is set to contract at even faster annual rates (1.2 %) (see Graph 4.3.1).

Graph 4.3.1: **Population pyramid**



Source: European Commission

The level of labour shortages has reached a historical peak in 2018, following a decline during the crisis. The greatest shortages are in industry and construction, but the increasing shortages in services have been equally steep in recent years (see Graph 4.3.2). As a response, Bulgaria has signed or is negotiating agreements with non-EU countries to enable the recruitment of foreign workers. The number of workers arriving from outside the EU is still limited and mostly concentrated in a few economic activities; however, no comprehensive forecasts or evaluation of the potential impact by sector or type of employment seems to exist at present. The lack of teachers and nurses is also having an impact on public service delivery. Measures are under way to increase the attractiveness of these professions, including noteworthy salary increases for teachers, but their results will most probably be seen only in the medium term.

([30]) Negative net migration has however been decreasing and stabilised at around 4 000 migrants per year in 2012-2016 (Open Society, 2017).

Box 4.3.1: Monitoring performance in light of the European Pillar of Social Rights

The European Pillar of Social Rights is designed as a compass for a renewed process of upward convergence towards better working and living conditions in the European Union. It sets out 20 principles and rights in the areas of equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion([1]).

SOCIAL SCOREBOARD FOR BULGARIA		
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24)	Weak but improving
	Gender employment gap	On average
	Income quintile ratio (S80/S20)	Critical situation
	At risk of poverty or social exclusion (in %)	Critical situation
	Youth NEET (% of total population aged 15-24)	Weak but improving
Dynamic labour markets and fair working conditions	Employment rate (% population aged 20-64)	Better than average
	Unemployment rate (% population aged 15-74)	On average
	Long-term unemployment	On average
	GDHI per capita growth	Best performers
	Net earnings of a full-time single worker earning AW	Weak but improving
Social protection and inclusion	Impact of social transfers (other than pensions) on poverty reduction	Critical situation
	Children aged less than 3 years in formal childcare	Critical situation
	Self-reported unmet need for medical care	On average
	Individuals' level of digital skills	Critical situation

Members States are classified according to a statistical methodology agreed with the EMCO and SPC Committees. The methodology looks jointly at levels and changes of the indicators in comparison with the respective EU averages and classifies Member States in seven categories (from "best performers" to "critical situation"). For instance, a country can be flagged as "better than average" if the level of the indicator is close to EU average, but it is improving fast. For methodological details, please consult the draft Joint Employment Report 2019, COM (2018)761 final.
NEET: neither in employment nor in education and training; GDHI: gross disposable household income.

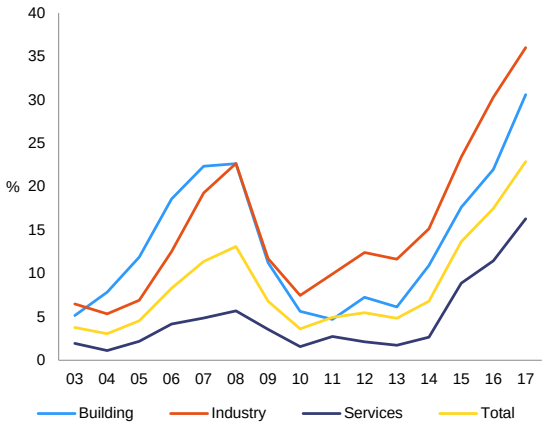
Bulgaria faces challenges with regard to a number of indicators of the Social Scoreboard supporting the European Pillar of Social Rights. It has still one of the highest numbers of people living at risk of poverty or social exclusion as well as high levels of income inequality. Social transfers have a low impact on poverty reduction. Major challenges for the education and training system remain, including providing quality inclusive education and tackling early school leaving. The level of digital skills of the population remains very low. Despite improvements in labour market performance, the low skilled, the Roma and people with disabilities still face significant difficulties in finding work.

The very low enrolment rate of young children in formal childcare continues to be a challenge. Only 9.4% % of children aged 0 to 3 are enrolled, significantly below the EU average of over 30 %. It is due to the significant shortages of nurseries and/or other appropriate arrangements. This situation translates into poor labour market outcomes for young women. In 2017, the gender employment gap in Bulgaria (8 %) was below the EU average (11.5 %) for the general population, but significantly above the EU average for the 20-29 age group.

Bulgaria has made significant progress in the deinstitutionalisation of children. There has been an 80 % decrease in the number of children placed in institutional care, to below 1 000 in 2017. All specialised institutions for children with disabilities have been closed following the implementation of the national 'Vision for Deinstitutionalisation' strategy and its action plans. EU funds catalysed this change from institutional to community-based care, but it certainly would not have been achieved without national political commitment. Monitoring the implementation of deinstitutionalisation reforms and continuous training and supervision of staff is also important to guarantee good quality services. Sustained efforts are also being made on prevention, family support and early intervention with integrated service provision, but these efforts need to continue.

([1]) The European Pillar of Social Rights was proclaimed on 17 November 2017 by the European Parliament, the Council and the European Commission. https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

Graph 4.3.2: **Labour shortage index (1)**



(1) Percentages show share of respondents citing labour shortage as a limiting factor on production; the index (total) averages the labour shortage indices for the building, industry and service sectors weighted by sectoral employment.
Source: European Commission

Inequalities of opportunity are limiting access to the labour market for large groups of the population, which could hinder sustainable and inclusive growth. People living in rural areas, the low-skilled and the Roma still have very low levels of activity and employment. Around 55 % of Roma are unemployed; only 26 % are engaged in any form of paid work and 65 % of young Roma continue to be neither in work nor in education or training (FRA, 2016)([31]). In view of the adverse demographic trends, the Roma community will represent a significant share of the working-age population in the short term, making activation, outreach, upskilling and reskilling measures essential. The co-financed programmes of the European Social Fund provide a wide range of labour market reintegration initiatives. These include training opportunities for low-skilled young people and the support of psychologists and Roma mediators for public employment services. Job creation, as well as improvement of knowledge and training in rural areas, is among the main objectives of support provided through the European Agricultural Fund for Rural Development. Positive results are expected in the coming years.

([31]) Indicators used in the 2016 FRA survey closely resemble those applied in standard European surveys (EU-SILC, EU Labour Force Study) but full comparability was not intended. For more details, see FRA 2016.

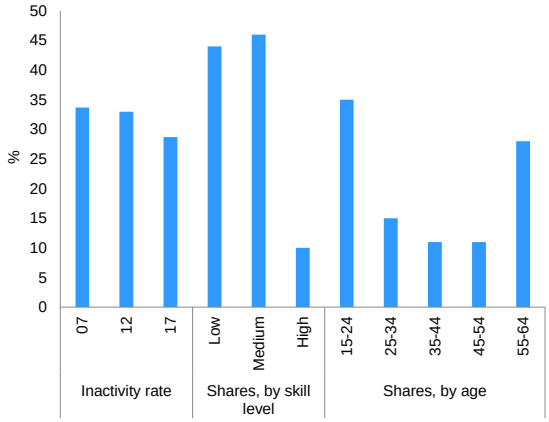
The number of young people not in education, employment or training is still high but steadily decreasing. In 2017, the rate for young people aged 15-29 in Bulgaria fell to 18.9 % (from 25.7 % in 2013), but was still well above the EU average of 13.4 %. While the rate of people not in education, employment or training in cities is lower (11.2 %) than the EU average (12.5 %), in rural areas it is much higher (31.1 % against 14.2 %). The majority of those people are inactive, which contributes to the low participation in the Youth Guarantee (in 2017, this included only 13 % and 18.8 % of the population not in education, employment or training in age groups 15-24 and 25-29, respectively). Nevertheless, more than two thirds of participants reported being in employment, education or training 6 months after leaving the scheme. The youth unemployment rate has also been decreasing steadily and reached 12.9 % in 2017, below the EU average of 16.8 %. In addition, the share of young people unemployed for longer than 12 months shrank rapidly from 8 % in 2016 to 4.7 % in 2017.

Educational attainment is a major factor in determining employment prospects for young people. The unemployment rate among low-skilled young people (24.8 %) is nearly three times higher than for the medium-skilled (8.7 %) and this difference has widened in the last 3 years. Several measures co-funded by the Youth Employment Initiative and the European Social Fund provide tools for people to access the labour market, including incentives for employers to hire young people after their training and supervised internships. Investment in traineeships and apprenticeships could help to make young people more employable.

The overall inactivity rate decreased sharply, partly reflecting positive dynamics in the labour market. With the inactivity rate declining from 31.3 % in 2016 to 28.7 % in 2017, Bulgaria came close to the EU average of 26.5 % (see Graph 4.3.3). Inactivity levels are highest in two groups: persons aged 15-24 (35 % of the total) and those aged 55-64 (28.5 %). Many of the young people (15-24) are still studying or in training, while older individuals (55-64) are more likely to be inactive because of early retirement. Also, there is a greater

prevalence of inactivity due to discouragement([32]) in Bulgaria than in most other EU countries.

Graph 4.3.3: **Inactivity rates and shares of the inactive people**

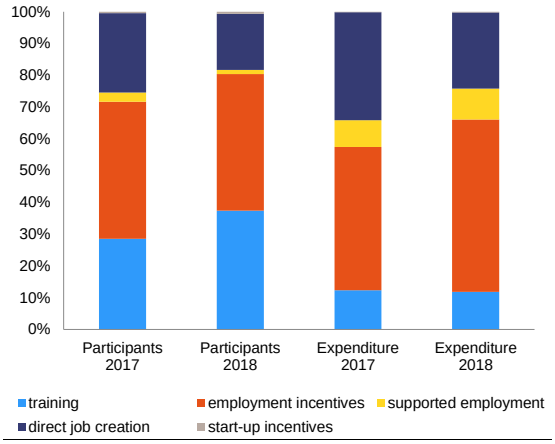


Source: European Commission

Targeting of active labour market policies has improved, but the level of participation is still very low though increasing. Only 5.4 % of those wanting to work participated in active labour market policies in 2016. On a positive note, specific measures are being implemented to support people with disabilities, the long-term unemployed and the low-skilled. Enrolment in training and upskilling increased in 2018, although adult participation in learning remains among the lowest in the EU at only 2.3 %. Employment subsidies and direct job creation still absorb most of the expenditure on active labour market policies (see Graph 4.3.4). Strengthening the training component of these policies and further developing vocational education and training could improve the impact and sustainability of activation measures.

([32]) Defined as being willing and able to work but not actively searching for jobs.

Graph 4.3.4: **Expenditure and participation in activation measures, 2017 and January-August 2018**



Source: National data from public employment services

Modernisation of the Employment Agency is advancing, although the integration of employment and social services is still limited and could be improved through further investment. Efforts are ongoing to integrate several information systems to reduce the administrative burden, but basic tasks and checks are still carried out using paper certificates. A software programme to facilitate job matching has been tested in 27 labour offices and will be rolled out nationwide in 2019. This system helps the matching of jobseekers' skills to the requirements of employers. Additional services have been introduced, such as 'mentors', 'mobile services', 'family counselling' and 'professional compass' for online self-assessment, but these are still in a very preliminary phase of implementation. Finally, a National Framework Agreement ([33]) aiming to improve the delivery of integrated services to the long-term unemployed was signed in January 2019.

Increases in the minimum wage follow the government's medium-term budgetary projections rather than an established transparent mechanism. From January 2019 the minimum wage is set at BGN 560 (EUR 286), which represents an increase of nearly 10 % from 2018 and over 100 % since 2011. After several rounds of negotiations between the social partners during 2018, diverging views remain between

([33]) Between the Ministry of Labour and Social Policy, Ministry of Education and Science, Ministry of Health and the National Association of the Municipalities.

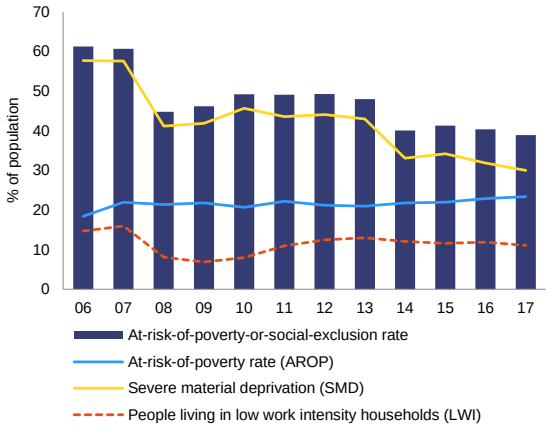
employers and trade unions over the criteria to be applied in setting the minimum wage. The number of people receiving the minimum wage has increased, reaching almost 15 % of the labour force in Q2-2018([34]). Meanwhile, the maximum insurable income has been increased from BGN 2 600 to 3 000 (EUR 1 329 to 1 534) in 2019 and the minimum social security contribution for people working in the agricultural sector has been raised from BGN 300 to 350 (EUR 153 to 178).

Social dialogue remains challenging in spite of the more active tripartite cooperation. Substantial differences persist between social partners on several issues related to industrial relations and the tripartite dialogue. The social partners agree there have been recent improvements regarding their involvement in the design and implementation of policies and reforms, although they consider that the consultation process is often formalistic and with little real impact. Membership of trade unions and employers' associations has decreased further in recent years, though at a slower pace. Collective bargaining takes place largely at the company/enterprise level ([35]) and the majority of collective agreements are in the public sector (87.2 %). Broken down by economic activities, the largest share of collective agreements is in education (828), healthcare and social work (288), and manufacturing (124).

4.3.2. SOCIAL POLICIES

High levels of poverty and income inequality remain a serious challenge. In 2017, 39 % of the total population was at risk of poverty or social exclusion, according to the Social Scoreboard supporting the European Pillar of Social Rights. The rate of severe material deprivation decreased by 1.9 pp. to 30 % of the population (see Graph 4.3.5), or about 2.8 million people. Poverty is particularly high for the most vulnerable groups — the elderly, in particular women, people with disabilities, the Roma, families with three or more children and those living in rural areas. The share of employed persons at risk of poverty slightly decreased to 10 % in 2017 (EU-28 average 9.4 %). In-work poverty has been rising in the last decade and is particularly high among low-skilled workers and people in temporary employment. Income inequality has risen steadily in recent years to one of the highest levels in the EU. In 2017, the income of the richest 20 % of population was over eight times higher than that of the poorest 20 %, which is significantly higher than the EU average.

Graph 4.3.5: **At-risk-of-poverty or social exclusion rate and its components (AROP, SMD, LWI)**



Source: European Commission

Major regional and spatial disparities persist. The risk of poverty or social exclusion is above the EU average in all regions but 63 % higher in the less developed North-West region than the South-West region, which includes the capital Sofia (see Graph 4.3.6). There is a large variance in income levels largely along rural-urban lines; the difference in median household income between rural and urban dwellers is one of the most pronounced in the EU([36]). To alleviate the effect of poverty on the most disadvantaged, the Fund for European Aid to the Most Deprived supported an estimated 630 000 individuals in 2017 through food packages, 'hot lunches' and accompanying measures.

([34]) 473 000 workers receiving the minimum wage, out of a total workforce of 3 157 000 in Q2-2018.

([35]) General Labour Inspectorate and CITUB data: in 2016 there were 1 404 valid collective agreements plus annexes at the company/enterprise level and 63 collective agreements at sectoral/branch level.

([36]) In 2017, the median income of rural households was 40 % lower than that of urban households.

Graph 4.3.6: **At-risk-of-poverty or social exclusion by NUTS2, 2017**

Source: European Commission

The situation of children and the elderly remains particularly alarming. In 2017, 49 % of people aged 65 and over and 42 % of children were at risk of poverty or social exclusion. The risk for women over 60 was 14 pp. higher than for men. Despite the indexation of pensions and an ad hoc payment of extra supplements ([37]), the minimum pension of BGN 207.60 is still 60 % below the at-risk-of-poverty threshold of BGN 351 (EUR 179) and the average pension of BGN 364 (EUR 186) is almost equivalent to this threshold. Child poverty is particularly influenced by the economic activity and educational attainment of their parents([38]). One in five children suffers severe housing deprivation and more than 6 in 10 live in overcrowded households.

Inequality of opportunity remains a major challenge. The gap in at-risk-of-poverty or social exclusion rates for children of low-skilled and high-skilled parents is among the highest in the EU, at 83.4 % in 2017. Key factors in perpetuating the cycle of disadvantage are unequal access to the healthcare system as well as failure to enrol in early childhood education and to benefit from efficient education services.

([37]) In December 2018, BGN 51.6 was allocated for one-time supplements of BGN 40 to pensions below the poverty line. In July 2018, all pensions were increased by 3.8 %. The planned increase in July 2019 is by 5.7 %.

([38]) 77.5 % for children whose parents have attained less than primary, primary and lower secondary education; 18 % for those whose parents have attained upper secondary and post-secondary non-tertiary education; and 3.1 % for those whose parents have attained tertiary education.

The Roma continue to face multiple challenges. The proportion of the Roma population living at risk of poverty is estimated at 89 %. The majority (65 %) suffer from living in households without access to public utilities such as tap water and basic housing amenities (FRA MIDIS, 2016). The lack of a functioning coordination mechanism for Roma integration policies at national level adds a further layer of difficulty to defining policy and implementing the Roma integration strategy effectively. The monitoring and evaluation system for this strategy developed with EU resources will facilitate the design of appropriate policy measures based on a system of indicators.

People with disabilities receive limited support to help them live independently. In 2016, the rate of poverty and social exclusion among people with disabilities stood at 55.9 %, 18.4 pp. higher than the rate for those without disabilities. More than half of people with disabilities drop out of education early([39]) and only 34 % have jobs. Their tertiary education attainment rate of 13.5 % is also very low.

The affordability of housing and energy services is limited, especially for vulnerable groups. The share of the population experiencing severe housing deprivation is very high, at 10.6 % in 2017 (EU average 4.0 %). The situation is worse for the population at risk of poverty (27.2 % of households in this category). Housing costs are also an issue for the majority of the population at risk of poverty (50.1 % of households at poverty risk overburdened by housing costs, compared to the EU average of 37.9 %). This contributes to a high share of overcrowded households at 41.9 % and to the development of illegal dwellings and neighbourhoods, while 30 % of dwellings are vacant (World Bank, 2017b). In 2017, around 59.5 % of the most socially deprived households were unable to heat their homes. This remains significantly above the EU average of 18.4 %. More than 20 urban municipalities have made plans ([40]) to invest in social housing, but the operation is still in a preparatory phase. The

([39]) The early school leavers' rate and the gap between people with and without disabilities is one of the highest in the EU (51.2 % vs. the EU average of 23.6 %, 32.9 pp. vs. the EU average of 12.6 pp.).

([40]) Integrated Plans for Urban Regeneration and Development, with the support of the European Regional Development Fund.

exception is the city of Blagoevgrad, where 202 social apartments are already under construction (Roma Civil Monitor, 2018). The limited scope of the social housing measures currently being implemented calls for further dedicated investment.

The tax and benefit system has a weak impact on reducing poverty and income inequality. In 2017, taxes reduced income inequality by only 4.13%, against an EU average of 11.7%, while social transfers reduced inequality by only 28.3%, against an EU average of 40.4%. ([41]). The low overall spending on social protection, the lack of a consistent mechanism to update social transfers and the limited redistributive features of the taxation system (see Section 4.1.1) play a relevant role.

The social security system does not cover all people in employment. In particular seasonal workers do not have formal coverage for unemployment and maternity benefits, accident and occupational injuries and old age/survivors' pensions. Moreover, the self-employed do not have formal coverage for unemployment benefits and accident and occupational injuries.

Minimum income adequacy and coverage remain limited. Only 6.3 % of people living below the poverty threshold benefited from minimum income support in 2016([42]). In the past 10 years, the level of the guaranteed minimum income threshold ([43]) was increased only twice, by 37 % in total, while the national poverty line grew by 112 %. As a result, the adequacy of the minimum income schemes is estimated at only 24 % of the poverty threshold or 20 % of the income of a low-wage earner([44]). Moreover, there is no objective mechanism for regularly updating minimum income in line with poverty line developments, inflation or minimum wage increases([45]). Transitions from social benefits to employment are not sufficiently supported, which hinders effective labour market integration. Restrictive conditions for claiming social benefits even after short-term employment are an issue.

Social services are hampered by low quality, limited accessibility and the lack of an integrated approach. An evaluation conducted in 2017 identified insufficient provision of most types of social services across the territory ([46]), which calls for further investment. This is an issue especially in smaller and rural municipalities where there is a serious shortage of services for both children and adults, particularly for home-based care, day-care, mobile and integrated services. Based on the centralised planning system, services are provided mostly based on the availability of resources instead of the needs of the vulnerable person. The fragmentation of the provision of services impairs the effectiveness of the support they give, since integrated services can address multiple issues among vulnerable populations simultaneously. At the same time, the social services sector suffers from high staff turnover, limited training and the low qualification standards of social workers.

A comprehensive reform of social services is under preparation. A draft new social services law was approved by the government in December 2018. The planning of social services will be based on a national map of needs and a minimum package of services for each municipality and region. This new model is expected to improve quality([47]), planning, financing and accessibility, as well as monitoring and control. The law also aims to tackle the qualification of social workers, strengthen the competencies of local authorities in

([41]) Income inequality as measured by the S80/S20Commission calculations based on EU-SILC.

([42]) This percentage covers only the social assistance component based on average number of recipients per month.

([43]) In 2018, the GMI was increased to EUR 38.

([44]) According to the Benchmarking Framework on Minimum Incomes conducted within the Social Protection Committee. For details, see the draft Joint Employment Report 2019, COM(2018) 761 final.

([45]) Although heating benefits are regularly increased in line with energy prices, for the 2018-2019 heating season the government introduced a one-time supplement of BGN 100.

([46]) Ministry of Labour and Social Policy (2017), 'Compendium: Model for planning a minimum package of services at regional and municipal level; Objective criteria for developing mapping of needs and services at national level; A map of needs and a map of services at national level'. The mapping made a distinction between six different types of services: 1) consultative social services; 2) mobile social services; 3) day-care; 4) residential social services; 5) home-based social services; and 6) integrated services.

([47]) The Social Services Agency will authorise social service providers, develop quality standards, ensure that consumer rights are respected, carry out *ex post* controls and monitor the efficiency of the services.

planning and delivering services, and introduce universal services accessible to the whole population.

Bulgaria faces increasing demand for long-term care services. The rapidly ageing population and an uneven distribution of existing care services are among the key contributing factors. In 2016, the reported unmet need for homecare services was the highest in the EU at 65.1 %, mainly for financial reasons. In addition, the care sector lacks professional standards, with no clear formal definition of a care worker and no common competence-based standards. The government has adopted a strategic framework for long-term care and implementation of the action plan is under way. Deinstitutionalisation (moving vulnerable people from specialised institutions to community-based care) and the development of quality community-based services for adults with mental disorders and mental retardation remain among the key challenges. Completing the deinstitutionalisation process would warrant further investment.

The delayed reform of the social inclusion of people with disabilities will be implemented in 2019. Through national legislation([48]), the government adopted several measures including personal assistance and targeted support for people with disabilities conditional on assessment of individual needs. A new methodology for assessment, to be drafted and brought into force by April 2019, should have a positive impact on labour market participation. Moreover, the law introduces an increased disability allowance which may benefit more than 600 000 people([49]). In addition, to improve access for people with disabilities to the labour market, the legislation envisages obligatory quotas([50]) requiring employers to hire them, specific subsidies for employers, job brokerage services at the labour offices, pilot centres for protected employment, etc. However, concerns over the implementation of the individual assessment by yet-to-be-formed new assessment committees remain due to the limitations on administrative capacity. The effects of the reform and of the new measures on social and labour market integration remain to be seen.

4.3.3. EDUCATION

Despite recent improvements, the rate of early school leaving remains high at 12.7 %([51]) (see Graph 4.3.7). It is estimated to be significantly above the national average among Roma (67 %)([52]), in rural areas (27.9 %) and in the North-West (21.6 %) and South-East (22 %) regions. Measures to prevent dropout and improve school retention are being developed through the interinstitutional mechanism([53]) and European Social Fund projects. The continuity and sustainability of these efforts is of vital importance. A revised school curriculum is being implemented and there is an increased focus on digital skills([54]). However, available data show that there are still significant gaps in the acquisition of basic([55]) and digital([56]) skills and knowledge of the Bulgarian language. These call for additional investments and policy measures in improving basic and digital skills. Career guidance centres were set up with European Social Fund support but the provision of career guidance and individual approaches to every student require strengthening.

([48]) In December 2018, the People with Disabilities Act and the Personal Assistance Law were adopted.

([49]) Depending on the level of disability, the new benefit for people with disabilities above 18 years will be 7-57 % of the national poverty line, i.e in 2019 from BGN 25 to 198 (EUR 13 to 101) per month. Previously, the disability allowance was BGN 11-37.5 per month.

([50]) For employers with 50 to 99 employees, the quota is 1 employee with permanent disability; for 100 or more employees, it is 2 % of their average staff total.

([51]) The rate of girls who are early leavers from education and training is higher than for boys (gender gap of -1.5 pp.).

([52]) The indicators used in the 2016 FRA survey closely resemble those applied in standard European surveys (EU-SILC, EU Labour Force Study) but full comparability was not intended. For more details see FRA 2016.

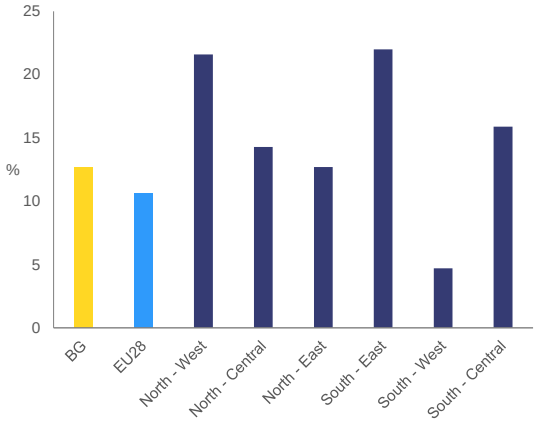
([53]) In 2017 almost 22 000 children were brought back to school, but 1 200 (5 %) had dropped out by the end of the first school term along with 4 500 other students.

([54]) E.g. computer modelling was introduced in third grade; the number of classes with profiles in computer studies in upper secondary, is increasing; extra-curricular activities oriented towards science, technology, engineering and mathematics are pursued; the European Social Fund will finance the development of a cloud with educational content, digital competences are being assessed, etc.

([55]) About 40 % of Bulgarian 15-year-olds do not have basic competences in either reading, sciences or mathematics (PISA, 2015).

([56]) Bulgaria has the highest share of population without any digital skills (37 %). Digital skill levels are also low among the young: 45.7 % of people aged 16-24 do not have basic digital skills, compared to the EU average of 18.1 %.

Graph 4.3.7: **Early leavers from education and training by regions, 2017**



Source: European Commission

Bulgaria invests insufficiently in pre-primary and primary education — areas which are instrumental for supporting equal opportunities. Spending on these levels of education amounted to only 0.7 % of GDP in 2016, less than half of the EU average of 1.5 %. In general, expenditure on education as a percentage of GDP is among the lowest in the EU (3.4 % vs 4.7 %). Participation in early childhood education and care for ages 0-3 is improving, but is still low at 9.4 % (the EU average is 34 %); a lack of facilities is one reason. Quality standards are not up to date. For the 5-6 age group, for which pre-school is compulsory, care-related costs and fees are a barrier to the participation of students from disadvantaged backgrounds, including Roma. Plans to lower the age of the compulsory pre-school programme to 4 are hampered by the insufficient availability of places ([57]). Investment in care infrastructure is therefore important both for economic and societal reasons.

The concentration of disadvantaged students in schools with low performance is relatively high in Bulgaria, driving the skills divide. Several international surveys confirm that socio-economic status has a significant impact on students' performance([58]). An estimated 60 % of Roma students study in Roma-majority or Roma-only schools (FRA, 2016). A European Social Fund financed project supports individualised approaches for students to overcome learning gaps ([59]) but promoting ethnically-mixed schools and desegregation measures remains a challenge. Further investment could help to offset this phenomenon.

Despite their central role in improving the quality of education, policies concerning teachers show weak results. About half of all teachers are set to retire within the next 10 years, particularly in big cities. Teacher salaries are set to reach 120 % of the average wage by 2021 in a bid to raise the attractiveness of the profession, which remains low, partly due to unattractive working conditions. This is reflected by low entry into the teaching profession([60]). Already about 2 300 teaching positions are vacant([61]), especially in English, information and communication technology, physics, kindergarten and primary schools. On the other hand, the number of lower secondary classes in small localities is insufficient for teachers to complete their teaching norm (i.e. the number of hours teachers need to have). Despite recent measures to strengthen initial teacher education, teachers still need to acquire adequate skills to work with students from disadvantaged backgrounds or those with special educational needs. There are a number of national measures trying to tackle the shortage of teachers which need to continue. In addition, European Social Fund supported interventions([62]) focus on the training of teachers in digital skills, which are often outdated, and modern pedagogics. Despite improvements, school management capacities require strengthening.

Recent reforms aim at improving the quality and relevance of vocational education and training. The financial stimulus to schools providing this training combined with regular updates of the curricula in cooperation with businesses is expected to increase the quality and

([57]) For Sofia alone, authorities reported a shortage of about 5 000 places.

([58]) PISA, ICCS, PIRLS.

([59]) Under the project 'Your class', for 2017 more than 53 000 students (9 % of students in grades I-XII) were receiving support in Bulgarian language. 33 000 (6 %) were receiving support in mathematics. Support for overcoming learning gaps also covers foreign languages, natural sciences, digital competence, etc.

([60]) According to Bulgaria University Ranking (BURS) only 60 % of graduates in teacher training and pedagogy enter the profession.

([61]) Data from October 2018.

([62]) These interventions aim to support 39 000 teachers - the equivalent of 47 % of teachers and pedagogical specialists in pre-primary and school education.

labour market relevance of vocational education and training. The lists of protected professions were initiated in 2018 to address the qualification shortages, in particular in the metallurgy, machine industry, electrical engineering and construction sectors.

The employability of vocational education and training graduates ([63]) remains a challenge. While the share of students in vocational education and training in Bulgaria is slightly above the EU average (51.3 % compared to 49.3 % in 2016), their employability is 17.1 pp. lower. This could partly be due to the low participation in work-based learning (only 22 % of vocational education and training graduates aged 15-34) and the slow rollout of dual vocational education and training, which is primarily project-based. In spite of high demand, in particular for technicians and machine operators, and the changes in secondary legislation facilitating partnership with businesses, only 1 % of students in vocational gymnasiums were in such dual programmes in the 2017/2018 school year. Targeted investment could help to enhance the attractiveness, quality and labour market relevance of vocational education and training.

Despite ongoing efforts, higher education is insufficiently aligned to labour market needs. The number of students in higher education decreased by 17 % between 2012 and 2017 as a result of demographic factors; students' preference to study abroad([64]), also due to a perception of low teaching quality at home; and few international students. Tertiary educational attainment is improving but remains below the EU average (33 % in 2017 compared to 40 %). Enrolment in information and communication technology-related fields is increasing, but overall the attractiveness of science, technology, engineering and mathematics has not increased significantly and the percentage of graduates in those subjects remains low (19.7 % in 2016). Only 10.9 % of graduates in these subjects are women. Tuition fees will be eliminated for professions in shortage on the labour market. At the same time, the state-funded places in social sciences, business and law, which are in oversupply (accounting for 49 % of all graduates in 2016, against the EU average of 34 %), are being reduced. Employers often identify knowledge and skills deficiencies, in particular the lack of soft skills among graduates (CEDEFOP, 2018). Only 1.8 % of new university entrants have parents with a low level of education.

Anticipating and matching skills demand with education and training lacks effective coordination. In spite of the existing medium- and long-term forecasts of the Ministry of Labour and Social Policy, complemented this year by the employers' surveys, the link between skills forecasting and follow-up in the education system is still not comprehensive. A project is underway to adjust the national list of professions to the requirements of the economy. In addition, the issue of matching supply and demand for skills and qualifications is being addressed with a project in cooperation with the European Centre for the Development of Vocational Training.

Bulgaria has one of the EU's lowest rates of participation in adult learning. According to the benchmarking framework on adult skills and learning, in 2017 it stood at 2.3 %, compared to the EU average of 10.9 %. In addition to the measures set out in the National Employment Action Plan, in 2018 consultations at national, regional and local level resulted in updates of the Action Plan for the Implementation of the National Strategy for Lifelong Learning. At the same time many adult learning programmes are project-based, which calls into question their sustainability and highlights the need for a more strategic approach by authorities and employers.

4.3.4. HEALTH POLICIES

Many Bulgarians still face significant obstacles in accessing healthcare. According to the authorities, at the end of 2017 the number of people lacking health insurance was 719 000, which is more than 10 % of the population. For those without insurance, hospital and emergency services are usually an entry point to the system, which reduces the efficiency of healthcare use. This is especially the case for many Roma, fewer than 50 % of whom are estimated to have health insurance coverage (FRA, 2016). The number of people reporting unmet medical needs has been

([63]) VET graduate employability, 2017: EU Labour Force Survey - graduates aged 20-34, not enrolled in any education or training, who graduated 1-3 years before the survey.

([64]) In 2016, 7.4 % of upper secondary graduates in Bulgaria had finalised tertiary education abroad.

decreasing, but the share is still high among those in the lowest income quintile (5.6 % compared with the EU average of 3.2 %). The gap in unmet medical needs between the lowest and the highest income quintiles in Bulgaria is very high. Increasing access to health services, in particular for primary care, including through infrastructural development, could help to tackle these issues.

Public expenditure on healthcare remains low. In 2016, public spending was only 5 % of GDP, 2 pp. below the EU average. In addition, the public expenditure covered only around 50 % of total healthcare costs, against 77 % on average in the EU. Therefore, out-of-pocket payments (formal and informal) cover almost half of healthcare costs — the highest share in the EU.

There is a shortage of nurses and general practitioners, while physicians are unevenly distributed. Although the number of medical doctors in Bulgaria is above the EU average, at district level their distribution varies widely, from 597 per 100 000 inhabitants in Pleven to 264 in Kardzhali. In addition, only 15 % of all physicians are general practitioners (significantly less than the EU average of 23 %), which limits the scope to deliver primary care. The ratio of 440 nurses per 100 000 inhabitants is among the lowest in the EU and significantly below the EU average of 840, in part due to unattractive working conditions. The National Health Map estimates that around 30 000 more nurses are needed to reach the EU level. On a positive note, in 2018 the number of study places for nurses at universities increased and unlike in 2017, all of them were filled. There is a plan to educate medical assistants and paramedics in greater numbers, which would relieve doctors and nurses from some of their current tasks. This should help ensure the healthcare workforce is used more efficiently.

Hospital services dominate in the Bulgarian healthcare system. 34 % of total health expenditure is earmarked for inpatient care, above the EU average of 30 % and one of the highest shares among all Member States. 8.6 % of hospital admissions are potentially avoidable, 3.2 pp. above the EU average. In contrast, the share of expenditure on outpatient care (17 %) is among the lowest in the EU where the average is 30 %. Over 2014-2020, the European Regional Development Fund is investing in a network of emergency healthcare which, as planned in the National Health Strategy, will contribute to alleviating the burden on hospitals. In the long run, the challenge is to develop a network of accessible primary healthcare, including long-term care.

Limited access to healthcare and low health expenditure are among the factors which negatively affect the health status of the population. Over 2011-2015, preventable mortality in the EU dropped by 1.1 %, whereas in Bulgaria it increased by 2.5 %([65]). The pattern was similar for amenable mortality([66]), with a decrease of 2 % in the EU and increase of 0.2 % in Bulgaria. Total life expectancy in Bulgaria, at 74.9 years, is 6.1 years below the EU average.

Health promotion and preventive measures are insufficiently used to improve health outcomes. In Bulgaria unhealthy diet and high blood pressure are the greatest health risks. More could be done to lower the relatively high use of alcohol and tobacco and to promote a healthier diet. The share of people vaccinated against certain infectious diseases, such as measles or polio, is below the level that guarantees immunity of the whole population.

The implementation of the National Health Strategy action plan is considerably delayed. In 2018, some progress was achieved in improving access to disease prevention medicines and outpatient programmes. Most of the measures planned for 2019 aim to improve the system's efficiency. They include the introduction of central procurement for public hospitals and actions to reduce public expenditure on pharmaceuticals and increase the currently limited uptake of digital health solutions. Further reform measures targeted at improving the governance of the health system were adopted as part of the National Health Insurance Fund budget for 2019. However, their implementation may be delayed as corresponding amendments in other legal provisions first need to be approved by Parliament. Altogether, the envisaged reform measures for 2019 are not enough to address the mounting challenges

([65]) Preventable mortality is defined as deaths that could be avoided through public health and prevention interventions.

([66]) Amenable mortality is defined as deaths that could be avoided through effective and timely healthcare.

concerning the health of the population and the status of the healthcare workforce.

The Ministry of Health has proposed public discussions on two options for reforming the health insurance system. Both options should enable competition between the existing single payer National Health Insurance Fund and private insurance companies and keep the current contribution levels unchanged. One of the options includes an increase in the system's financing by introducing a mandatory complementary healthcare insurance in the form of a flat, non-means-tested contribution, intended to lower out-of-pocket payments. Not linking the amount of this contribution to incomes will result in a greater financial burden on low-income groups. Moreover, out-of-pocket payments may increase because of the proposed limits on public financing of hospital care and outpatient specialist care. Having a voluntary supplementary health insurance should remain possible. Both reform options will lead to an increase in administrative and governance costs, by requiring supervision of private health insurance companies and administration of a risk-adjustment mechanism to finance resource allocation between the competing health insurance funds. Under government plans, a new financing model will become operational in 2020 at the earliest.

4.3.5. INVESTMENT

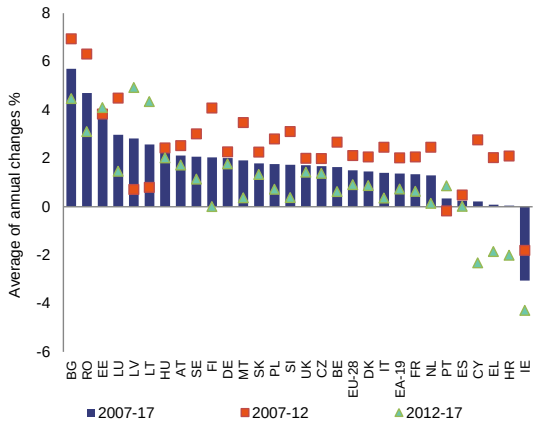
Increased investment in skills, education and training, and social inclusion are important for improving productivity and long-term inclusive growth. Considerable labour and skills shortages point to the need to invest more in training and reskilling, aligning education to labour market needs and improving the capacity of public employment services. Persistently high early school leaving and low educational outcomes highlight the need for significant investment, notably for early childhood, school and vocational education and training, including relevant infrastructure. Wide income inequalities and the high number of people at risk of poverty point to the need for investment in active inclusion policies and targeted support to vulnerable groups, including the Roma, as well as improving the availability and quality of integrated social and healthcare services, while paying due attention to geographical disparities.

4.4. COMPETITIVENESS REFORMS AND INVESTMENT

4.4.1. COMPETITIVENESS

Labour costs have outpaced productivity developments over the last 10 years. During this period, labour costs have risen by 8.3 %, significantly above the growth of productivity at 2.5 %. This is reflected in the average yearly increase of 5.7 % in the nominal unit labour costs (Graph 4.4.1). In 2017, after 3 years of somewhat subdued growth in nominal compensation of employees, it surged by 10.5 %, while productivity grew at a slower rate of 2 %. The pick-up in unit labour costs has been mainly driven by the non-tradable sector, especially construction and the public sector. In industry, and particularly manufacturing, which covers the bulk of exporting companies, unit labour costs have risen less on average than in the rest of the economy.

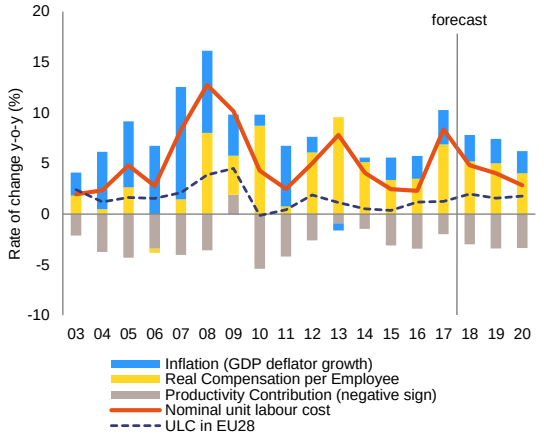
Graph 4.4.1: **Nominal unit labour costs**



Source: European Commission

With a fixed nominal exchange rate, the rise in unit labour costs has also been reflected in the appreciation in the real effective exchange rate. Since 2010, there has been a significant increase in the unit labour costs-based real effective exchange rate in comparison with peer countries and the EU average. It stabilised between 2014 and 2016, which has helped external competitiveness, and it was reflected in stronger export growth. In 2018, Bulgaria's real effective exchange rate (unit labour costs) further appreciated by 5 %, increasing the risk of cost-competitiveness losses (Graph 4.4.3).

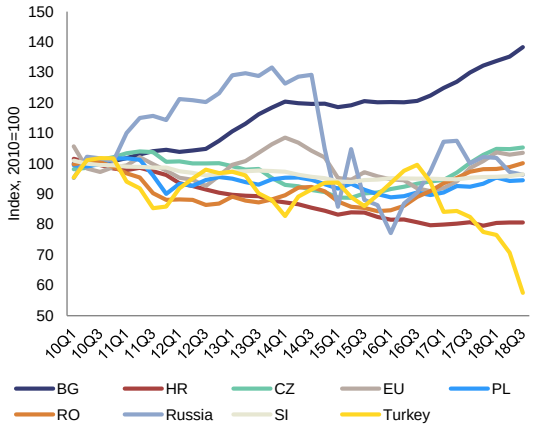
Graph 4.4.2: **Breakdown of rate of change of Unit Labour Costs**



Source: European Commission

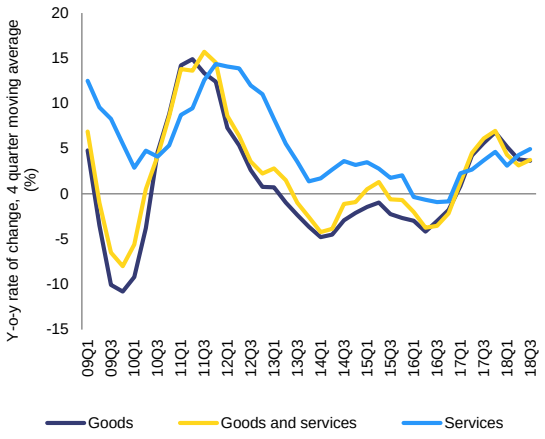
Cost developments have not so far hampered external competitiveness but might be a risk in the medium term. The faster increase in unit labour costs in Bulgaria than in its main trade partners has translated into a higher increase in tradable prices. In 2017, export prices (in euro) increased by 4.4 % and by 1.2 % cumulatively over the last 3 years (see Graph 4.4.4). A continuation of this rising trend in unit labour costs and export prices could threaten further increases in export market shares, unless accompanied by non-cost factors leading to a transition to higher value added products, integration into global value chains and access to new export markets.

Graph 4.4.3: **Real effective exchange rate, Unit Labour Costs deflator (IC-37)**



Source: European Commission

Graph 4.4.4: **BGN-denominated export price evolution**



Source: European Commission

Exports have improved both in terms of volume and quality. Over the last decade exports have increased by 55 %, reaching 67.4 % of GDP in 2017 (from about 56 % in 2007). Quality has also improved. The share of top quality products in the value of manufacturing products' exports almost doubled between 2012 and 2017, to around 20 %. Over the same period, the share of low-quality products dropped substantially. Quality gains occurred across all main export industries but were more conspicuous for computers-office machines and electronics-telecommunications. The proportion of high-tech exports is nevertheless still well below the EU average (5.4 % vs 17.8 %).

Bulgaria has consistently gained export market share in recent years. Bulgaria's export market share increased by 8.4 % in 2016 and by a further 5.0 % in 2017. Over 2012-2017 it increased by 15 %, which is in line with peer countries. The main gains came from products such as basic metals, minerals and machinery and equipment. Export market shares in services continued to expand as well. Over 2012-2017, Bulgaria gained market shares in some of its main destination countries such as Germany and Russia.

Further improvements in non-cost factors would help increase competitiveness. The quality improvements and improved competitiveness mentioned above seem to have led to this progress in external performance. Further competitiveness gains could be achieved by improving non-cost factors such as infrastructure and innovation capability, as well as by making the institutional and business environment more efficient.

4.4.2. INVESTMENT AND PRODUCTIVITY

Investments in skills, infrastructure and research and innovation are needed to support competitiveness, productivity and the convergence process with the EU. Skills shortages represent a significant barrier to business investment and limit productivity gains (see Section 4.3). The still low quality of energy and water infrastructure and the weak transport connections, especially in the north of the country, are an obstacle to investment and to the export potential of Bulgarian companies. Improved R&D investments, strengthened links between businesses and research institutions and a better integrated research and innovation system are needed to remove bottlenecks to productivity gains and boost innovation capacity. Equally importantly, ensuring the quality of institutions is key to successfully implement reforms and investment priorities.

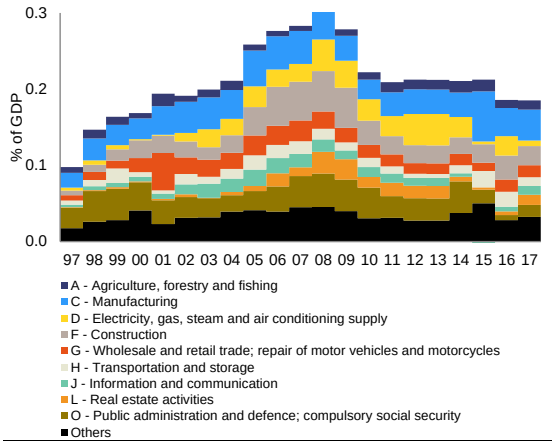
Investment activity

Investment is still insufficient to narrow the capital gap with the EU. The investment-to-GDP ratio of around 20 % is below that of most regional peers, except for Poland and Slovenia, and below the EU average since 2016. Insufficient investment is preventing the renewal and increase of the capital stock, whose share of GDP is well below the EU average and has been declining since 2014. It is also delaying the introduction of new technologies. The private sector is the main source of investment. However, despite its lower overall weight, public investment is vital for specific areas, such as infrastructure development.

EU funding plays a key role in public investment. Since 2007, public sector investment has been on average around 4.2 % of GDP. The contribution of EU funds can be more than two thirds of total public investment, depending on the year. This reliance explains most of the fluctuations in public investment. In 2015, the last year that allowed absorption of funds under the previous programming period, public investment jumped to 6.5 % of GDP, only to fall back to 2.6 % in 2016 and 2.1 % in 2017 as the projects of

the new programming period had not picked up yet. The stock and quality of physical infrastructure is still inadequate (see Section 4.4.4 and 4.4.5) and several sectors would require higher public investment (see Section 4.3 and EIB, 2017).

Graph 4.4.5: **Investment by sector**

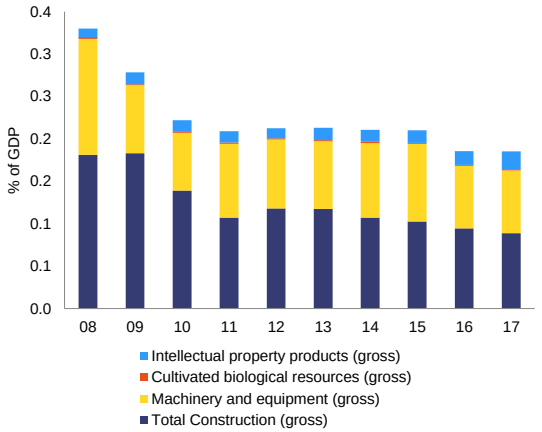


Source: European Commission

Business investment has been weak and unstable in almost all sectors since the crisis. According to a European Investment Bank survey, only around two thirds of firms reported some investment activity for 2017. This is one of the lowest levels in the EU, only slightly above Greece (EIB, 2018). Moreover, almost one fifth of these companies reported investing too little over the last 3 years. The manufacturing sector has the highest share of investment and together with electricity and water utilities seems to be the main driving force of total investment growth (positive or negative) since 2015 (see Graph 4.4.6). However, their size and contribution to investment growth is unstable and often driven by one-off projects and financial events in these sectors. The construction sector played a leading role in investment activity in the past but its share of investment has halved. Transport and storage and other service sectors have gained some momentum in recent years, taking a much higher share of total investment and investment growth than in the past.

The role of intellectual property as investment assets is increasing. The growing share of investment in intellectual property products, which could support productivity growth in the future, is a positive sign for the economy (see Graph 4.4.6). Investment in machinery and equipment also picked up slightly in 2017. However, the average share of state-of-the-art machinery and equipment in firms is low (EIB, 2017). Investment in information and communication technology equipment has declined in recent years. This reflects mainly a reduced effort by Bulgarian companies to digitalise and to a lesser extent the falling cost of information and communication technology equipment.

Graph 4.4.6: **Gross fixed capital formation**



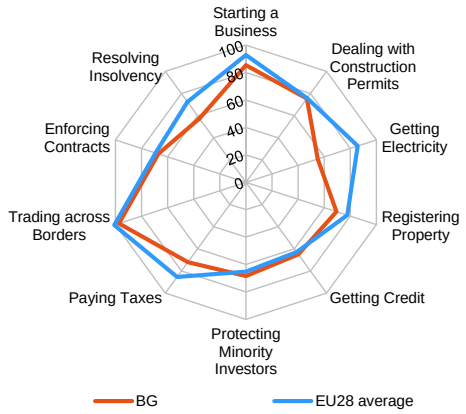
Source: European Commission

Business environment

The business environment remains weak. In 2018, Bulgaria fell from 50th to 59th place in the 'Ease of Doing Business' ranking (World Bank, 2018). The most problematic area is still getting electricity, with lengthy and complicated procedures for connecting to the network, creating significant obstacles to new businesses (see Graph 4.4.8). The unavailability of the Commercial register in August 2018 due to technical reasons also had a negative impact on the conditions for doing business and on trust in public institutions. Business regulations and their implementation vary substantially within Bulgaria, with Sofia lagging behind other regional centres([67]) (World Bank, 2017a).

([67]) Plovdiv, Pleven, Burgas, Varna, Ruse.

Graph 4.4.7: **World Bank Doing Business 2019 score**



Source: Source: World Bank (2019)

Small and medium-sized enterprises still face a number of challenges. Bulgaria's progress in implementing the Small Business Act([68]) is weak, especially in the areas of skills and innovation, responsive administration, environment and, above all, entrepreneurship, where Bulgaria ranks last in the EU (European Commission, 2018g). The measures to address these shortcomings have been often small-scale and sporadic and have not led to visible improvements. The most promising step was the introduction of entrepreneurship training at schools which is expected to have a long-term effect. Companies' engagement in the process is crucial for its success. In addition, the frequently changes in legislation have been identified as one of the main sources of uncertainty for companies([69]). However, the recently introduced Impact Assessment and the 'SME Test' have not improved the situation (see Section 4.4.6).

Productivity

Labour productivity has been increasing but is still far below the EU average. Raising productivity levels is essential for narrowing the income gap and preserving competitiveness, given the increasing levels of labour compensation and the ageing population. Despite its upward trend, in 2017 labour productivity per hour worked reached just 45.3 % of the EU average in purchasing power standard, ranking Bulgaria last in the EU. Since 2000, labour productivity has increased by only 12.8 pp., while it rose by 26 pp. on average in the Baltic states and by 37.5 pp. in Romania, which had started from similar productivity levels. Growth in total factor productivity slowed after 2007 but is picking up again. Moreover, the share of investment in GDP across all regions ranges around the EU and country average, but this is not reflected in higher labour productivity. The main obstacles to productivity growth are a lack of skilled labour (see Section 4.3), the challenging business environment, insufficient spending on research and innovation and the slow digitisation of the economy. This is putting at risk the country's mid-term competitiveness and its capacity to attract foreign and domestic capital. Moreover, Bulgaria has decided not to follow 2016 Council Recommendation and establish a National Productivity Board, on the account of existing institutions that already perform some of the tasks.

Low- and medium-low-technology manufacturing continue to dominate industry. This is the case in terms of both employment and value added. Labour productivity in high-technology manufacturing is more than three times higher than in low and medium-low segments, but only about 10 % of all manufacturing companies belong to this category. In addition, Bulgaria is well integrated in terms of trade but the domestic value added in gross exports is relatively low. Increasing the share of companies in high value added sectors and moving up in the global value chains will be key for maintaining the country's long-term competitiveness and economic growth.

Research and innovation

Weak innovation performance is not supportive of productivity gains. Bulgaria ranks 27th in the European Innovation Scoreboard (European Commission, 2018d) with a performance level below 50 % of the EU average. Bulgaria's relative weaknesses are in the categories of innovative companies, finance and support, attractive research systems and links between companies and research institutions. The share of small and medium-sized enterprises introducing product or process innovation is only 11 % of the EU average; the share of those innovating in-house is 14 % of the average.

([68]) Small Business Act is an overarching framework for EU policy on small and medium-sized enterprises. It aims to improve the approach to entrepreneurship in Europe, simplify the regulatory and policy environment for small and medium-sized enterprises and remove the remaining barriers to their development.

([69]) Council of Ministers' Decision No. 617 of 12 August 2015.

Box 4.4.1: Investment challenges and reforms in Bulgaria

Section 1. Macroeconomic perspective

Total investment remains relatively low and the business environment is still weak. The recovery of private investment after the crisis was subdued and unstable. Public investment financed by the EU Structural and Investment Funds picked up only in 2018. Institutional shortcomings, regulatory uncertainty and corruption remain among the main obstacles to investment and create a business environment that is weak overall.

Section 2. Assessment of barriers to investment and ongoing reforms

Public administration/ Business environment	Regulatory/ administrative burden	
	Public administration	
	Public procurement /PPPs	
	Judicial system	
	Insolvency framework	CSR
	Competition and regulatory framework	
Labour market/ Education	EPL & framework for labour contracts	
	Wages & wage setting	
	Education, skills, lifelong learning	CSR

Financial Sector / Taxation	Taxation	
	Access to finance	CSR
R&D&I	Cooperation btw academia, research and business	
	Financing of R&D&I	
Sector specific regulation	Business services / Regulated professions	
	Retail	
	Construction	
	Digital Economy / Telecom	
	Energy	
	Transport	

Legend:

	No barrier to investment identified
CSR	Investment barriers that are also subject to a CSR
	No progress
	Limited progress
	Some progress
	Substantial progress
	Fully addressed

So far only about half of the measures in the government's action plan to remove obstacles to investment have been put in effect. The government updated the action plan at the beginning of 2018; however there is no evaluation of the impact of the measures applied. Public administration reform and the introduction of e-government are slow with insufficient results. (see Section 4.4)

The lack of adequately skilled staff continues to be a key obstacle to many investments. The low quality of the education and training systems and the limited supply of programmes that correspond to market needs weigh on investment decisions. (see Section 4.3)

Insolvency framework reform is still incomplete and the insolvency proceedings cannot support the reduction of private debt (see Section 4.2.4). Justice system has improved with changes to reinforce independence of the judiciary, but there are still a number of challenges concerning the prosecution service and the distribution of workload among the courts (see Section 4.4.5).

Despite the ongoing deleveraging process the level of private sector debt remains high and credit subdued, while the only gradually decreasing high stock of non-performing loans is limiting banks' capacity to boost credit for investment (see Section 4.2.3). Venture capital and the other forms of non-banking financing are still limited (see Section 4.2.5). The financial market is underdeveloped and the public support plays an important role. The EU financial instruments provide possibilities of improved financing conditions for businesses.

The national promotional institution is the Bulgarian Development Bank (99.9% state-owned). The Bank's main goal is to support small and medium-sized enterprises focusing on start-ups and innovation, exports of final products, manufacturing, mineral extraction and agriculture and tourism. The national promotional institution is the Fund Manager of Financial Instruments in Bulgaria (the Fund of Funds, 100% state-owned), acting as long-term investor in infrastructure and entrepreneurship with European Structural and Investment Funds.

R&D spending remains very low in both the private and public sectors. Private sector R&D expenditure amounted to only 0.53 % of GDP in 2017 (compared to the EU average of 1.36 %), even though it has been improving since 2007, particularly for manufacturing and information and communication technology. Large multinational companies account for half of the entire business sector's R&D investment. Regional concentration is also strong, with more than 70 % of R&D investment going to the South Western region, primarily to Sofia. The public sector's R&D spending is among the lowest in the EU (European Commission, 2018e). In 2017 it amounted to only 0.21 % of GDP, far from the EU average of 0.69 %. However, in 2018 Bulgaria doubled its public research budget to support its 2017-2030 Strategy for Research and its commitment to gradually increasing public R&D spending to 1 % of GDP by 2025. The lack of an adequate funding portfolio in R&D remains a barrier for fostering public-private cooperation and internationalisation as well as reintegration of researchers and innovators.

High fragmentation and slow pace in implementing reforms prevent the move towards a more innovation-oriented research and innovation system. . There is a large number of universities and research institutes, but most of them show low performance in research and production of high-quality scientific publications([70]). To address the recommendations stemming from the evaluation of its national research and innovation system (European Commission, 2015), Bulgaria has started to fund its public research institutions on the basis of performance criteria and has created national scientific programmes that aim to consolidate resources and research potential. However, it is too early to assess results.

Science-business cooperation remains very weak. Public-private scientific co-publications as a percentage of total publications declined to 0.8 % in 2017, compared to an EU average of 3.9 %. Patent applications are also very low([71]). In addition, the availability of human capital in the R&D system is a source of significant concern. Bulgaria has only four researchers per thousand employees (STIP, 2018), and mainly in the public sector.

Important projects to encourage business innovation and digitisation are on the way. Over 2014-2020, EU funds are financing four centres of excellence and nine centres of competences, as well as regional research projects outside Sofia. Together with other EU grants and financial instruments for innovation under the smart specialisation strategy, these investments are expected to lay the basis for collaboration between research institutes, universities and the private sector. They should facilitate knowledge transfer, help to create university spin-offs and attract (venture) capital. The sustainability and performance of these projects are vital for future investments, both in terms of infrastructure and soft measures. Meanwhile, the flagship 'Sofia Tech Park' continues to face challenges. The underuse of its scientific infrastructure, governance issues and its long-term financial sustainability are some of the concerns. Clusters and their potential in Bulgaria are underdeveloped as they often lack a critical mass.

The smart specialisation strategy seems to be limited to guiding EU-funded investments. Instead of empowering local businesses and communities, it remains very much a top-driven bureaucratic exercise. The Council for Smart Growth, which should set priorities and coordinate and monitor the strategy, has undertaken little activity, thus weakening the whole process.

Digitalisation

Uptake of digital technologies is slow in both public and private sectors. Bulgaria is among the lowest performing Member States in the Digital Economy and Society Index (European Commission, 2018f). The main challenges are the very low level of citizens' digital skills and the low integration of digital technologies by businesses. A growing ecosystem of digital and tech entrepreneurs has emerged in recent years, but investment in the digitisation of the economy is still limited and lacks an overarching strategy. Bulgaria is committed to strategically investing in digital technologies via EU-coordinated programmes (e.g. through EuroHPC Joint

([70]) In 2015, 3.6 % of total publications were highly cited, compared to the EU average of 11.1 %.

([71]) In 2014, eight Patent Cooperation Treaty patents per million population compared to the EU average of 102.

Undertaking). Bulgaria also has a National Centre for Supercomputing Applications, but its activities could be further enhanced, especially to the benefit of small and medium-sized enterprises. While Bulgaria is a signatory to the Declaration on Cooperation on Artificial Intelligence, measures to encourage the take-up of artificial intelligence applications in the public and private sectors are lagging behind.

Connectivity has slightly improved but still lags far behind the EU average. Fixed broadband take-up remains well below the EU average (58 % v 77 %), as well as 4G coverage (80 % v 98 %). More positively, the take-up of fast broadband is slightly above the EU average (43 % v 41 %), while ultrafast broadband coverage is well above (75 % v 60 %). Investments in better, more reliable and faster connectivity would help to attract more high value added businesses and are a prerequisite for improving the level of digitisation. There is no 5G strategy yet, but a dedicated working group was launched in 2017 to revise the Next Generation Access plan to include it. Securing a very high speed connectivity of academic and educational entities to facilitate access to e-education and cloud services remains a challenge.

Transport

The coverage and quality of transport infrastructure have improved but remain below the EU average. Key connections are still underdeveloped, especially in the North and between Northern and Southern regions([72]). The low quality of road and rail connections([73]), including trans-European transport core network, results in long travel times, poor transport safety and low connectivity across regions in Bulgaria and with the neighbouring countries. The lack of comprehensive network connections to Serbia and the Republic of North Macedonia creates important obstacles to trade([74]). A modern, operational infrastructure allowing for intermodal transport connections is lacking, which also causes regional disparities (see Section 4.4.4). Inland navigability suffers from bottlenecks and cross-border connectivity between Bulgaria and Romania across the Danube River is a challenge due to the low number of bridges that have been built or modernised([75]).

Implementing the Trans-European Transport Network policy is important for the future of the transport system. Transposition of the Trans-European Transport Network would bring about low-emission facilities, new generation services' concepts and innovation. This includes the construction of road and rail infrastructure, building the links to the Western Balkans, exploiting the potential of the Black Sea and the Danube and putting in place more innovative financial instruments while ensuring consistency of investment between the programming periods. This would allow Bulgaria to benefit from its central location, including as a transit country on the future Alpine-West Balkans rail freight corridor. The priority remains to develop the Trans-European Transport Network corridors 'Orient/East-Med' and 'Rhine-Danube' and the connections with Western Balkan countries.

Bulgaria is among the countries with the lowest perceived quality of transport infrastructure. Bulgaria ranks 93rd out of 137 countries on road quality (World Economic Forum, 2018). To improve road infrastructure, intelligent transport systems need to be developed, encompassing cross-border data, road charging/e-toll schemes, safety and parking facilities. Along the core rail network, there are compliance issues with train lengths, operating speeds and the European Rail Traffic Management System standards.

Road safety is a major issue. Bulgaria has one of the highest road fatality rates in the EU, with 96 deaths per million inhabitants in 2017 (almost double the EU average). Traffic control teams can sanction law violations, but the enforcement acts are often cancelled by the courts due to legal loopholes. Drivers' behaviour, a very old vehicle

([72]) The south's more developed road infrastructure creates more favourable investment conditions. Furthermore, the connection between the south and the north is often interrupted in winter conditions (National Transport Strategy 2030, 2017: pp.106, 194).

([73]) Priority projects include the speedways Vidin - Montana and Vratsa - Mezdra, IMT Ruse and Varna, connections between IMTs Burgas-Varna and Varna-Ruse. The IMT's significance would be further enforced through motorway connections between Ruse-Veliko Tarnovo and Varna-Veliko Tarnovo.

([74]) National Transport Strategy 2030 p.54

([75]) EU Strategy for the Danube Region.

fleet and an underdeveloped road network are contributing factors to the poor performance.

Traffic intensity of freight and passenger rail transport is decreasing. Rail accounts for only 2 % of passenger and 17 % of freight transport (European Commission, 2018h). The railway company BDZ accounts for 92 % of the total transport volume and has a public service contract to transport passengers by 2024, but nonetheless has unsatisfactory financial results. In rail freight transport, there is a need to address the significant maintenance backlog of the rail network. The rail regulatory body faces serious governance issues and challenges in performing controls on certification. The extremely low level of remuneration is a major obstacle to attracting highly qualified specialists. Increasing the use of competitive tendering and award procedures for public service contracts for access to rail rolling stock would encourage the entry of new private operators in rail.

The use of alternative and clean fuels in transport is not reaching the targets. Despite the government's intention to promote the use of alternative fuels([76]), there are currently only 108 publicly accessible charging stations for electrical vehicles, ranking Bulgaria as second to last in per capita (peri-) urban area coverage in the EU. It is unclear how the country will reach its national target of 2 500 public charging stations by 2020. Bulgaria has developed very few natural gas refuelling stations (none for liquefied natural gas), and no hydrogen refuelling infrastructure, although its National Policy Framework announced 10 hydrogen refuelling stations by 2025.

Urban transport is an issue in all major cities([77]). These cities suffer largely from poor air quality (European Commission, 2018j), congestion and accelerated urbanisation (NSI, 2016). There is a lack of sustainable urban mobility plans and action to reduce pollution, CO2 and noise emissions, to improve urban road safety, and to increase energy efficiency as well as the share of renewables in urban transport.

([76]) Tax exemption for vehicles with electric engines since 2018.

([77]) In line with the Urban Mobility Package (European Commission, 2018i).

Energy and climate

Investment needs in the fields of energy and climate are significant. Frequent amendments of the Energy Act are not conducive to creating a stable and predictable investment climate. Likewise, recent transactions in the energy sector have fuelled speculation of political meddling, reducing the sector's attractiveness and potentially deterring much-needed foreign investment. Bulgaria is expected to adopt the final version of its Integrated National Energy and Climate Plan by 31 December 2019, as required by the Energy Union Governance Regulation, with an overview of investment needs for the different dimensions of the Energy Union until 2030. Having this strategy in place would help improve long-term predictability for investors, and delays in presenting it could lead to investor uncertainty. Also, Bulgaria hosts several Projects of Common Interest which aim at improving security of supply, better integrating the country into the EU energy markets, and integrating renewable electricity.

Bulgaria remains the most energy-intensive economy in the EU by a wide margin. The structure of Bulgaria's final energy consumption is quite similar to that of the EU. However, in 2016 energy consumption per unit of GDP was three times the EU average (European Commission, (2017c). This inefficient use of energy is preventing Bulgaria from fully exploiting the potential of its relatively low energy prices.

Bulgaria is lagging behind in its progress towards its 2020 indicative national target for energy efficiency. In 2017, Bulgaria was off the mark by approximately 8% in terms of primary energy consumption and 15% in terms of final energy consumption([78]), with both gaps increasing compared to 2016 levels. Bulgaria ranked last in the EU in 2011 on energy efficiency([79]), which illustrates that this is a long-standing issue and it negatively affects productivity and competitiveness of businesses in the country. Additional efforts should thus be made to ensure that sufficient energy savings are achieved by 2020. Targeted measures and investment can unlock the huge energy-saving potential in the

([78]) 2018 ESTAT data

([79]) Energy Union Factsheet Bulgaria, SWD(2017) 386 final, available at: https://ec.europa.eu/commission/sites/beta-political/files/energy-union-factsheet-bulgaria_en.pdf

industrial, transport and residential sectors, improving the economy's overall competitiveness and people's quality of life. Attracting investment and unlocking private financing to improve energy efficiency is also crucial for securing the Union's energy transition targets with a 2020 perspective and beyond.

To alleviate the socio-economic impacts of the clean energy transition, planning of transitional measures is important. This is also to ensure that Bulgaria can reap the benefits from low-carbon transformation in the form of new jobs and growth. The scale of the challenge is substantial as Bulgaria accounts for 7% of EU coal production and 6% of jobs in the coal mining sector, meaning that over 12 000 jobs in coal regions are at risk. Active participation in the EC Coal Regions in Transition Initiative should help with the preparation of adequate transition strategies and identification of priority projects and measures.

Though on track to achieve its 2020 renewable energy target, Bulgaria remains the most greenhouse gas emission-intensive economy in the EU. In 2016, the greenhouse gas intensity of Bulgaria's economy([80]) was 4.3 times higher than the EU average (European Commission 2017c). Bulgaria exceeded its 2017 indicative trajectory target as set under the Renewable Energy Directive. The 2017 level of the renewable energy share in gross final energy consumption stood at 18.7 %, well above the 16 % target. However, the share of renewables in transport was 7.2 % in 2017, still below the 2020 target of 10 %. At the same time, based on its own projections, Bulgaria may miss by 1 pp. its 2030 target of keeping its greenhouse gas emissions at no higher than the 2005 level (European Commission, 2018c).

Environment

The potential of new circular economy business models is not being exploited. Waste management continues to be a challenge, despite municipal waste generation being below the EU average([81]). Landfilling rates for municipal waste are among the highest in the EU, putting Bulgaria at risk of missing the 2020 target for 50 % municipal waste recycling. Separate collection of waste remains suboptimal at all levels, as do related infrastructure, public awareness and monitoring (European Commission 2018m). A 'pay-as-you-throw' principle was formally introduced but is not enforced. The secondary use of material in Bulgaria was 4.3 % in 2016, substantially below the EU average of 11.7 %. The capacity of municipalities to organise, procure and manage waste collection and treatment is limited.

Connection and treatment rates for urban wastewater are very low. Investments in water supply and sanitation have increased significantly in the last decade, mainly supported by EU funds. However, there are weaknesses in the planning and management of these projects. Only about 26 % of Bulgaria's wastewater is collected; 20.4 % is subjected to secondary treatment and 6.7 % undergoes more stringent treatment where required (European Commission, 2017b).

Air quality continues to give cause for concern. Bulgaria remains among the Member States with the highest pollution-related deaths, number of years of life lost associated with air pollution and urban population exposure to particulate matter (dust) (EEA, 2018b). The main sources of air pollution with particulate matter are the domestic (residential) heating sector using solid fuels and transport. The age of the road transport fleet increases the risk of exceeding nitrogen oxide emission values. Bulgaria has not yet taken any structural measures to address air pollution and to align air quality objectives with policies in key sectors such as climate, energy and transport.

The emergency management system for disaster prevention and response requires investment. Mitigation measures for floods and earthquakes, adaptation to climate change and monitoring of the marine environment are of concern. There is a need to transition from a response-focused emergency management system to a more holistic disaster risk prevention and management system (Briggs et al, 2015).

Plans to develop efficient management structures for areas in the Natura 2000 nature protection network are lagging behind. Construction in Natura 2000 areas and a lack of integration of nature and biodiversity policy into other sectoral policies are among the main threats to nature and biodiversity in Bulgaria. Other

([80]) Measured in tCO2eq/M EUR (2010)
([81]) Eurostat, Municipal waste by waste operations

weaknesses are poor enforcement of nature conservation laws and environmental regulations, including the absence of conservation objectives and measures for Natura 2000 sites; ineffective management and administration of protected sites; and insufficient financing or inefficient spending of the financing available.

4.4.3. FUNCTIONING OF THE MARKETS

Single market for goods and services

The single market for services is performing relatively well, with a few exceptions hampering competition. The new Law on Private Security Activities introduces complex authorisation and reporting requirements and an even more burdensome regime for temporary cross-border service providers. In the tourism sector, the recent regulations for tourist guides and mountain guides are also very restrictive, while construction services are burdened by various authorisation schemes.

In the area of product safety, limited financial and human resources affect the possibility to carry out product testing. This results in only some product categories being subject to restrictive and protective measures (and notified in the EU Rapid Alert System on non-food products). As a consequence, consumers and retailers report very low levels of confidence in product safety and retailers give low assessment of product safety legislation enforcement by public authorities (European Commission, 2019a).

Energy sector

Problems with liquidity still linger on the electricity market. This is particularly the case in the forward market where transactions in standardised baseload and flexible products are held back by bilateral trade, despite the energy exchange's steps to improve liquidity on the day-ahead segment and implement market coupling with neighbouring countries. More generally, the Independent Bulgarian Energy Exchange still lacks an operational clearing house to become a central counterparty to transactions and thus reduce risk and improve the credibility of its price discovery mechanism.

Bulgaria is pushing forward with the plan to modernise and strengthen its high-pressure gas network. Important milestones were reached on the cross-border gas interconnector between Greece (Komotini) and Bulgaria (Stara Zagora) and the operation is expected to start in July 2020. On the other hand, Bulgaria still lacks access to diversified sources of gas; bilateral trade and market-based balancing are in their infancy; an organised exchange for standardised gas commodity trading is not yet operational and some problems with the functioning of the internal market remain unresolved([82]).

Retail markets for electricity and natural gas remain price-regulated. Consumers do not have sufficient access to open, transparent and competitive offers and their level of satisfaction with the quality of service received is among the lowest in the EU. There has been little sign of improvement over the years.

The overall functioning of the motor fuel market remains problematic. In July 2018 Bulgaria adopted the Act on the administrative regulation of economic activities related to oil and petroleum products. This aims to tackle issues such as the low fuel quality, access to tax warehouses, VAT evasion, unregulated trades at selling points which are not connected to the National Customs Agency and the National Revenue Agency, and enforcing fair competition. The implementing act is not yet adopted and the adoption process has so far been riddled with controversies and protests from stakeholders.

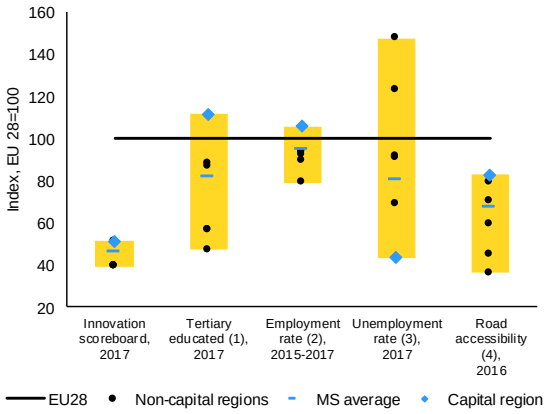
4.4.4. REGIONAL DISPARITIES

There are significant regional differences in factor endowments. Despite clear improvements over recent years, there is still a wide gap between regions in terms of human capital. In skilled labour and education attainment, the capital region is a strong outperformer, even relative to the EU average, but the rest of the country is underperforming (See Graph 4.4.1). Thus, large

([82]) In December 2018 the European Commission has fined Bulgarian Energy Holding (BEH), its gas supply subsidiary Bulgargaz and its gas infrastructure subsidiary Bulgartransgaz (the BEH group) €77 068 000 for blocking competitors' access to key gas infrastructure in Bulgaria, in breach of EU antitrust rules.

portions of the Bulgarian economy are lacking the fundamentals needed to make the transition to a dynamic, high value added, knowledge-oriented economy.

Graph 4.4.8: **Regional disparities**



Yellow areas represent the range of disparities across regions
(1) Percentage of population aged 30-34
(2) Percentage of population aged 20-64
(3) Percentage of economically active population
(4) Ratio population within 120km to population accessible with a 90 minute drive
Source: European Commission

Even the capital region is lagging behind the EU average in innovation and research and development. Research activities and infrastructure are concentrated in Sofia and several of the biggest cities like Plovdiv, Varna, Burgas, Ruse, Gabrovo, Stara Zagora and Blagoevgrad([83]). Companies are late in spreading the benefits of technological progress and this weighs heavily on total factor productivity. According to the 2018 Regional Innovation Scoreboard, South Western and south Bulgaria are 'moderate innovators' while north and east Bulgaria are at the bottom, with innovation performance decreasing slightly over time([84]).

Northern regions suffer from underdeveloped transport infrastructure. All the major motorway and rail developments since 2010 have been concentrated in the south of the country, while the density of motorways in the north remains close to zero. In addition, the north of Bulgaria has underdeveloped and outdated cross-border connections with Romania and there is a lack of intermodal terminals in key cities like Ruse and Varna. There is a need to address the existing regional disparities by completing the planned motorway and rail network, improving travel time and safety and reducing CO2 emissions in the north.

([83]) Bulgaria: Diagnostic Review – mapping of infrastructure, equipment and apparatus, 2017.
([84]) Regional Innovation Scoreboard 2018.

4.4.5. INSTITUTIONAL QUALITY AND GOVERNANCE

International indices continue to point to problems in governance. Bulgaria is underperforming in the European Quality of Governance Index([85]) and the World Bank's Worldwide Governance Indicators([86]). It is also among the lowest EU performers in the Bertelsmann Stiftung Sustainable Governance Indicators 2018([87]), with the executive accountability score slightly increasing and the executive capacity score the same as in 2017.

Public administration

Public administration reform continues to be slow and is yielding insufficient improvements. Bulgaria's capacity to design and implement policies is still limited. Despite the progress in 2018, with 22 completed comprehensive impact assessments and 344 partial ones, the regulatory impact assessment system suffers from several deficiencies. Insufficient data, low administrative capacity and political interference are hampering the *ex ante* assessment of legislative proposals and do not support informed policy choices. Weak *ex ante* assessment is leading to frequent legislative changes and creating legal uncertainty for both companies and citizens. Moreover, monitoring of the practical implementation and enforcement of measures is limited and *ex post* assessment is lacking.

There has been little progress in the provision of public services. Moreover, the perception of their quality is still low. According to a Eurobarometer survey([88]), only 28 % of

([85])https://ec.europa.eu/regional_policy/en/information/maps/quality_of_governance.
([86])http://info.worldbank.org/governance/wgi/index.aspx#home.
([87]) https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/SGI_2018_Englisch_komprimiert.pdf.
([88]) Eurobarometer survey, spring 2018.

respondents considered the quality of public services good, while 53 % considered them bad, putting Bulgaria among the worst performers in the EU.

Progress with e-government remains critical for improving the public sector's transparency and efficiency. Actions have been taken to update the strategic e-government framework for the period 2019-2023. Architecture of the e-government has been developed for the first time. The strategic framework is in place and the State e-government Agency is operational and plays the key coordinating role. The number of e-government users has increased to 61 % and is now almost in line with the EU average (64 %). Bulgaria's interconnected base registers — which constitute the Registry information exchange system RegiX — are now operational, allowing administrations to access data contained in registers and databases of other public sector services. However, the outdated legal framework is the major obstacle to its widespread use. The so-called 'special laws' require citizens to bring and present in person hard copy certificates. This may constitute an obstacle to the full digitisation of public services. It could be overcome through efficient implementation of the national e-identity scheme, which is lagging behind. Other important projects like the establishment of the National Health Information System, the introduction of new e-identity documents and the electronic signatures are significantly delayed and have shown very little progress during the last year. Lastly, a major constraint on the development of e-government is the shortage of IT specialists in the country and the public sector's difficulty in attracting and retaining them.

The provision of digital public services for businesses improved significantly. Bulgaria scored 96 out of 100 above EU average in the Digital Scoreboard (European Commission, 2019b). Since 2018, tax declarations for legal persons are to be submitted only in electronic form. For physical persons, this will be optional and will be incentivised via a tax rebate. On the other hand, delays to reforms have diluted the general move towards modernisation, putting at risk the whole reform process. Investment in digital transformation is necessary to maintain and boost the improvement process.

There is no visible progress on feedback-based human resources management. The adopted 2019 State Budget Law proposes an increase of 10 % in civil servants' salaries, to take effect as of January 2019, but differences in salaries for the same functions among different budgetary institutions persist. This is due to the different degree of implementation of optimisation measures for the administrative structures in recent years. According to the 2017 Report on the state of the administration([89]), 31 % of the administration units still do not have a human resources management system and 4 % do not have a payroll system. Although legally settled, the introduction of centrally managed competitions has been postponed until October 2019.

Administrative capacity continues to hinder the execution of EU-financed projects. Bulgaria has proven so far to have an effective EU-funded projects control system, but management and implementation need further improvement. There are issues with the stability in the management of managing authorities and the capacity of beneficiaries (e.g. municipalities) to manage projects. Bulgaria participates in the Commission's 'Integrity Pacts — A Civil Control Mechanism for Safeguarding EU Funds' initiative as a concrete step to combat the misuse of EU funds.

Public procurement

The practical benefits of the ongoing reforms of public procurement are still limited. The vast majority of measures included in the national procurement strategy have been adopted, but their implementation requires constant monitoring, control and assessment. The World Bank is carrying out an independent review of the public procurement sector. Assessment of the overall institutional capacity of the Public Procurement Agency, an overall evaluation of how well the public procurement system functions and a qualitative and quantitative analysis of data are envisaged at the beginning of 2019.

The public procurement sector's administrative capacity is still a matter of concern. Currently, the Public Procurement Agency does not have sufficient capacity to intensify its proactive role in overhauling the procurement environment, beyond

([89]) https://iisda.government.bg/annual_report/304.

its core function of legal compliance and *ex ante* control. Implementation of a three-year training plan (2017-2019) prepared by the Institute of Public Administration and the OECD is progressing. Despite continuous effort in training, further professionalisation of public buyers in particular at municipality level remains challenging.

The uptake of electronic procurement has been delayed. This is a serious problem as the electronic platform is an important instrument for improving the transparency and efficiency of public procurement processes. The practical use of the system has been postponed due to the need for further testing of the electronic platform and training of its users. According to the amendment to the Public Procurement Act, electronic procurement will not be functional before November 2019. The uploading of all buyer profiles of contracting authorities to the platform is to be completed by January 2021. The challenge of ensuring the necessary technical capacity in the administration remains.

Aggregated purchases are progressing only at the central level. The central purchasing body within the Ministry of Finance is functioning well and has expanded the product scope of the tenders it manages several times. The central purchasing body for municipalities has a lot of untapped potential to broaden the scope of its activity and the number of users. The possibility of joint procurement has not been explored yet, in particular at the local level. The central purchasing body for the health sector has not seen an adequate uptake of activity since its establishment.

Considerable effort has been put into strengthening *ex ante* controls, in particular through random selection of procedures based on risk assessment. The control exercised by the Public Procurement Agency aims to give methodological assistance to inspected contracting entities and provide an opportunity to rectify errors and inconsistencies as early as possible. Procurement is facilitated by the use of standard contract forms and special clauses in public procurement contracts, approved by the Minister of Finance.

New measures were introduced in the system of reviewing procurement procedures. Their objective is to prevent abusive appeals affecting mainly procurements of considerable value. However, their impact on the functioning of the review system has yet to be seen.

Frequent regulatory changes, such as successive amendments to the Public Procurement Act, risk undermining legal certainty in the application of public procurement rules. In addition, the use of the less transparent negotiated procedures without prior publication in Bulgaria is well above the EU average (24% vs 4% in 2018). In 33% of the awards of contract there was only one offer received([90]). Moreover, Bulgaria is using predominantly the lowest price as the only award criteria, thus limiting the strategic use of the public procurement.

Corruption

The fight against corruption remains a challenge. While Bulgaria's rank on the ethics and corruption component of the Global Competitiveness Index has moved from 27th to 25th place in the EU, the country continues to score poorly on favouritism, irregular payments and bribes and diversion of public funds. According to the Transparency International 2017 Corruption Perception Index([91]), Bulgaria ranks last in the EU with a score of 43 out of 100 (EU average: 65). This is also the case in the 2017 World Bank's control of corruption index([92]). In the Business Flash Eurobarometer, 62 % of businesses indicated that corruption creates problems for their operations (EU average: 37 %). In the World Economic Forum survey on competitiveness, corruption has consistently been ranked as the single most problematic factor for doing business in Bulgaria([93]).

In January 2018, Bulgaria adopted a comprehensive reform of its anti-corruption legislation. The new law establishes a new unified

([90]) European Commission, Tenders Electronic Daily, January 2019, https://ted.europa.eu/TED/main/HomePage.do

([91])https://www.transparency.org/news/feature/corruption_perceptions_index_2017.

([92])http://info.worldbank.org/governance/wgi/index.aspx#home, World Economic Forum, 2017-2018 Competitiveness Report.

([93]) Most recently in the index published in 2017. In its latest report from 2018, the World Economic Forum stopped presenting the 'most problematic factors for doing business' ranking.

anti-corruption agency. The agency is in charge of verifying conflicts of interest and the private assets of high-level officials, investigating allegations of malpractice among them, generally promoting the prevention of corruption, and conducting procedures to seize and confiscate illicit assets. The Commission's November 2018 report on Bulgaria's progress under the Cooperation and Verification Mechanism underlined as key challenges for the new agency its very broad remit of responsibilities and the need to build public trust. The report also acknowledged that efforts to improve the framework for investigating and prosecuting high-level corruption would need to continue in order for Bulgaria to be able to show concrete results over time and build a solid track record([94]).

Judicial system

Bulgaria has carried out reforms aimed at improving the effectiveness of its judiciary. A number of challenges remain and efforts continue in several areas, notably to increase the accountability of and trust in the prosecution service([95]), and to rebalance the workload among courts while also preparing broader reforms of the judicial map and the introduction of e-justice. In its 2018 Cooperation and Verification Mechanism report, the Commission concluded that the benchmarks referring to the constitutional safeguards for independence of the judiciary and the broader legislative framework could be provisionally closed. The benchmark on continued judicial reform remains open pending further follow-up to a number of recommendations([96]).

Perceptions among citizens and businesses about the independence of the judiciary remain among the weakest in the EU. According to the 2019 EU Justice Scoreboard (forthcoming), Bulgaria improved marginally on the previous year. The low rankings reflect in particular concerns that judges are perceived to face interference in their work or pressure from economic interests and the government and politicians.

In terms of the quality of the justice system, the picture is mixed. While the 2019 EU Justice Scoreboard shows that there are positive developments, such as the higher number of judges per 100 000 inhabitants, there are also some negative trends**.** The continued lack of a reliable evaluation system is hindering improvement of the justice system. In addition, the use of and follow-up on the results of surveys conducted among court users are limited (European Commission, 2019). According to the 2019 EU Justice Scoreboard, other ways of further improving the quality of justice include compulsory training for judges.

The negative trend in the clearance rate for first instance cases other than criminal cases has continued. This means that more cases enter the courts than are resolved, which is likely to result in a backlog. In general, first instance court cases and proceedings related to specific areas of EU law which are of particular economic relevance are dealt with in acceptable timeframes and this has remained stable. However, the distribution of workload among the various courts is a matter of concern.

Consumers have low trust in public authorities to safeguard their rights. Consumer trust in public authorities to safeguard their rights is one of the lowest in the EU, whereas the proportion of consumers experiencing illicit practices is one of the highest. At the same time, consumer trust in redress mechanisms (courts, Alternative Dispute Resolution) did not increase and remains low([97]), whereas Bulgarian retailers indicate that approximately one in two retailers in the country conduct unfair commercial practices.

([94]) COM(2018) 850.

([95]) In 2016 the European Commission organised a project to carry out an independent and comprehensive analysis of the Prosecutor's Office and provide suggestions for ways to improve the system. An executive summary is available at http://www.mjs.bg/Files/Executive %20Summary %20Final %20Report %20BG %2015122016.pdf.
The analysis formed the basis of a government roadmap in 2017. The November 2018 Cooperation and Verification Mechanism report noted that this work will take time to have an impact and will require a persistent and continued focus to ensure success over time. Some legislative issues are also still under consideration.

([96]) COM(2018) 850.

([97]) Consumer trust in Alternative Dispute Resolution is among the lowest in the EU. Retailers' assessment of the prevalence of unfair commercial practices is one of the highest in the EU — forthcoming Consumer Conditions Scoreboard (2019).

ANNEX A: OVERVIEW TABLE

Commitments	Summary assessment [1]
2018 country-specific recommendations (CSRs)	
CSR 1: Improve the efficiency of tax collection and public spending, including by stepping up enforcement of measures to reduce the extent of the informal economy. Upgrade the State-owned enterprise corporate governance framework in line with international good practices.	Bulgaria has made **Some Progress** in addressing CSR 1
Improve the efficiency of tax collection	**Some Progress** In 2018, Bulgaria has put in place a number of measures to tackle the shadow economy and improve tax collection. Many of those measures were implemented in the framework of "The Single National Strategy for improving tax collection, tackling shadow economy and reducing compliance costs". These measures have brought some positive results in the form of higher revenue. A particularly successful measure was the checks of declared cash by the companies (bringing in additional BGN 108.3 million, a 55.6% increase year-over-year), which encouraged many of the companies with excess cash to amend their financial results or declare dividend payments. In addition, the introduction of tax controls on the movement of high-risk goods has brought higher direct and indirect tax revenue from companies in these sectors.
and public spending	**Some Progress** The government has made steps to improve public expenditure efficiency. In 2018, the World Bank completed a spending review in a number of public institutions (ministries and municipalities), published two pilot studies and delivered to the authorities a manual for future reviews. No follow-up measures or additional spending reviews have been announced as yet. The government also updated and stabilised the set of performance indicators per policy area in the medium term fiscal strategy. The Ministry of Finance is planning to use this stable set of indicators to assess the impact of public spending and to inform the budget evaluation and planning in the medium term.
, including by stepping up enforcement of measures to reduce the extent of the informal economy.	**Some Progress** To fight undeclared work, the authorities implemented measures such as one-day flexible contracts in agriculture and the exclusion of companies convicted for undeclared work (in the last three years) from public procurement. The General Labour Inspectorate has signed an agreement with the trade unions to jointly fight undeclared work. At

	the same time, the National Revenue Agency (NRA) applies a number of measures to improve compliance and collection in high-risk sectors, including undeclared work risk. Another positive element in 2018 is the launch of an information campaign "Salary in an Envelope" by the National Revenue Agency. The campaign primary aim is to demonstrate to the citizens the amount of the losses they are experiencing from this practice in the long run, including a dedicated webpage in which they can estimate the actual losses in their future pension, among other harmful consequences.
Upgrade the State-owned enterprise corporate governance framework in line with international good practices.	**Limited Progress** There is not yet any change in the state-owned enterprises corporate governance framework but its reform has been planned. The government put in place a project to (i) review and assess the legal, regulatory and operational framework of State-owned enterprises and (ii) revise and align legislation with OECD guidelines on corporate governance of State-owned enterprises. The initiative is part of the action plan of the government in view of the envisaged application for participation in the ERMII. A technical assistance project with the European Commission and the OECD was launched in August 2018. The adoption of the new framework is expected by July 2019.
CSR 2: Take follow-up measures resulting from the financial sector reviews and implement the supervisory action plans in order to strengthen the oversight and stability of the sector. Ensure adequate valuation of assets, including bank collateral, by enhancing the appraisal and audit processes. Complete the reform of the insolvency framework and promote a functioning secondary market for non-performing loans.	Bulgaria has made **Some Progress** in addressing CSR 2
Take follow-up measures resulting from the financial sector reviews	**Substantial Progress** Most recommendations of the 2016 asset quality review of the banking sector have been addressed, leaving one important outstanding action. Insurance companies' solvency has improved since the completion of the sector's reviews. According to the Financial Supervision Commission, all recommendations of the independent balance sheet reviews of insurance companies and pension funds were fully implemented by April 2017. At the end of 2017, all but one insurer satisfied Solvency Capital Requirements, without the application of Long-Term Guarantee and transitional measures. However, some insurers' solvency ratios are close to 100%, which could indicate potential weaknesses

	that should be closely monitored. In 2017, the Financial Supervision Commission withdrew the licences of two insurers for a number of reasons, including the failure to comply with capital requirements. Both companies have appealed this sanction. The decision is still pending before the administrative higher court. Group-level supervision remains a challenge for an adequate risk-based insurance supervision. The group-level assessment of two insurance groups was never completed. While in one case group supervision is no longer applicable due to restructuring, in the other case the Supreme Administrative Court revoked the decision of the authority for identification of the group. The authorities' approach following the court's decision will still have to take into account the requirements under the transposed Solvency II Directive stipulating that group level supervision is to be applied at the ultimate parent level. The supervision of the car insurance sector is being strengthened. The authorities started in November 2017 to automatically match information from car registration databases with motor third-party liability contracts, to combat fraud. The Financial Supervision Commission has taken further measures to ensure that victims of car accidents receive the proper compensation, in particular in cases of cancelled insurance contracts, and that all Bulgarian insurers have a network of claims representatives in all EU Member States, as required in the Motor Insurance Directive. As expected under the Action Plan 2017, the Financial Supervision Commission has published a report on the level of motor third-party liability premiums. Nevertheless, significant challenges regarding the business model and business strategy of market participants remain a concern, with potential spill overs beyond the sector itself.
and implement the supervisory action plans in order to strengthen the oversight and stability of the sector.	**Some Progress** Delayed actions for improving banking supervision from the 2015 plan are being completed. The Financial Supervision Commission adopted an Action Plan for reforming non-bank financial supervision in September 2017, in cooperation with the European Insurance and Occupational Pensions Authority. Implementation is on-going. The actions towards a proper risk-based forward-looking supervisory process already delivered some outputs, like a supervisory manual and risk matrices. These are useful and necessary tools, but the full implementation of an action plan to

	establish such a risk-based forward-looking supervisory process remains key, and only time will show to what extent new rules are effectively enforced and whether supervision has really improved in practice. The failure of Olympic, issues with group-level supervision, the frequency at which the supervisor's decisions are overturned by the courts and the worsened problems of the Green Card Bureau show that insurance supervision still faces some real challenges. In the area of pension funds, amendments to the Social Insurance Code were adopted by the parliament in November 2017. They include a broader definition of related parties, in line with international standards. As the law previews a 12 months implementation delay, the changes need to be duly enforced and their effectiveness monitored. In addition, the Financial Supervision Commission was strengthened by legislative amendments introduced in 2017, which provided it with sufficient funding and staff and expanded its supervisory capacity. A proper risk assessment framework, currently under development, should support the improved supervision capacity. The head of Insurance Supervision in the Financial Supervision Commission resigned in August 2018, as a consequence of the failure of Olympic Insurance. Despite announced plans to designate a successor, no formal steps have been taken so far. Furthermore, the announced change in the Financial Supervision Commission chair in March 2019 could generate further uncertainty, in particular given the ambitious scope of the planned reforms. It is important in both cases to ensure the timely appointment of professionals who duly fulfil fit-and-proper requirements.
Ensure adequate valuation of assets, including bank collateral, by enhancing the appraisal and audit processes.	**Some Progress** Issues with the valuation of collateral limit the incentives of banks to dispose of non-performing loans. A range of hard-to-value assets still exist, notably related to immovable property. Examples include real-estate collateral in the banking sector, receivables and real estate holdings in the insurance sector, and stocks, bonds, real estate and other financial instruments in the pension funds sector. In addition, the uneven quality of auditing affects the valuation of illiquid instruments traded on stock exchanges, as well as non-traded assets, including receivables, minority equity stakes and subsidiaries. For real-estate valuations, auditors rely on locally-licensed appraisers. Despite the advantage of local expertise,

	valuation standards differ and the licensing system is not sufficiently tight. In the absence of a mandatory standardised methodology, commercial banks have the discretion to use different valuation frameworks, which may create considerable discrepancies. Some issues related to valuation in the non-banking financial sector require further monitoring. According to the Financial Supervision Commission, auditors have not identified any particular problem with the clean-cut reinsurance contracts. However, concerns regarding their supervisory treatment remain to be addressed. The on-going on-site inspections are also expected to allow further assessment by the Financial Supervision Commission. The issue of hard-to-value assets, including traded securities with low liquidity and low free float, as well as non-traded assets, has been identified in the reviews of both the banking and non-bank financial sectors but has not yet been fully addressed. Amendments to secondary legislation could be followed by changes to the rules governing the work of valuation practitioners to improve the application of valuation rules. Amendments to Ordinance 9 of the Financial Supervision Commission, concerning the valuation of the assets and liabilities of the pension funds, entered into force on 19 November 2018.
Complete the reform of the insolvency framework	**Limited Progress** Reform of the insolvency framework is still incomplete, with important legislative elements missing. The pre-insolvency restructuring procedure entered into force on 1 July 2017, but so far its take-up has been weak. The new framework could benefit from further streamlining and less complexity, inter alia by encouraging out-of-court settlements, less court involvement and administration and lower thresholds when voting on adoption of restructuring plans. On the positive note, Bulgaria asked for assistance to progress on the reform of the insolvency framework in 2018. This project will put forth a roadmap addressing the identified gaps.
and promote a functioning secondary market for non-performing loans.	**Limited Progress** The overall ratio of non-performing loans declined to 9.2% in June 2018, from 12.1% a year earlier. Non-performing loans by non-financial corporations also decreased, but still topped 15.4% of total loans and advances (19.9% a year earlier). These levels are well above the EU averages in June 2018. Progress with restructuring has been slow.

CSR 3: Increase the employability of disadvantaged groups by upskilling and strengthening activation measures. Improve the provision of quality inclusive mainstream education, particularly for Roma and other disadvantaged groups. In line with the National Health Strategy and its action plan, improve access to health services, including by reducing out-of-pocket payments and addressing shortages of health professionals. Introduce a regular and transparent revision scheme for the minimum income and improve its coverage and adequacy.	Bulgaria has made **Limited Progress** in addressing CSR 3
Increase the employability of disadvantaged groups by upskilling and strengthening activation measures.	**Some Progress** Several measures are being implemented supporting disadvantaged groups to access the labour market, including training, supervised internships and incentives to employers to hire them after their training. Other measures encourage entrepreneurship among young people for starting their own business. Mediation services have been broadened and Job Integration Agreements (JIA) have been introduced during 2018 for long-term unemployed. Overall, however, participation in active labour market policies (ALMP) remains low and the training component of these policies could be strengthened. Further developing vocational education and training could improve the impact and sustainability of activation measures.
Improve the provision of quality inclusive mainstream education, particularly for Roma and other disadvantaged groups.	**Some Progress** Some Progress was made in improving the provision of quality inclusive mainstream education, but a significant amount of work is still needed. A few measures have been implemented such as the inter-institutional mechanism to identify out-of-school children and return them to school, support for students to overcome learning gaps, several measures aiming to improve digital skills, increasing teachers' salaries and retraining teachers, as well as reforming funding standards to allocate additional funding to disadvantaged schools and kindergartens. However, improvements in educational outcomes have not been recorded yet and efforts to improve the situation of students from the most vulnerable groups and Roma are lagging behind.
In line with the National Health Strategy and its action plan, improve access to health services, including by reducing out-of-pocket payments and addressing shortages of health professionals.	**Limited Progress** The implementation of the National Health Strategy action plan is considerably delayed. In 2018, some progress was achieved in improving access to disease prevention medicines and outpatient programmes. The 2014-2020 ERDF investment in a network of emergency health care, planned in the National Health Strategy, started as

Introduce a regular and transparent revision scheme for the minimum income and improve its coverage and adequacy.	late as end of 2018. **Limited Progress** While no regular and transparent revision mechanism has been proposed for the minimum income (MI) the number of supported persons has increased according to administrative data of the authorities. The minimum income remains too low to have an impact on the number of people living in poverty or on income inequality. In 2018 the guaranteed minimum income (GMI) was increased by 15% - from BGN 65 to 75 (EUR 5). However, the minimum income is still among the least adequate in the EU and significantly below the at-risk-of-poverty threshold (EUR 180 in 2018). Despite the measures that have been taken – social assistance for heating is being granted on the current place of residence, making it more flexible and accessible, the amount of the heating benefits for the next heating season is adjusted to the electricity prices, the mechanism for compensation of pensions' increase is being updated so that the pensioners who receive heating benefits could not drop out due to the pensions' increase – the coverage and adequacy of social benefits remain low and an objective mechanism for their regular updates is still lacking.
Europe 2020 (national targets and progress)	
Employment rate target: 76 %	71.3 % in 2017.
Early school leaving target: 11 %	12.7 % in 2017.
Tertiary education target: 36 %	32.8 % in 2017.
At risk of poverty target in numbers of persons: Decrease by 260 000 (baseline 2008: 1 632 000)	1 665 000 in 2017.
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, Bulgaria is expected to achieve its target. In 2020 Bulgaria's non-ETS emissions are expected to be 1.7% less than in 2005, which is an overachievement of the 2020 target by a margin of 21.7 percentage points. The increase in non-ETS greenhouse gas emissions between 2005 and 2017 was +17.9% according to

Non-ETS interim target([98]) for 2017: +17%	preliminary data, which underachieves the 2017 interim target by 0.9 percentage point.
2020 Renewable energy share target: 16 % in Gross Final Energy Consumption	Bulgaria is on track. The 2017 the share of renewable energy in gross final energy consumption was 18.7%, on par with the level registered in 2016 and well above the 2020 target of 16% of gross final energy consumption ([99]). The RES share of transport stabilised around 7.2% in 2017, broadly in line with the average growth rate required by Bulgaria to achieve the binding 10 % RES target in transport.
Energy efficiency **indicative national target**: 16.9 Mtoe in primary energy consumption (PEC) 8.6 Mtoe in final energy consumption (FEC)	Indicative national target not yet achieved. In 2017 PEC stood at 18.3 Mtoe, up from 17.7 Mtoe in 2016. In 2017 FEC stood at 9.89 Mtoe, up from 9.65 Mtoe in 2016.
R&D target: 1.5 % of GDP	0.75 % (2017) No progress towards the target: R&D intensity decreased from 0.78 % of GDP in 2016 to 0.75 % in 2017, and is one of the lowest in the EU. Business R&D activities were just 0.53% of GDP in 2017, despite a substantial improvement over a decade ago (0.13% of GDP in 2007). Large companies account for half of this spending with intra-group funding being their main sources of investment. In 2017 R&D intensity in Bulgaria was composed of 0.22 % public R&D intensity, 0.53% business R&D intensity.

[1] The following categories are used to assess progress in implementing the country-specific recommendations (CSRs):

([98]) The Effort Sharing Decision sets both overall national 2020 targets for Member States and annual interim targets for the period 2013-2020 to monitor progress across the EU, allow for corrective action and ultimately ensure that the EU attains its GHG emission target by 2020.

([99]) Renewable energy shares for 2015 are approximations and not official data, reflecting the available data (4.10.2016). See the Öko-Institut Report: Study on technical assistance in realisation of the 2016 report on renewable energy, http://ec.europa.eu/energy/en/studies

No progress: The Member State has not credibly announced nor adopted any measures to address the CSR. This category covers a number of typical situations to be interpreted on a case by case basis taking into account country-specific conditions. They include the following:

- no legal, administrative, or budgetary measures have been announced
- in the national reform programme,
- in any other official communication to the national Parliament/relevant parliamentary committees or the European Commission,
- publicly (e.g. in a press statement or on the government's website);
- no non-legislative acts have been presented by the governing or legislative body;
- the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures to be taken (unless the CSR explicitly asks for orientations or exploratory actions). However, it has not proposed any clearly-specified measure(s) to address the CSR.

Limited progress: The Member State has:

- announced certain measures but these address the CSR only to a limited extent; and/or
- presented legislative acts in the governing or legislative body but these have not been adopted yet and substantial further, non-legislative work is needed before the CSR is implemented;
- presented non-legislative acts, but has not followed these up with the implementation needed to address the CSR.

Some progress: The Member State has adopted measures

- that partly address the CSR; and/or
- that address the CSR, but a fair amount of work is still needed to fully address the CSR fully as only a few of the measures have been implemented. For instance, a measure or measures have been adopted by the national Parliament or by ministerial decision but no implementing decisions are in place.

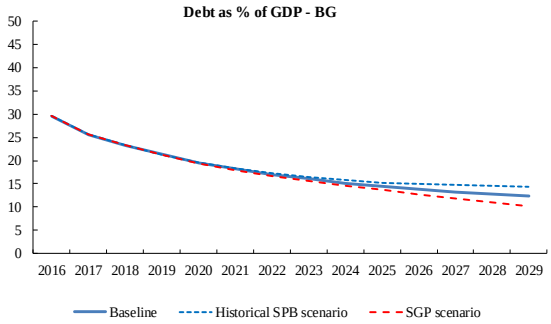
Substantial progress: The Member State has adopted measures that go a long way towards addressing the CSR and most of them have been implemented.

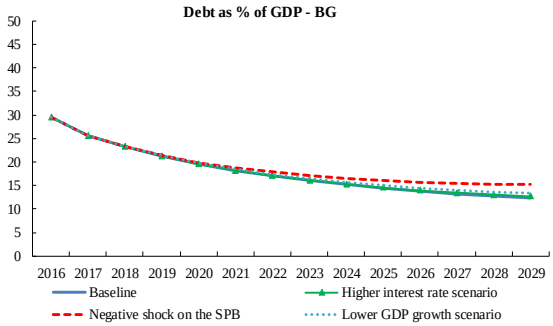
Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

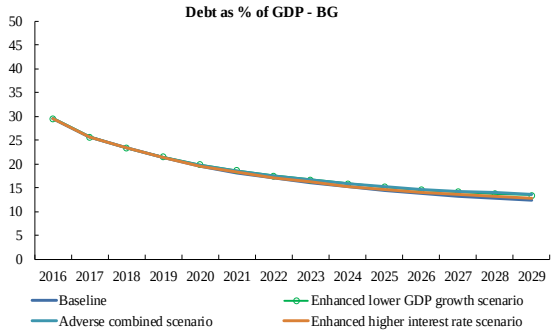
ANNEX B: COMMISSION DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

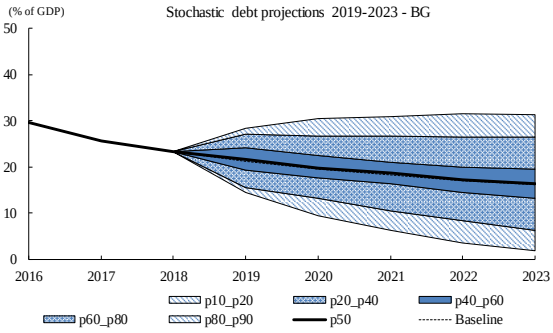
General Government debt projections under baseline, alternative scenarios and sensitivity tests

BG - Debt projections baseline scenario	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross debt ratio	**25.6**	**23.3**	**21.3**	**19.5**	**18.2**	**17.0**	**16.1**	**15.2**	**14.4**	**13.8**	**13.2**	**12.8**	**12.4**
Changes in the ratio (-1+2+3)	*-4.0*	*-2.3*	*-2.0*	*-1.8*	*-1.3*	*-1.2*	*-1.0*	*-0.9*	*-0.8*	*-0.6*	*-0.5*	*-0.4*	*-0.4*
of which													
(1) Primary balance (1.1+1.2+1.3)	**1.9**	**1.5**	**1.3**	**1.2**	**1.1**	**1.0**	**0.8**	**0.8**	**0.7**	**0.5**	**0.5**	**0.4**	**0.4**
(1.1) Structural primary balance *(1.1.1-1.1.2+1.1.3)*	***1.9***	***1.4***	***1.1***	***0.9***	***0.9***	***0.9***	***0.8***	***0.8***	***0.7***	***0.5***	***0.5***	***0.4***	***0.4***
(1.1.1) Structural primary balance (bef. CoA)	*1.9*	*1.4*	*1.1*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*
(1.1.2) Cost of ageing					*0.0*	*0.0*	*0.1*	*0.1*	*0.2*	*0.3*	*0.4*	*0.5*	*0.5*
(1.1.3) Others (taxes and property incomes)					*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
(1.2) Cyclical component	***0.0***	***0.1***	***0.2***	***0.3***	***0.2***	***0.1***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
(1.3) One-off and other temporary measures	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
(2) Snowball effect (2.1+2.2+2.3)	**-1.2**	**-0.8**	**-0.7**	**-0.6**	**-0.2**	**-0.2**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**0.0**	**0.0**
(2.1) Interest expenditure	*0.8*	*0.7*	*0.7*	*0.6*	*0.6*	*0.5*	*0.5*	*0.5*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*
(2.2) Growth effect	*-1.1*	*-0.9*	*-0.8*	*-0.7*	*-0.4*	*-0.3*	*-0.3*	*-0.3*	*-0.3*	*-0.2*	*-0.2*	*-0.2*	*-0.2*
(2.3) Inflation effect	*-1.0*	*-0.7*	*-0.6*	*-0.5*	*-0.4*	*-0.4*	*-0.3*	*-0.3*	*-0.3*	*-0.3*	*-0.3*	*-0.3*	*-0.3*
(3) Stock-flow adjustments	**-0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**









Short term	Medium term	S1	Debt sustainability analysis (detail)	Baseline	Historical SPB	Lower GDP growth	Higher interest rate	Negative shock on SPB	Stochastic projections	DSA	S2	Long term
LOW (S0 = 0.2)	LOW	LOW (S1 = -4.2)	Risk category	LOW	LOW	LOW	LOW	LOW	MEDIUM	LOW	LOW (S2 = 1.8)	LOW
			Debt level (2029)	12.4	14.4	13.3	12.7	15.2				
			Debt peak year	2018	2018	2018	2018	2018				
			Percentile rank	42.0%	45.0%							
			Probability debt higher						28.7%			
			Dif. between percentiles						29.6			

Note: For further information, see the European Commission Fiscal Sustainability Report (FSR) 2018.

[1] The first table presents the baseline no-fiscal policy change scenario projections. It shows the projected government debt dynamics and its decomposition between the primary balance, snowball effects and stock-flow adjustments. Snowball effects measure the net impact of the counteracting effects of interest rates, inflation, real GDP growth (and exchange rates in some countries). Stock-flow adjustments include differences in cash and accrual accounting, net accumulation of assets, as well as valuation and other residual effects.

[2] The charts present a series of sensitivity tests around the baseline scenario, as well as alternative policy scenarios, in particular: the historical structural primary balance (SPB) scenario (where the SPB is set at its historical average), the Stability and Growth Pact (SGP) scenario (where fiscal policy is assumed to evolve in line with the main provisions of the SGP), a higher interest rate scenario (+1 pp. compared to the baseline), a lower GDP growth scenario (-0.5 pp. compared to the baseline) and a negative shock on the SPB (calibrated on the basis of the forecasted change). An adverse combined scenario and enhanced sensitivity tests (on the interest rate and growth) are also included, as well as stochastic projections. Detailed information on the design of these projections can be found in the FSR 2018.

[3] The second table presents the overall fiscal risk classification over the short, medium and long-term.

a. For the short-term, the risk category (low/high) is based on the S0 indicator. S0 is an early-detection indicator of fiscal stress in the upcoming year, based on 25 fiscal and financial-competitiveness variables that have proven in the past to be leading indicators of fiscal stress. The critical threshold beyond which fiscal distress is signalled is 0.46.

b. For the medium-term, the risk category (low/medium/high) is based on the joint use of the S1 indicator and of the DSA results. The S1 indicator measures the fiscal adjustment required (cumulated over the 5 years following the forecast horizon and sustained thereafter) to bring the debt-to-GDP ratio to 60 % by 2033. The critical values used are 0 and 2.5 pps. of GDP. The DSA classification is based on the results of 5 deterministic scenarios (baseline, historical SPB, higher interest rate, lower GDP growth and negative shock on the SPB scenarios) and the stochastic projections. Different criteria are used such as the projected debt level, the debt path, the realism of fiscal assumptions, the probability of debt stabilisation, and the size of uncertainties.

c. For the long-term, the risk category (low/medium/high) is based on the joint use of the S2 indicator and the DSA results. The S2 indicator measures the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical values used are 2 and 6 pps. of GDP. The DSA results are used to further qualify the long-term risk classification, in particular in cases when debt vulnerabilities are identified (a medium / high DSA risk category).

ANNEX C: STANDARD TABLES

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

	2013	2014	2015	2016	2017	2018
Total assets of the banking sector (% of GDP)[1)]	113.3	110.6	107.3	105.7	103.2	102.4
Share of assets of the five largest banks (% of total assets)	49.9	55.0	57.6	58.0	56.5	-
Foreign ownership of banking system (% of total assets)[2)]	71.5	76.1	76.3	76.5	76.4	78.1
Financial soundness indicators:[2)]						
- non-performing loans (% of total loans)	-	16.0	14.5	12.8	10.2	9.2
- capital adequacy ratio (%)	17.0	21.5	21.6	21.5	21.8	20.8
- return on equity (%)[3)]	4.4	7.2	8.0	11.3	10.2	11.8
Bank loans to the private sector (year-on-year % change)[1)]	1.1	2.2	-0.2	3.4	7.8	9.5
Lending for house purchase (year-on-year % change)[1)]	-0.8	-1.7	-0.5	2.7	8.7	11.6
Loan to deposit ratio[2)]	-	82.7	73.4	72.4	72.6	72.7
Central Bank liquidity as % of liabilities[1)]	0.0	0.0	0.0	0.0	0.0	0.0
Private debt (% of GDP)	132.3	123.4	110.5	104.8	100.1	-
Gross external debt (% of GDP)[2)] - public	8.2	14.1	12.3	14.1	11.1	10.3
- private	66.1	65.3	54.0	48.0	45.2	42.6
Long-term interest rate spread versus Bund (basis points)*	190.3	218.4	199.6	218.2	128.5	49.3
Credit default swap spreads for sovereign securities (5-year)*	102.1	119.4	153.8	139.0	102.7	62.0

1) Latest data Q3 2018. Includes not only banks but all monetary financial institutions excluding central banks.
2) Latest data Q2 2018.
3) Quarterly values are annualised.
* Measured in basis points.
Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); European Central Bank (all other indicators).

Table C.2: **Headline Social Scoreboard indicators**

	2013	2014	2015	2016	2017	2018 [6]
Equal opportunities and access to the labour market						
Early leavers from education and training (% of population aged 18-24)	12.5	12.9	13.4	13.8	12.7	:
Gender employment gap (pps)	5.7	6.1	6.6	7.3	8.0	7.8
Income inequality, measured as quintile share ratio (S80/S20)	6.6	6.8	7.1	7.7	8.2	:
At-risk-of-poverty or social exclusion rate[1] (AROPE)	48.0	40.1	41.3	40.4	38.9	:
Young people neither in employment nor in education and training (% of population aged 15-24)	21.6	20.2	19.3	18.2	15.3	:
Dynamic labour markets and fair working conditions[†]						
Employment rate (20-64 years)	63.5	65.1	67.1	67.7	71.3	72.4
Unemployment rate[2] (15-74 years)	13.0	11.4	9.2	7.6	6.2	5.3
Long-term unemployment rate[3] (as % of active population)	7.4	6.9	5.6	4.5	3.4	3.1
Gross disposable income of households in real terms per capita[4] (Index 2008=100)	111.6	113.0	116.9	123.2	130.0	:
Annual net earnings of a full-time single worker without children earning an average wage (levels in PPS, three-year average)	7615	8164	8742	9329	:	:
Annual net earnings of a full-time single worker without children earning an average wage (percentage change, real terms, three-year average)	3.7	5.5	7.3	8.5	:	:
Public support / Social protection and inclusion						
Impact of social transfers (excluding pensions) on poverty reduction[5]	21.3	20.1	22.5	17.9	19.9	:
Children aged less than 3 years in formal childcare	11.0	11.2	9.0	12.5	9.4	:
Self-reported unmet need for medical care	8.9	5.6	4.7	2.8	2.1	:
Individuals who have basic or above basic overall digital skills (% of population aged 16-74)	:	:	31.0	26.0	29.0	:

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).
(2) 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.
(3) Long-term unemployed are people who have been unemployed for at least 12 months.
(4) Gross disposable household income is defined in unadjusted terms, according to the draft Joint Employment Report 2019.
(5) Reduction in percentage of the risk of poverty rate, due to social transfers (calculated comparing at-risk-of poverty rates before social transfers with those after transfers; pensions are not considered as social transfers in the calculation).
(6) Average of first three quarters of 2018 for the employment rate, long-term unemployment rate and gender employment gap. Data for unemployment rate is annual.
Source: Eurostat.

Table C.3: **Labour market and education indicators**

Labour market indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018** [4]
Activity rate (15-64)	68.4	69.0	69.3	68.7	71.3	71.6
Employment in current job by duration						
From 0 to 11 months	11.5	10.6	9.9	9.6	10.2	:
From 12 to 23 months	7.8	8.2	7.2	7.2	7.3	:
From 24 to 59 months	19.4	19.3	17.9	18.2	17.5	:
60 months or over	61.1	61.9	65.0	65.0	65.0	:
Employment growth* (% change from previous year)	-0.4	0.4	0.4	0.5	1.8	1.0
Employment rate of women (% of female population aged 20-64)	60.7	62.0	63.8	64.0	67.3	68.4
Employment rate of men (% of male population aged 20-64)	66.4	68.1	70.4	71.3	75.3	76.2
Employment rate of older workers* (% of population aged 55-64)	47.4	50.0	53.0	54.5	58.2	60.5
Part-time employment* (% of total employment, aged 15-64)	2.5	2.5	2.2	2.0	2.2	1.9
Fixed-term employment* (% of employees with a fixed term contract, aged 15-64)	5.6	5.3	4.4	4.1	4.4	4.2
Participation in activation labour market policies (per 100 persons wanting to work)	7.1	3.2	2.8	5.4	:	:
Transition rate from temporary to permanent employment (3-year average)	34.7	31.5	28.9	28.2	:	:
Youth unemployment rate (% active population aged 15-24)	28.4	23.8	21.6	17.2	12.9	13.3
Gender gap in part-time employment (aged 20-64)	1.0	0.5	0.5	0.5	0.3	0.4
Gender pay gap[1] (in undadjusted form)	14.1	14.2	15.4	14.4	13.6	:
Education and training indicators	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Adult participation in learning (% of people aged 25-64 participating in education and training)	2.0	2.1	2.0	2.2	2.3	:
Underachievement in education[2]	:	:	42.1	:	:	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	29.4	30.9	32.1	33.8	32.8	:
Variation in performance explained by students' socio-economic status[3]	:	:	16.4	:	:	:

* Non-scoreboard indicator

(1) Difference between the average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. It is defined as "unadjusted", as it does not correct for the distribution of individual characteristics (and thus gives an overall picture of gender inequalities in terms of pay). All employees working in firms with ten or more employees, without restrictions for age and hours worked, are included.

(2) PISA (OECD) results for low achievement in mathematics for 15 year-olds.

(3) Impact of socio-economic and cultural status on PISA (OECD) scores. Values for 2012 and 2015 refer respectively to mathematics and science.

(4) Average of first three quarters of 2018 for the activity rate, employment growth, employment rate, part-time employment, fixed-term employment. Data for youth unemployment rate is annual.

Source: Eurostat, OECD

Table C.4: **Social inclusion and health indicators**

	2012	2013	2014	2015	2016	2017
Expenditure on social protection benefits* (% of GDP)						
Sickness/healthcare	4.2	4.4	5.0	4.6	4.7	:
Disability	1.3	1.4	1.4	1.3	1.3	:
Old age and survivors	8.0	8.6	8.9	8.7	8.5	:
Family/children	1.7	1.8	1.9	1.9	1.8	:
Unemployment	0.6	0.5	0.5	0.5	0.5	:
Housing	0.0	0.0	0.0	0.0	0.0	:
Social exclusion n.e.c.	0.3	0.3	0.3	0.3	0.3	:
Total	16.1	17.0	17.9	17.3	17.0	:
of which: means-tested benefits	0.7	0.7	0.8	0.7	0.6	:
General government expenditure by function (% of GDP, COFOG)						
Social protection	12.4	13.5	13.4	13.3	12.7	:
Health	4.4	4.5	5.5	5.5	5.0	:
Education	3.3	3.7	4.1	4.0	3.4	:
Out-of-pocket expenditure on healthcare (% of total health expenditure)	47.7	47.2	45.8	47.7	48.0	:
Children at risk of poverty or social exclusion (% of people aged 0-17)*	52.3	51.5	45.2	43.7	45.6	41.6
At-risk-of-poverty rate[1] (% of total population)	21.2	21.0	21.8	22.0	22.9	23.4
In-work at-risk-of-poverty rate (% of persons employed)	7.4	7.2	9.2	7.7	11.4	9.9
Severe material deprivation rate[2] (% of total population)	44.1	43.0	33.1	34.2	31.9	30.0
Severe housing deprivation rate[3], by tenure status						
Owner, with mortgage or loan	13.6	6.5	11.8	16.0	14.2	15.6
Tenant, rent at market price	12.6	13.9	18.1	16.9	14.1	11.4
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	12.5	13.0	12.1	11.6	11.9	11.1
Poverty thresholds, expressed in national currency at constant prices*	2553	2549	2875	2941	2811	3246
Healthy life years (at the age of 65)						
Females	9.5	9.9	9.6	9.5	10.1	:
Males	8.7	8.7	8.7	8.7	9.2	:
Aggregate replacement ratio for pensions[5] (at the age of 65)	0.4	0.4	0.4	0.4	0.5	0.4
Connectivity dimension of the Digital Economy and Society Inedex (DESI)[6]	:	:	36.5	44.0	48.2	52.3
GINI coefficient before taxes and transfers*	47.0	47.7	49.7	50.2	53.0	53.8
GINI coefficient after taxes and transfers*	33.6	35.4	35.4	37.0	37.7	40.2

* Non-scoreboard indicator
(1) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.
(2) 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.
(3) Percentage of total population living in overcrowded dwellings and exhibiting housing deprivation.
(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) Ratio of the median individual gross pensions of people aged 65-74 relative to the median individual gross earnings of people aged 50-59.
(6) Fixed broadband take up (33%), mobile broadband take up (22%), speed (33%) and affordability (11%), from the Digital Scoreboard.
Source: Eurostat, OECD

Table C.5: **Product market performance and policy indicators**

Performance indicators	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Labour productivity per person[1] growth (t/t-1) in %						
Labour productivity growth in industry	3.12	3.22	3.42	1.63	5.11	2.92
Labour productivity growth in construction	0.34	5.05	-2.33	0.23	-2.93	4.24
Labour productivity growth in market services	1.20	0.46	1.12	2.74	2.04	3.13
Unit Labour Cost (ULC) index[2] growth (t/t-1) in %						
ULC growth in industry	2.61	3.41	3.74	1.45	4.33	6.85
ULC growth in construction	3.38	2.12	13.11	4.67	2.60	8.46
ULC growth in market services	9.39	4.33	5.65	4.28	5.32	6.40
Business environment	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Time needed to enforce contracts[3] (days)	564	564	564	564	564	564
Time needed to start a business[3] (days)	25.0	25.0	25.0	25.0	23.0	23.0
Outcome of applications by SMEs for bank loans[4]	:	0.86	0.97	0.54	0.49	0.25
Research and innovation	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
R&D intensity	0.60	0.64	0.79	0.96	0.78	0.75
General government expenditure on education as % of GDP	3.30	3.70	4.10	4.00	3.40	:
Employed people with tertiary education and/or people employed in science and technology as % of total employment	29	31	32	33	33	33
Population having completed tertiary education[5]	21	22	24	24	24	25
Young people with upper secondary education[6]	86	86	86	85	85	86
Trade balance of high technology products as % of GDP	-3.50	-2.18	-2.56	-2.52	-2.12	-1.94
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)[7], overall				:	:	1.57
OECD PMR[7], retail				:	:	0.20
OECD PMR[7], professional services				:	:	:
OECD PMR[7], network industries[8]				:	:	2.45

(1) Value added in constant prices divided by the number of persons employed.
(2) Compensation of employees in current prices divided by value added in constant prices.
(3) The methodologies, including the assumptions, for this indicator are shown in detail here: http://www.doingbusiness.org/methodology.
(4) 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 75% and above, two if received below 75%, three if refused or rejected and treated as missing values if the application is still pending or don't know.
(5) Percentage population aged 15-64 having completed tertiary education.
(6) Percentage population aged 20-24 having attained at least upper secondary education.
(7) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are

Table C.6: **Green growth**

Green growth performance		2012	2013	2014	2015	2016	2017
Macroeconomic							
Energy intensity	kgoe / €	0.47	0.43	0.45	0.45	0.42	0.42
Carbon intensity	kg / €	1.56	1.42	1.47	1.50	1.38	-
Resource intensity (reciprocal of resource productivity)	kg / €	3.30	3.17	3.40	3.71	3.22	3.30
Waste intensity	kg / €	4.14	-	4.50	-	2.81	-
Energy balance of trade	% GDP	-6.9	-6.2	-5.6	-3.8	-2.4	-3.1
Weighting of energy in HICP	%	13.7	15.0	14.0	13.1	10.7	11.5
Difference between energy price change and inflation	%	6.5	-2.9	-1.3	6.2	-0.7	2.2
Real unit of energy cost	% of value added	36.1	34.0	30.8	30.4	30.4	-
Ratio of environmental taxes to labour taxes	ratio	0.31	0.30	0.27	0.29	0.28	-
Environmental taxes	% GDP	2.7	2.8	2.7	2.9	2.8	2.7
Sectoral							
Industry energy intensity	kgoe / €	0.27	0.27	0.27	0.27	0.26	0.25
Real unit energy cost for manufacturing industry excl. refining	% of value added	46.2	50.6	44.4	43.8	43.3	-
Share of energy-intensive industries in the economy	% GDP	11.4	11.5	11.3	12.3	13.0	12.9
Electricity prices for medium-sized industrial users	€ / kWh	0.07	0.08	0.08	0.07	0.09	0.08
Gas prices for medium-sized industrial users	€ / kWh	0.04	0.04	0.03	0.03	0.02	0.02
Public R&D for energy	% GDP	0.00	0.00	0.00	0.00	0.00	0.00
Public R&D for environmental protection	% GDP	0.01	0.00	0.00	0.00	0.00	0.00
Municipal waste recycling rate	%	25.0	28.5	23.1	29.4	31.8	34.6
Share of GHG emissions covered by ETS*	%	60.7	59.5	60.0	60.8	56.6	-
Transport energy intensity	kgoe / €	1.68	1.43	1.48	1.50	1.51	1.63
Transport carbon intensity	kg / €	4.63	3.84	4.05	4.08	4.05	-
Security of energy supply							
Energy import dependency	%	36.9	38.5	35.3	36.5	38.6	39.5
Aggregated supplier concentration index	HHI	77.2	65.5	58.8	68.3	60.3	-
Diversification of energy mix	HHI	0.26	0.25	0.26	0.26	0.24	0.24

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2010 prices
Energy intensity: gross inland energy consumption (Europe 2020-2030)(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 % of total value added for the economy
Industry energy intensity: final energy use in industry (in kgoe) divided by gross value added of industry, including construction (in 2010 EUR)
Real unit energy costs for manufacturing industry excluding refining : real costs as % 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.
Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste
Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP
Proportion of GHG emissions covered by EU emissions trading system (ETS) (excluding aviation): based on GHG emissions (excl land use, land use change and forestry) as reported by Member States to the European Environment Agency.
Transport energy intensity: final energy use in transport sector including international aviation, (in kgoe) divided by transport industry gross value added (in 2010 EUR)
Transport carbon intensity: GHG emissions in transport sector divided by gross value added of the transport activities
Energy import dependency: net energy imports divided by gross inland energy consumption plus consumption of international maritime bunkers
Aggregated supplier concentration index: Herfindahl-Hirschman index for net imports of crude oil and NGL, natural gas and hard coal. Smaller values indicate larger diversification and hence lower risk.
Diversification of the energy mix: Herfindahl-Hirschman index of the main energy products in the gross inland consumption of energy
* European Commission and European Environment Agency
Source: European Commission and European Environment Agency (Share of GHG emissions covered by ETS); European Commission (Environmental taxes over labour taxes); Eurostat (all other indicators)

ANNEX D: INVESTMENT GUIDANCE ON COHESION POLICY FUNDING 2021-2027 FOR BULGARIA

Building on the Commission proposal for the next Multi-Annual Financial Framework for the period 2021-2027 of 2 May 2018 (COM (2018) 321), this Annex presents the preliminary Commission services views on priority investment areas and framework conditions for effective delivery for the 2021-2027 Cohesion Policy. These priority investment areas are derived from the broader context of investment bottlenecks, investment needs and regional disparities assessed in the report. This Annex provides the basis for a dialogue between Bulgaria and the Commission services in view of the programming of the cohesion policy funds (European Regional Development Fund, Cohesion Fund and European Social Fund Plus).

Policy Objective 1: A Smarter Europe – Innovative and smart industrial transformation

Bulgaria's weak innovation performance is not supporting productivity gains. Synergies with Horizon Europe including its widening instruments can help improve performance. High priority investment needs([100]) have therefore been identified to **enhance research and innovation capacities and the uptake of advanced technologies**, and in particular to:

- strengthen innovation performance and foster productivity growth by identifying smart specialisation areas on the basis of national and regional needs and potential;
- increase the number of innovative firms (introducing and developing innovations) in high tech and knowledge intensive sectors, in line with the smart specialisation strategy;
- increase the competitiveness and efficiency of the research system by putting emphasis on performance and by creating incentives for attracting qualified researchers (e.g. improving working conditions, international collaboration and mobility, cooperation with businesses);
- develop skills in universities and research institutions to increase the commercial viability and market relevance of their research projects and ability to participate in research consortia;
- support collaboration between research and businesses, technology transfer and commercialisation of research outcomes;
- promote business investment in research and innovation, intangible assets and entrepreneurial universities.

The business environment for small and medium-sized enterprises remains a challenge as Bulgaria is underperforming in the area of entrepreneurship with the lowest score in the EU. High priority investment needs have therefore been identified for **growth, competitiveness and skills development of small and medium-sized enterprises**, and in particular to:

- foster the creation of new firms as well as scale-ups, in particular through financial instruments and investments in intangibles and also through cooperation networks and consolidation of clusters, including coordination with other Danube Region States;
- encouraging the entrepreneurial ecosystem, in particular outside Sofia, and the sustained engagement of small and medium-sized enterprises in the Entrepreneurial Discovery Process;
- develop market-driven special Information and Communications Technology skills in small and medium-sized enterprises;
- develop entrepreneurship skills including by searching for synergies between governmental and private business initiatives for support of start-ups and entrepreneurship.

The number of digitalised enterprises in 2017 was among the lowest in the EU while the relative improvement of digital public services resulted in an increased number of e-government users. In addition to digital skills, cyber-security is an issue. Investment needs have therefore been identified to sustain the relative progress and **reap the benefits of digitalisation for citizens, companies and governments**, and

([100]) The intensity of needs is classified in three categories in a descending order – high priority needs, priority needs, needs.

in particular to:

- increase Information and Communications Technology uptake in small and medium-sized enterprises, including supporting infrastructures and services; all with a view to improving the number of enterprises reaching a high digital intensity;
- upscale and accelerate e-government, including the take-up of EU-wide interoperable services.

Policy Objective 2: A low carbon and greener Europe – Clean and fair energy transition, Green and blue investment, circular economy, climate adaptation and risk prevention

Bulgaria remains the most energy and greenhouse gas intensive economy in the EU. It has high levels of air pollution and landfilling rates for municipal waste. Its recycling rate is considerably lower than the EU average. High priority investment needs have therefore been identified to **promote energy efficiency measures**, **improve resource efficiency and waste management and promote the transition to a circular economy** and in particular to:

- support energy efficiency measures having as primary task to reduce air pollution;
- Improve energy efficiency in industrial small and medium sized enterprises, including their premises, installations and processes;
- improve energy efficiency in buildings with a primary focus on public buildings;
- shift towards the highest steps of the waste management hierarchy, including infrastructure: waste prevention, reuse and recycling and expanding separate collection system;
- increase resource efficiency and promote the circular economy including the development of alternatives to raw materials and the use of recycled materials as raw materials;
- improve the knowledge base on the circular economy, waste monitoring and material streams;
- raise awareness of sustainable consumption practices and behaviour, as well as accompanying measures with a focus on economic instruments.

Bulgaria has very low connection and treatment rates for urban waste water. High priority investment needs have therefore been identified to **promote sustainable water management**, and in particular to:

- improve collection and treatment of waste water starting with agglomerations above 10000 p.e.

Bulgaria's response-focused emergency management system lacks investments in risk prevention, air quality and habitat restoration despite its vulnerability to climate change effects. Cross-border and transnational cooperation can be reinforced. Priority investment needs have therefore been identified to **promote climate change adaptation, risk prevention and disaster resilience**, as well as **enhance biodiversity, green infrastructure and reduce pollution** and in particular to:

- improve air quality e.g. through green infrastructure in urban and rural environments and environment friendly production processes;
- support biodiversity including the preparation of management plans, ecosystem restoration projects, actions to improve the knowledge base and the exchange of experiences between stakeholders from different Member States;
- address risks from the national risks assessment, such as actions to improve the knowledge base, prevention strategies, awareness-raising, green infrastructure for flood protection, disaster-proofing of buildings and networks, etc. and support preparedness measures, preferably in the context of the European Civil Protection pool of response assets;
- address issues at sea basin level including through coordinated and cooperative actions across borders in the Black Sea area;
- cooperate in international programmes for the Danube region and the Black Sea.

Policy Objective 3: A more connected Europe – Mobility and regional Information and Communications Technology connectivity
At present the Trans-European Transport Network corridor in Bulgaria is still incomplete for rail and road especially in North Bulgaria. For rail there is a need for further development and road sections require Intelligent Transport System improvement. High priority investment needs have therefore been identified to develop a **sustainable, climate resilient, intelligent, secure and intermodal Trans-European Transport Network**, and in particular to: • develop railways and roads on the core and comprehensive Trans-European Transport Network networks including cross-border sections to address bottlenecks and missing links of the Trans-European Transport Network, to connect with neighbouring networks, and also bringing national sections of the network to meet EU standards; • develop Intelligent Transport and Traffic System, for efficient and optimised infrastructure use, including for electronic tolling systems; • improve navigability on the Danube River, deploy river information services and environmental protection measures along the corridor in cooperation with Danube region Member States.
Rail connections to comprehensive network lines and development of intermodal terminals with road and rail links to the Trans-European Transport Network core network are essential for safer passenger and cargo transport with reduced emissions and pollution. High priority investment needs have therefore been identified to develop **sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to Trans-European Transport Network and cross-border mobility**, and in particular to: • develop multimodality and intermodal terminals improving connectivity of different sustainable transport modes; • reduce the current negative externalities of transport (congestion, emissions, etc.) and improve access to Trans-European Transport Network networks where positive impact on regional development can be demonstrated; • address safety (in particular the necessary upgrades and control measures to reduce the death rate in road accidents), energy efficiency, uptake of clean fuels and other environmental issues across all transport modes; • improve cross-border connectivity by realising additional transport connections across the Danube, either by constructing new bridges or improving ferry connections.
The need for more sustainable urban transport and high dependency on cars is an issue in most major cities and their surroundings, calling for Sustainable Urban Mobility Plans. Priority investment needs have therefore been identified to **promote sustainable multimodal urban mobility**, and in particular to: • develop sustainable multimodal urban transport systems based on sustainable urban mobility plans (preferably part of integrated territorial development strategies) to reduce dependency on cars and enable shift towards cleaner public transport and active modes of mobility; • support sustainable and accessible urban and peri-urban transport and increasing the share of renewables in transport.
The Information and Communications Technology sector has insufficiencies in the broadband strategy development. Investment needs have therefore been identified to **enhance digital connectivity**, and in particular to: • support national broadband strategies; • increase the capacity of programme authorities and implementing bodies in the sector and take

measures to reduce the cost of deploying high speed electronic communication networks (e.g. broadband infrastructure, demand/investment mapping).
Policy Objective 4: A more social Europe – Implementing the European Pillar of Social Rights
Shortages and skills gaps in the labour market are increasing in a context of regional disparities, low participation in activation measures and difficulties of disadvantaged groups to enter the labour market. High priority investment needs have therefore been identified **to improve access to employment, anticipate skills needs and support labour market transitions and mobility,** and in particular to: • further improve the design of and participation in active labour market policies with focus on individualised and integrated support including for inactive persons; • support targeted upskilling and re-skilling opportunities, traineeships, apprenticeships; • finalise the modernisation of the Employment Agency and ensure adequate forecasting of future labour market needs; • develop policies and actions which support internal labour mobility, self-employment and social entrepreneurship; promote longer active lives and lifelong career guidance.
Education and training outcomes are still not sufficiently aligned to labour market needs; the acquisition of basic and digital skills is low and early school leaving remains a challenge. High priority investment needs have therefore been identified **to improve the quality, effectiveness and labour market relevance of education and training, and to promote equal access to inclusive education and lifelong learning,** and in particular to: • improve inclusive, accessible and quality early childhood education and care, including relevant infrastructure and equipment; • prevent early school leaving with a targeted approach and promote flexible second chance programmes; • develop quality inclusive school education, including investment in out-of-school infrastructure and equipment; ensure attainment of basic and digital skills and foster inclusiveness in education and training; • support teachers' and trainers' professional development and promote innovative teaching methods and content to best support disadvantaged students; • enhance attractiveness, quality and relevance of vocational education and training programmes and promote participation in adult learning, including investment in infrastructure and equipment; • improve quality and labour market relevance of higher education, including joint research actions and traineeships in companies.
High levels of poverty and inequalities remain serious challenges while active inclusion measures are limited. Disparities in access to social services, healthcare and long-term care persist. High priority investment needs have therefore been identified **to foster active inclusion, promote socio-economic integration of vulnerable groups including Roma community, enhance access to quality services and address material deprivation,** and in particular to: • develop active inclusion measures to improve employability of the vulnerable groups through integrated support; • improve access of vulnerable groups including Roma to targeted active inclusion support and mainstream services and develop measures to overcome prejudice and housing discrimination; • develop social housing for people at risk at poverty or social exclusion; • increase quality and availability of integrated social services through individual needs' assessment;

• support deinstitutionalisation for children and adults and the provision of community-based, home-based and long-term care services, including relevant infrastructure and equipment; • increase access to health services, in particular primary care, including through infrastructure and digital health solutions; develop health promotion and prevention measures for vulnerable groups; support the re-skilling and upskilling of social and health-care workers and their territorial mobility; • address material deprivation through food aid and basic material assistance to the most deprived.
Policy Objective 5 – A Europe closer to citizens by fostering the sustainable and integrated development of urban, rural and coastal areas and local initiatives
The matrix of the regional disparities in Bulgaria is complex as all regions face a multitude of issues with a limited number of major cities presenting the potential of being local economic drivers. High priority investment needs have therefore been identified to **foster the integrated socio-economic development in those major urban areas**, and in particular to: • reduce inequalities between regions by developing economic activity poles, also outside the capital region and creating the necessary linkages with the surrounding areas. More specifically, investments in 7 leading economic centres based on integrated urban development strategies (to be defined by the Member State/regional and local bodies, through the relevant territorial development mechanisms) and administrative capacity necessary for the effective administration and implementation of the Funds.
Smaller cities and surrounding territories face challenges similar to rural areas (e.g. access to labour market, education, healthcare and other social services). Their capacity to retain or attract people is very much dependent on their connectivity among themselves and to major centres. High priority investment needs have therefore been identified to **foster the integrated socio-economic local development, including for rural areas also through community-led local development**, and in particular to: • reduce urban-rural divide by supporting functional areas, including those affected by the transition from the carbon-intensive industry, covering smaller economic centres and their linkages to the major economic activity poles based on integrated territorial development strategies (to be defined by the Member State/regional and local bodies, through the relevant territorial development mechanisms) and proper administrative capacity necessary for the effective administration and implementation of the Funds for authorities and grass-root organisations; • address access to education, employment, health and social vulnerability issues in the most deprived regions (e.g. addressing the needs of elderly people in rural areas, innovative approaches taking into account the diversity of the population).
Factors for effective delivery of Cohesion policy
• additional efforts are needed to increase the administrative capacity necessary for the effective administration and implementation of the Funds; • development and implementation of a roadmap on strengthening administrative capacity, based on the pilot action on frontloading administrative capacity building; • strengthened capacity of authorities to deliver policies and strategies that could be the basis for the implementation of European Structural and Cohesion Funds and improved coordination and information exchange between administrations for a better and integrated service delivery; • strengthened capacity of authorities for improved project implementation and service delivery and ensured stability in the management of managing authorities; • strengthened capacity of local authorities to implement integrated territorial development

strategies throughout the entire process;

- comprehensive simplification of the procedures in implementation of the EU funds, eliminating excessive burden for applicants and beneficiaries;
- strengthened capacity of beneficiaries, stakeholders, social partners, civil society and other bodies to prepare and implement high quality projects and to shape policy through public consultation;
- improved public procurement performance, in particular through improved efficiency and administrative capacity necessary for the effective administration and implementation of the Funds;
- broader use of financial instruments and/or contributions to a Bulgarian compartment under InvestEU for revenue-generating and cost-saving activities;
- improved and more efficient measures to prevent and address conflict of interest, fraud and corruption.

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