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In-depth review for BULGARIA

in accordance with Article 5 of Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances

Accompanying the document

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT AND THE COUNCIL AND TO THE EUROGROUP**

Results of in-depth reviews under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances

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EXECUTIVE SUMMARY AND CONCLUSIONS

In May 2012, the Commission concluded that Bulgaria was experiencing macroeconomic imbalances, in particular as regards developments related to external indebtedness, corporate sector deleveraging and the labour market adjustment process. In the Alert Mechanism Report (AMR) published on 28 November 2012, the Commission found it useful, also taking into account the identification of an imbalance in May, to examine further the persistence of imbalances or their unwinding. To this end, this In-Depth Review (IDR) takes a broad view of the Bulgarian economy in line with the scope of the surveillance under the Macroeconomic Imbalance Procedure (MIP). The main observations and findings from this analysis are:

- **Bulgaria's external position remains highly negative, although recent developments go in the right direction.** The external indebtedness imbalance seems to be unwinding since 2010. Debt repayments and nominal economic growth have reduced indebtedness as a share of GDP. Expectations of future economic growth and current account developments suggest a gradual improvement of the country's net international investment position.
- **The current account adjustment has been driven by export market share gains, but risks remain.** The current account has remained broadly balanced over the last three years. The excessive deficits observed during the economic boom years are not expected to return to the same extent as the economy recovers. The excessive current account deficits in the pre-crisis years were facilitated by ample capital inflows that were often linked to foreign investment in real estate. A replication of such a growth pattern in the future would lead to renewed pressure on the current account. While a repeat of this scenario cannot be excluded, the probability seems low.
- **Notwithstanding export market share gains, concerns over losses in cost-competitiveness remain.** Bulgaria's external competitiveness was supported by the sustained gains in export market shares, except over the 2009-2010 crisis period. Non-cost factors, including quality improvements made by export-oriented industries, have been identified as the main contributor to market share gains. Nevertheless, unit labour cost (ULC) growth, while having come down, remains one of the fastest in the EU. This is likely to weigh on competitiveness, thus compromising export performance.
- **While the private sector is clearly deleveraging, corporate debt remains very high and still a cause for concern.** Debt of non-financial corporations has been reduced over 2010-2011 but remains very high as a share of GDP. In addition, a significant build-up of other accounts payable (not part of the debt definition), such as trade credit, rent and arrears on the payment for goods and services, poses a threat to the overall development of the non-financial corporate sector. Continuously rising non-performing loans of corporates also testify to the on-going difficulties faced by the private sector.
- **Financial sector stability has been preserved, but profitability remains very low and very weak credit growth may adversely affect growth and future output.** The banking sector has proved resilient to the deterioration in the economic situation following the global economic crisis. Banking sector stability is supported by prudent impairment provisioning, reflecting strict supervisory standards, and sufficient capital

buffers. High provisioning has, however, depressed banking-sector profitability and very low credit demand has left banks with excess liquidity on their balance sheets. Credit growth is unlikely to resume soon, given the still highly-leveraged private sector. Depressed domestic credit growth risks compromising near-term growth prospects.

- **The labour market has been hit disproportionately hard by the crisis.** In response to the economic downturn, companies overwhelmingly opted for shedding labour rather than reducing wages. This caused Bulgaria to experience one of the largest drops in employment in the EU. The unemployment rate reached 12% in 2012 and the share of inactive population has increased. Unemployment is concentrated in vulnerable groups like the low-skilled and the young and the share of long-term unemployed has increased.
- **Skills mismatches and labour supply shortages in some sectors are impeding economic growth.** A concerted effort, including labour market and regional policy measures as well as educational reform, is needed to alleviate the situation. Moreover, the continued increases in sectoral and occupational minimum social-security thresholds aimed at reducing the share of grey economy and raising government revenue have some adverse side-effects on certain segments of the labour market. As those thresholds are set very close to the average wage for certain occupations, they might inadvertently price out workers in some low-skilled occupations and less developed regions. Additionally, they impose a higher effective social tax rate for those employees whose wage is below the threshold.

The IDR also discusses the policy challenges stemming from these developments and possible policy responses. A number of elements can be considered:

- Concerning Bulgaria's high external indebtedness, efforts aimed at attracting capital in productive sectors and improved EU funds absorption are among possible measures to improve growth prospects and address the challenge of achieving a sustainable level of external indebtedness.
- Concerning the challenge of reducing non-financial corporate sector indebtedness, late payments and the uncertainty thereby created among economic agents may need to be examined more closely. Streamlining the business insolvency framework through in- and out-of-court settlement procedures and improving the efficiency of the judiciary can reduce existing risks and deleveraging pressures.
- The strong adverse effects from the crisis are still felt in Bulgaria's labour market, as evidenced by the rising unemployment and job losses, especially in the low-skilled segment. Furthermore, skills mismatches appear to have led to labour shortages in some sectors, thus confirming the increasingly structural nature of the unemployment in the country. A comprehensive package of measures could be discussed to tackle this significant challenge that threatens to impede future economic growth.

1. INTRODUCTION

On 28 November 2012, the European Commission presented its second Alert Mechanism Report (AMR), prepared in accordance with Article 3 of Regulation (EU) No. 1176/2011 on the prevention and correction of macroeconomic imbalances. The AMR serves as an initial screening device helping to identify Member States that warrant further in depth analysis to determine whether imbalances exist or risk emerging. According to Article 5 of Regulation No 1176/2011, these country-specific “in-depth reviews” (IDR) should examine the nature, origin and severity of macroeconomic developments in the Member State concerned, which constitute, or could lead to, imbalances. On the basis of this analysis, the Commission will establish whether it considers that an imbalance exists and what type of follow-up it will recommend to the Council.

This is the second IDR for Bulgaria. The previous IDR, published on 30 May 2012 led the Commission to conclude that Bulgaria was experiencing macroeconomic imbalances, in particular as regards developments related to external indebtedness, corporate sector deleveraging and the labour market adjustment process. Overall, in the AMR the Commission found it useful, also taking into account the identification of an imbalance in May, to examine further the persistence of imbalances or their unwinding. To this end this IDR takes a broad view of the Bulgarian economy in line with the scope of the surveillance under the Macroeconomic Imbalance Procedure (MIP).

Against this background, Section 2 of this in-depth review looks more in detail into these developments covering both the external and internal dimensions, followed by a specific focus on external indebtedness, private sector debt and labour market challenges in Section 3. Section 4 discusses policy considerations.

2. MACROECONOMIC SITUATION AND POTENTIAL IMBALANCES

Both internal and external imbalances had built up in the Bulgarian economy in the pre-crisis period, especially during the economic boom from 2006-2008 when GDP growth averaged 6.5% in a catching-up context. Bulgaria's EU accession in 2007 contributed to positive confidence developments and an exceptionally strong flow of foreign investment in the economy. The capital inflows were mirrored by a dramatic rise in external indebtedness, private sector credit and a soaring current account deficit. Private sector indebtedness increased rapidly to levels above the indicative scoreboard threshold, mainly explained by increases in corporate debt, while household debt remains limited. Rising budget revenues led to surpluses, allowing the build-up of a fiscal buffer and keeping public debt at a low level at the same time. As a reflection of economic and labour market overheating during 2007-2008, private consumption, inflation, real estate prices and construction also soared. The tight labour market drove exceptionally rapid growth in wages, starting from a low level and leading to strong rises in unit labour costs (ULC).

The imbalances have been unwinding during and after the global economic crisis. The Bulgarian economy was strongly affected by the crisis in 2008/09. The recovery has been slow, reflecting not only global economic headwinds, but also the deleveraging process following a markedly strong economic boom and a sudden stop of capital inflows. External indebtedness has been reduced mainly due to private sector debt repayments and the growth in nominal GDP after the crisis. The current account deficit has corrected swiftly and has

remained broadly balanced over 2010-2012. The improvement has not come only from reduced imports, as capital inflows have practically halted, but also from a strong export performance. Both external indebtedness and private sector debt indicators have registered stable improvements. The adjustment on the labour market has taken place through strong cuts in employment but at the same time continued growth in average wages, implying that certain segments of the labour market were hit more severely than others, possibly pointing to some structural issues. ULC growth has slowed considerably in the economic adjustment phase and does not appear harmful to external competitiveness at the moment; nevertheless, future wage growth should be supported by labour productivity gains. Rising unemployment remains a concern and points to structural problems that pose a serious risk of locking the economy on a low growth path.

The identified macroeconomic imbalances are likely to persist over the forecast period.

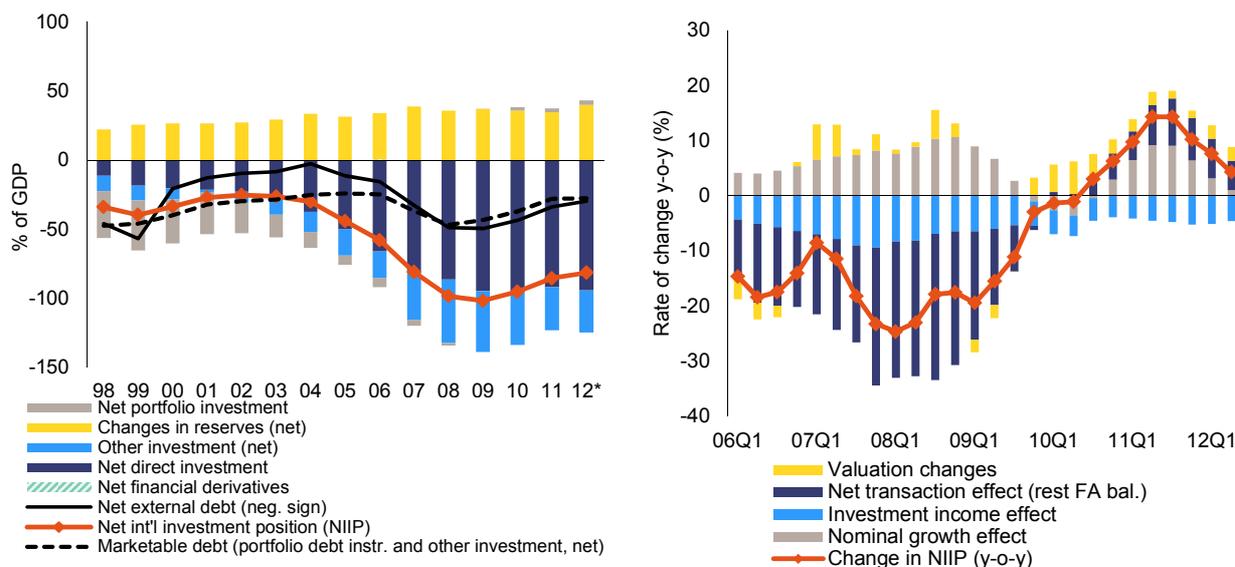
On the external side, indebtedness is expected to increase slightly. The current account is expected to register a deficit of 2% of GDP by the end of 2014, with net borrowing at 0.4% of GDP. The trade balance is seen to remain negative based on expected higher imports growth. Some external competitiveness concerns remain as unit labour cost growth is forecast to continue relatively rapidly. Unemployment should stabilise at the current high level and measures to reduce it should be the focus of policymakers. Corporate debt is seen to continue to weigh on credit growth and ultimately on economic output, as some sectors are still recovering from the crisis.

2.1. External indebtedness

The net international investment position (NIIP) remains strongly negative but has improved over 2010-2011. A large build-up of foreign-owned assets in the country, which started in 2005 and was especially strong over 2006-2008, is reflected in a strongly negative NIIP and a high foreign debt stock¹ (see Graphs 1 and 4). However, the NIIP has improved by 12% in nominal terms between the peak in 2009Q2 and 2012Q2. As a percentage of GDP, there is an improvement from -102% of GDP in 2009 to -86% in 2011 due to a combination of the nominal growth effect, the repayment flow and valuation changes.

Graph 1: International investment position, stocks **Graph 2: International investment position, flows (including valuation effects)**

¹ Both the NIIP and the foreign debt stock describe external indebtedness but from different conceptual viewpoints.

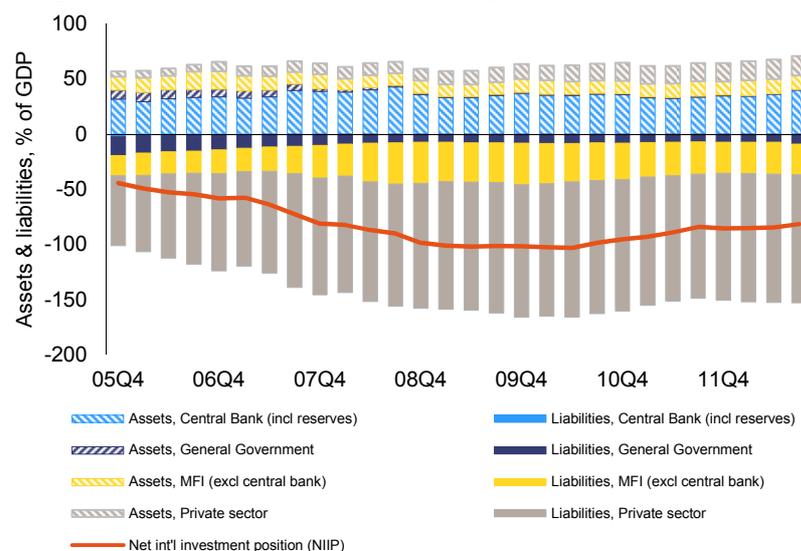


Source: Commission services

The deleveraging is largely explained by decreasing net external debt (NED) – that part of external liabilities that requires the payment of principal and interest (see Graph 1). NED has been reduced by almost 25% in nominal terms and by 15 pps. as a share of GDP between 2008 and 2011. The country's large FDI stock has proven more resilient and remained largely intact.

The reduction of net indebtedness comes from both financial institutions and the non-financial private sector. The banking sector has managed to both reduce external liabilities and increase its foreign assets, while the rest of the private sector benefits mostly from a continued increase in assets from a very low base. In the meantime, the government's prudent fiscal policy throughout the crisis has kept government debt low. Central bank reserves remained mostly stable, although somewhat lower than their 2008 peak.

Graph 3: International investment position, by sector



Source: Commission services

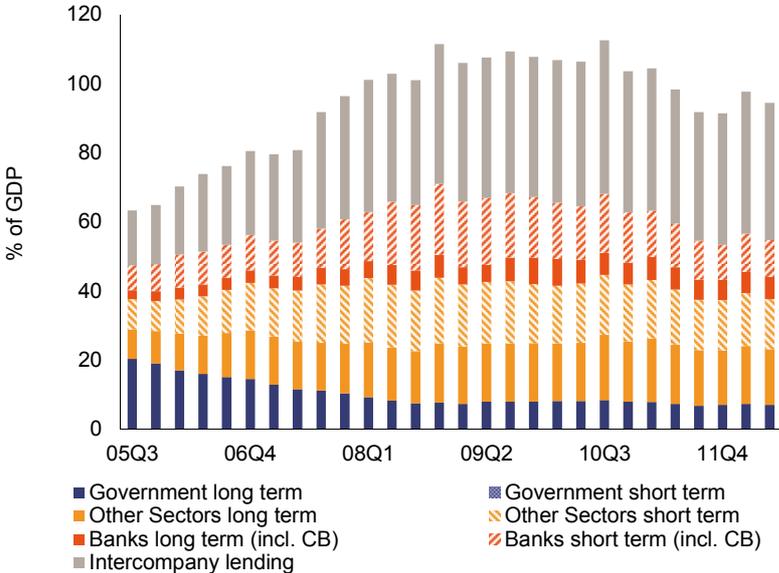
The NIIP continued to improve in 2012, albeit at a slower pace, but will certainly continue to exceed the indicative scoreboard threshold (-35%) over the coming years.

The future evolution of the NIIP will depend on the strength and composition of economic growth. Stronger growth would allow the country to grow out of its external indebtedness. The composition of growth also matters. During the boom years, growth was dominated by domestic demand and Bulgaria was running large current account (CA) deficits that increased the economy's dependence on foreign financing. A similar future growth pattern would once again negatively affect the country's external position. Keeping in mind that the indicator is a stock variable, it is likely to remain beyond the indicative threshold for years to come. The development of NIIP is discussed in more detail later on.

A significant part of Bulgaria's external indebtedness stems from FDI, also in the form of foreign intercompany lending,² i.e. sources that are less dependent on financial market conditions and risks. The net FDI stock accounted for close to 86% of GDP at the end of 2011, substantially higher than in other new Member States (see Graph 5). Cross-border intercompany lending stands at around 40% of GDP, among the highest levels in the EU. Nominal gross external debt has decreased since the end of 2008 largely due to decreasing short-term debt of the banking sector. The trend is due to the shift of funding of financial institutions towards the domestic market.

Bulgaria's large FDI stock decreases the risk of 'hot money' capital outflows, associated with portfolio investment and third-party loans. Most of the country's external liabilities have been accumulated during the boom years through parent-company equity investment and lending. During the crisis, this has reduced spill-over effects to the financial sector and helped preserve its resilience (Lisicky and Maleček, 2012). Given the composition of investor countries, it is likely that part of FDI has in fact a domestic origin but is channelled through foreign companies for administrative or financial reasons, further reducing the country's genuinely external exposure.

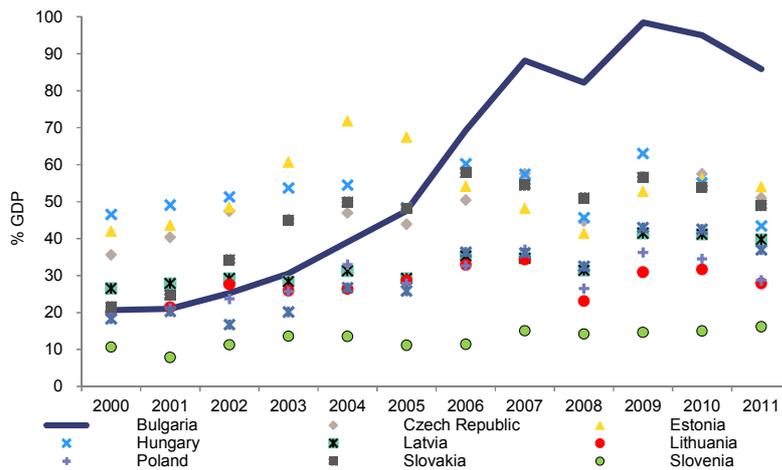
Graph 4: Foreign debt structure



Source: World Bank

Graph 5: Net FDI stocks, comparison with selected Member States

² Intercompany foreign lending is statistically part of FDI.

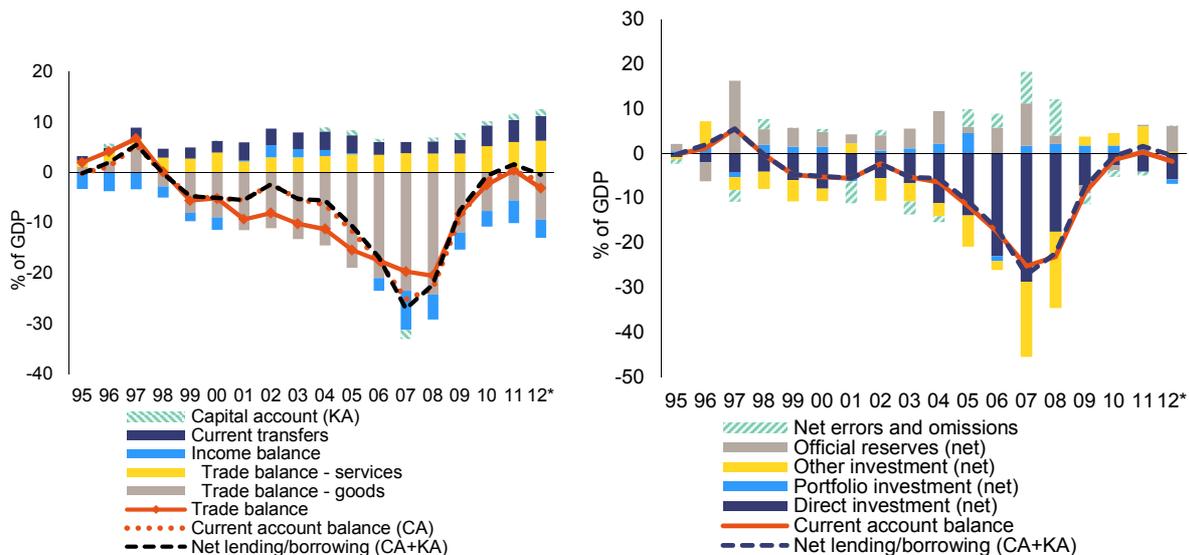


Source: United Nations

FDI inflows seem to have stabilized at a low level. The foreign direct investment inflows have been pro-cyclical and peaked at around 29% of GDP in 2007, but dried up considerably during the global economic crisis. In both 2010 and 2011, the inflow amounted to some 5% of GDP, with even lower results expected for 2012. Most FDI inflows come from EU Member States. However a slight shift is observed in 2012, when Russia and Switzerland also had significant contributions. The largest outflows were towards Germany and Greece, mainly linked to the energy sector and loan repayments to parent companies.

The current account has stabilised following the large swings over the past decade. Bulgaria ran moderate current account (CA) deficits prior to 2005, reflecting a typical economic catching-up process requiring a higher investment rate financed through capital inflows. The sharp deterioration in the balance over 2005-2009 moved it well-beyond the scoreboard threshold (-4% of GDP). Following a swift improvement of the trade balance and increasing current transfer inflows, the CA adjusted quickly and remained broadly balanced over the 2010-2012 period (see Graph 6). The earlier deficit was largely financed by exceptionally strong FDI inflows that follow closely the trade deficit in goods. In 2007-2008, other capital inflows (mainly foreign lending) also contributed strongly to the deficit, indicating possible speculative (portfolio and real estate) investment showing up in an asset price bubble. The crisis rapidly corrected the deficit, with adjustment coming from both reduced imports and sustained growth in exports. The value of exports increased by about 27% from 2008 to 2012, although it partly also reflects favourable global price trends for Bulgaria's commodity-rich exports. Bulgaria has overall shown strong gains in global export market shares.

Graph 6: Current account composition Graph 7: Current account financing



Source: Commission services

If sustained, the currently stable CA balance would continue to reduce foreign indebtedness. A balanced or slightly negative current account, which is expected to persist in the coming years according to the Commission's winter 2013 forecast extending to 2014, appears sufficient for a gradual reduction in external indebtedness as a share of GDP, given the medium- to long-run growth prospects of the Bulgarian economy. Also, updated estimates suggest that the Bulgarian REER is currently not overvalued.³ Future deleveraging is discussed in more detail in Section 3.1.

The current account adjustment has been very steep as the facilitating capital flows dried up. It seems that the very substantial foreign capital inflows into Bulgaria up to 2008 not only financed the large and growing current account deficits, but were actually driving them to a large extent. The current account deficit peaked during exceptional economic times, characterised by a booming world economy and financial market deepening together with positive confidence effects following Bulgarian EU accession in 2007 and an abundance of profitable investment opportunities and incentives for consumption smoothing in a catching-up economy. The current economic context is characterised by higher degrees of risk perception and risk aversion. This is likely to lead to more cautious investment decisions and related modest capital inflows. Thus, the current account adjustment appears to have been of a structural nature, following a one-off large influx of foreign investment linked to Bulgaria's integration in world markets, which was halted abruptly by the financial crisis.

The cyclical component in the adjustment might become more apparent with economic recovery. Once the economy returns to its normal catching-up dynamic, the current account gap is likely to open up again but to remain below the exceptional levels observed over 2005-2008 (see Graph 8). A good understanding of the drivers of the deficit is important to determine the best policy response. During the boom years, the current account appears to

³ The concept of a fundamental equilibrium exchange rate describes the exchange rate that would prevail if a country's business-cycle-adjusted current account balance were to match its 'current account norm', i.e. the 'average' current account balance that would prevail in a country with similar structural characteristics. Deviations from the current account norm may be translated into the deviation of the REER from its equilibrium via empirically-derived semi-elasticities. REER overvaluation thus describes the extent to which the REER would have to depreciate for the current account balance to reach its corresponding current account norm. For details on the methodology, see Salto and Turrini (2010).

have had a strong link with the real-estate sector, which has been volatile. For the convergence process to continue, foreign capital inflows should largely be in capital goods and productive FDI in order to boost future GDP growth and export capacity. A massive return of real-estate related investments, which were an important driver of capital inflows and credit growth during the boom, would be a cause for concern. A future recovery in the labour market could give a boost to domestic demand, thereby putting further pressure on the current account through increased imports. Renewed increases in unit labour costs, resulting from a tightened labour market, could weigh on the country's export performance, thus increasing the cyclical component of current account adjustment.

Graph 8: Current account and output gap



Source: Commission services

2.2. Private sector indebtedness

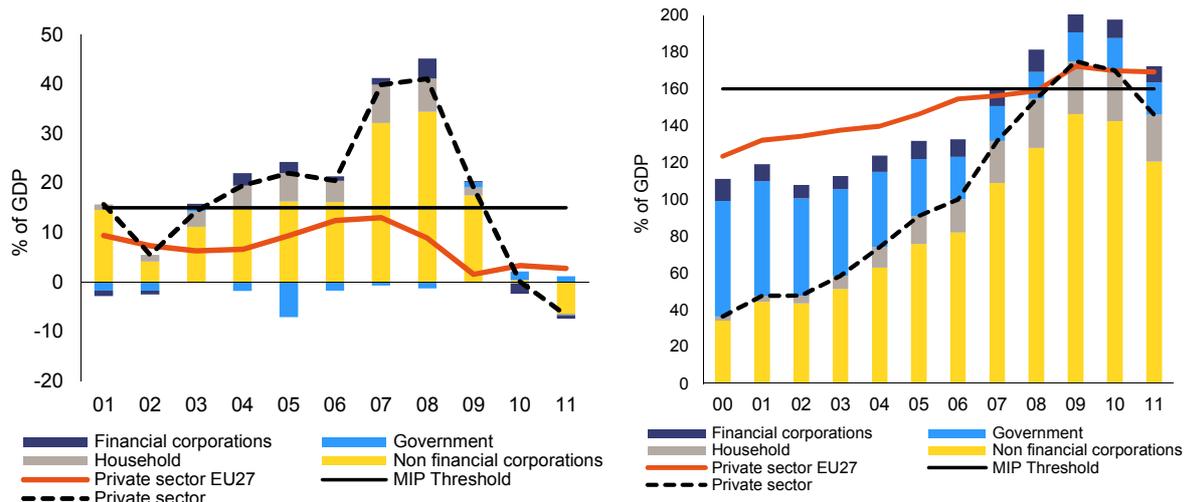
Following a large accumulation of liabilities before the crisis hit, the private sector has been deleveraging over the last couple of years. During the boom years, the Bulgarian private sector accumulated significant liabilities, exceeding the levels in all EU-10⁴ Member States, except Hungary. Debt as a share of GDP peaked in 2009 for both households and corporates but has since been trending downwards largely on account of nominal growth and some repayments. The government has served as a stabilizer for the economy, running surpluses during the boom and modest deficits during the crisis. Private sector debt is concentrated in the non-financial corporate sector, while household debt is relatively low.

Household indebtedness is at the second-lowest level in the EU, at 25.5% of GDP in 2011 and down from 28.7% in 2009. Nevertheless, households contributed to the increase in private sector indebtedness over 2001-2009 by some 22 pps. Credit growth has been slightly negative since then, with a declining stock of consumer loans and decelerating growth in mortgages. Given the low debt level, the interest burden on the household budget is below the EU average. Over time, the interest burden may increase as households' propensity to take on more debt increases with economic recovery and income convergence. However, at present, the risk of overleveraging does not appear significant.

Graph 9: Credit growth

Graph 10: Credit stocks

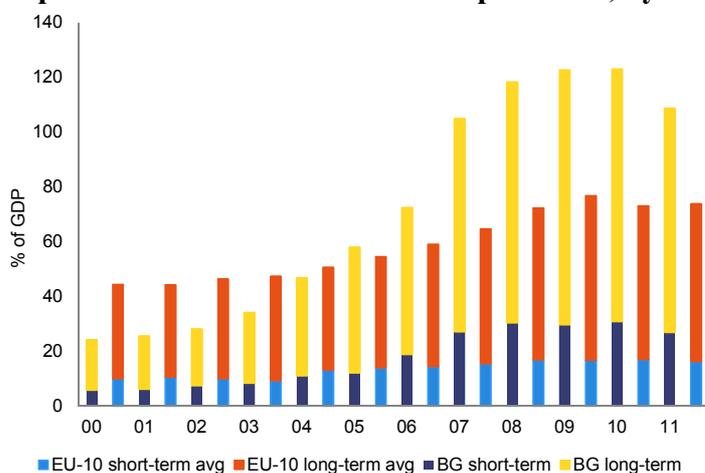
⁴ EU-10 countries comprise Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia.



Source: Commission services

The corporate sector remains highly indebted. Similar to the developments in Bulgaria's external position, non-financial corporations (NFC) are deleveraging from a high debt stock and the process will take some time. Nevertheless, as shown in Graphs 9 and 10, recent developments indicate that a deleveraging process is under way. The corporate debt stock amounted to 120.5% of GDP in 2011, which is a markedly high level compared to other EU-10 countries. At the same time, the financial sector appears little indebted on aggregate (15% of GDP) and the government sector's conservative fiscal policy has kept public debt at a low level (17% of GDP).

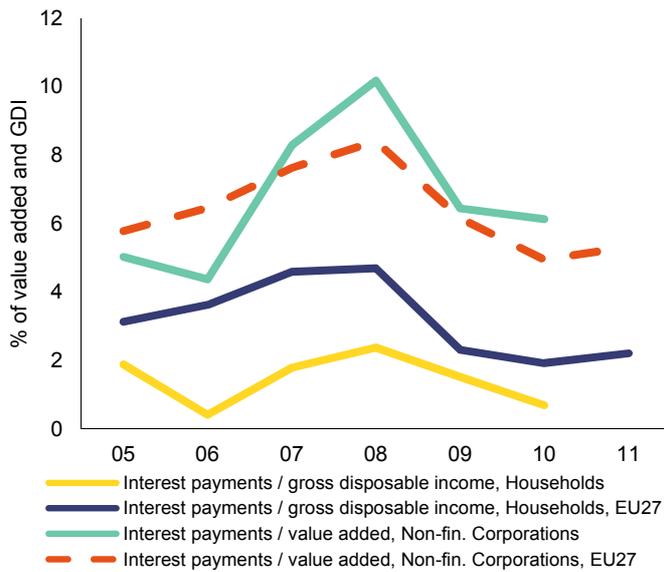
Graph 11: Debt of non-financial corporations, by maturity



Source: Eurostat

Foreign long-term debt dominates the corporate leverage structure. The bulk of financing comes from abroad and is almost equally distributed between intercompany and third-party debt. Domestic corporate indebtedness amounts to around 38% of the total stock. Short-term debt levels are somewhat higher than those for the EU-10 peers and could be a cause for some liquidity concerns (see Graph 11). However, the main difference in indebtedness comes from long-term obligations to parent companies. The NFC interest burden remains above the EU average (see Graph 12).

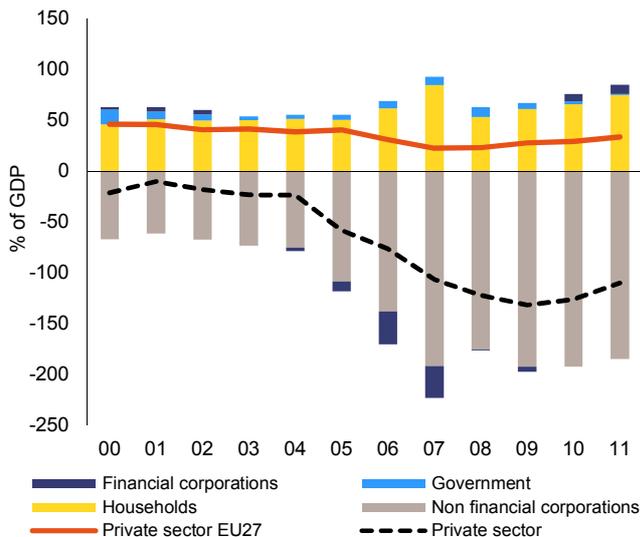
Graph 12: Interest burden of corporates and households



Source: Commission services

The recent sharp drop in corporate debt is unlikely to continue. Private sector debt has decreased from a peak of 175% of GDP in 2009 to 146% in 2011. While dropping below the scoreboard threshold, it is still a rather high number given Bulgaria's relatively low income levels. A major correction took place in 2011, when private sector debt declined by around 25% of GDP. Some 8-9 pps. of this decline can be attributed to repayments, while 7 pps. resulted from nominal growth (denominator effect). The remainder came from a methodological reclassification of some short-term trade credits, which were listed as short-term debt in previous years, to the other payables account. Given the nature of the correction, balance sheet adjustments in the coming years are likely to be smaller. The net assets of the sector are highly negative, which may imply deleveraging pressures (see Graph 13).

Graph 13: Net assets by sector



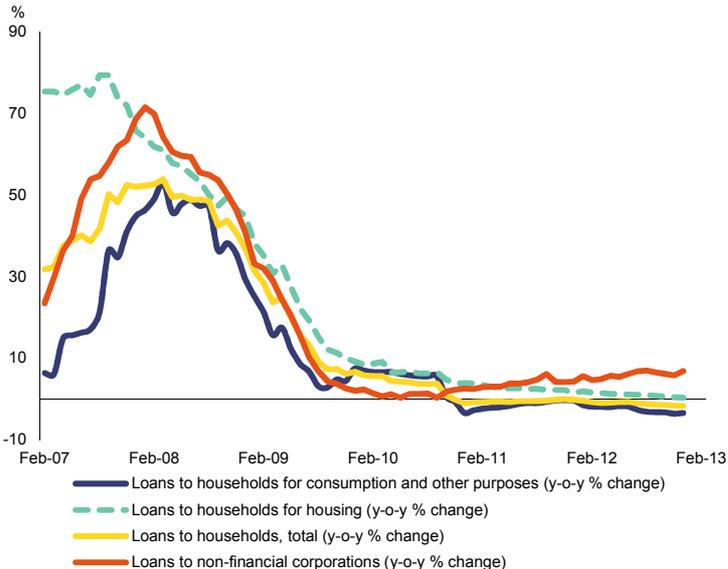
Source: Commission services

The high value of net assets as a share of GDP is partly due to the large overall size of the corporate sector balance sheet compared to the country's GDP. In order to better understand

its link to indebtedness, the dynamics of the corporate financial account are explored in more detail in Section 3.2.

In the coming years, private debt developments will depend on nominal GDP growth and corporate financing sources. Moderate nominal GDP growth is forecast to continue, according to the Commission services' Winter 2013 Forecast extending until 2014. This would help the country to grow out of its debt stock. Credit growth of NFC has picked up somewhat in 2011-2012 but remains subdued (see Graph 14). The high level of indebtedness and the continuously rising non-performing loans ratio suggest that corporates may need to explore other sources of financing for investment and future growth.

Graph 14: Credit growth



Source: Commission calculations based on Bulgarian National Bank (BNB) data

2.3. Financial sector

Despite the negative impact of elevated private sector indebtedness on the quality of banks' assets, the Bulgarian banking sector remains resilient. Following a relative slowdown in the increase of non-performing loans in late 2011, the growth of loans that are more than 90 days past-due accelerated again in the first half of 2012. Thus, the stock of non-performing loans reached 16.6% of the total loans at the end of 2012. While this number may appear high compared to peer countries, it should be interpreted in the appropriate domestic context. On top of Bulgarian banks' conservative impairment policy in line with IFRS requirements, the supervisor is imposing further specific regulatory provisions. As a result, impairments of more than 60% of the gross amount of non-performing loans are taken as a charge against the regulatory capital account. Furthermore, it is to be noted that, even in the context of this relatively high coverage ratio, banks' overall capital adequacy remains above international averages, at 16.7% at the end of 2012, with a core tier 1 ratio of 15.2%. Finally, the loss-absorption capacity of Bulgarian banks' own funds remains very high. In fact, most of the own funds are in the form of equity, as evidenced by the system's average core tier 1 ratio of 15.2% in mid-2012.

In parallel with its comfortable capital position, the Bulgarian banking system is also benefitting from positive liquidity inflows. In 2012, resident deposits grew by 9.4% in the context of an almost stagnating credit growth of under 3%. On the one hand, these numbers reflect the conservative stance of households and the lack of more profitable investment alternatives. On the other hand, slow credit growth indicates that overleveraged corporates are not taking on additional debt. This has resulted in the accumulation of extra liquidity as attested by a declining loan-to-deposit ratio and increased investments in government securities. The latter has been the most-dynamically growing asset class on banks' balance sheets. The extra liquidity in the system has also resulted in a continued decline in the inter-bank market rates.

Overall, macro-financial stability in Bulgaria has been preserved since the onset of the crisis. Banks managed to maintain their capital buffers and to remain profitable despite significant loan-loss impairments, while their liquidity position has even improved. Most importantly, the financial sector stayed stable without recourse to public money or state guarantees. As a result, the stability of the banking sector has supported the sound management of public finances.

Close monitoring of balance sheet developments should continue with a view to preemptively assessing solvency and liquidity risks. The evolution of non-performing loans, as well as banks' strategies for dealing with them, needs to be followed closely. For now, commercial banks have, for the most part, opted to keep collateral from bad loans on their balance sheets. On the corporate-loans side, banks are working closely with firms to help them restructure debt so as to retain them as clients going forward. On the household side, some non-performing consumer loans have been sold, whereas collateral on mortgage loans remains on the banks' balance sheets due to unfavourable housing prices. Thus, the future development of real estate prices would have an impact on balance sheets through collateral valuation and impairment provisions. A continued decrease in housing prices should be reflected in collateral valuations and adequate additional charges taken from banks' capital buffers.

Table 1: Macro-financial stability of the Bulgarian banking system

	2007	2008	2009	2010	2011	2012
Total assets of the banking sector (% of GDP)	101.4	103.9	108.8	111.2	109.7	114.1
Share of assets of the five largest banks (% of total assets)	56.7	57.3	58.3	55.2	52.6	...
Foreign ownership of banking system (% of total assets)	81.6	83.4	83.7
Financial soundness indicators:						
- non-performing loans (% of total loans) 1)	2.1	2.5	6.4	11.9	14.9	16.6
- capital adequacy ratio (%) 2)	13.8	14.9	17.0	17.5	17.5	16.7
- return on equity (%) 1), 3)	24.8	23.1	10.2	7.9	7.1	...
Bank loans to the private sector (y-o-y % change)	64.5	32.4	4.1	1.6	3.8	4.3
Lending for house purchase (y-o-y % change)	62.9	38.1	8.6	3.7	1.3	0.1
Loan to deposit ratio	105.6	128.1	126.7	119.5	107.5	104.1
CB liquidity as % of liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Banks' exposure to countries beneficiary of official financial assistance (% of GDP)
Private debt (% of GDP)	...	72.6	76.2	74.6	71.9	...
Gross external debt (% of GDP)						
- Public	10.1	7.1	8.1	7.9	7.2	7.1
- Private	65.8	72.1	76.6	75.4	69.8	71.1
Long term interest rates spread versus Bund (basis points)*	32.3	139.3	399.3	326.2	274.8	300.3
Credit default swap spreads for sovereign securities (5-year)*	...	498.6	353.1	259.0	276.0	253.8

Notes:

¹⁾ 2008-2009 figures include foreign bank branches.

²⁾ The capital adequacy ratio is defined as total capital divided by risk weighted assets.

³⁾ Net income to equity ratio. After extraordinary items and taxes. Tier 1 capital.

* Measured in basis points.

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

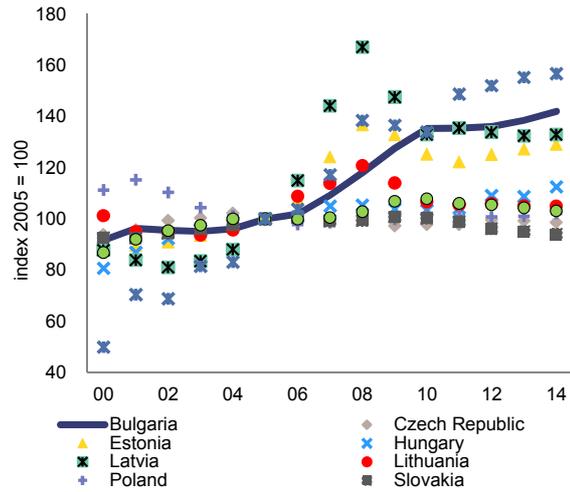
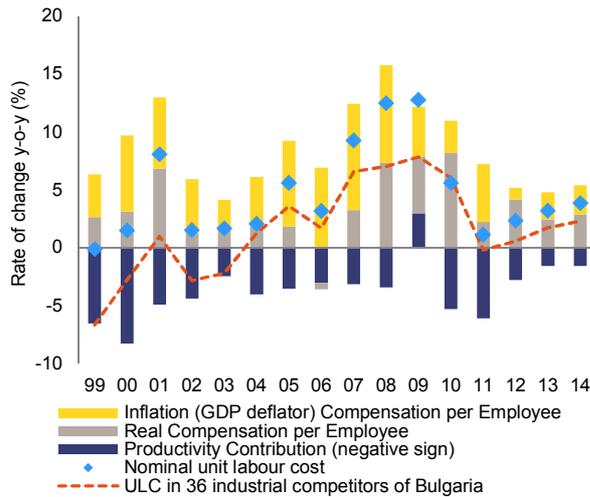
2.4. Unit labour costs

Following a period of particularly rapid growth over 2007-2009, the moderation in ULC growth has continued during 2012, bringing the scoreboard indicator below the threshold. However, ULC growth is still higher than in most other European economies. The 2007-2009 period was an exceptional one, marked by economic and labour market overheating and a sudden drop in output in 2009. In 2000-2006 and in the economic recovery phase during 2010-2012, the rise in ULC was somewhat more moderate. Nevertheless, in the absence of reforms, ULC growth (driven by wage pressures and economic convergence) may become excessive again in the medium term when the economy picks up and the labour market tightens. However, in the shorter term (2013-2014), according to the most recent Commission services' forecast, the rate of change of the ULC is predicted to remain below the scoreboard threshold.

ULC growth is mirrored in REER trends, similarly showing stabilisation after a marked deterioration over 2007-2009. Nevertheless, over a longer historical period from 2005 to 2012, Bulgaria appears to have lost wage cost competitiveness relatively rapidly compared with the other EU-10 Member States. While the standard cost-related indicators (ULC and REER) show one of the steepest deteriorations in competitiveness in the EU, a solid rise in global market shares suggest that non-cost factors (product quality, marketing efficiency, etc.) could have mitigated these adverse ULC trends.

Graph 15: Decomposition of ULC

Graph 16: REER (ULC-deflated)



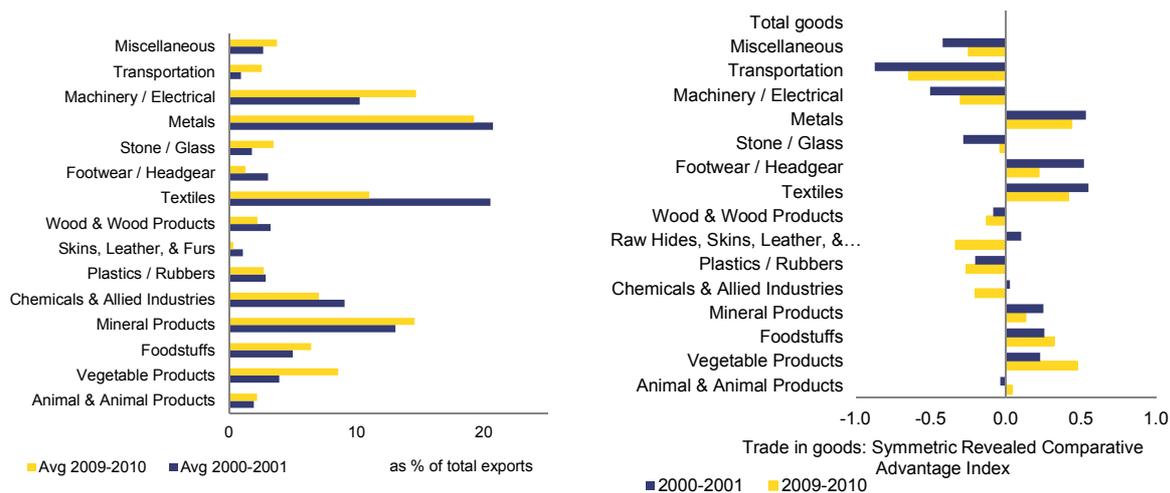
Source: Commission services

The decomposition of ULC reveals that the indicator is driven by wage growth, which has consistently outpaced productivity growth. Important questions also relate to the overall labour market adjustment over the crisis, with wages rising strongly even with a marked decline in employment and rising unemployment. These issues are analysed in more detail in Section 3.3.

2.5. External competitiveness

The tradable sector has remained competitive since the crisis and exports have contributed strongly to the correction of the current account balance. In comparison with EU-10 peers, cumulative gains in world export market shares have been strong with both goods and services contributing positively in 2011, whereas services were the main driver in previous years. The largest gains were realised in tourism on the services side and in basic metals, mineral products, electrical machinery and agricultural products on the goods side (see Graphs 19 and 20). Bulgaria's export specialisation in global markets appears to be tilted towards raw materials (basic metals, minerals, petroleum products, wood, and agriculture) and basic low-value-added goods (clothing, tobacco products). A gradual shift away from textiles and towards machinery and minerals export can be observed over the last decade (see Graphs 17 and 18). The rising market share in tourism can be explained by the increased number of tourist accommodations that became available as a result of the real estate boom.

Graph 17: Structure of Bulgarian exports **Graph 18: Comparative advantage by sector**



Source: Commission services

Bulgaria's sustained gains in export market shares can be explained by improving non-cost competitiveness. Non-cost factors allow for a reconciliation of the apparent loss of cost competitiveness, evidenced through rising ULC and appreciating ULC-deflated REER, and the growth in export market shares observed in the last ten years. A recent study shows that Bulgarian exports benefited from significant quality improvements (both physical and branding/marketing ones that increase the consumers' valuation of a product) over 1999-2011 (Benkovskis and Wörz, 2012). The contribution of those non-price changes outweighs the losses in cost-competitiveness, partially stemming from the convergence process, thereby allowing the country to gain market shares. Deepening of economic integration and FDI inflows are among the possible explanations for the quality changes observed.

Quality improvements have been observed for all of the country's largest export industries. Another study looks at the contribution of quality (allowing exporters to charge a higher price) and other non-cost factors (allowing exporters to sell higher volumes for a given price) to external competitiveness (Di Comite, 2012). The conclusion for Bulgaria is that, once again, quality improvements contribute positively over 1999-2011, while other non-cost factors and ULC have only a negligible influence during this period. The paper also presents results by product category. Among Bulgaria's main export industries, the largest gains in quality were achieved for mineral fuels, plastics and machinery. The mix of companies operating in those sectors, including a large oil refinery, a few foreign ones and several domestic ones, suggests that the gains realised should be sustainable in the future.

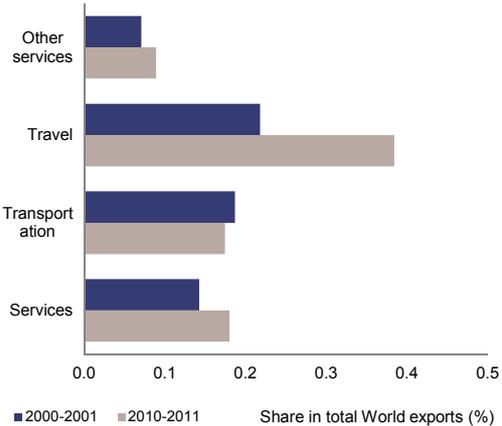
Some other factors that could explain the apparently favourable external competitiveness position in spite of steady rises in nominal ULC include:

1. Labour costs in the manufacturing sector have grown more moderately than the national aggregate and also compared to a peer group of new Member States. As shown in Graph 21, the nominal ULC in manufacturing, which is a good proxy for tradable goods and the export sector, has remained nearly flat over the past decade, in contrast to the index for the overall economy.

2. External competitiveness is boosted by the lowest level of wages and non-wage costs in the EU. The average wage amounted to about 350 euros per month in 2011. The hourly labour cost in Bulgaria was still just EUR 3.5, 15% of the EU average of EUR 23.1 and compared with EUR 4.2 in Romania. In purchasing power standards, wages in Bulgaria

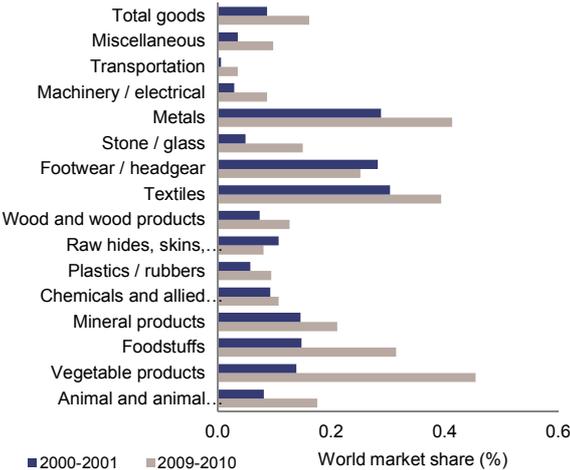
amount to about 37% of the EU average, on par with Romania (for a more detailed study of wages and wage formation see Section 3.3.). While at first sight this might seem to be a strong competitiveness situation, productivity is also the lowest in the EU, with nominal GDP per head at 20% of the EU average, or 45% when adjusted for purchasing power standards. Looking forward, wage levels will most likely converge gradually towards the EU average as productivity levels also converge. Various business surveys show that the current average wage level is not the main concern for enterprises in the present economic circumstances.

Graph 19: Market shares in services



Source: Commission services

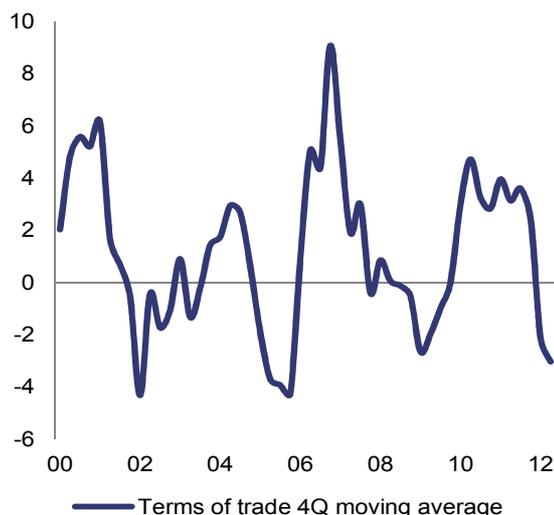
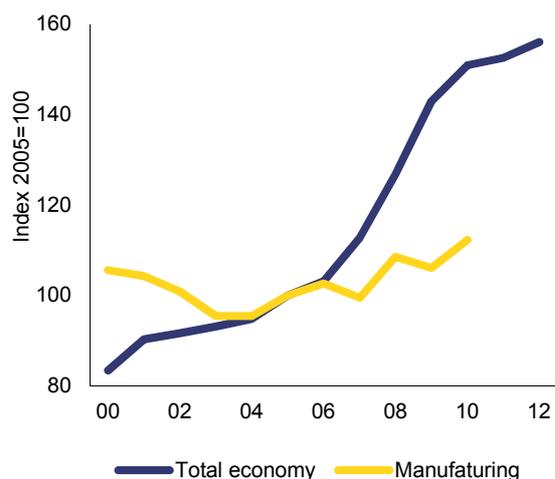
Graph 20: Market shares by product categories



World export market shares of Bulgaria seem to have benefited recently from a windfall profit via the rise in world market prices for various commodities that are important for Bulgaria's exports. In recent years, ferrous and non-ferrous metals, plastics, rubber, fuels and cereals world prices have given rise to a positive terms-of-trade effect (Graph 22). In 2010 and 2011, export prices grew by close to 10% annually, well over import price growth. However, world commodities prices have proven to be volatile in the past. In fact, export price growth seems to have started to decelerate strongly in the first half of 2012, more than import prices, contributing to the return to a current account deficit in the first half of 2012.

Graph 21: Nominal unit labour cost

Graph 22: Terms of trade (four-quarter moving average)



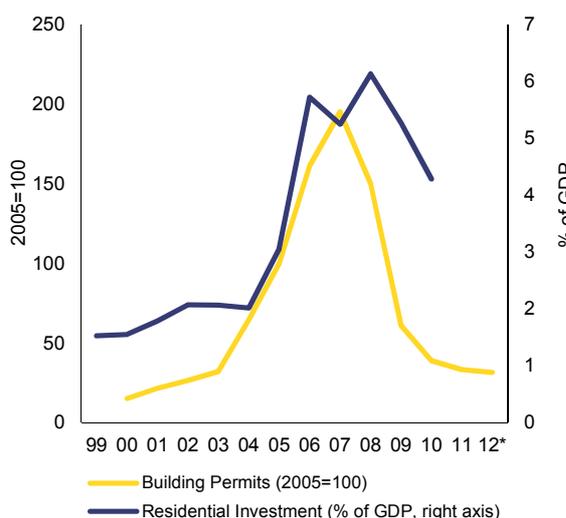
Source: Eurostat, Commission services

2.6. Real-estate market

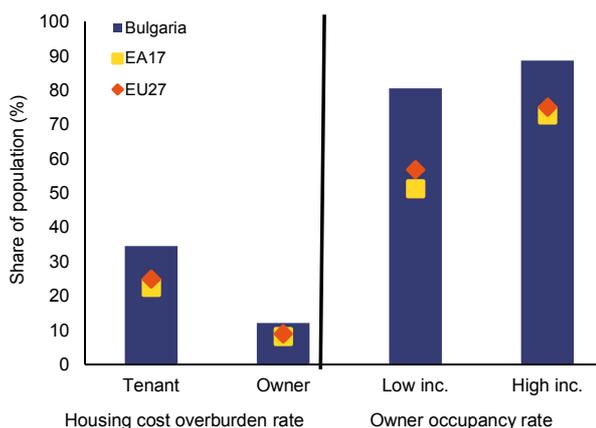
Bulgaria has gone through a real-estate boom-bust cycle over the past decade. Nominal prices dropped substantially over the crisis, by about 41% between 2008Q3 and 2012Q2. From 2004 to 2008, residential construction increased from about 2% of GDP to 6% of GDP and readjusted to about 4% of GDP in 2010, which is already slightly below the EU average.

The adjustment in the real-estate sector is continuing. The number of building permits, which acts as a leading indicator, is on a downward trend and is expected to drop further in 2012 to around 30% of the 2005 level (see Graph 23). Investment volumes were still declining in 2012.

Graph 23: Residential investment and building permits



Graph 24: Structural housing features

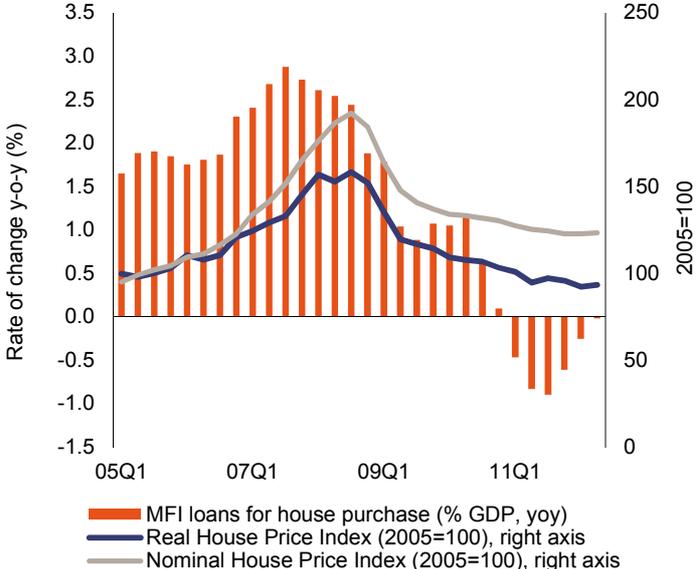


Source: Commission services

The inflow of foreign capital, one of the main drivers of the real-estate boom is subsiding. As of 2012Q2, real estate accounts for about 21.5% of the gross FDI stock, the largest among all industries. While the share of real-estate-related FDI inflow was notably large in 2006-2008, since then it has declined in line with all foreign investments. The FDI

inflow in real estate even turned negative in 2010⁵, while returning to a modest positive growth in 2011. Downward valuation effects from falling housing prices could drive the share of real estate down (see detailed discussion below). Recent data do not suggest that foreign investors are returning to buy second residences or to invest in the tourism sector.

Graph 25: House prices and MFI loans for house purchase



Source: Commission services

Household indebtedness related to the real-estate sector has remained largely in check. Mortgages have decreased as a share of GDP since the beginning of 2011 (see Graph 25). The outstanding mortgage debt even decreased slightly in 2012, indicating weak demand. In part, this is due to country- and culture-specific factors – above 80% of the people already own at least one home and ownership rates significantly exceed the EU average for both the low-income and high-income households (see Graph 24). Securing housing is traditionally perceived as important and a lot of affordable accommodation was made available to households during the socialist regime.

Rent levels appear high compared to disposable income. This is to be expected given the low income level and rising real housing prices, which tripled between 2003 and 2008. An increase in supply coming from completed projects purchased speculatively, as witnessed by the high FDI inflow, could help reduce rents in certain sectors of the market (like holiday accommodations) but should play a lesser role in residential renting.

⁵ Negative FDI inflow in an economic sector means that the amount of foreign capital leaving the country in a given year is larger than the foreign capital coming in.

3. IN-DEPTH ANALYSIS OF SELECTED TOPICS

3.1. External indebtedness

This section examines two features of Bulgaria's external indebtedness – its vulnerability and sustainability. The vulnerability is analysed using the composition of the NIIP, foreign exchange risk, debt maturity, currency and geographical structure. The sustainability analysis is based on the debt stock level, recent and projected capital flows and the expected economic performance. Finally, the structure of foreign direct investments is described, together with possible valuation effects and their impact on different industries.

Vulnerability of the external position

The composition of Bulgaria's external indebtedness does not imply significant vulnerability concerns. As a converging economy, Bulgaria has a small amount of assets abroad and its NIIP is very close to the stock of domestic assets held by foreigners. Thus, any shocks to the economy would have a much stronger impact on the country's external liabilities. An examination of the structure of the country's gross external debt provides more insights into the vulnerability of the external position. Foreign exchange risk is relatively low as 89% of the gross external debt is denominated in euro. Given the currency-board regime in the country, the Bulgarian lev, which is pegged to the euro, is stable and supported by sufficient currency reserves. The arrangement is supported by the public at large, so political risk is also low. Foreign-exchange risk could be further decreased if the large US dollar-denominated bond issue maturing in 2015 is refinanced in euro as envisaged in the country's latest national reform programme (National Reform Programme, 2012). Short-term debt, which reflects the exposure to short-term refinancing needs, is 26% of the total. More than half the debt is attributable to non-financial corporations, while the financial sector has significantly reduced its short-term foreign liabilities and replaced them by attracting domestic deposits, mainly from households. The geographical structure of the debt shows that it is concentrated in the country's main trading partners – the EU Member States and international institutions hold over 75% of the gross debt. Thus, a weak EU economy is likely to weigh on Bulgarian exports and decrease the availability of foreign funding to the country.

Sustainability of the NIIP

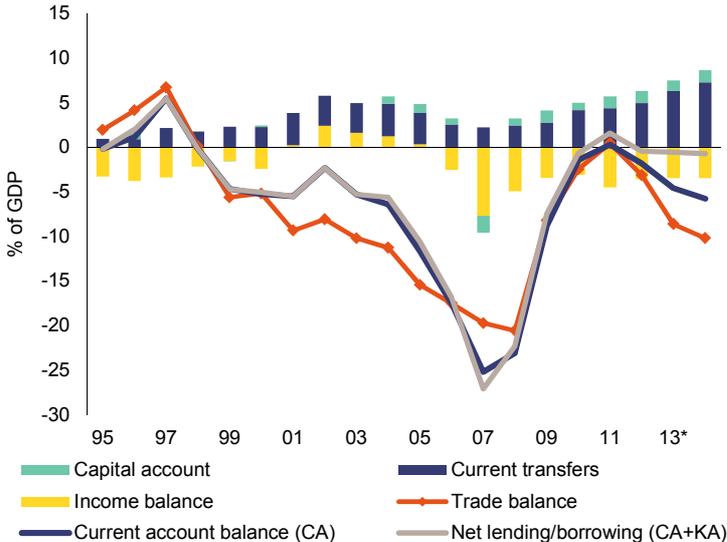
Flow data show that three components are driving the NIIP correction – nominal growth, net transactions and valuation changes. Repayments (net transactions) turned positive in Q4 2010 but have played a more significant role since Q2 2011. Deleveraging is moderate but sustained, pointing to a possibly prolonged, but smooth, adjustment. Valuation changes have contributed to reduce Bulgaria's NIIP since Q4 2009, being the main driver of deleveraging in 2010. The process eased somewhat in 2011 but seems to have picked up again in 2012 (see Graph 2). Given the sluggish economic growth projected for the coming years, further reductions of the NIIP as a share of GDP are unlikely to come from the denominator. Thus, debt repayments and valuation changes are likely to have a larger impact on the overall ratio.

Bulgaria's external position appears sustainable, although further deleveraging may be a difficult and protracted process. External positions and the related transactions are unsustainable if they require an expected large future adjustment of the CA balance. A large negative NIIP, as is the case of Bulgaria, means that large payment outflows are needed to

service the liabilities. This negative investment income transfers domestic wealth to foreigners, creating a wedge between GDP and GNI, and could weigh on domestic demand in the future.⁶ The country's income balance contributed negatively to the CA balance in 1995-2000, and again since 2006, by an average of 4.4% of GDP over the last six years. Current transfers from an increasing number of citizens working abroad, linked to the opening of European labour markets, seem to partially offset the negative income balance. Overall, the CA balance remained stable over the last three years and no large outflows are expected in the coming years as evidenced by the net lending/borrowing account (see Graph 26).

An analysis of the primary CA balance based on recent data indicates slow, but stable, deleveraging ahead. The net borrowing account is the part of the balance of payments that requires financing and, as a result, increases the nominal NIIP. Net borrowing is formed by the sum of the current and capital account balances. Bulgaria has run large CA deficits throughout the economic boom mainly due to a negative trade balance financed by FDI inflows. The capital account on the other hand, has contributed positively by around 1% of GDP since 2008 – a development that is linked to EU funds absorption. The CA posted a small surplus in 2011 but is forecast to return to negative territory in 2012 and remain there throughout the forecast period. The capital account development depends largely on the country's capacity to absorb structural EU funding, which could significantly reduce the country's financing needs. On balance, the net borrowing account is forecast to remain under 1% of GDP in the forecast period.

Graph 26: External financing needs



Source: Eurostat

Recent levels of current account balances appear consistent with a gradual improvement in the NIIP. The country's primary current account (trade balance) is likely to remain negative and the CA gap may open up further if the economic growth pattern repeats the boom years' scenario. Despite Bulgaria's large negative NIIP, it appears that the country can sustain the current level of its NIIP by running a small CA deficit. The necessary condition is that the non-interest part of the CA (i.e. trade balance and current transfers) is positive. For Bulgaria, capital transfers from EU funds also contribute positively. The requirements for reducing the external indebtedness are reviewed below. An in-house model is used to forecast

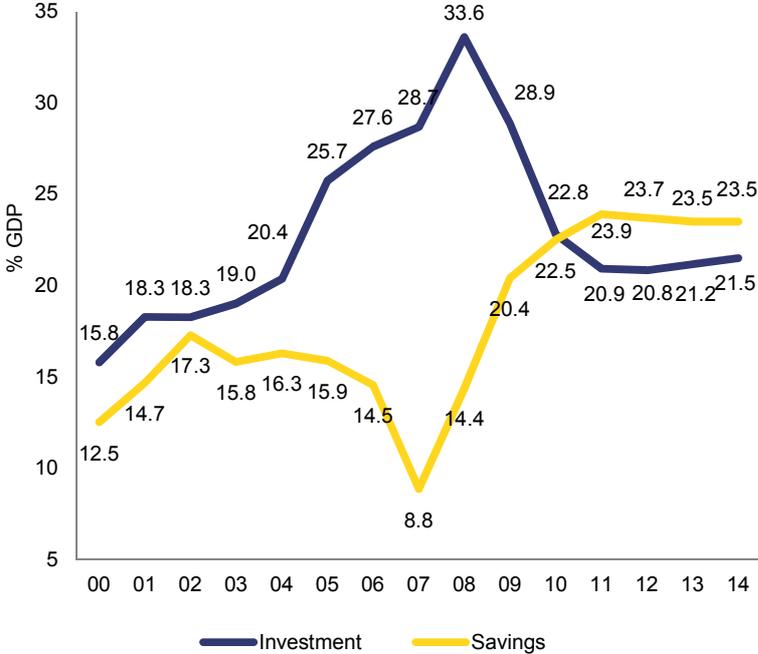
⁶ As witnessed for EA Member States, high negative NIIP translates into negative investment income (D'Auria et al., 2012).

the development of Bulgaria's NIIP under different assumptions for economic growth, inflation, the CA balance and the external yield. The baseline scenario⁷ tests for sustainability of the NIIP at its current level. In order to sustain the 2011 NIIP value by the year 2020, Bulgaria could run an average annual CA deficit of 3.2%, which translates into an average positive non-interest CA balance of 1.3%. According to the latest forecast, the CA deficit is expected to average 2.1% of GDP up to 2014, resulting in a gradual improvement of the NIIP as a share of GDP.

Saving and investment rates

The sustainability of the current saving and investment rates is important for future growth. Another approach to assess the country's external financing needs is to look at the current and projected saving and investment rates. The current saving rate has remained at historically-high levels over the last three years with increasing contributions coming from both corporates and households (see Graph 27). The sustainability of the adjustment will depend on whether the current saving and investment levels are compatible with investment needs in the future. In this respect, the magnitude of the decline in the corporate sector's gross capital formation (from a peak of 60% of value added in 2008 to 30% of value added in 2010) stands out as exceptionally strong compared to the euro-area average, but less so compared to some Central and Eastern European countries that also went through a rapid adjustment. The corporate investment level still appears relatively buoyant compared with the euro-area average of about 20% of value added in 2010 or compared with other converging Central and Eastern European economies. This indicates that the current investment level might imply only moderate upward pressures in terms of economic convergence needs. The relatively low level of household indebtedness could lead to increased dissaving and re-opening up of the saving-investment gap once overall economic conditions and international capital markets normalise, allowing for stronger capital inflows to Bulgaria.

Graph 27: Aggregate economy saving and investment rates



Source: Commission services

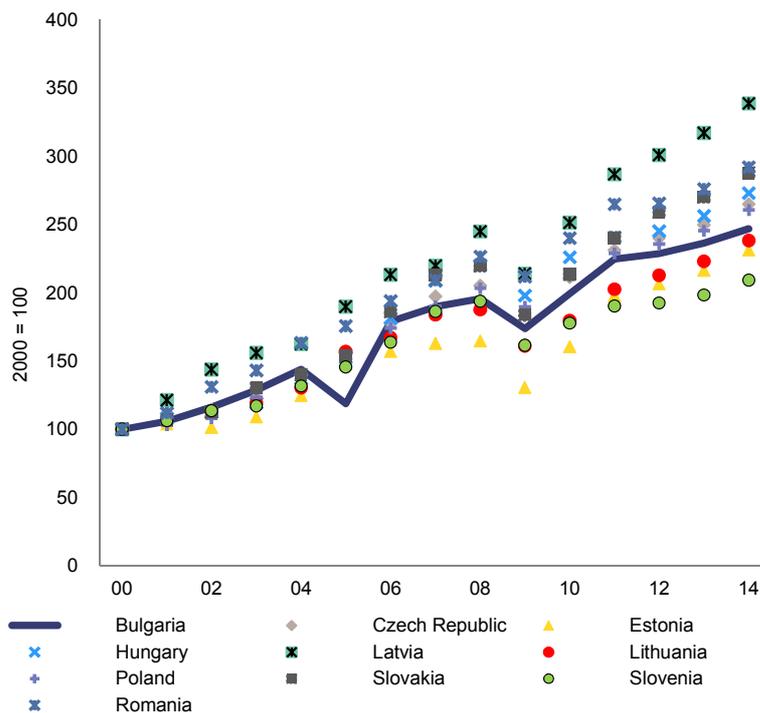
⁷ The model has been developed by the European Commission's Directorate General for Economic and Financial Affairs. The baseline scenario assumptions for GDP growth, inflation and external yield are based on the Financial Sustainability Report 2012.

FDI structure and developments

Manufacturing and other productive sectors seem to replace real estate as the main driver of FDI. Out of the total foreign direct investment stock at the end of 2009, 70% was accounted for by the services sector, while the share of the manufacturing sector was around 16%. FDI inflows in real estate and financial intermediation were especially strong over 2007-2008. In the subsequent two years, the trend reversed to some extent with increased inflow in manufacturing and diminishing investments in construction and real estate. Four low-value-added and resource-intensive sectors, i.e. food products, textile, metal products and chemicals, account for 75% of the FDI in manufacturing. A positive trend observed recently is the increased investment in higher value-added activities, most notably in the automotive industry.

FDI has been concentrated in the non-tradable sector but has also benefitted exporters through extended availability of business services. FDI was heavily concentrated in sectors servicing the local market. Nevertheless, it also helped strengthen the export capacity in some tradable sectors, including mining, minerals and the metal industries, which saw significant FDI inflows. Bulgaria has shown one of the strongest growth rates in exports of goods and services among the EU-10, both in nominal value and in constant price terms (see Graph 28). Strong FDI in financial and other business services (e.g. advertising, marketing), which are key intermediary inputs, may also have played an indirect role in strengthening the export capacity in other sectors.

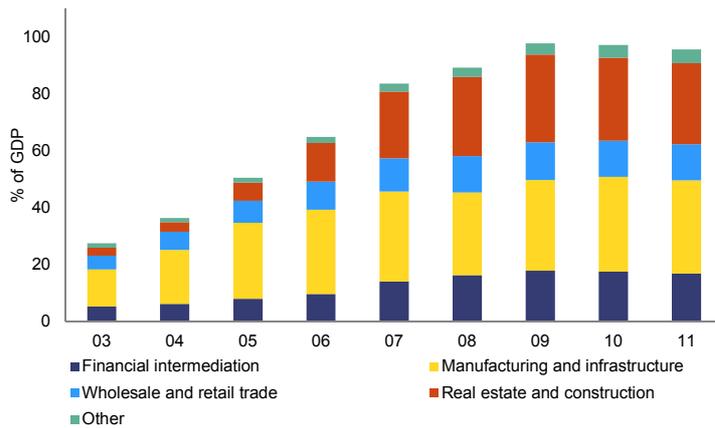
Graph 28: Export growth compared to selected countries, fixed prices



Source: Commission services

The largest FDI stocks in Bulgaria are in real estate, financial intermediation and manufacturing. From 2000 to 2006, the largest portion of FDI prior to the boom years was concentrated in manufacturing, transport and telecommunications. During the boom years, the focus shifted to real estate and financial intermediation (see Graphs 29 and 30). FDI inflows have shrunk to under 5% of GDP in recent years (3.2% in 2010, 4.5% in 2011 and 3.5% in 2012). Currently six sectors comprise 90% of the FDI stock in the country.

Graph 29: FDI stock by economic sector

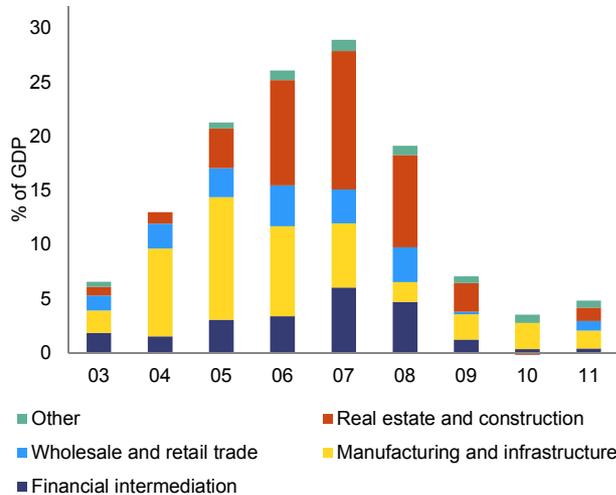


Source: BNB

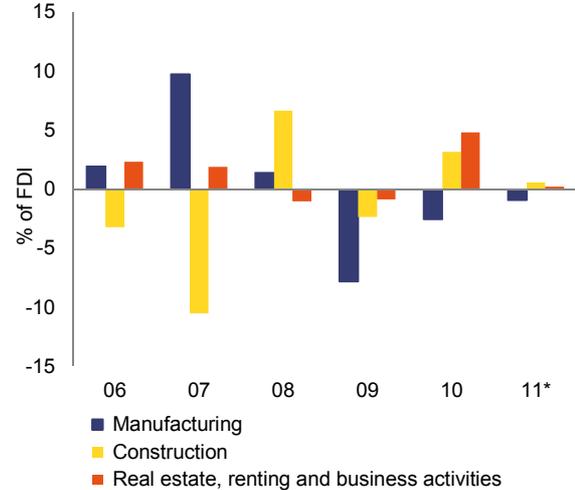
Valuation effects from asset revaluation may have an impact on Bulgaria's FDI stock.

As explained above, a significant part of Bulgaria's external indebtedness stems from the large FDI stock. In addition to flow developments, it is worth investigating the composition of this stock and the role played by valuation effects⁸ in recent years. These effects have two main sources – changes in the currency exchange rate and changes in underlying asset prices. As Bulgaria operates under a currency-board regime and most FDI comes from the EU, we can conclude that there is no significant valuation effect from currency fluctuations. In contrast, asset valuations could have a significant impact on the FDI stock, especially given the large portion of real-estate investment in FDI.

Graph 30: FDI inflow by economic sector



Graph 31: FDI stock valuation effects



Source: BNB and Commission calculations

Negative valuation effects⁹ in real estate and positive trends in manufacturing are observed. FDI stocks have remained stable and have slightly increased with the notable exception of real estate. A minor outflow in 2010 has translated into a decrease of nearly 5%

⁸ Valuation effects are defined as the difference between the annual FDI flow and the change in FDI stock between the beginning and the end of that year. FDI in Bulgaria (and not net FDI) is used to analyse price changes of domestic assets. Direct investment by Bulgarians abroad is small and valuation effects there are negligible.

⁹ As we are looking at FDI inflow stock, positive valuation effects are defined as increases in domestic asset prices that expand the FDI stock.

in the stock in just one year, suggesting negative valuation effects (see Graph 31). The same trend is confirmed by 2011 data that show that the stock increased by less than the net inflow in both the construction and the real-estate sectors. In contrast, the FDI stock in productive activities, like manufacturing, experienced positive valuation effects in the 2009-2011 period. Larger valuation effects for all industries can be expected once the 2011 FDI data are revised to reflect all corporate balance sheets.¹⁰ Negative valuation effects in productive sectors could impair the future ability to attract fresh FDI as this would increase the country risk perception.

3.2. Corporate sector indebtedness

The sectoral balance sheets reveal deleveraging pressures for non-financial corporations. Sectoral data reveal the contribution of institutional agents – households, non-financial corporation and government – to the country's net position against the rest of the world. The analysis of such data helps to detect a possible concentration of risk in certain areas of the economy, which may pose a threat to future economic growth. As discussed above, the net asset position of the non-financial private sector in Bulgaria is highly negative as a share of GDP. Below we look in more detail into the causes and implication of this situation. Graph 32 plots the net financial assets of a country against the rest of the world, together with the net position of the public sector. Countries, in which net assets of households exceed those of non-financial corporations, are displayed in a light colour; dark is used otherwise. For Bulgaria, deleveraging pressures appear from the negative net position against the rest of the world as well as the insufficient coverage of corporate net assets by those of households. When compared to EU-10 peers, deleveraging pressures in Bulgaria appear quite high. Hungary is in a worse position as public sector consolidation needs put an additional burden on the economy. Latvia is in a similar position, whereas external pressures in other countries are less pronounced.

Intra-sector corporate payables increase the debt burden and increase the balance sheet sustainability risk of firms in the country. The private sector's net assets are highly negative with large corporate liabilities outweighing the increasingly positive household net asset position and improving balance of the financial sector. Focusing on the non-financial corporations, their net liabilities exceed 180% of GDP and are well above the EU-10 peers (see Graph 33). The equity part of the liabilities for Bulgarian NFC is around 41% compared to an EU-10 average of 48% and an EU-27 average of 49% (see Graph 34). The remaining liabilities are distributed evenly between loans and other payables.¹¹ On a non-consolidated basis, the sectoral balance sheet is much larger than those of other EU-10 Member States, implying both higher assets and liabilities. On a consolidated basis, the gap closes significantly but remains one of the highest in the EU, meaning that the bulk of payables and receivables are concentrated between firms within the non-financial sector.¹² This is not the case for corporate debt,¹³ where most of the liabilities are due to other sectors. The on-going accumulation of payables in the sector, coupled with the high level of corporate loans and

¹⁰ 2011 data will be revised using corporate balance sheets data in March 2013. Valuation effects are strengthened when BoP data are replaced by data from corporate financial statements.

¹¹ The 'other payables' account includes:

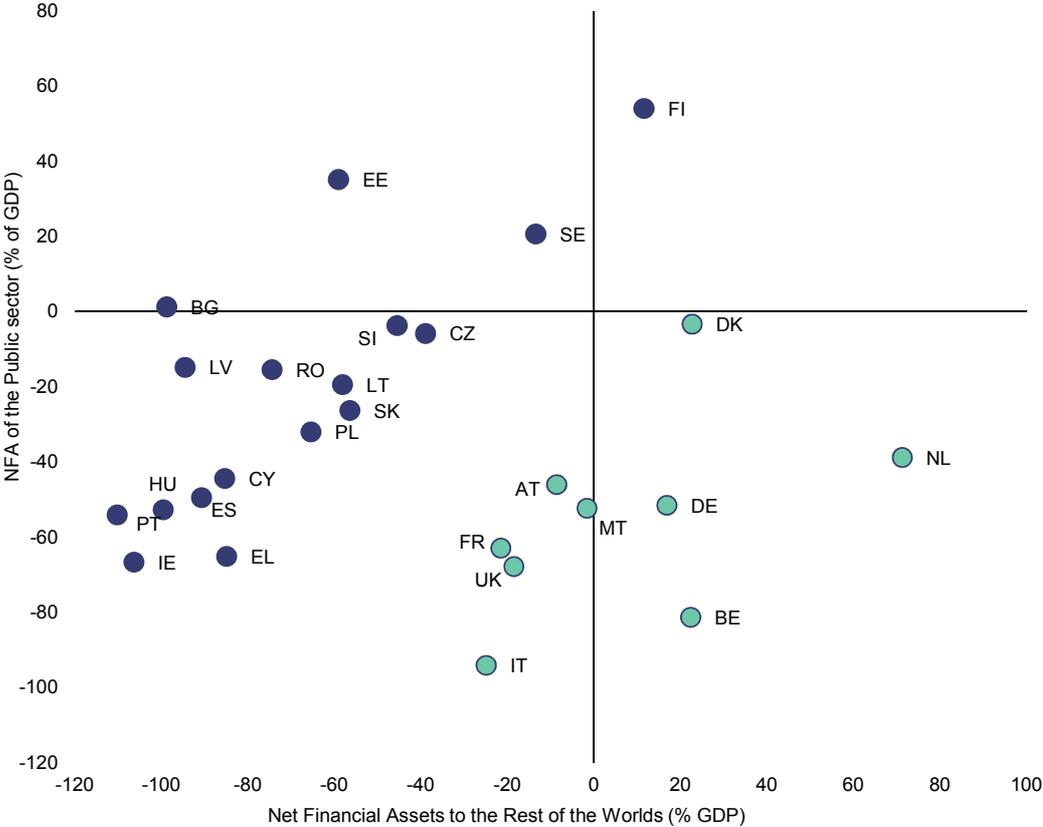
- trade credits (relating to normal business activity that are not classified as loans as well as arrears); and
- other accounts (rent, wages, taxes and social security payments, dividends and interest).

¹² Consolidation is done at sectoral level. Thus, consolidated payables are due to the other sectors of the economy, including the Rest of the World account.

¹³ Corporate debt is defined as the sum of loans and securities other than shares and does not include other payables.

rising non-performing loans, indicates significant deleveraging pressures that need to be addressed.

Graph 32: Deleveraging pressures

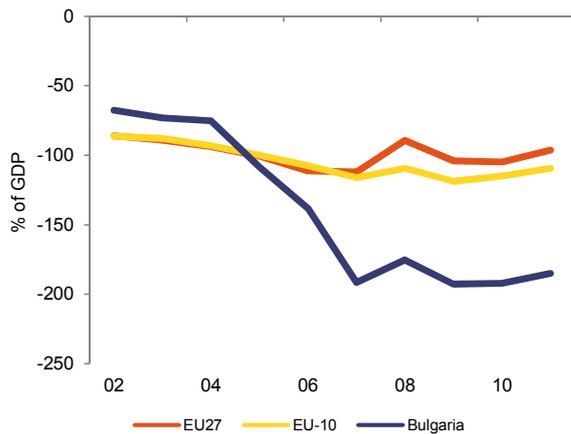


Source: Eurostat

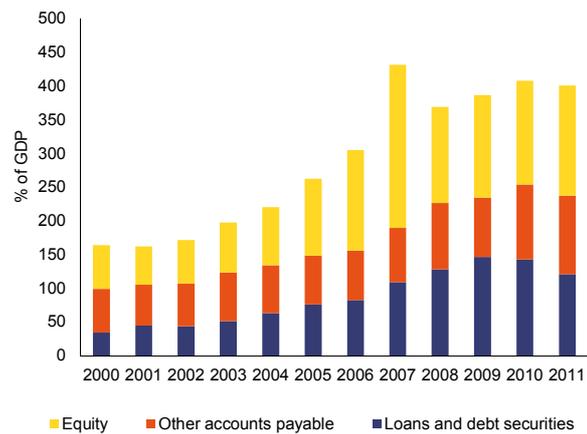
The "other payables" account has expanded rapidly throughout the crisis pointing to increased uncertainty and possible market-clearing issues. As discussed above, a large share of the corporate liabilities come from intercompany loans, which can be seen as less problematic. Among EU-10 peers, it can be observed that other payables have grown in line with nominal GDP, which is to be expected as part of normal business activity (see Graph 36). The other payables account of NFC in Bulgaria expanded from 80% of GDP in 2007 to 117% in 2011, exceeding the pace of the economy.

Graph 33: Net assets of non-financial corporations, comparison

Graph 34: Decomposition of financial liabilities, non-financial corporations

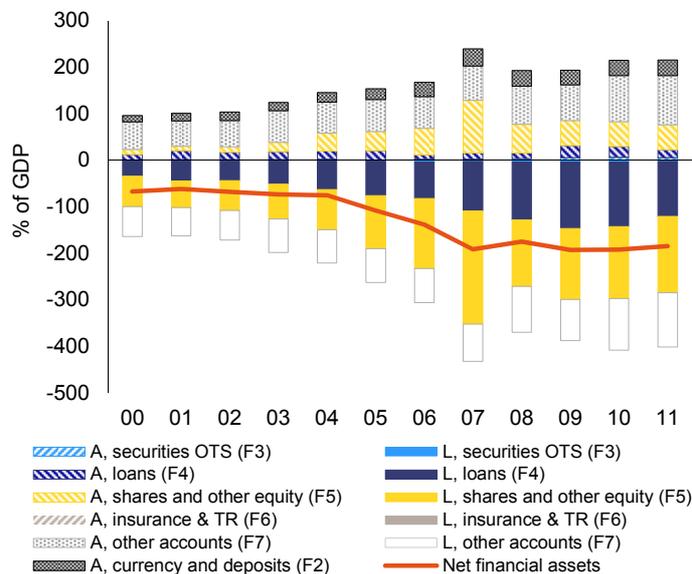


Source: Eurostat



Source: Commission services

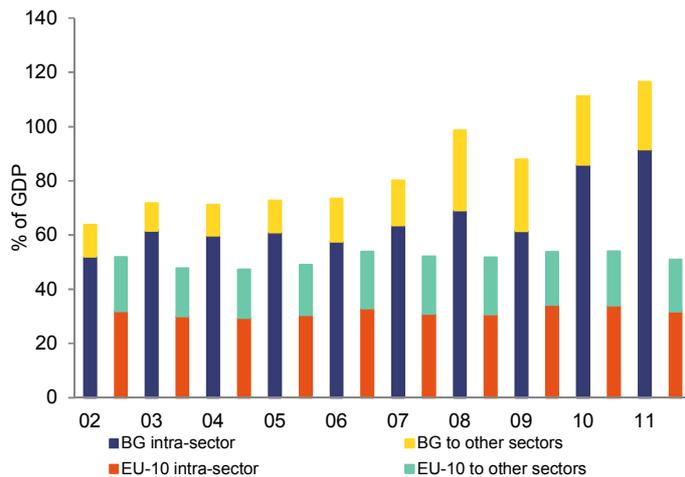
Graph 35: Balance sheet of non-financial corporations



Source: Commission services

Arrears in the 'other payables' account pose a sector-wide risk. Focusing on the breakdown of the 'other payables' account, the bulk is in the trade credits account consisting of payments due to suppliers, rent on buildings and arrears. No data are available on the exact share of arrears but the increase of payables during the crisis suggests impeded market clearing. Even without arrears, the uncertainty created by the large amount of other payables puts a strain on the cash flow and could impair the normal operation and future investment decisions of firms.

Graph 36: Non-financial corporations, 'other payables' account

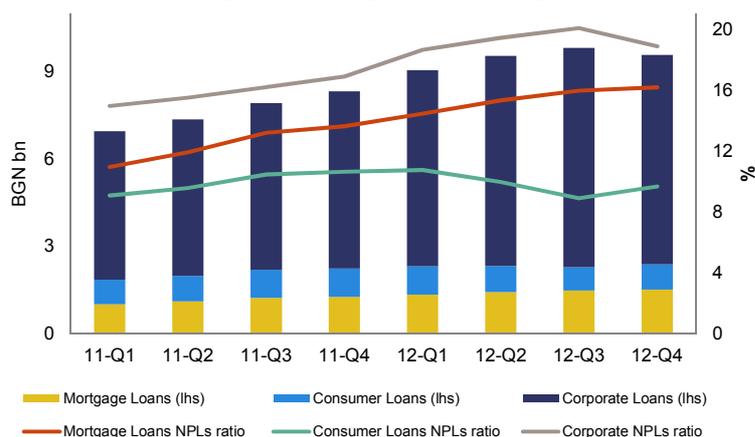


Source: Eurostat

Non-performing loans (NPLs) continue to increase for the corporate sector as a whole but developments in different industries may vary. NPLs (91+ days overdue) reached 20% of gross loans to non-financial corporations in 2012 (see Graph 37). Combined with the amount of impaired loans (31-90 days overdue), the ratio reaches 25%. Companies in Bulgaria operate in a very difficult environment of slow economic growth and high indebtedness within both the corporate sector and the financial sector. On the part of households, decreasing house prices combined with deteriorating labour market conditions weigh negatively on the prospects of credit growth. NPLs for mortgages continue to increase and could harm bank profitability. The deteriorating loans portfolio is not an immediate concern but can have a negative impact on the economy in the medium term. Demand for lending is subdued due to the sluggish economy, while banks have plenty of liquidity, since they are experiencing a stable inflow of domestic deposits.

Alternative forms of financing could assist corporate sector deleveraging. Using own funds as well as attracting more equity investment can be beneficial for firms. Sustained profitability of the sector suggests availability of retained earnings and while the capital market is still dormant, increasing assets of private pension funds in the country could provide fresh capital flows. Private equity and venture capital funds operating in the country can fund small and especially start-up businesses. Private debt issues are another option that could potentially diversify the capital structure and has been used increasingly by other European companies to compensate for the stricter bank lending (Lewandowska and Thiel, 2010). The last option is somewhat limited in the case of Bulgaria due to the small size of companies and the large fixed cost required for bond issues. Small and medium-sized enterprises have to rely mainly on intercompany and bank financing.

Graph 37: Non-performing loans by type



Source: BNB

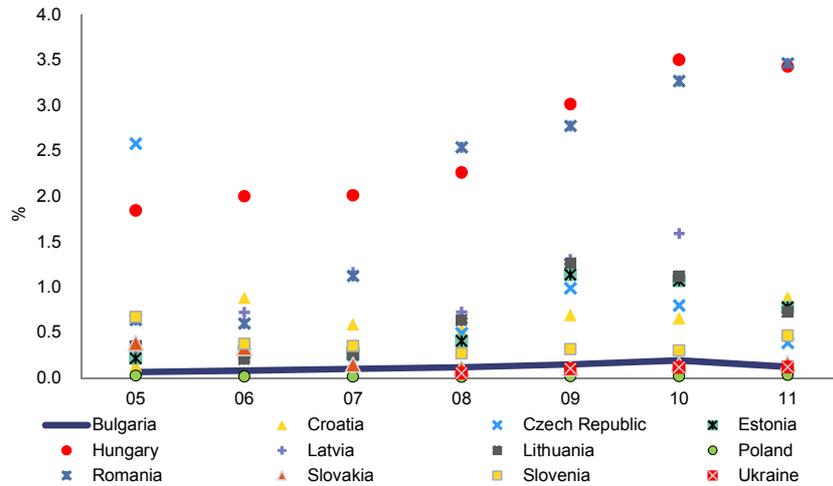
Even though bad loans and payables are increasing, insolvencies seem very low compared to regional peers. According to a recent study (Coface, 2012), insolvency procedures in Bulgaria are almost non-existent and contrast sharply with the experience of other countries in the region (see Graph 38). Given the high levels of overall and intercompany indebtedness, these results are somewhat surprising and could point to structural barriers that hinder insolvency and bankruptcy procedures. The lack of information¹⁴ about the future financial health of debtors hurts planning and investment decisions of the concerned parties. To resolve the problem, the authorities could look into streamlining the debt restructuring and insolvency procedures and making court proceedings more efficient. Court specialisation and out-of-court agreement guidelines could have beneficial effects and facilitate settlements (IMF, Article IV Staff Report, 2012).¹⁵

Recent legislative changes in the corporate law address insolvency and late payments issues. In the last few months, two important new measures have been discussed by legislators. Firstly, the insolvency backdating option, allowing companies to file for insolvency from a historical date. Until recently, firms had the opportunity to 'backdate' their insolvency, leaving claims from lenders and trade partners incurred after the insolvency date unsatisfied, thus disadvantaging some creditors. Secondly, a 30-day deadline on the payment of invoices, for both company-to-government and company-to-company transactions, has been introduced (extended up to 60 days in some cases). Delayed payments will accumulate a penalty interest rate set by the regulation.

¹⁴ Meaning many firms could be waiting for receivables from companies that are insolvent but are not in a procedure or the procedure is taking too long to complete.

¹⁵ See also a World Bank study (Garrido, 2012) and the EBRD report on NPLs (2012), for detailed discussions of specific measures related to out-of-court settlement.

Graph 38: Insolvency rate in Central and Eastern Europe



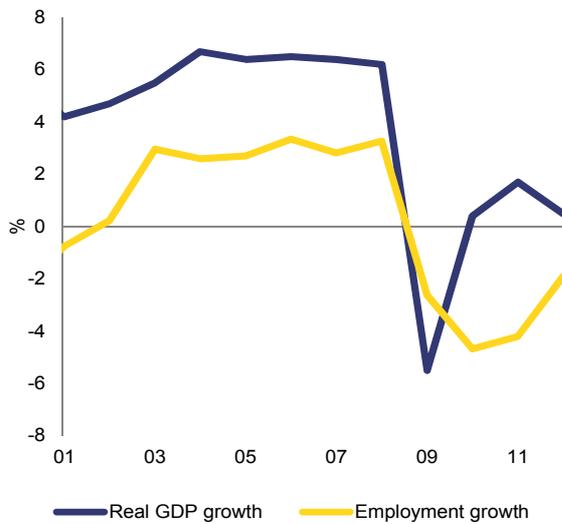
Source: Coface Central Europe

3.3. Labour market challenges

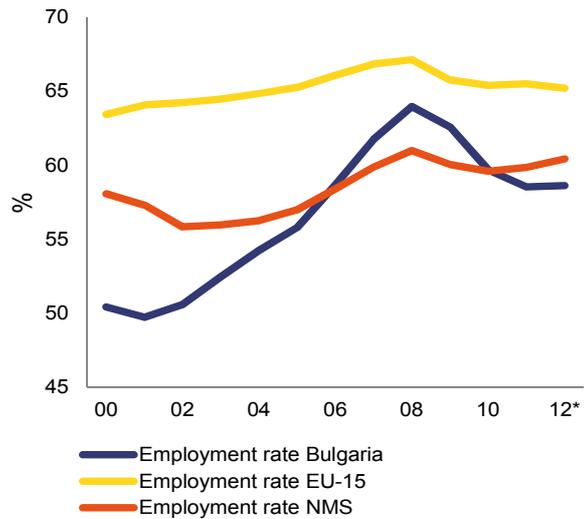
This section provides a more in-depth analysis of the interlinked factors behind the relatively rapid wage growth (which leads to the adverse ULC trends discussed above) and the overall labour market adjustment with a persistent rise in unemployment.

Over the past decade, the Bulgarian labour market has benefited from a period of strong gains in employment and declining unemployment, which was, however, followed by a sharp crisis from 2009 onwards. In the economic boom years (2003-2008) prior to the crisis, employment grew consistently at a relatively high rate of about 3% per year, while unemployment declined from almost 14% of the labour force to just 5.5% and the employment rate improved substantially, albeit from low starting levels (see Graphs 39 and 40). Especially the construction sector boomed with employment expanding by about 20% each year over 2005-2008. Following the crisis, Bulgaria experienced one of the strongest drops in employment in the EU, declining cumulatively by about 12% over 2009-2012. The construction sector accounted for over a quarter of the aggregate employment losses, but most other sectors were also affected. Part of the fall in employment can be attributed to the strong decline in Bulgaria's working-age population by about 1.5% per year due to negative demographic trends (low birth rate, ageing population, emigration). However, the unemployment rate has also more than doubled from about 5% of the labour force in 2008 to over 12% in Q3 2012, thus above the scoreboard threshold value. The labour market is forecast by the Commission to stabilise in 2013, with only very moderate improvements expected in 2014.

Graph 39: Real GDP and employment growth



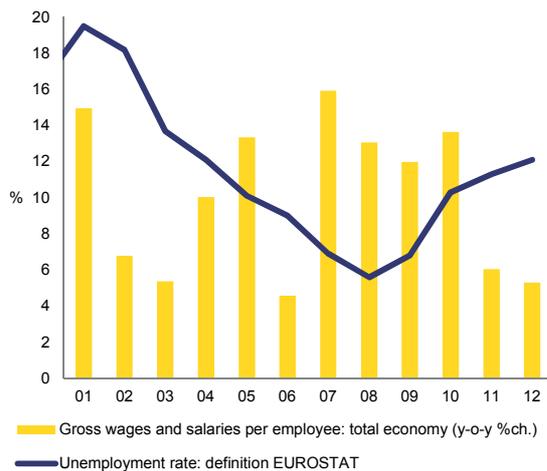
Graph 40: Employment and unemployment rate (% 15-64 years), BG, NMS¹⁶, EU-15



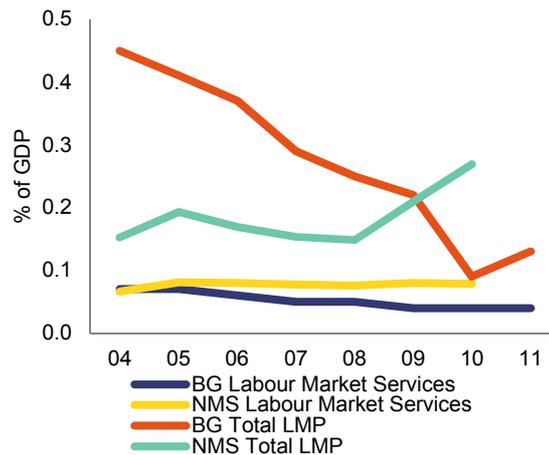
Source: Commission services

The Bulgarian labour market adjustment during the economic crisis stands out in terms of its significant job losses, but simultaneously strong average wage growth, above productivity growth (Graph 41). Employers seem to have overwhelmingly opted for cutting jobs rather than wages, probably due to restructuring needs following a period of economic overheating and a sudden stop in capital inflows. The predominance of job cuts over wage cuts is especially problematic for the vulnerable labour market groups, sectors and regions, which also have the least capacity of finding alternative employment. In contrast to most other countries, expenditure for active labour market policies has been substantially reduced in Bulgaria in the midst of the downturn (Graph 42), which might have added to unemployment.

Graph 41: Unemployment rate and compensation per employee



Graph 42: Expenditure on ALMPs*



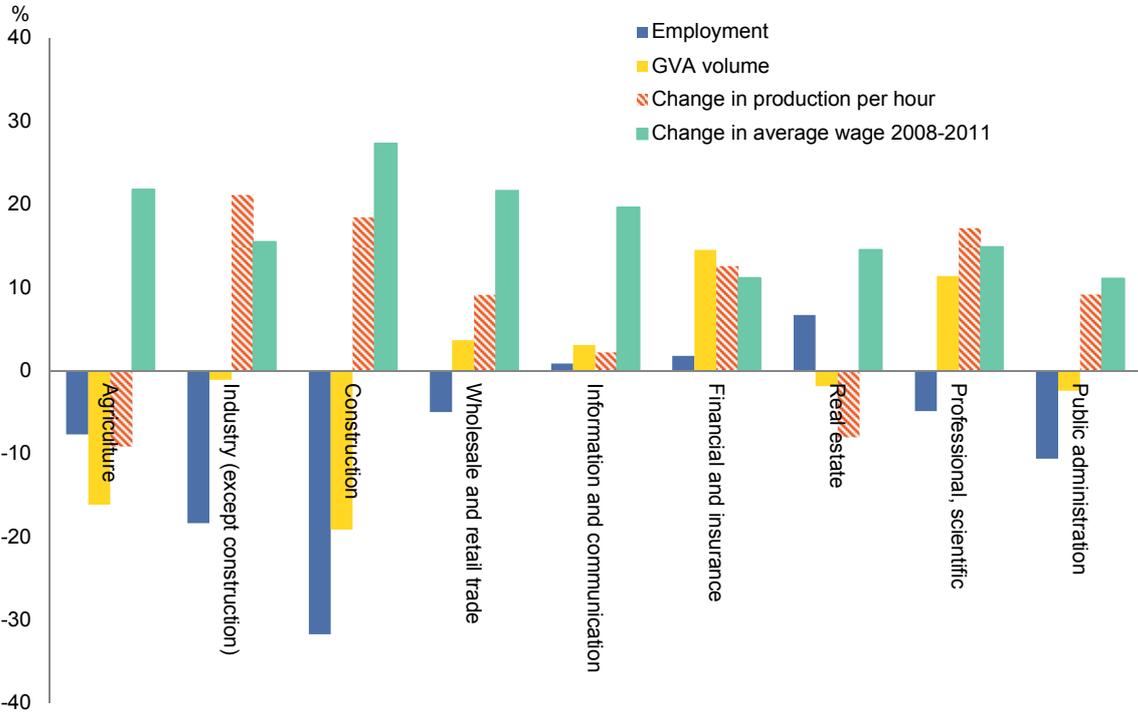
Source: Commission services

*Active labour market policies

¹⁶ NMS – New Member States refers to the countries, which joined the EU since 2004.

The impact of the economic downturn varies significantly among sectors. Between 2008 and 2011, production was reduced in construction and the primary sector by 19% and 16%, respectively, while it was relatively constant in industry and even increased in some service sectors. In turn, over the same period, employment was cut by more than 30% in construction but also by nearly 20% in industry, while it even marginally increased in some service sectors (Graph 43). Productivity growth has remained relatively strong over the crisis and post-crisis period in most sectors as well as in the economy as a whole. Part of the growth in productivity could be driven by economic catching-up from the lowest level in the EU, but it is also influenced by statistical effects arising from employment being reduced more than output. For example, in the industry sector employment declined strongly while output remained stable, which resulted in strong growth in statistically-measured productivity (output per employee). Overall, sectoral differences seem to explain upward wage pressures in some growth-sectors, but do not explain relatively strong wage growth in some crisis-hit sectors.

Graph 43: Sectoral employment, production, productivity and wage developments

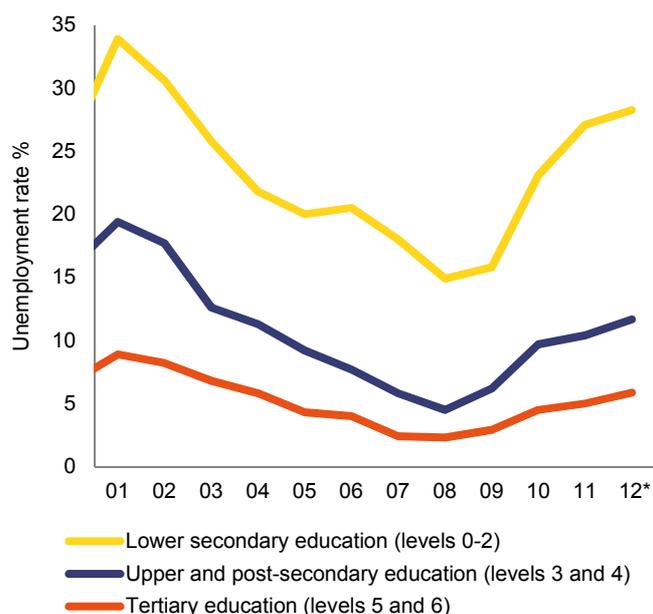


Source: Commission services

Low-skilled workers were the most severely hit by the crisis and the ensuing restructuring. While employment of low-skilled workers dropped by nearly 40% over the crisis, it fell by only 6% for high-skilled employees. Similarly, the unemployment rate for low-skilled stood at 27% in 2011, while for high-skilled it was only 5% (Graph 44).¹⁷

¹⁷ For an in-depth study of Bulgaria's labour market see Maiväli and Stierle (2013).

Graph 44: Unemployment rate by skill level

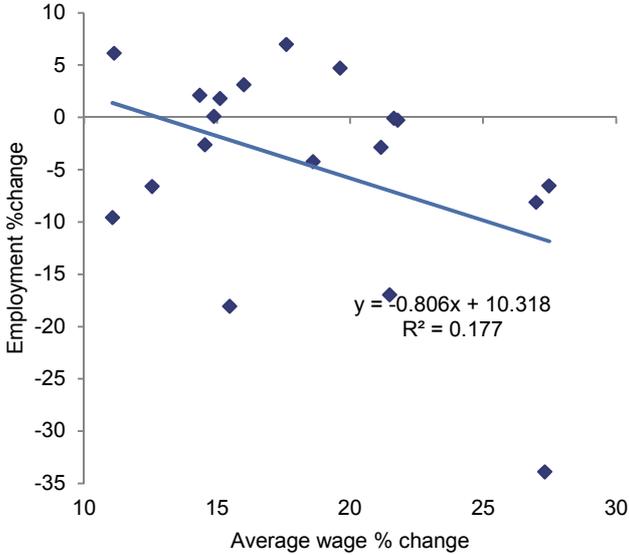


Source: Commission services

Employers thus seem to have adjusted to the downturn by slashing "excess" labour with the lowest educational attainment, weakest productivity and corresponding low wage levels. Purely statistically, this change in the composition of employment raises the average wage of the economy, as well as productivity (output per employee). This effect seems to be confirmed by the sectoral wage and employment data, which shows that, contrary to the usual intuition, on average the sectors most heavily hit by the crisis surprisingly show the highest average wage growth over 2008-2010 (Graph 45). For example, the construction sector shows one of the fastest growth rates in average wages, by 27% over 2008-2010, while also having cut the most jobs (34%) in a crisis context.¹⁸ However, given that job cuts affect both average wages and productivity in parallel, this composition effect should, in principle, not apply to unit-labour costs.

¹⁸ The whitening of the economy can have a similar statistical effect. Bulgaria is assessed to have the largest share of the shadow economy in the EU (Schneider, 2011) and the government has taken measures to improve tax compliance and enhance labour inspections. The legalisation of wage payments could play a significant role in average wage growth in some sectors, for example retail trade, where the social security minimum thresholds have been increased substantially. However, no concrete data are available to quantify those effects.

Graph 45: Sectoral wage and employment change, 2008 - 2010



Source: National Statistical Institute

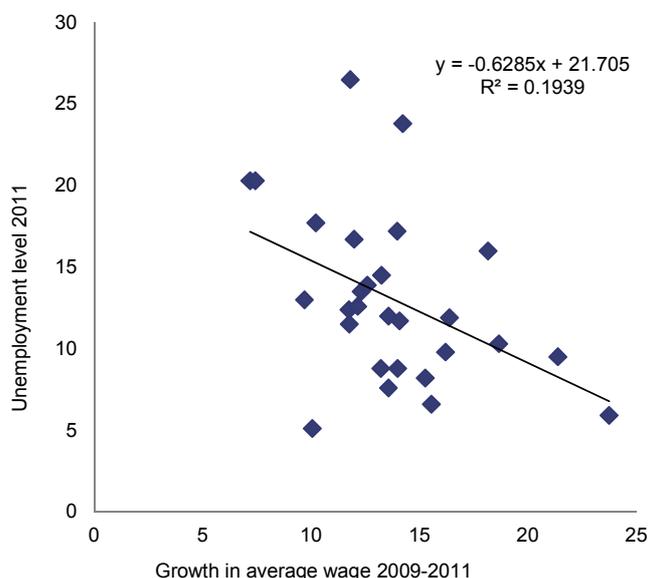
Large regional discrepancies in unemployment existed already before the crisis and have remained prominent. Currently, unemployment rates range from about 6% in the capital region to over 20% in the poorest regions.

Regional variations in labour market conditions have a relatively limited impact on corresponding wage growth rates (Graph 46). For example, in the capital region, the region with one of the lowest unemployment rates, average wages grew at a rate of about 10% per year and thus far above the national average. Consequently, some part of the average wage growth appears to be explained by wage increases in regions with a tighter labour market. However, it does not explain wage growth of more than 10% per annum in some regions with an elevated unemployment rate.

The relatively rapid wage growth is influenced by a combination of factors, some of which only affect the statistical average even without actual wage increases. As discussed above, these effects arise from job cuts being concentrated in low-paid jobs, while higher-paid jobs remained intact, and a reduction in undeclared wages.

Actual received wages have also increased, driven by convergence from the lowest wage levels in the EU, skills and regional mismatches and by increases in minimum social security thresholds bidding up wages (discussed below). Policy measures to alleviate skill and regional mismatches are therefore crucial both for addressing the unemployment challenge and keeping ULC growth pressures in check.

Graph 46: Regional unemployment rate and average wage growth



Source: Commission services

Wage setting appears relatively flexible in Bulgaria, according to most labour market institutional features. Wage bargaining takes mainly place at firm level and at individual contract level, with a relatively low coverage of collective wage agreements (about 14% of employees, Bulgarian National Bank, 2011). Adjusted bargaining coverage¹⁹ amounts to 30% of employees, which is the lowest in the EU apart from the Baltic countries. About 20% of wage and salary earners in employment are affiliated to a trade union. This is below the average of the 12 Member States that joined the EU since 2004, but the average is pushed up by high union density in some of these countries (Visser, 2011). In fact, only five of those countries have a higher union density. Consequently, while union density does not seem to be a driving force behind wage dynamics in Bulgaria, it cannot be regarded as exceptionally low either. The duration of wage bargaining contracts is normally one year, i.e. allowing for changes in economic conditions to be taken into account relatively swiftly. Similarly, the degree of wage indexation is rather limited. According to a survey conducted by the Bulgarian National Bank, about 7% of firms use an automatic inflation-based mechanism and about 17% of firms take inflation "implicitly" into account in their wage setting (Bulgarian National Bank, 2011).

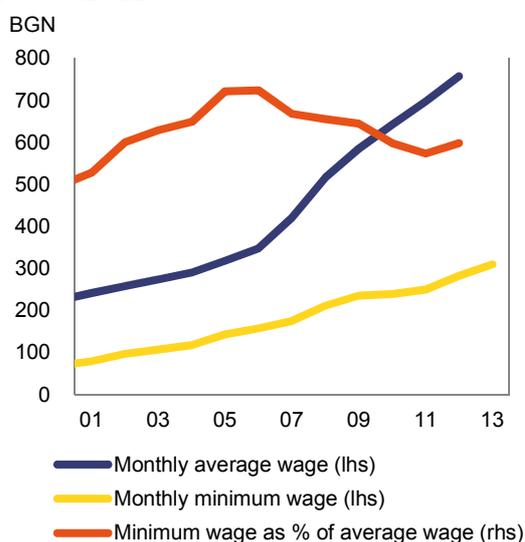
The nation-wide minimum wage played a limited role in the labour market, at least up to 2011. The minimum wage was frozen for two and a half years between 2009 and 2011. This brought the ratio of the minimum wage to the average wage down from 45% in 2005 to 35% in August 2011 (Graph 47).²⁰ Recently, the minimum wage was increased by about 29% (by 12.5% in September 2011, 7.4% in April 2012 and most recently 6.9% in January 2013),

¹⁹ The adjusted bargaining coverage gives the share of employees covered by wage bargaining agreements as a proportion of all wage and salary earners in employment with a right to bargaining, expressed as percentage, adjusted for the possibility that some sectors or occupations are excluded from the right to bargain.

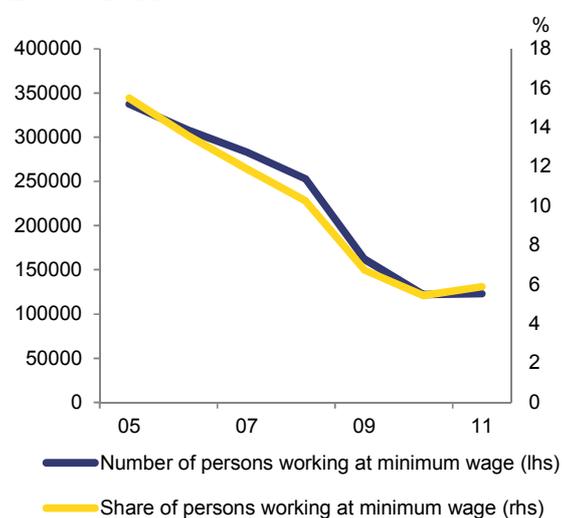
²⁰ At first sight, the figure of 45% might seem relatively high in an international comparison, especially for a catching-up economy. However, part of this high number might be explained by the grey economy, i.e. by an artificially reduced figure for average wages due to undeclared wages.

reversing some of the decline in the ratio to the average wage. Nevertheless, the new minimum wage of about 160 euros per month remains the lowest in the EU. Similarly, the share of employees receiving the minimum wage has fallen from 16% to 6% over 2005-2011 (Graph 48).

Graph 47: Minimum and average wages, 2005 - 2012



Graph 48: Coverage of minimum wages, 2005 - 2011



Source: Commission services

While most institutional features do not seem to significantly limit labour market adjustments, an exception appears to be the system of minimum social-security thresholds. This system, implemented with a view to combating the shadow economy and improving tax collection, sets over 700 different minimum-income thresholds across about 85 sectors and 9 occupations for the calculation of social security contributions. Also, a maximum limit for the social-security tax applies, capped at a wage income of 2200 leva, which is slightly over 1100 euros per month.²¹ All employees and self-employed are covered by this system. The minimum thresholds are agreed between social partners or, in case an agreement is not reached for some groups, these thresholds are administratively set by the government. While social security contributions have to be paid according to these thresholds, actual wages can be lower as long as they comply with the statutory minimum wage.

The declared wage of over one quarter of all employees is close to their respective minimum threshold (+/-10% around the threshold). This is substantially higher than the coverage ratio for the statutory minimum wage. The thresholds range from the minimum wage for some unskilled workers to more than five times the minimum wage for managers. While this dispersion could seem reasonable at first sight, in some sectors, even for elementary occupations, the thresholds are significantly above the statutory minimum wage. Consequently, according to unpublished data, the minimum thresholds are on average only about 20% below the average income in the same sectors/occupations. Overall, in low-paid sectors and occupations, the minimum thresholds have a higher coverage and are closer to the average wage than in other sectors and occupations (Table 2).

²¹ The social security tax rate is 30.3%, of which over half is paid by the employer.

Table 2: Coverage of minimum thresholds and ratio to average income

	Share of employees from total insured at minimum level (+/-10%)	Minimum threshold income ratio to average income
TOTAL	27.0	79.0
Managers	8.0	68.0
Professionals	6.0	70.0
Applied specialists	10	71
Clerks	14.0	75.0
Service and retail workers,	36.0	93.0
Skilled agricultural workers	32.0	90.0
Craft and related trade workers	27.0	81.0
Machine operators and assemblers	29.0	83.0
Elementary occupations	30.0	94.0

Source: Commission calculations based on unpublished data

Note: Data calculated as weighted average across industry groups

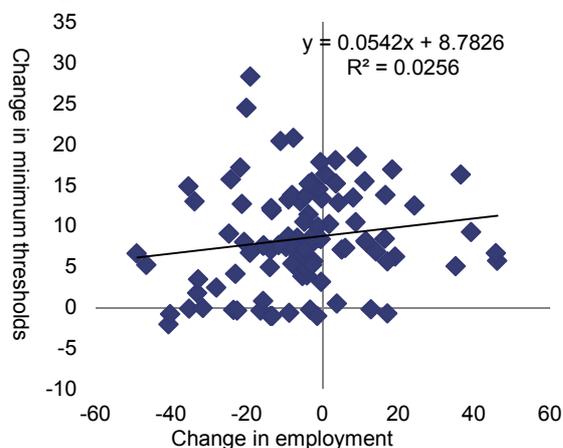
These thresholds are commonly considered by social partners as indicative minimum wages by sector and occupation. Thus, the increases in thresholds have some impact on wage demands in the same sectors. While, in principle, threshold increases should follow actual wage trends in the economy, there are some incentives to push for higher thresholds. Employee organisations have an incentive to ask for higher thresholds as this indirectly leads to higher wages. The government also has some incentives for increasing thresholds as this directly adds to tax revenues and reduces the shadow economy. At the same time, the potential adverse impacts on employment might be overlooked since these effects are less immediately evident.

It appears that especially for the low-skilled employees, the thresholds did not allow for sufficient downward flexibility in the context of the economic crisis. Most of the thresholds were increased substantially also during the crisis. The thresholds for some of the sectors and occupations severely affected by the crisis were frozen for several years, but they were not reduced. The weighted average annual growth rates of the thresholds amounted to about 5% in 2010 and 7% in 2011, which probably played a role in influencing wage demands for the entire economy. It could be expected that the increases to the various thresholds would take account of differing sectoral conditions in order to avoid excessive increases in crisis-hit sectors. Remarkably, the correlation between a change in employment and increases in thresholds in the same sectors and occupational groups is very weak (Graph 49). This might indicate that the increases in thresholds did not take sufficient account of differences in sectoral and occupational employment conditions.

While Bulgaria has an overall low tax wedge, the system of minimum social security thresholds implies a higher tax wedge for low-paid jobs. Bulgaria has introduced a flat income tax of just 10%, the lowest rate in the EU and has been able to substantially reduce the tax wedge, including social security contributions to be paid by employers and employees. Over time, Bulgaria's tax wedge has fallen below the EU average (Graph 50). Social security taxes (aggregate tax rate of slightly over 30%) constitute a relatively large share in the overall labour tax burden in Bulgaria given the very low flat income tax rate. Crucially, with a maximum cap at about three times the average wage, the system of minimum social-security thresholds implies regressive taxation for some income groups (higher effective tax rates for low-paid employees, whose actual wage is below the social-security income threshold and lower taxes for the high-paid). While the aim of the thresholds is to fight undeclared wages,

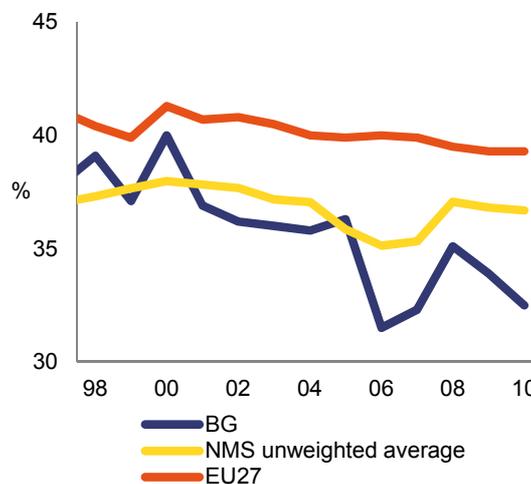
paradoxically, the regressive taxation effect could lead to an opposite effect and push those jobs into the shadow economy, where the actual received wage is below the threshold used for taxation.

Graph 49: Rates of change of minimum threshold and employment by sector and occupation, 2009 – 2011



Source: Commission calculations based on unpublished data

Graph 50: Tax wedge on labour income



Source: Commission services

The government has made some progress in differentiating the growth of social security thresholds according to sectoral and occupational economic conditions. As part of the negotiations of the 2013 thresholds, the government has decided to keep the limits for those professions unchanged, where the employers and employees were unable to reach a decision. This has also resulted in a lower average increase of the thresholds.

4. POLICY CHALLENGES

The analysis in sections 2 and 3 has shown that Bulgaria continues to experience macroeconomic imbalances which, while not being excessive, need to be addressed. In particular, the country's external indebtedness, corporate sector deleveraging pressures and labour market adjustment in response to the crisis present the main policy challenges. It should be recalled that these challenges and the labour market concerns in particular, as well as relevant policy responses, were integrated in the country-specific recommendations (CSRs) issued for Bulgaria in July 2012. The assessment of progress in the implementation of those recommendations will take place in the context of the European Semester. Against this background, this section discusses different avenues that could be envisaged to address the challenges identified in this IDR.

Concerning the challenge of achieving a sustainable level of external indebtedness, the following measures may be discussed:

Attracting more capital in productive sectors would be beneficial for future economic growth. As a small open economy, Bulgaria remains inherently vulnerable to external shocks and depends on foreign financing to fuel its output growth. In the years leading up to the crisis, the country saw significant investment in real estate, which was partially responsible for inflating an asset price bubble. Improving the business environment would allow Bulgaria to attract more investments in productive sectors and would improve future economic growth prospects. This would help the country grow out of its external indebtedness in the medium and long term through increases in economic output. The business climate could benefit from further reduction of administrative costs and red tape and from improving the efficiency of the judiciary to ensure a level playing field.

Better EU funds absorption would help placing Bulgaria on a higher growth path. The increase in output the post-crisis years, albeit small, has come in part from investment supported by EU structural, cohesion and agricultural funds. Better funds absorption could deliver a double benefit to the economy in general and the external indebtedness in particular. It would have a positive effect on future growth and could also help reduce the need for external payments and indebtedness through the capital account.

Concerning the challenge of reducing private sector debt and tackling corporate deleveraging pressures in particular, a number of avenues can be explored:

Enhancements in the insolvency framework could prove useful for increasing business confidence and improving the investment climate. Both in- and out-of-court settlement procedures may be explored as options for facilitating orderly debt restructuring. Providing guidelines for streamlining negotiations and speeding up court proceedings appears to have benefitted other countries facing similar challenges.

Improving corporate sector legislation and its application by the judicial system can have a positive impact on debt market clearing. Measures, recently proposed by the authorities, aim at improving corporate legislation, including the removal of the possibility of insolvency backdating. If applied consistently and effectively by courts, those measures could speed up and facilitate bankruptcy proceedings, thus reducing uncertainty for economic actors

and having a favourable influence on the overall business climate. Further to this, court know-how and capacity to implement corporate legislation could be enhanced by following the positive experiences of other countries.

Strict implementation of rules on late payments would relieve cash flow concerns and present a clearer picture of the corporate balance sheet. Arrears on the payment for goods and services between non-financial corporations, combined with the high level of corporate debt, pose a sector-wide risk. Clear rules on the treatment of late payments, in line with EU Directive 2011/7/EU, and their strict enforcement can have a favourable impact on business relations within the non-financial sector as well as between the corporate and government sectors.

Concerning the challenge of rising unemployment and job losses, especially in the low-skilled segment of the labour market, the following issues could be considered:

A major challenge relates to the high structural unemployment level, reflecting skills mismatches in some sectors of the economy. Measures that specifically target the low-skilled segment of the labour market, that was the hardest-hit by the crisis, could usefully be examined.

A comprehensive set of labour market measures may be necessary to address the skills mismatch problem, especially labour shortages in some sectors. High structural unemployment may already be pushing up wages and ULC in some sectors that have recovered from the crisis. Insufficient labour supply may result in missed opportunities and impede economic growth in the future. Reforms in higher education, youth employment programs and regional policy measures can be considered as possible remedies. Specific measures could be identified as part of the Europe 2020 process.

Continued increases in the minimum thresholds for social security contributions appear to have some adverse side-effects on vulnerable sectors of the labour market. The system of minimum social security thresholds was introduced as a measure to combat the shadow economy and may have proved beneficial in that regard according to recent studies. However, continued increases in the thresholds, including during the crisis years, has brought those social payment floors very close to the average wage in some sectors and occupations, especially the low-wage segment. Furthermore, the system implies a higher effective social tax rate for the lower-paid employees and might price out some low-skilled segments and regions of the labour market. A careful examination of those side-effects may benefit the threshold-setting mechanism and prevent adverse influence on the more vulnerable part of the labour market.

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