December 2012
IMF Country Report No. 12/328

# Bulgaria: 2012 Article IV Consultation—Staff Report; Public Information; and Statement by the Executive Director for Bulgaria

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of a combined discussion of the 2012 Article IV consultation with Bulgaria the following documents have been released and are included in this package:

- The staff report for the 2012 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on October 2, 2012, with the officials of Bulgaria on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 13, 2012. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- A Public Information Notice (PIN) and Press Release, summarizing the views of the Executive Board as expressed during its November 30, 2012, discussion of the staff report on issues related to the Article IV consultation and the IMF arrangement, respectively.

- A statement by the Executive Director for Bulgaria.

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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# BULGARIA

## STAFF REPORT FOR THE 2012 ARTICLE IV CONSULTATION

November 13, 2012

## KEY ISSUES

**Context**. Conservative fiscal and financial supervisory policies have helped maintain macroeconomic and financial stability. However, the adjustment has resulted in sizeable job losses and a feeble recovery. The economy remains vulnerable due to linkages with the euro zone, still substantial external debt and rising nonperforming loans.

**Outlook and risks.** The subdued external environment is limiting near-term growth to a range of 1 to 1½ percent. Risks to growth emanate from the euro zone, oil price developments and, over the longer term, aging pressures. These risks call for the maintenance of prudent policies and high buffers.

**Fiscal policy.** Little further structural fiscal adjustment remains to reach the 2015 target of budget balance. Policy makers should safeguard this achievement by resisting election-related spending pressures in 2013, and improve budget composition by adding space for infrastructure and ameliorate public services gaps to promote growth.

**Financial sector policies.** The banking system is stable and liquid but nonperforming loans are rising. Banks should be encouraged to actively resolve poorly performing assets, while provisioning should remain conservative. Continued supervisory vigilance, preemptive actions, and stronger safety nets are priorities in the current environment.

**Structural policies.** More public investment using European Union funds and improvements in the insolvency framework would address key growth bottlenecks. Addressing workers' skills deficiencies and nominal rigidities in the labor market would tackle unemployment and over time reduce poverty by raising incomes.

**Previous IMF advice.** Policy implementation has mostly been consistent with IMF recommendations. The fiscal deficit has been reduced well below Maastricht and national limits. Buffers have been bolstered through vigilant financial sector supervision and a recent eurobond issue that raised the capacity of the fiscal reserve to meet forthcoming debt repayments. Progress has been made on reforms in pensions and public administration but not health and corporate debt resolution.

Approved by
**Ajai Chopra (EUR) and Vivek Arora (SPR)**

Discussions took place in Sofia from September 20 to October 2. The staff team comprised Ms. Purfield (head), Messrs. Lakwijk and Gracia (all EUR), Ms. Weber (FAD), Ms. Nedelescu (MCM), Ms. Rendak and Mr. Giddings (both LEG), and Mr. Lybek (Resident Representative) and Ms. Paliova (Resident Representative Office, Economist), with research assistance from headquarters by Mr. Peterson and administrative assistance by Ms. Zaffaroni. Mr. Manchev (OED) participated in the discussions. The mission met with Finance Minister Djankov, Bulgarian National Bank Governor Iskrov, EU Funds Minister Donchev, other senior officials, and financial sector and industry representatives. A press conference concluded the visit. In July 2012, a 1½-day IMF-ILO consultation on job creation was held in Sofia with participation of the International Trade Union Confederation and local labor unions. In addition, the mission had a constructive exchange of views on a broad range of policy issues with representatives from civil society organizations and think tanks.

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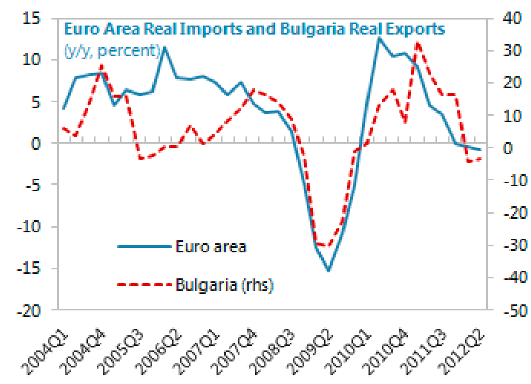
# CONTEXT: STABILITY WITH INSUFFICIENT GROWTH

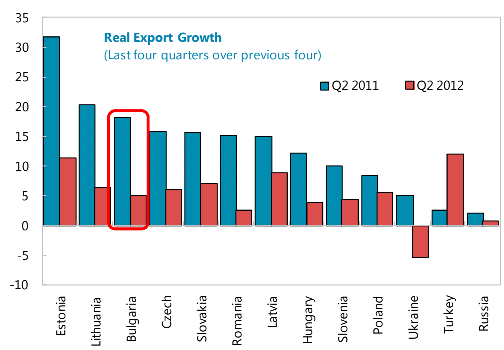
1. **Macroeconomic and financial stability has been maintained in recent years.** This owes to both the policies pursued before the crisis—fiscal surpluses and proactive banking supervision—and steadfast policy implementation since. The framework of European Union (EU) membership (from 2007 and anticipated well before) and currency board (since 1997) have provided legal and monetary stability.

2. **Growth since the crisis has left unemployment high and income levels relatively low.** Per capita GDP growth has been substantial over the last 15 years, but Bulgaria remains the poorest EU member. The real economy has yet to recover from the crisis, reflecting the unwinding of the domestic demand boom and headwinds from the euro zone crisis. Unemployment has continued to rise and emigration and aging undermine potential growth.




Source: Haver.

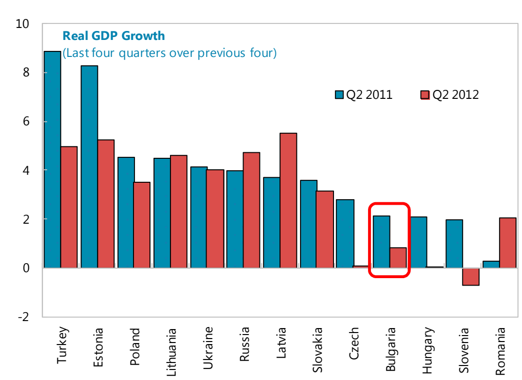
3. **The policy framework, while solid and resilient to the 2009 crisis, could be tested by further shocks.** The economy has shown its ability to adjust rapidly within this framework. Flow imbalances have unwound since the crisis but stock issues linger (Figure 1). Private external debt has fallen but a large share is short-term and needs to be rolled over, and in the banking system, which has significant buffers, nonperforming loans (NPLs) are rising. The currency board imposes constraints on lender of last resort abilities. Large swings in the fiscal deficit may be difficult to finance now that fiscal buffers have been reduced. Trade and financial links to the euro area are strong especially with economies in difficulty (Annex I).




Sources: Haver

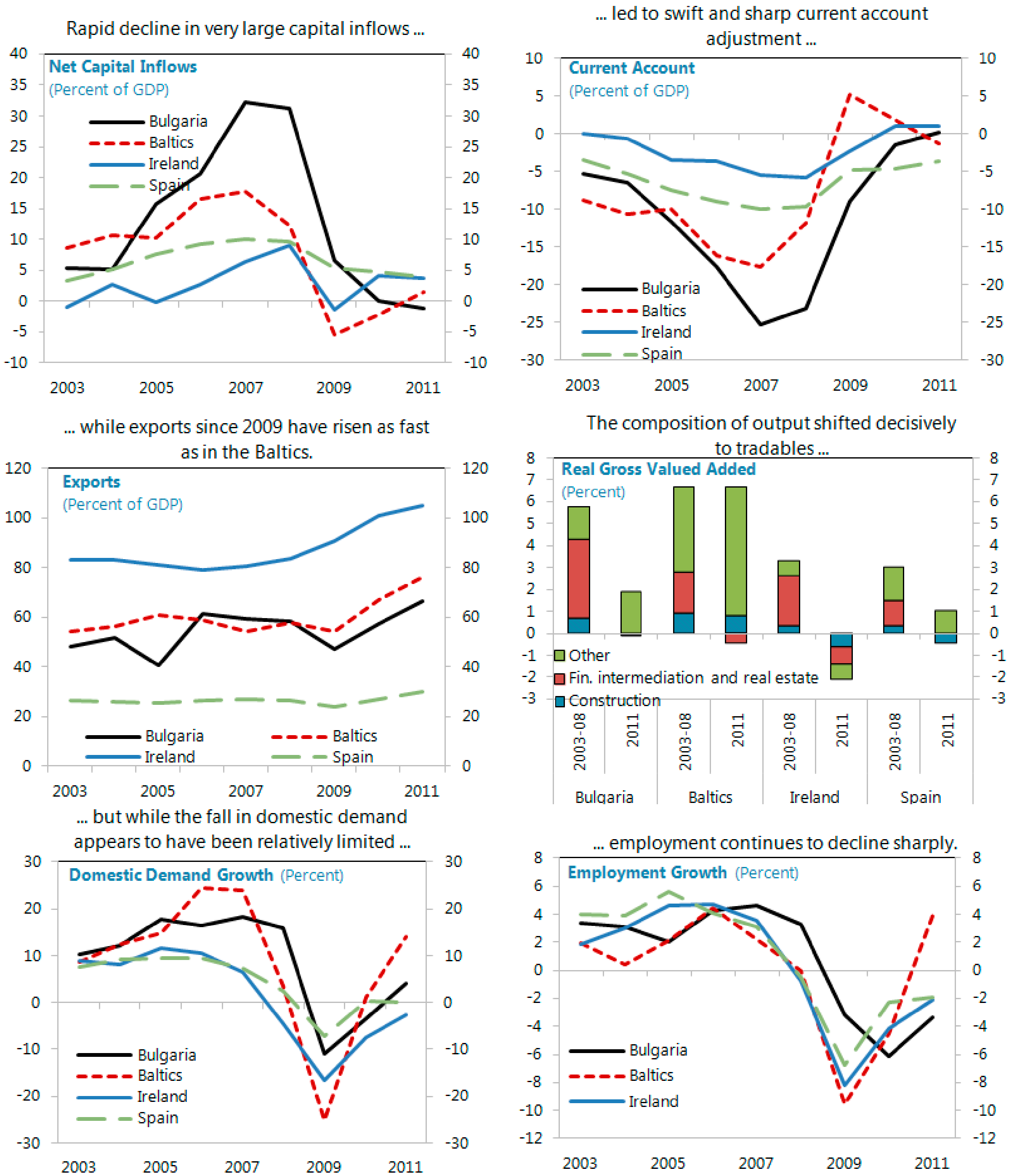
# BACKGROUND: EXTERNAL HEADWINDS HAMPER RECOVERY

4. **Growth has been lackluster since the crisis and output remains below pre-crisis levels** (Tables 1–3). Domestic demand has fallen until recently while exports, which rose sharply in 2010–11, have slowed (Figures 2 and 3). GDP growth in the first half of 2012 was positive but weak at 0.9 percent,



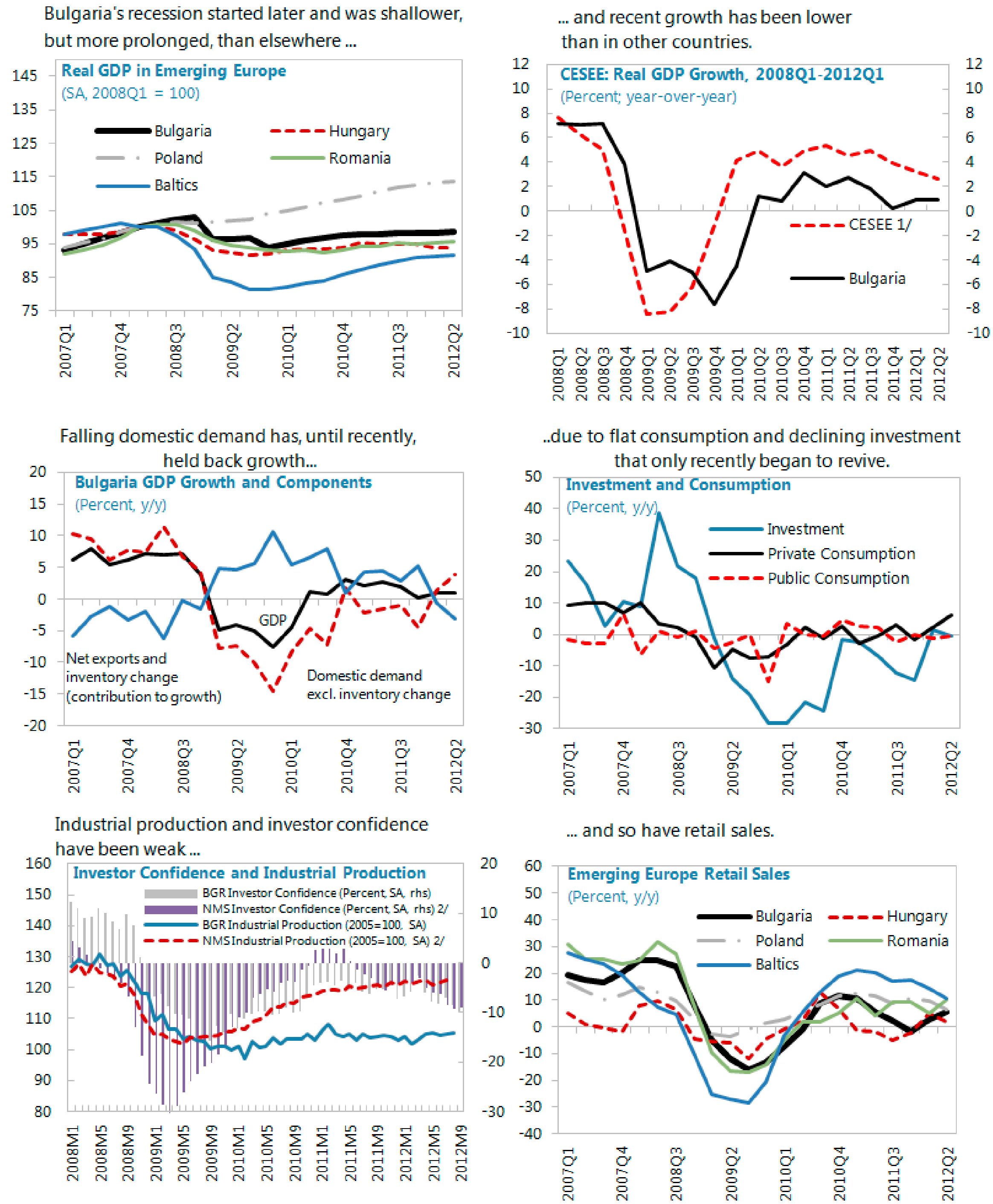

Sources: Haver

## Figure 1. Bulgaria: Trends in Recovery Following Domestic Demand Collapse, 2003-11




Source: Haver.

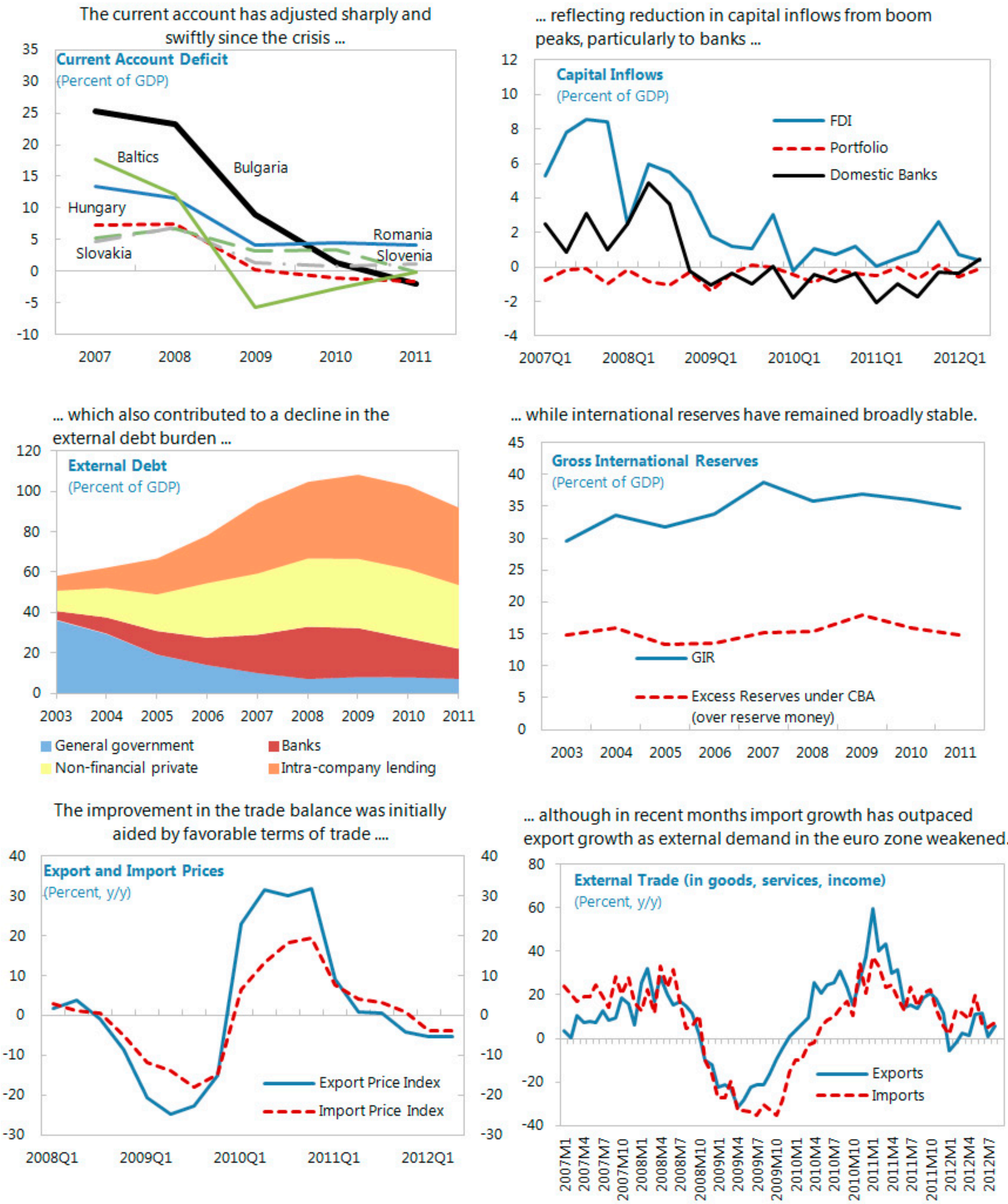
## Figure 2. Bulgaria: Real Sector Developments, 2007-12




1/ CESEE: Albania, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Ukraine, and Turkey.
2/ NMS: Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovakia, and Slovenia.

Sources: Haver; national authorities; and IMF staff calculations.

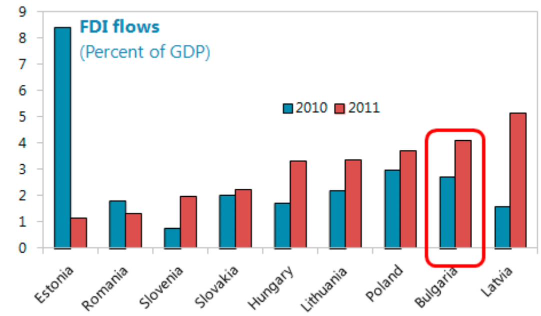
## Figure 3. Bulgaria: External Sector Developments, 2003-12



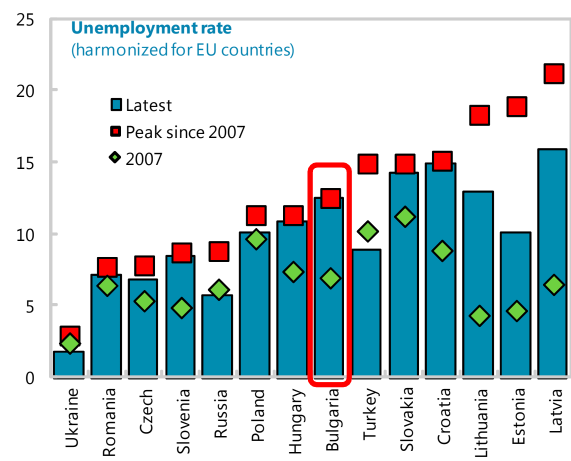

Sources: Haver; National Authorities; and IMF staff estimates.

supported by an uptick in domestic demand but with a negative external sector contribution.[1] While many countries are suffering from lower export growth, GDP growth in Bulgaria has weakened more, and is lower, than in most regional peers.

**5. Domestic demand has recently shown signs of revival.** Investment is benefitting from rising foreign direct investment (FDI) and EU funds absorption—the latter is projected to be some 40 percent higher in 2012 than in 2011 (Tables 3 and 6a). However, significant corporate (nonfinancial) sector leverage—at 138 percent of GDP in 2010—remains a drag. Households have been buffeted by still rising unemployment, declining real estate prices and tensions in the euro zone that undermined confidence. Increases in nonperforming mortgages are evidence of some financial stress but households on the whole are not in poor financial health. Their bank deposits are rising, banking debt remains low at 25 percent of GDP, headline inflation has fallen significantly from pre-crisis highs and real wages have grown rapidly since 2009, factors that have allowed consumption to revive.




Sources: BNB; Haver.




Sources: Haver

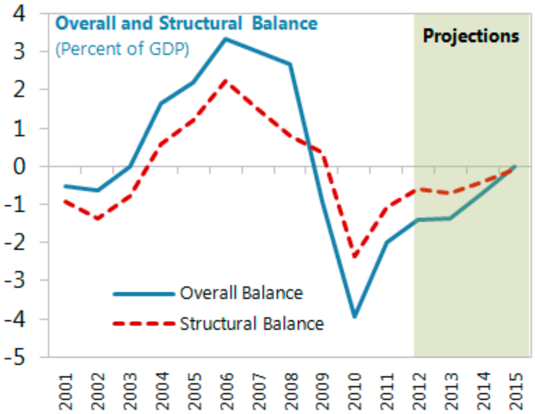
**6. The rapid correction in the current account deficit since 2009 culminated in a small surplus in 2011** (Table 4). It reverted to deficit in the first half of 2012 with subdued exports and more imports related to FDI. The overall balance of payments, however, improved as inflows in the first half of 2012 were 2½ percent of GDP higher than a year earlier due to higher FDI and slowing financial sector outflows. The international investment position has improved in line with the fall in external debt (Table 5), reflecting in particular capital outflows from the financial sector.

**7. The fiscal deficit has continued to decline and public debt is the second lowest in the EU** (Figure 4, Tables 6a–b). The adjustment, which amounted to a cumulative structural improvement in 2011–12 of 2 percent of GDP, was largely expenditure-based. Pensions and wages were frozen and a public administration reform reduced public employment by 3 percent since 2010. Meanwhile, domestic arrears fell from 1 percent of GDP at end-2009 to 0.5 percent of GDP at end-2011.

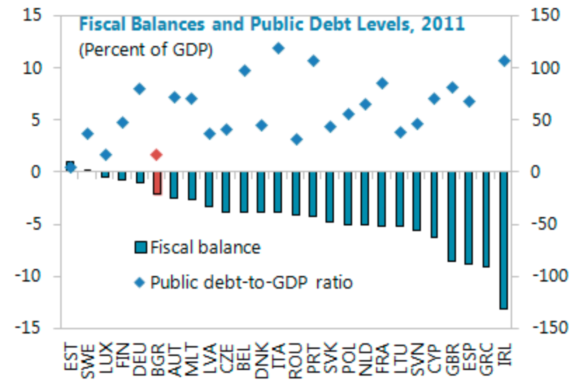
[1] Increased indirect tax collection through improved enforcement has added to measured real domestic demand.

## Figure 4. Bulgaria: Fiscal Developments, 2001-15

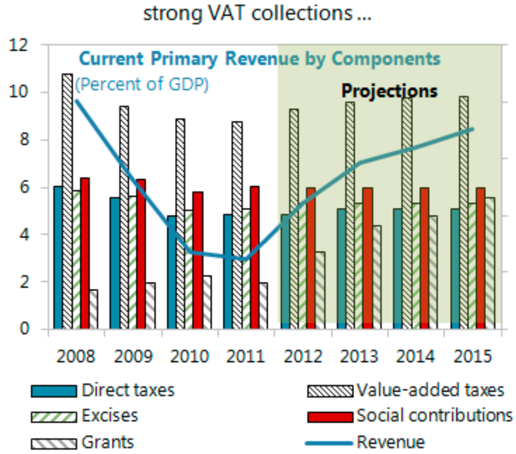
Significant adjustment has taken place after the crisis ...



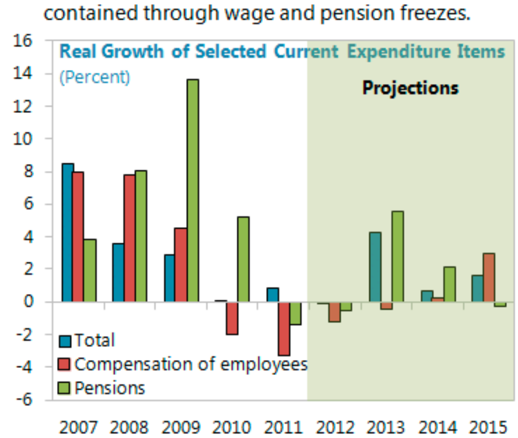

... and Bulgaria now has one of the lowest deficits and public debt ratios in the EU.



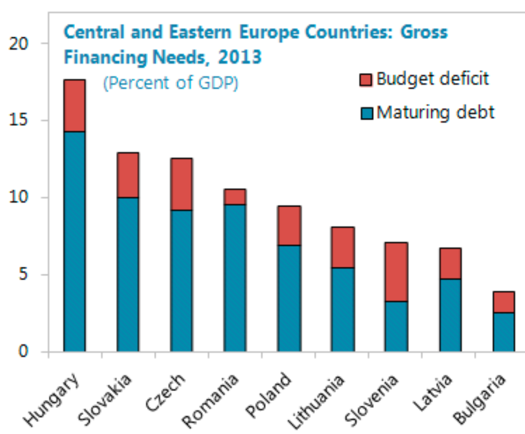

Tax revenues have recovered on the back of strong VAT collections ...



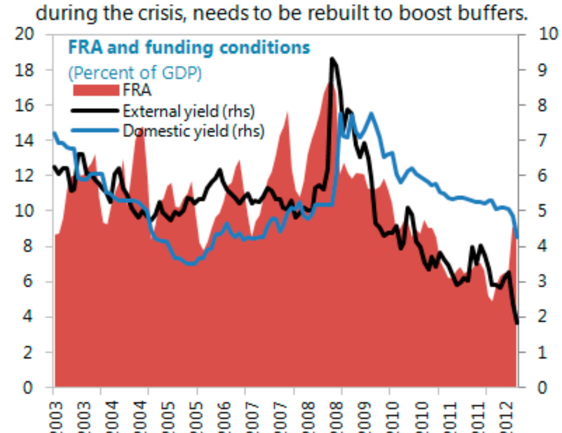

... at the same time current expenditures were contained through wage and pension freezes.




Financing needs in 2013 are relatively low compared to other CEE countries...




...but the FRA, which was used to finance part of the deficit during the crisis, needs to be rebuilt to boost buffers.

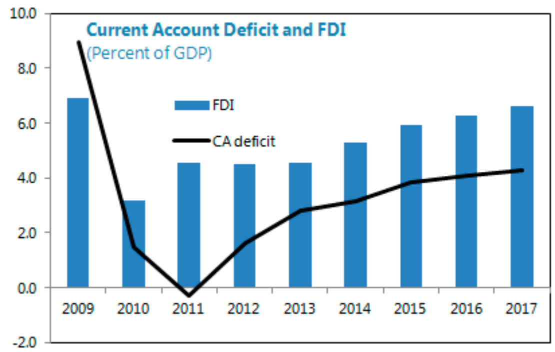



Sources: Country authorities; Eurostat; KPMG; Schneider (2011); and IMF staff estimates.

**8. Credit growth is weak and deposits are rising** (Figure 5, Table 7). These developments represent two sides of the same coin—subdued domestic demand—and increasing domestic deposits allowed banks to reduce their foreign liabilities and improve their liquidity. The local financing of Greek banks also improved (their loan-to-deposit ratio decreased from 151 percent in 2009 to 125 percent in mid-2012) and their share of assets has declined (Annex I), but the two largest Greek banks still account for just over 15 percent of total system assets. The non-bank financial sector is witnessing moderate growth in the net assets of Supplementary Insurance Pension Funds, uneven developments in the capital market, and still contracting life and non-life insurance segments.

# ECONOMIC OUTLOOK AND RISKS

**9. On a baseline of a tepid euro area recovery, growth is projected to be modest, around 1–1½ percent, in the near term driven by EU funds absorption** (Tables 2–4). Headline inflation is expected to reach 2½ percent on average in 2012 due to higher food and fuel prices and moderate next year in the absence of demand pressures. The current account is projected to be in deficit as imports—driven by rising FDI and EU funds absorption—outpace exports. Over the medium-term, growth is projected to gradually increase towards 4½ percent by 2017 and close the output gap, provided external conditions improve, domestic demand recovers from the sharp contraction witnessed during 2009–11, and, equally crucially, productivity growth increases. Higher productivity growth will require stronger EU funds absorption to narrow the infrastructure gap, improvements in the business climate, institutions, and product markets to attract foreign investment to bolster innovation, as well as better education, training and active labor market policies to develop skills.[2] Employment is projected to be little changed as the labor force shrinks due to aging and emigration.




Sources: BNB; IMF staff estimates.

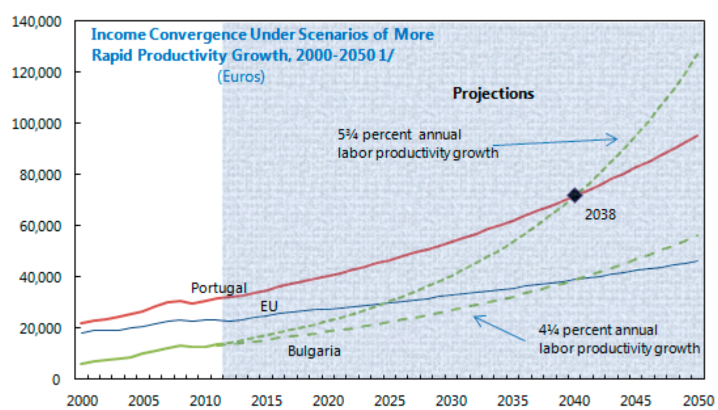
Potential output growth (average annual percent change)

| | Potential GDP | Labor contribution | Capital contribution | Productivity |
|---|---|---|---|---|
| 2002-08 | 5.5 | 5.1 | 1.2 | -0.8 |
| 2009-11 | 0.1 | -2.0 | 0.9 | 1.2 |
| 2012 | 1.5 | -1.2 | 0.1 | 2.6 |
| 2013 | 1.7 | -0.6 | 0.3 | 2.0 |
| 2014-15 | 3.0 | 0.1 | 0.6 | 2.3 |
| 2016-17 | 4.2 | 0.3 | 1.0 | 3.0 |

Source: IMF staff estimates.

1/ Based on labor share of 0.6 and capital share of 0.4.

2/ Full employment measured by hours worked.

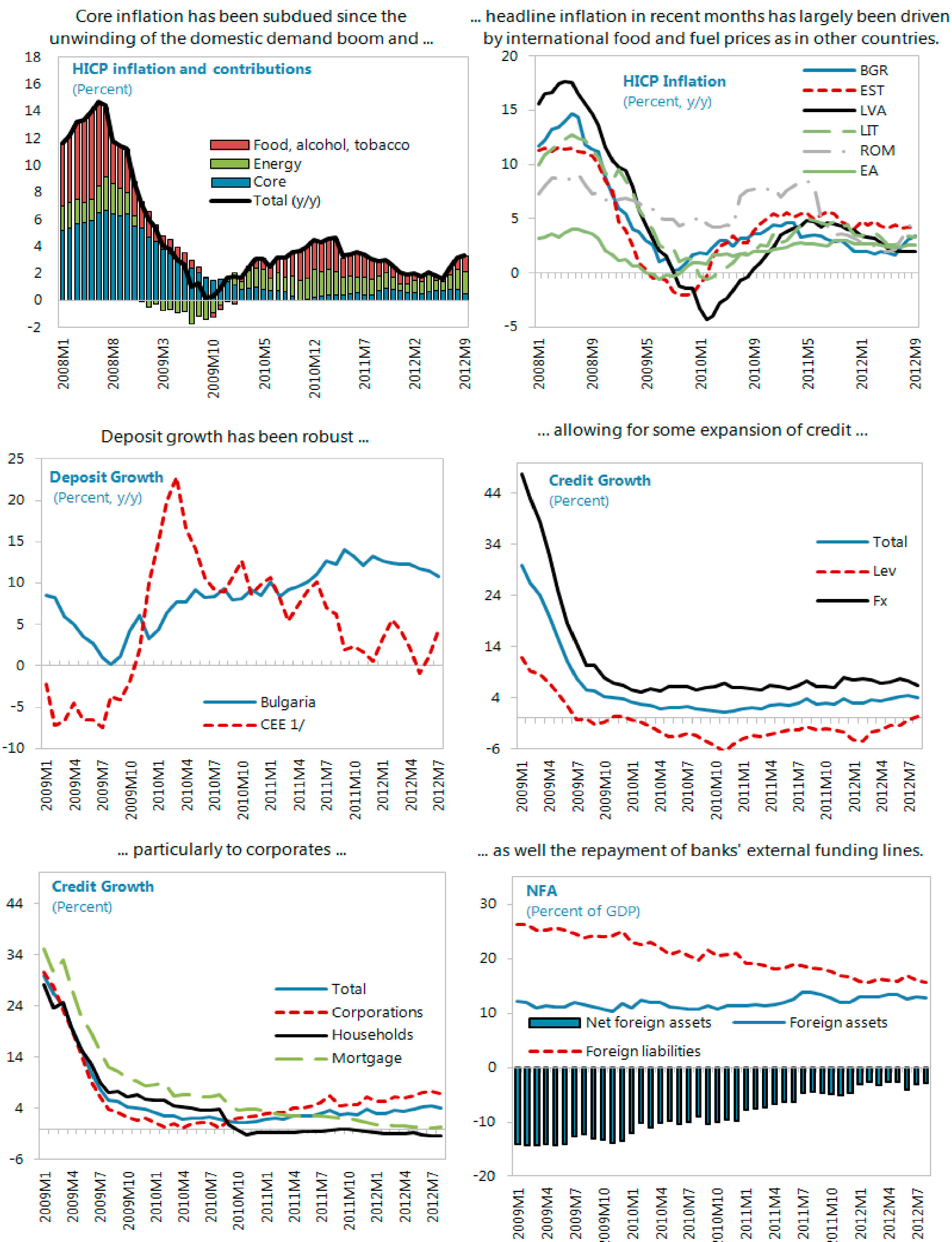



1/ With labor productivity growth at the average over the past decade of 3¾ percent, it would take until 2050 to catch up to average EU incomes.

Source: Pritha Mitra and Cyril Pouvelle, "Productivity Growth and Structural Reform in Bulgaria: Restarting the Convergence Engine," IMF WP/12/131, May 2012.

[2] See "Bulgaria—Staff Report for the 2011 Article IV Consultation."

## Figure 5. Bulgaria: Inflation and Credit Developments, 2008-12




1/ Hungary, Slovakia, Czech Republic, Romania, Poland, Lithuania, Slovenia, Latvia, and Bulgaria.

Sources: Haver; National Authorities; IFS; and IMF staff estimates.

**10. Bulgaria is vulnerable to adverse external developments and risks remain tilted to the downside.** Large short-term external debt leaves the country vulnerable to rollover risks. However, both external and fiscal debt are projected to be sustainable to a wide range of shocks (Appendix I). Staff's views are summarized in the Risk Assessment Matrix (RAM) and focus on:

- The key domestic risk is inadequate structural reform. EU funds absorption needs to accelerate to tackle the infrastructure gap. The predictability of the business environment including the insolvency framework, judiciary, and governance must be improved, and health care reformed to counter aging pressures. An additional risk is that the stock of NPLs could constrain credit availability going forward, especially if deposit growth were also to ease in a context of more limited parent funding. This risk is not significant in the short-term because of subdued credit demand. However, to prevent a large stock of NPLs from impeding the recovery once it gains traction over the medium-term, a strategy to deal with them is required now.

- External risks dominate. Severe euro area stress would reduce export demand and Bulgarian growth. The predominantly European-owned banking system could be affected if parent banks reduced funding of local subsidiaries thus depressing liquidity. Corporates already struggling with a debt overhang would be affected as would households through job losses, leading to increased delinquencies in loan repayment and lower banks' profits and capital adequacy.

- Other external risks include higher energy prices impacting inflation, incomes, and growth as Bulgaria's energy intensity of production is five times higher than the EU average and Bulgaria imports about half of its energy consumption. An increase of 20 percent in the price of oil raises inflation directly by about 0.8 percentage points.

**11. The authorities agreed that the near term outlook was for modest growth.** They did see room for GDP growth to approach 2 percent next year on the assumption that the euro area recovers. The return of the current account to deficit was seen as largely related to FDI developments and thus unproblematic. The authorities recognized that aging constrains future growth and structural reforms were imperative to boost productivity.

**12. The authorities also saw external spillovers as the key risk to the recovery.** They were confident about the ability of the economy to absorb shocks and maintain stability. They viewed their banking system as replete with buffers and benefitting from close supervision that would act preemptively if needed. They see fiscal policy less as a shock absorber than as a support for the currency board arrangement (CBA). The authorities disagreed that rising NPLs in the near term could limit credit supply because liquidity was ample and credit demand low. Deleveraging posed little risk as it was in their view largely driven by the plentiful domestic liquidity amid low credit demand, and they were also confident that their supervisory powers and on-going collaboration with home supervisors mitigated remaining risk. On structural reforms and building on some recent improvements in international competitiveness rankings, they felt that with improved EU funds absorption, longer-term growth could surprise especially if external uncertainty resolves. They also saw the need for a push after the elections to tackle insolvency, judicial, and health reforms to boost growth.

**Bulgaria: Risk Assessment Matrix** (as of October 2, 2012)[3]
(Scale: high, medium, or low)

| **Source of Risk** (listed by impact if realized from high to low) | **Relative Likelihood** | **Impact if Realized** |
|---|---|---|
| 1. Inadequate implementation of structural reforms to raise productivity growth and offset the impact of aging and emigration. | **Medium** Political economy considerations, including a lack of consensus following the elections, postpone the structural reform agenda. | **High** Low potential GDP growth and high structural unemployment resulting in a lack of income convergence with other EU members. |
| 2. Strong intensification of the euro area crisis | **Medium** Heightened financial stress could adversely alter the outlook for the euro area, and Bulgaria's buffers could be overwhelmed. | **High** Direct effects through lower export demand, GDP growth, and inward financial sector spillovers; indirect effects through parent deleveraging and uncertainty; expanding fiscal deficit. |
| 3. A slowdown of world growth. | **Medium** Slowing demand from Asia and the U.S. | **Medium** Lower external demand hurts exports, employment, and fiscal stance. |
| 4. Sharp increase in oil prices. | **Medium** Geo-political risks lead to oil supply disruptions. | **Medium** Given high energy intensity, rising energy prices reduce growth and employment, and increase prices and the current account deficit. |
| 5. Rising NPLs reduce supply of credit by Bulgarian banking system. | **Low** Inadequate action to reduce the stock of NPLs and address judicial bottlenecks to balance sheet repair. | **Medium** More subdued supply of domestic lending raises interest rates and negatively affects growth. |

[3] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path discussed in this report (which is the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is staff's subjective assessment of the risks surrounding this baseline. The RAM reflects staff's views on the source of risks and overall level of concerns as of the time of discussions with the authorities.

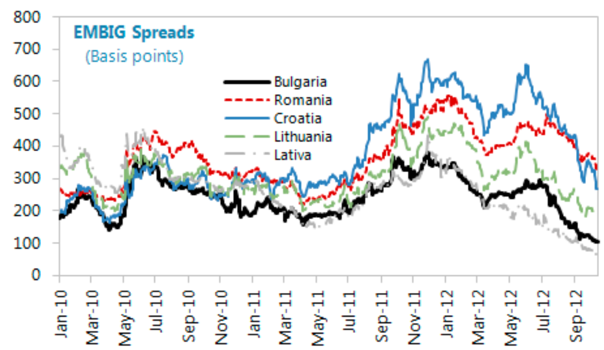
# POLICY CHALLENGES: SAFEGUARDING STABILITY AND REVIVING GROWTH

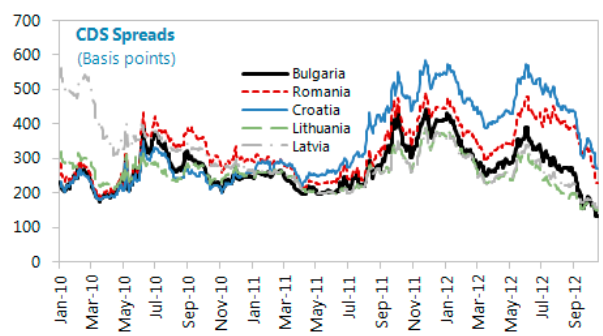
**13. Needed policies to maintain stability and reduce vulnerabilities, while reviving growth, are twofold.** First, fiscal and financial buffers should remain sufficient in view of the downside risks from the euro zone crisis. This precludes space for looser fiscal and credit policies placing the onus firmly on structural reform to revive growth. Second, structural policies need to support growth, investment, and job creation. This includes greater EU funds absorption and changing the composition of fiscal policy, tackling the legacy of NPLs, and reforms to boost productivity.

## A. The Policy Framework: A Bulwark in Uncertain Times

### Background

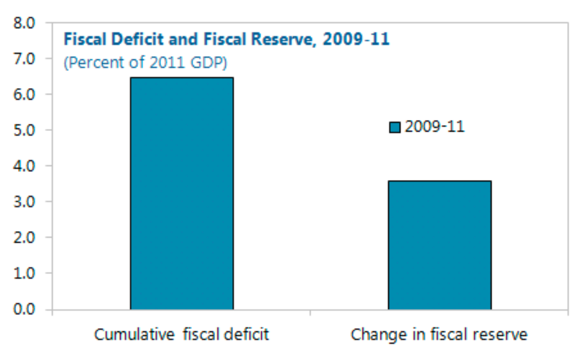
**14. Bulgaria's policy framework is three-pronged and proved its worth in recent years.** First, the CBA which links the lev to the euro has provided a macroeconomic anchor. Second, prudent fiscal policies generated pre-crisis fiscal surpluses and sizeable fiscal reserves. This did little to dampen the domestic demand boom but did allow the crisis, when it came, to be absorbed with moderate fiscal deficits and public debt. Third, conservative supervisory policies ensured the building of buffers in the financial system in pre-crisis years so that post crisis the system remained sound.




Source: Bloomberg.

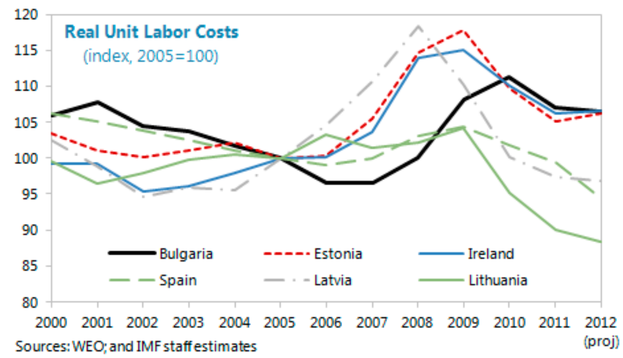
**15. Policy credibility is high at present.** Domestically, the CBA enjoys unquestioned support. Official reserves, 37 percent of GDP at mid-2012, are well in excess of the minimum required. Internationally, Bulgaria was able to issue a eurobond in July 2012 for €950 million (2 percent of GDP) with an interest rate of 4¼ percent. Spreads have fallen further since then, placing Bulgaria more in league with the Baltics than its geographic neighbors.




Source: Haver.

**16. The fiscal reserve has been reduced.** It helped fund the budget when it turned from surplus to deficit following the crisis, and now stands at half the pre-crisis peak with a large share comprising working balances and pledged funds. The eurobond secured resources for upcoming debt repayments temporarily boosting the fiscal and international reserves.

**17. Competitiveness has been maintained under the policy framework.** The CGER-valuation range suggests that the real exchange rate is broadly in line with fundamentals (table below). Improved export performance and the correction in the current account have occurred despite rising private sector real wages and unit labor costs (ULCs). The latter likely contributed to the sizable reduction in employment, but may not have harmed external competiveness given that wage levels in Bulgaria remain low, with hourly remuneration just one-third of the EU median (Section D). More broadly, the comfortable level of international reserves, subdued but increasing capital flows, moderate current account deficit, and improving international investment position reinforce the notion that the exchange rate is broadly in line with fundamentals.




**Exchange rate assessment**

| Methodology | REER required adjustment | Underlying current account | Current account norm |
|---|---|---|---|
| Macroeconomic balance approach 1/ | -2.3 | -3.8 | -3.1 |
| External sustainability approach 1/ | 3.8 | -3.8 | -5.0 |
| Equilibrium exchange rate | 3 | … | … |

1/ The current account elasticity with respect to the REER is 0.3.

## Policy Issues

**18. The three policy prongs are mutually reinforcing and need to be well maintained or even enhanced.** The CBA remains the approriate anchor for policies until eventual euro adoption given the strong on-going support provided by fiscal and financial policies. In the current highly uncertain environment, the benefit of the fiscal reserve is enhanced as it complements other crisis management tools and financial system buffers. With the reduction in the fiscal reserve since 2009, a low probability, large impact shock could prove more difficult to absorb (see Annex II).

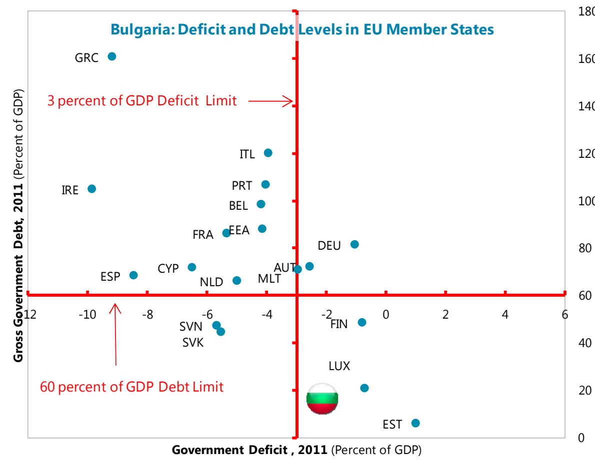
**19. Saving any fiscal over performance, proceeding with budgetary plans of domestic debt issuance, and saving privatization proceeds would strengthen the fiscal reserve**. Such measures have the potential to increase the reserve, without recourse to further external borrowing, to about 7 percent of GDP in 2016 prior to the bond repayments falling due in 2017. The recently adopted debt management strategy, which focused on gross debt, should be complemented with a review of how the fiscal reserve is structured and funded to meet its fiscal and financial shock absorbtion and savings objectives.

**20. The authorities saw limited scope to increase the fiscal reserve via further external borrowing particularly ahead of the elections.** They agreed that the reserve serves a crucial role in supporting Bulgaria's policy framework by providing a backstop, particularly now that euro adoption plans are on hold. They are not letting the fiscal reserve fall further and are setting its legal minimum at end-2013 nominally unchanged from end-2012 at 5½ percent of GDP. They emphasized the availability of other tools to resolve any potential liquidity or solvency issues in the banking system.

## B. Reorienting Fiscal Policy to Better Support Growth

### Background

**21. Fiscal consolidation continued in 2011–12.** The fiscal deficit is on track to fall to 1.3 percent of GDP in 2012. On the revenue side, the combination of administrative improvements and price developments boosted VAT collections. Furthermore, risks from contingent liabilities in the energy and transport sectors have been reduced by cancelling the construction of a nuclear reactor and reforming the railway system to eliminate public subsidies by 2013. The latter includes privatizing freight, closing unprofitable lines, and laying-off 2,000 workers.

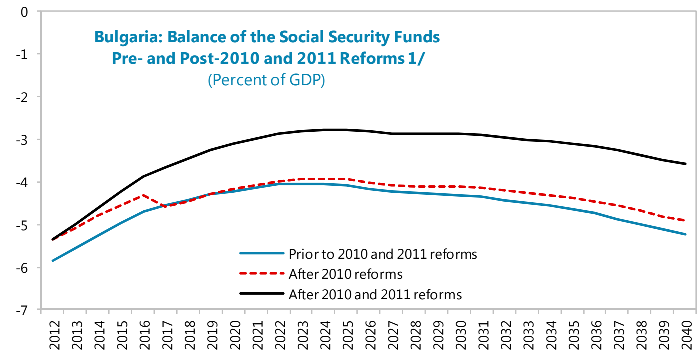



Source: WEO; IMF staff estimates.

**22. The 2013 budget represents a pause in the consolidation effort.** Average pensions are to increase by 9.3 percent in April 2013 to compensate for inflation during the last three years while public wages will remain largely frozen for a fourth year. Interest income will be included in the income tax base and minimum social security contributions thresholds raised by 3.3 percent to counter under-recording of incomes. Reaching the government's 2015 target of a balanced budget will require 0.4 percent of GDP in structural measures. On current projections this would result in structural balance in 2015, a more ambitious target than the EU's Fiscal Compact.

**23. A proposed new public finance law incorporates the Fiscal Compact's structural budget balance rule.** It also puts forward automatic correction mechanisms in case of non compliance, lists all national and supranational fiscal rules, and introduces monthly general government financial reporting requirements. The financial management of sub-national governments remains weak. However, their budgets are small and broadly balanced, and their debt is low at 1.3 percent of GDP. Moreover, the authorities have established an incentive system to improve performance, monitoring, and transparency at the municipal level.

**24. Pension reform advanced in 2011, building on the 2010 efforts.** Retirement ages were raised from 2012 (to 65 years for men by 2017 and 63 years for women by 2020), pensions indexed to prices, and requirements for military and police pensions tightened. The pension deficit (pillar I) is now projected to decrease to 0.5 percent of GDP by 2030 before widening again, with a continued budget transfer of 3 percent of GDP.




1/ Includes impact of planned 9.3 percent pension increase in 2013.

Source: NSSI Bulgaria.

**25. Health Reform is lagging.** Despite the highest number of hospital beds per capita in the EU, primary care and preventative services are poor, and large out-of-pocket outlays disadvantage lower-income patients. A lack of reform momentum could undo recent efforts to contain hospital costs at a time when pharmaceutical spending is rising fast (10 percent per year).

Bulgaria: Health Care Spending in a Regional Context

| | Total Health Spending % of GDP | | Hospitals per 100, 000 | | Inpatient Discharges per 100 | |
|---|---|---|---|---|---|---|
| | 2006 | 2009 | 2006 | 2009 | 2006 | 2010 |
| Bulgaria | 6.9 | 7.38 | 4.1 | 4.64 | 21.59 | 25.5 |
| Croatia | 7.16 | 7.84 | 1.76 | 1.44 | 16.95 | 16.88 |
| Estonia | 5.02 | 7 | 4.09 | 4.4 | 18.83 | 18.16 |
| Latvia | 6.18 | 6.52 | 4.63 | 3.06 | 23.14 | 16.99 |
| Lithuania | 6.24 | 6.6 | 3.39 | 3.41 | 21.57 | 22.09 |
| Romania | 5.1 | 5.44 | 2.12 | 2.48 | 24.14 | 23.57 |
| Slovakia | 7.34 | 8.5 | 2.76 | 2.53 | 18.58 | 18.61 |
| EU | 8.9 | 9.76 | 2.68 | 2.67 | 17.58 | 17.77 |
| EU members before May 2004 | 9.57 | 10.5 | 2.74 | 2.66 | 16.9 | 16.9 |
| EU members between May 2004 or 2007 | 6.38 | 6.94 | 2.61 | 2.8 | 16.8 | 21 |

Source: Health Care for All, http://data.euro.who.int/hfadb/

## Policy Issues

**26. Targeting a balanced budget by 2015 appropriately supports Bulgaria's policy framework.** A small and declining deficit would keep public debt low, preserve the fiscal reserve, and allow fiscal space to use in the event of potential shocks. The trade-off with short-term growth would be limited because of the small adjustment and modest multipliers (Annex III). However, if growth were to slow significantly relative to projections, automatic stabilizers should be allowed to operate provided adequate financing is available. A pause in the adjustment next year seems reasonable given the subdued growth outlook and the small structural adjustment remaining till 2015, but it will be necessary to resist pressures for generalized wage increases.

**27. The composition of fiscal policy should be made more supportive of growth and quality of spending improved.** Higher infrastructure and active labor market policy spending financed by EU funds as well as improved tax compliance and lower untargeted subsidies hold the potential to stimulate growth (Annex III). Limiting early retirement, linking it to life expectancy, and increasing the retirement age of women to that of men would help boost labor force participation and counter the drag from aging on growth. To safeguard the integrity of the pension system, social security contribution collections should flow to the relevant funds under new streamlined collection procedures. At the same time, proposals to reduce fees and strengthen the governance structure of mandatory private pension funds are welcome given the need to improve these funds' performance. Spending effectiveness would also be enhanced by a comprehensive health reform to rationalize hospitals, promote primary care, and improve transparency.

**28. The commitment to fiscal discipline should be complemented by improvements in public financial management.** The proposed law is an important step but further efforts are needed including reconciling domestic and EU reporting standards and rules, setting up an independent fiscal council to assess fiscal projections, and disclosing contingent liabilities, particularly related to State Owned Enterprises.

**29. The authorities are committed to preserving fiscal stability and market credibility.** They are skeptical of the counter cyclical effectiveness of fiscal policy in a downside scenario and fear the negative impact on credibility of deviating from their 2015 balance target. They see scope to improve the quality and composition of spending, especially through improved EU funds absorption.

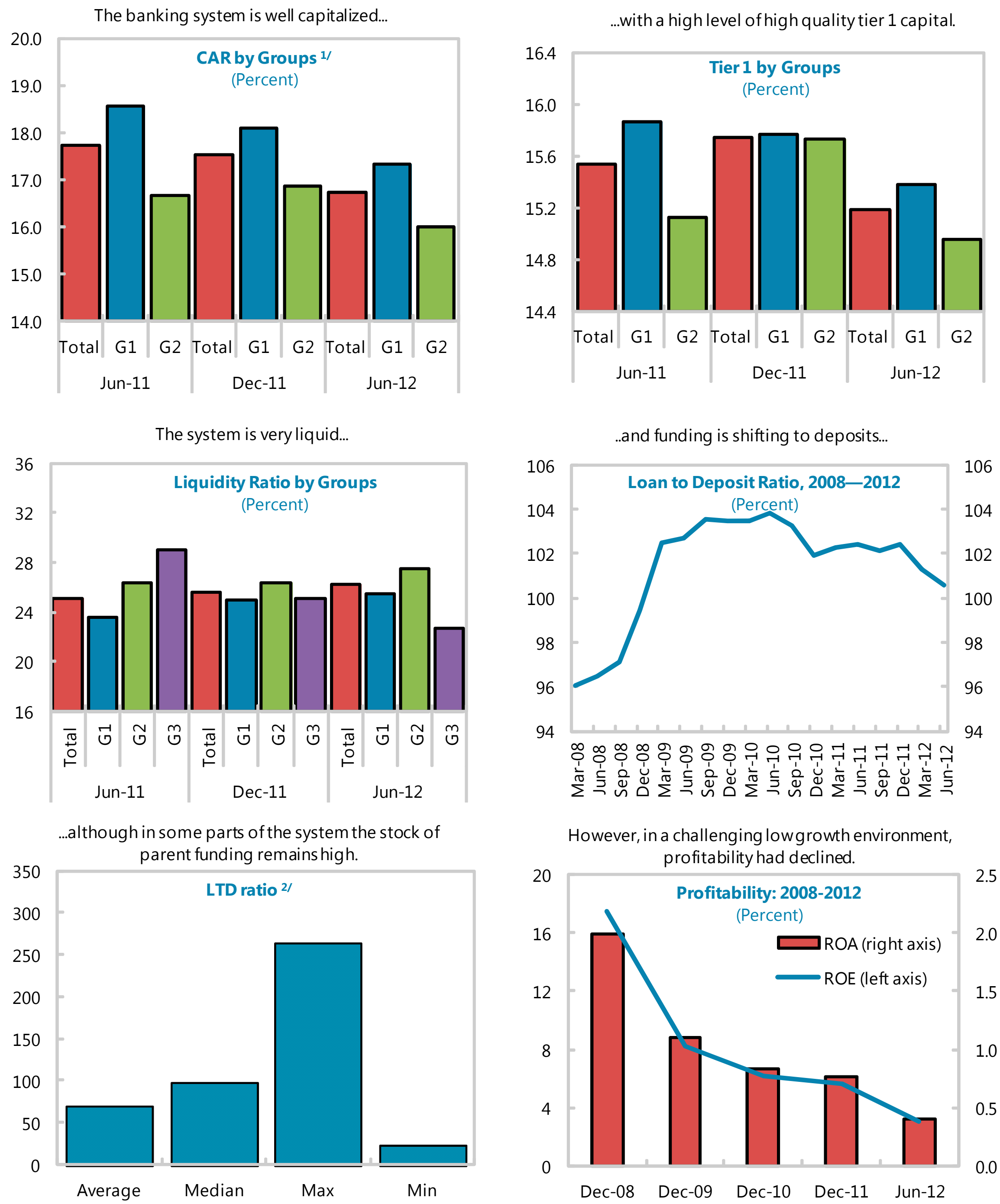
## C. Financial Sector: Fortifying Resilience

### Background

**30. The financial system is stable but operating in a challenging low-growth environment** (Table 8, Figure 6). The banking system-wide capital adequacy ratio is high (16.7 percent in June 2012) with all banks meeting the 12 percent regulatory minimum. Strong deposit growth and subdued credit demand boosted liquidity (coverage ratio of 26 percent) and allowed external funding to decline, although the stock of parent funding in some banks remains sizeable. The difficult economic environment has taken a toll on asset quality and profitability.

**31. Rising asset impairment could impede the recovery**. NPLs were 16.9 percent of total loans in June 2012 and still rising (Figure 7), but there is a high degree of dispersion across the system. Weak growth, high corporate indebtedness, and a depressed real estate market continue to pressure asset quality. A large stock of NPLs may constrain credit availability once the recovery gains traction and savings and related deposit growth ease, and it may also undermine the efficiency of credit intermediation by locking in resources.

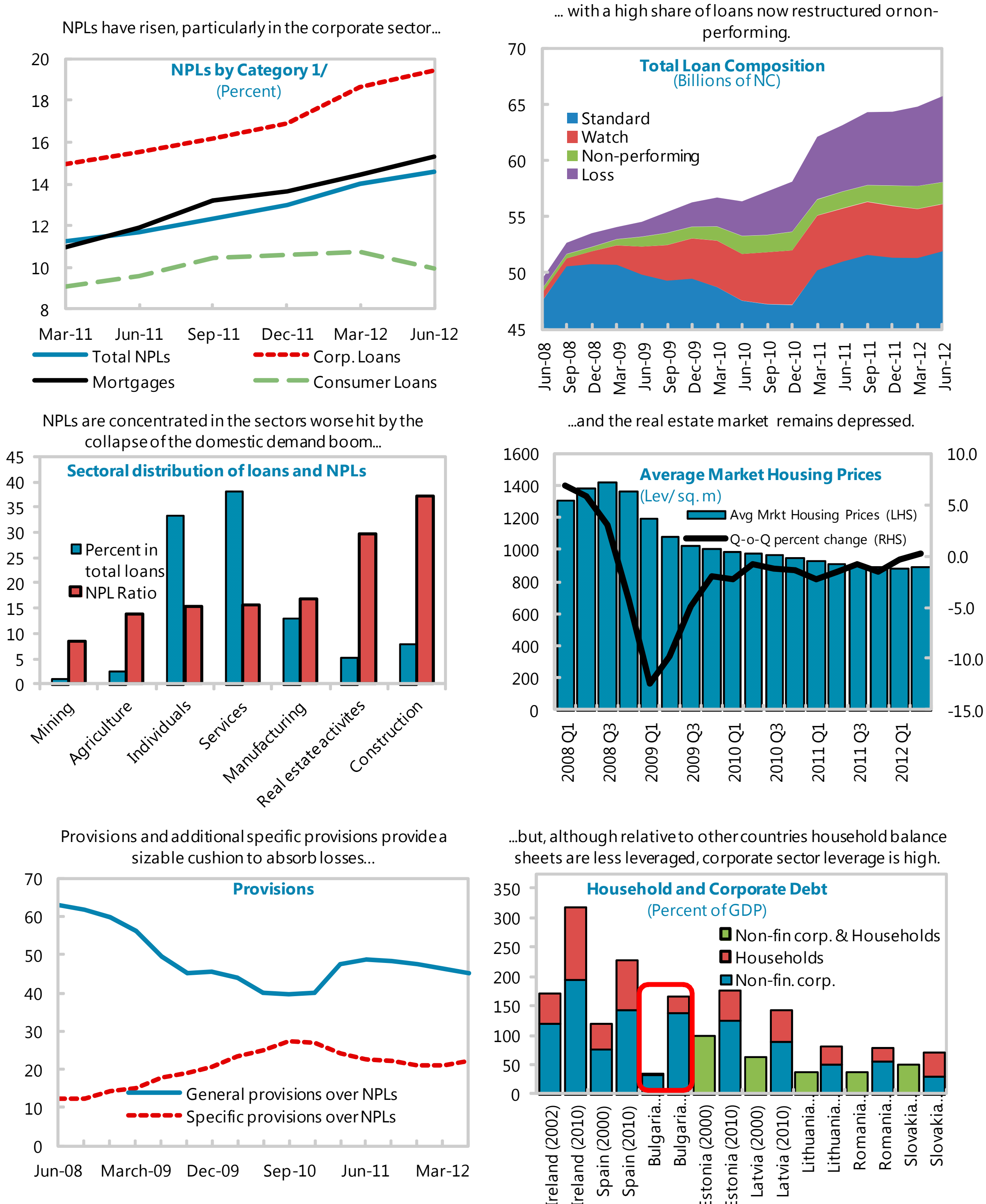
## Figure 6. Bulgaria: Financial Sector Indicators, June 2012




1/ Total stands for total banking system. G1 is composed of the 5 largest banks, G2 is the remaining domestic banks, and G3 is the branches of foreign banks.
2/ LTD ratio is defined as the sum of loans to non-credit institutions, corporates, and retail loans over the sum of deposits to non-credit institutions and households.

Source: Bulgarian National Bank.

## Figure 7. Bulgaria: Asset Quality, June 2012




1/ Includes loans to Financial Corporations.

Source: Bulgarian National Bank and National Statistical Institute of Bulgaria.

**32. Tight supervisory policies have reinforced buffers**. The BNB is closely monitoring banks, including through frequent onsite inspections, high frequency reporting, and enforcing higher capital and liquidity buffers in the relatively weaker pockets of the system that could be potentially exposed to spillovers from the on-going euro-area crisis and where NPLs are higher. Coverage of NPLs by accounting provisions stands at 45 percent, but additional capital in the form of specific provisions (22 percent of NPLs) could be used to cushion impairments (Box 1).

### Box 1. Provisioning Regulations

In Bulgaria, banks must set up accounting and specific provisions. The distribution between accounting and specific provisions is uneven across banks depending on their provisioning practices.

- Accounting provisions follow International Financial Reporting Standards (IFRS), reflect an incurred loss assessment, and are booked as expenses, thus reducing profits.

- Specific provisions are calculated according to a BNB methodology that embeds an expected loss model and are deducted from regulatory capital. Specific provisions build additional capital buffers which can be used to absorb losses, including from NPLs, provided that minimum capital adequacy requirements are not breached.

**33. The institutional framework to discuss financial stability matters is working well.** The Financial Stability Advisory Council meets quarterly and provides a platform of cooperation among the BNB, the Ministry of Finance, and the Financial Supervision Commission. The BNB also consults closely with foreign supervisors, but does not participate in the Vienna II Initiative. The Deposit Guarantee Fund has resources equivalent to 4.7 percent of the covered deposits.

### Policy Issues

**34. A comprehensive strategy to address NPLs would allow banks to better support the recovery.** Banks should be encouraged to resolve non-performing assets by loan restructuring, assets disposals, and write downs. The process should be closely monitored by the BNB, which should press for conservative provisioning, fair valuation of collateral, and strict recognition of interest income on NPLs, based on certainty of cash inflows. Accumulated buffers will be helpful in the resolution process.

**35. Broader measures would facilitate balance sheet repair of both banks and corporates.** Introduction of a fast-track court approval procedure for pre-agreed reorganization plans could help. This would combine the efficiency of out-of-court negotiations with an expeditious bind-in of dissenting creditors, thereby reducing costs and delays compared to recovery proceedings. Out-of-court debt restructuring guidelines could also be explored, which in other countries have facilitated speedy, cost-effective, and market-friendly settlements, especially in cases involving multiple creditors.

**36. Continued vigilance through close bank monitoring and strong safety nets remain priorities.** The BNB should continue to closely monitor banks and intervene preemptively through targeted requirements to reinforce capital and liquidity buffers in the relatively weaker pockets of the system. Plans to strengthen the BNB's bank resolution framework by introducing "purchase and assumption" and "bridge bank" options should proceed quickly in line with the proposed EU directive on bank recovery and resolution and the Financial Stability Board's indications.

**37. The authorities consider the banking system, with high buffers and increased domestic funding, well placed to cope with risks**. They assess the risks to the recovery posed by NPLs as low since credit demand remains subdued, liquidity high, and buffers adequate. With high deposit growth and a lack of evidence of parent banks' forcibly deleveraging, the authorities see existing cooperation with foreign supervisors and EU colleges working well. They see merit in fast-track court approval for corporate reorganizations while they view existing out-of-court debt restructuring as satisfactory.

## D. Improving the Environment for Growth

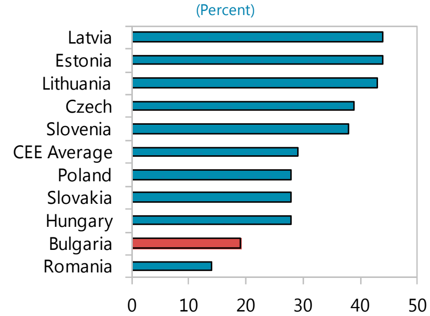
### Background

**38. Improvements in the predictability of the business environment, workers' skills, and quality of infrastructure would help boost growth.** These are areas where Bulgaria lags internationally and where improvements could make a real difference.[4]

**39. Regarding the business environment, shortcomings exist in the insolvency framework, notably the possibility to "backdate" the start of insolvency**. This backdating of the insolvency date by courts, often years before filing, triggers automatic invalidation of a wide range of transactions, including the validity of collateral and payments made after the insolvency date. It reduces the predictability of private contract enforcement, raises credit and operational risks, creates moral hazard, and discourages lending. Other shortcomings include delays in and costly court processes, lax enforcement of legal provisions on liability for failure to timely file for insolvency, insufficient expertise, and the uncertain and unpredictable process for reorganizing firms outside formal insolvency proceedings.

**40. Regarding infrastructure, higher EU funds absorption is helping tackle gaps.** Increased absorption, almost doubling within one year, resulted from streamlined administrative procedures, amendments to the public procurement law, and technical assistance from the World Bank and EBRD. The full impact of these reforms on absorption will be realized over the medium-term. Nonetheless, absorption rates remain low, particularly for

EU Funds Payment Ratio in 2011
(Percent)




[4] See "Bulgaria—Staff Report for the 2011 Article IV Consultation."

competitiveness programs focusing on the unemployed, while a lack of capacity and poor financial control at the sub-national level pose challenges.

**41. In the labor market, structural mismatches undermine potential growth.** The crisis exposed large and rising regional, age, and skills mismatches that have resulted in significantly higher unemployment and a slight increase in poverty and inequality (Box 2 and Figure 8). Average real wage growth in the private sector since the crisis (2009Q1 to 2012Q1) has surpassed productivity gains.[5] This wage growth partly reflects compositional changes in employment—the disproportionate lay off of less productive, low wage workers—but also likely reflects increases in the minimum thresholds for social security contributions. While labor productivity gains help explain the increase in exports (Annex I), they have come at the expense of jobs (especially low skilled).

### Box 2. Labor Market Developments

**The labor market experienced a boom and bust since the mid 2000s that exposed large structural mismatches**. Large increases in employment and the participation rate during 2003–2008 were mostly reversed after the crisis, with employment down 15 percent. The unemployment rate of 11.5 percent in September 2012 was similar to the 2004 rate and well above the 2008 rate of 5 percent. Unemployment has disproportionately affected those below 34 years of age (with their employment lower in 2012 than 2003), the low-skilled, and those in rural areas.

**Regional divergence, already present before the crisis, has since intensified**. The capital region stands out for its relatively low unemployment, high participation rates, and high wages. Regional divergences, as measured by the standard deviation of regional real wages, have doubled since 2008 and tripled since the early-2000s. Average wage levels in Bulgaria remain low.

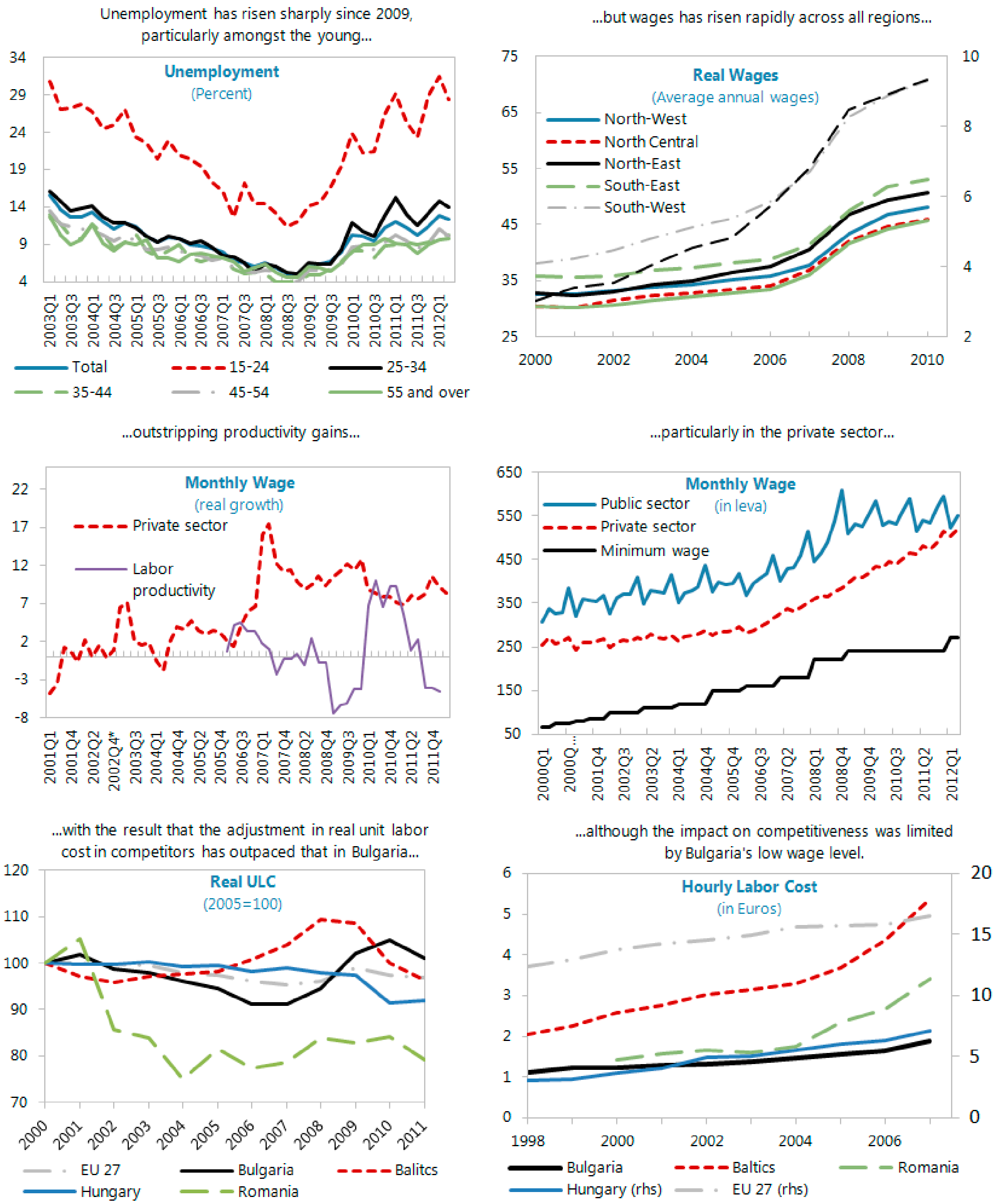
**The system of minimum thresholds for social security may be making low wage workers more expensive.** More than 600 different minimum thresholds for social security contributions are agreed between social partners and, if agreement is not reached, administratively determined by the government. The original intention of the thresholds was to reduce the scope of the grey economy. These thresholds have increased an annual average rate of 5–6 percent over 2010–11. Employers are allowed to pay a wage below the minimum threshold provided it is above the minimum wage. Whereas the minimum wage, two thirds below average wages, is not generally binding, regional average wages in some regions are close to many minimum thresholds. When binding, the thresholds increase the tax wedge making employment of low wage workers less attractive.

## Policy Issues

**42. The backdating of insolvencies should be disallowed.** Proposals, such as limiting the timeframe for back-dating, while not unknown to other legal systems, would not resolve the problem. A broader review of the existing insolvency framework is also needed to identify weaknesses in insolvency processes and suggest required legislative amendments. In addition, improving the capacity of all parties involved in the process is necessary.

[5] Real wage growth data vary from 6 percent annually since the crisis (National Accounts) to 9 percent (Labor Force Survey) and productivity growth from 1 percent (Labor Force Survey) to 4 percent (National Accounts). Unionization is low and bargaining largely occurs at firm level.

## Figure 8. Bulgaria: Labor Market Developments, 1998-2012




Sources: NSI; Haver Analytics; and IMF staff estimates.

**43. Boosting EU funds absorption is critical to improve productivity**. Additional reforms to complement those already implemented should focus on improved financial control and capacity building at the municipal level, and the introduction of a framework law to govern procedures and processes for EU funds management.

**44. Future wage increases need to be anchored in productivity gains to preserve competitiveness**. The upcoming review of the system of minimum social security contribution thresholds should identify the adjustments necessary to alleviate their impact on low-wage workers. Expanded active labor market policies and more targeted education and training would raise productivity and increase employment.

**45. The authorities recognize that the insolvency framework needs reform and see the post election period as holding the greatest promise for progress**. More broadly, the National Reform Program sets out policies for addressing structural impediments to growth. It also outlines programs on social inclusion and poverty reduction including long-term care, Roma integration, and training for vulnerable groups. Regarding EU funds, the authorities have increased contracts and implementation and are preparing for the next EU program period.

**46. The authorities see recent developments in private sector wages as largely reflecting productivity gains and do not consider it a risk for future competiveness.** They value the flexibility of the labor market but recognize that structural bottlenecks are keeping unemployment high. They are increasing active labor market programs to reduce skills mismatches and increase productivity. Given regional gaps, they are considering regional minimum wages to complement the review of social security contribution thresholds.

# STAFF APPRAISAL

**47. The defining events of recent years for Bulgaria are the ones that did not happen:** no exchange rate crisis, international bailout, bank intervention, or build-up of public debt. This attests to the strength of the policy framework and policy implementation. However, growth remains weak and has left unemployment high, while the economy is exposed to risks from the on-going euro-area crisis.

**48. Boosting growth in an uncertain external environment calls for bolder structural reform while maintaining prudent policies.** Fiscal and financial buffers need to remain sufficient in view of the downside risks from the euro zone crisis. This precludes space for looser fiscal and credit policies, placing the onus firmly on structural reform and higher EU funds absorption to revive growth. Rebuilding the fiscal reserve through saving fiscal over performance or privatization receipts would further strengthen defenses. Undertaking a review of the fiscal reserve to appropriately tailor its structure and funding to meet its shock absorbing and saving objectives would complement the existing debt management strategy.

**49. The fiscal adjustment achieved so far should be preserved but improving the composition of the budget would support growth**. The budget is close to structural balance and care should be taken in the election year not to squander this achievement. This is all the more so as little further adjustment remains to meet the 2015 target of budget balance which safeguards space to allow automatic stabilizers to work in the event of a shock. However, increasing spending on infrastructure investment and active labor market policies financed via EU funds absorption, better tax compliance, and reductions in subsidies would stimulate growth while preserving budget targets.

**50. The financial system is stable with high buffers but the low growth environment poses challenges**. A comprehensive strategy that seeks banks actively addressing non-performing assets would support the recovery, a process that the BNB should closely monitor by pressing for conservative provisioning and strict recognition of interest income on NPLs. Out of court debt restructuring guidelines and fast track court approval process for pre-agreed reorganization plans could facilitate the strategy. Meanwhile, BNB should remain vigilant and continue to request preemptively the buildup of capital and liquidity buffers in the weaker pockets of the system. The BNB's resolution powers and toolkit should be expanded, as times remain uncertain.

**51. While an external recovery in demand would help restore growth in Bulgaria, some domestic levers are available through structural reform.** The absorption of EU funds is key given its size, the large grant element, and the potential impact on growth and employment. The insolvency framework needs to be improved, in particular by eliminating backdating of insolvencies, to support the business environment. Ensuring that the labor market functions properly, in particular at the lower end, would help reduce employment and income disparities and over time contribute to lowering poverty.

**52. It is recommended that the next Article IV consultation with Bulgaria be held on the standard 12-month cycle.**

Table 1. Bulgaria: Selected Economic and Social Indicators, 2009–15

| | 2009 | 2010 | 2011 Est. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. |
|---|---|---|---|---|---|---|---|
| Output, prices, and labor market (percent change, unless otherwise indicated) | | | | | | | |
| Real GDP | -5.5 | 0.4 | 1.7 | 1.0 | 1.5 | 2.5 | 3.5 |
| Real domestic demand | -12.8 | -5.1 | -0.3 | 2.8 | 2.3 | 2.3 | 3.5 |
| Consumer price index (HICP, average) | 2.5 | 3.0 | 3.4 | 2.6 | 3.0 | 2.8 | 3.0 |
| Consumer price index (HICP, end of period) | 1.6 | 4.4 | 2.0 | 3.5 | 2.5 | 3.0 | 3.0 |
| Unemployment rate (percent of labor force) | 6.9 | 10.3 | 11.3 | 12.4 | 12.1 | 11.1 | 10.1 |
| Nominal wages (national accounts definition | 9.4 | 11.2 | 7.3 | 5.5 | 5.3 | 5.5 | 5.5 |
| General government finances (percent of GDP) | | | | | | | |
| Revenue | 35.3 | 32.7 | 32.5 | 34.4 | 35.9 | 36.4 | 37.0 |
| o/w: Grants | 1.9 | 2.3 | 1.9 | 3.3 | 4.4 | 4.8 | 5.6 |
| Expenditure | 36.2 | 36.6 | 34.4 | 35.7 | 37.2 | 36.9 | 37.1 |
| Balance (net lending/borrowing on cash basi | -0.9 | -3.9 | -2.0 | -1.3 | -1.3 | -0.5 | 0.0 |
| Privatization proceeds | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.0 |
| External financing 1/ | 0.9 | 0.2 | 0.2 | 3.4 | -1.2 | 2.5 | -1.7 |
| Domestic financing | -1.1 | 1.3 | 0.3 | 0.1 | 1.2 | 0.5 | 0.9 |
| Financing from fiscal reserves 2/ | 1.0 | 2.4 | 1.3 | -1.7 | 1.7 | -2.5 | 1.0 |
| Net lending and other items | 0.0 | 0.0 | 0.0 | -0.7 | -0.5 | -0.2 | -0.2 |
| Gross public debt | 13.8 | 14.9 | 15.5 | 18.5 | 17.6 | 19.7 | 17.8 |
| Financial net worth | 6.6 | 4.0 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| Money and credit (percent change) | | | | | | | |
| Broad money (M3) | 4.2 | 6.4 | 12.3 | 7.5 | 6.2 | 6.2 | 7.0 |
| Domestic private credit | 3.8 | 1.3 | 3.8 | 4.1 | 5.8 | 6.0 | 6.8 |
| Interest rates (percent) | | | | | | | |
| Interbank rate, 3-month SOFIBOR | 5.7 | 4.1 | 3.8 | … | … | … | … |
| Lending rate | 11.3 | 11.1 | 10.6 | … | … | … | … |
| Balance of payments (percent of GDP, unless otherwise indicated) | | | | | | | |
| Current account balance | -8.9 | -1.5 | 0.3 | -1.6 | -2.8 | -3.2 | -3.8 |
| o/w: Merchandise trade balance | -11.9 | -7.7 | -5.6 | -7.9 | -9.0 | -9.5 | -9.5 |
| Capital and financial account balance | 4.8 | -1.1 | -0.8 | 6.2 | 1.9 | 6.5 | 2.9 |
| o/w: Foreign direct investment balance | 7.2 | 2.7 | 4.1 | 4.0 | 4.1 | 4.8 | 5.4 |
| International investment position | -102 | -95 | -86 | -84 | -83 | -81 | -79 |
| o/w: Gross external debt | 108 | 103 | 92 | 94 | 88 | 85 | 76 |
| o/w: Gross official reserves | 37 | 36 | 35 | 38 | 36 | 37 | 34 |
| In months of imports | 7.2 | 6.1 | 5.7 | 6.1 | 5.6 | 5.7 | 5.6 |
| In percent of broad money | 53 | 50 | 46 | 48 | 45 | 46 | 42 |
| In percent of ST debt 3/ | 79 | 85 | 106 | 117 | 118 | 120 | 116 |
| In percent of risk-weighted metric 4/ | 124 | 126 | 128 | 130 | … | … | … |
| Exchange rates | | | | | | | |
| Leva per euro | Currency board peg to euro at lev 1.95583 per euro | | | | | | |
| Leva per U.S. dollar (end of period) | 1.34 | 1.48 | 1.45 | … | … | … | … |
| Real effective exchange rate (percent change) | | | | | | | |
| CPI based | 4.4 | -3.9 | 2.7 | 0.7 | 1.1 | 0.9 | 1.1 |
| GDP deflator based | 3.2 | 1.9 | 3.8 | 0.4 | 1.2 | 1.0 | 1.2 |

Social indicators (reference year in parentheses):

Per capita GNI (2011): US$ 6,550; income distribution (Gini index, 2007): 28.2; poverty rate (2007): 10.6 percent.

Primary education completion rate (2009): 95.5.

Births per woman (2010): 1.5; mortality under 5 (per 1,000) (2011): 12.1; life expectancy at birth (2010): 73.5 years.

Sources: Bulgarian authorities; World Development Indicators; and IMF staff estimates.

1/ Reflects €950 million Eurobond issued in 2012 and another assumed in 2014.

2/ In projection period, largely reflects issuance and repayment of eurobonds.

3/ Short-term debt is at remaining maturity and includes deposits of foreign banks in local subsidiaries.

4/ See "Assessing Reserve Adequacy" (IMF Policy Papers, 2/14/2011).

Table 2: Bulgaria: Macroeconomic Framework, 2009–17

| | 2009 | 2010 | 2011 Est. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. | 2016 Proj. | 2017 Proj. |
|---|---|---|---|---|---|---|---|---|---|
| GDP and prices (percent change) | | | | | | | | | |
| Real GDP | -5.5 | 0.4 | 1.7 | 1.0 | 1.5 | 2.5 | 3.5 | 4.5 | 4.5 |
| Real domestic demand | -12.8 | -5.1 | -0.3 | 2.8 | 2.3 | 2.3 | 3.5 | 5.1 | 5.2 |
| Of which: private | -13.3 | -5.7 | -0.1 | 2.0 | 2.0 | 2.3 | 3.1 | 5.3 | 5.4 |
| GDP deflator | 4.3 | 2.8 | 5.0 | 2.1 | 3.0 | 2.8 | 3.0 | 3.0 | 3.0 |
| Consumer price index (HICP, average) | 2.5 | 3.0 | 3.4 | 2.6 | 3.0 | 2.8 | 3.0 | 3.0 | 3.0 |
| Nominal wages (national accounts definition) | 9.4 | 11.2 | 7.3 | 5.5 | 5.3 | 5.5 | 5.5 | 5.5 | 5.5 |
| Real effective exchange rate, CPI based | 4.4 | -3.9 | 2.7 | 0.7 | 1.1 | 0.9 | 1.1 | 1.1 | 1.1 |
| Real effective exchange rate, GDP deflator based | 3.2 | 1.9 | 3.8 | 0.4 | 1.2 | 1.0 | 1.2 | 1.2 | 1.2 |
| Monetary aggregates (percent change) | | | | | | | | | |
| Broad money | 4.2 | 6.4 | 12.3 | 7.5 | 6.2 | 6.2 | 7.0 | 8.3 | 10.3 |
| Domestic private credit | 3.8 | 1.3 | 3.8 | 4.1 | 5.8 | 6.0 | 6.8 | 8.0 | 9.8 |
| Saving and investment (percent of GDP) | | | | | | | | | |
| Foreign saving | 8.9 | 1.5 | -0.3 | 1.6 | 2.8 | 3.2 | 3.8 | 4.1 | 4.3 |
| Gross national saving | 20.4 | 21.4 | 23.3 | 22.5 | 22.5 | 23.0 | 23.2 | 23.7 | 24.0 |
| Government | 4.2 | 0.2 | 1.9 | 4.3 | 4.9 | 5.9 | 7.2 | 8.2 | 8.8 |
| Private | 16.3 | 21.2 | 21.4 | 18.2 | 17.6 | 17.1 | 16.0 | 15.5 | 15.3 |
| Gross domestic investment | 29.4 | 22.9 | 23.1 | 24.2 | 25.3 | 26.2 | 27.1 | 27.7 | 28.3 |
| Government | 5.1 | 4.2 | 3.9 | 5.5 | 6.2 | 6.5 | 7.2 | 7.6 | 7.9 |
| Private | 24.3 | 18.7 | 19.2 | 18.7 | 19.1 | 19.7 | 19.9 | 20.1 | 20.4 |
| General government (percent of GDP) | | | | | | | | | |
| Revenue | 35.3 | 32.7 | 32.5 | 34.4 | 35.9 | 36.4 | 37.0 | 37.4 | 37.6 |
| Tax revenue (including social security contributions) | 28.1 | 25.7 | 26.1 | 26.8 | 27.2 | 27.5 | 27.6 | 27.6 | 27.7 |
| Non-Tax revenue | 5.2 | 4.7 | 4.4 | 4.4 | 4.2 | 4.1 | 3.9 | 3.9 | 3.9 |
| Grants | 1.9 | 2.3 | 1.9 | 3.3 | 4.4 | 4.8 | 5.6 | 5.8 | 6.0 |
| Expenditure | 36.2 | 36.6 | 34.4 | 35.7 | 37.2 | 36.9 | 37.1 | 36.8 | 36.6 |
| Balance (net lending/borrowing on cash basis) | -0.9 | -3.9 | -2.0 | -1.3 | -1.3 | -0.5 | 0.0 | 0.6 | 1.0 |
| Structural balance | 0.4 | -2.4 | -1.1 | -0.4 | -0.6 | -0.2 | 0.0 | 0.6 | 1.0 |
| Balance of payments (percent of GDP) | | | | | | | | | |
| Current account | -8.9 | -1.5 | 0.3 | -1.6 | -2.8 | -3.2 | -3.8 | -4.1 | -4.3 |
| Trade balance | -11.9 | -7.7 | -5.6 | -7.9 | -9.0 | -9.5 | -9.5 | -9.7 | -10.2 |
| Services balance | 3.7 | 5.2 | 6.0 | 6.1 | 5.8 | 5.7 | 5.6 | 5.5 | 5.4 |
| Income balance | -3.4 | -3.1 | -4.5 | -4.8 | -4.8 | -4.8 | -5.5 | -5.2 | -5.1 |
| Transfers balance | 2.7 | 4.2 | 4.4 | 5.0 | 5.2 | 5.4 | 5.5 | 5.4 | 5.6 |
| Capital and financial account | 4.8 | -1.1 | -0.8 | 6.2 | 1.9 | 6.5 | 2.9 | 5.3 | 5.6 |
| Foreign direct investment | 7.2 | 2.7 | 4.1 | 4.0 | 4.1 | 4.8 | 5.4 | 5.8 | 6.1 |
| Memorandum items: | | | | | | | | | |
| Gross international reserves (millions of euros) | 12,919 | 12,977 | 13,349 | 15,173 | 14,813 | 16,282 | 15,824 | 16,419 | 17,124 |
| Short-term external debt (percent of GDP) 1/ | 35 | 31 | 26 | 25 | 24 | 23 | 22 | 21 | 19 |
| Export volume (percent change) | -12.6 | 5.9 | 17.7 | 1.3 | 3.9 | 7.3 | 8.8 | 8.3 | 8.8 |
| Import volume (percent change) | -28.3 | -5.2 | 11.3 | 4.1 | 4.8 | 6.4 | 8.0 | 8.5 | 9.1 |
| Terms of trade (percent change) | -5.4 | 3.2 | 0.7 | -0.6 | -1.0 | -1.5 | -0.5 | -0.1 | -0.1 |
| Output gap (percent of potential GDP) | -3.5 | -4.3 | -2.7 | -2.2 | -1.8 | -0.8 | -0.1 | 0.0 | 0.0 |
| Nominal GDP (millions of leva) | 68,322 | 70,511 | 75,265 | 77,581 | 81,072 | 85,402 | 91,043 | 97,994 | 105,476 |
| Nominal GDP (millions of euros) | 34,932 | 36,052 | 38,483 | 39,667 | 41,451 | 43,665 | 46,550 | 50,104 | 53,929 |

Sources: Bulgarian authorities; and IMF staff estimates.

1/ At original maturity.

Table 3. Bulgaria: Real GDP Components, 2009–17

| | 2009 | 2010 | 2011 Est. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. | 2016 Proj. | 2017 Proj. |
|---|---|---|---|---|---|---|---|---|---|
| (Real growth rate, in percent) | | | | | | | | | |
| Real GDP | -5.5 | 0.4 | 1.7 | 1.0 | 1.5 | 2.5 | 3.5 | 4.5 | 4.5 |
| Domestic demand | -12.8 | -5.1 | -0.3 | 2.8 | 2.3 | 2.3 | 3.5 | 5.1 | 5.2 |
| Private demand | -13.3 | -5.7 | -0.1 | 2.0 | 2.0 | 2.3 | 3.1 | 5.3 | 5.4 |
| Public demand | -10.0 | -2.3 | -1.3 | 6.5 | 3.5 | 2.3 | 4.9 | 4.3 | 4.2 |
| Final consumption | -7.4 | 0.4 | -0.4 | 2.0 | 1.9 | 2.1 | 2.4 | 4.2 | 4.5 |
| Private consumption | -7.6 | 0.1 | -0.6 | 2.7 | 2.4 | 2.5 | 2.8 | 4.8 | 4.9 |
| Public consumption | -6.5 | 1.9 | 0.5 | -1.0 | -0.4 | 0.2 | 0.5 | 1.6 | 2.0 |
| Investment | -25.4 | -21.2 | 0.0 | 5.9 | 3.9 | 2.9 | 7.1 | 7.9 | 7.5 |
| Gross fixed investment | -17.6 | -18.3 | -9.7 | 5.1 | 4.3 | 3.0 | 7.7 | 8.7 | 7.8 |
| Private investment | -17.2 | -18.9 | -10.2 | -2.1 | 0.9 | 1.3 | 4.8 | 8.3 | 7.6 |
| Public investment | -19.2 | -15.3 | -7.6 | 36.5 | 15.0 | 7.6 | 15.0 | 9.7 | 8.5 |
| Inventories 1/ | -3.5 | -0.9 | 2.3 | 0.3 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| Net exports 1/ | 10.1 | 6.1 | 2.0 | -2.0 | -0.9 | 0.0 | -0.2 | -0.9 | -1.1 |
| Exports of goods and services | -11.2 | 14.7 | 12.8 | 1.0 | 3.5 | 6.8 | 8.1 | 7.7 | 8.1 |
| Imports of goods and services | -21.0 | 2.4 | 8.5 | 3.7 | 4.5 | 6.1 | 7.6 | 8.1 | 8.6 |
| (Contribution to real GDP growth, in percent) | | | | | | | | | |
| Domestic demand | -15.6 | -5.7 | -0.3 | 3.0 | 2.4 | 2.5 | 3.7 | 5.4 | 5.6 |
| Private demand | -13.5 | -5.3 | -0.1 | 1.7 | 1.7 | 2.0 | 2.7 | 4.6 | 4.7 |
| Public demand | -2.2 | -0.5 | -0.3 | 1.3 | 0.7 | 0.5 | 1.0 | 0.9 | 0.9 |
| Final consumption | -6.3 | 0.4 | -0.3 | 1.6 | 1.5 | 1.8 | 2.0 | 3.5 | 3.7 |
| Private consumption | -5.3 | 0.1 | -0.4 | 1.8 | 1.6 | 1.8 | 1.9 | 3.3 | 3.4 |
| Public consumption | -1.0 | 0.3 | 0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.3 |
| Investment | -9.3 | -6.1 | 0.0 | 1.3 | 0.9 | 0.7 | 1.7 | 2.0 | 1.9 |
| Gross fixed investment | -5.8 | -5.3 | -2.3 | 1.1 | 0.9 | 0.7 | 1.7 | 2.0 | 1.9 |
| Private investment | -4.7 | -4.5 | -1.9 | -0.4 | 0.1 | 0.2 | 0.8 | 1.4 | 1.3 |
| Public investment | -1.1 | -0.8 | -0.3 | 1.4 | 0.8 | 0.5 | 0.9 | 0.7 | 0.6 |
| Inventories | -3.5 | -0.9 | 2.3 | 0.3 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 |
| Net exports | 10.1 | 6.1 | 2.0 | -2.0 | -0.9 | 0.0 | -0.2 | -0.9 | -1.1 |
| Exports of goods and services | -6.2 | 7.7 | 7.6 | 0.7 | 2.3 | 4.6 | 5.7 | 5.6 | 6.1 |
| Imports of goods and services | -16.3 | 1.6 | 5.7 | 2.6 | 3.3 | 4.6 | 5.9 | 6.6 | 7.2 |

Source: Bulgaria National Statistical Institute (NSI); IMF staff estimates.

1/ Contributions to GDP growth.

Table 4. Bulgaria: Balance of Payments, 2009–17

| | 2009 | 2010 | 2011 Prel. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. | 2016 Proj. | 2017 Proj. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (Millions of euros) | | | | |
| Current account balance | -3,118 | -533 | 104 | -649 | -1,159 | -1,381 | -1,791 | -2,048 | -2,308 |
| Trade balance | -4,174 | -2,764 | -2,156 | -3,115 | -3,729 | -4,130 | -4,400 | -4,877 | -5,484 |
| Exports (f.o.b.) | 11,699 | 15,561 | 20,265 | 21,650 | 22,587 | 23,990 | 26,063 | 28,319 | 31,049 |
| Imports (f.o.b.) | -15,873 | -18,325 | -22,420 | -24,765 | -26,316 | -28,119 | -30,462 | -33,197 | -36,533 |
| Services balance | 1,300 | 1,868 | 2,314 | 2,401 | 2,424 | 2,493 | 2,621 | 2,755 | 2,920 |
| Exports of non-factor services | 4,917 | 5,011 | 5,348 | 5,645 | 5,793 | 6,016 | 6,325 | 6,656 | 7,038 |
| Imports of non-factor services | -3,617 | -3,144 | -3,034 | -3,244 | -3,369 | -3,523 | -3,704 | -3,901 | -4,118 |
| Income balance | -1,200 | -1,134 | -1,739 | -1,909 | -2,002 | -2,095 | -2,577 | -2,620 | -2,759 |
| Receipts | 803 | 618 | 641 | 769 | 895 | 1,006 | 1,145 | 1,277 | 1,447 |
| Payments | -2,003 | -1,752 | -2,381 | -2,678 | -2,897 | -3,101 | -3,721 | -3,898 | -4,205 |
| Current transfer balance | 956 | 1,497 | 1,685 | 1,974 | 2,148 | 2,351 | 2,564 | 2,694 | 3,014 |
| Capital and financial account balance | 1,669 | -411 | -306 | 2,474 | 798 | 2,850 | 1,333 | 2,644 | 3,013 |
| Capital transfer balance | 479 | 256 | 464 | 300 | 300 | 300 | 300 | 300 | 300 |
| Foreign direct investment balance | 2,498 | 977 | 1,577 | 1,593 | 1,684 | 2,091 | 2,525 | 2,890 | 3,307 |
| Portfolio investment balance | -589 | -660 | -419 | 296 | -1,337 | 435 | -511 | -650 | -699 |
| Other investment balance | -719 | -984 | -1,928 | 286 | 152 | 25 | -980 | 104 | 105 |
| General government and monetary authorities | 304 | 73 | 94 | 309 | 133 | 56 | -961 | 65 | 106 |
| Domestic banks | -848 | -1,217 | -1,889 | -110 | -106 | -103 | -100 | -97 | -94 |
| Other private sector | -175 | 160 | -133 | 87 | 125 | 72 | 80 | 136 | 93 |
| Errors and omissions | 799 | 560 | 361 | 0 | 0 | 0 | 0 | 0 | 0 |
| Overall balance | -650 | -384 | 159 | 1,825 | -360 | 1,470 | -458 | 595 | 705 |
| Financing | 650 | 384 | -159 | -1,825 | 360 | -1,470 | 458 | -595 | -705 |
| Gross international reserves (increase: -) | 650 | 384 | -159 | -1,825 | 360 | -1,470 | 458 | -595 | -705 |
| | | | | | (Percent of GDP, unless otherwise indicated) | | | | |
| Memorandum items: | | | | | | | | | |
| Current account balance | -8.9 | -1.5 | 0.3 | -1.6 | -2.8 | -3.2 | -3.8 | -4.1 | -4.3 |
| Merchandise trade balance | -11.9 | -7.7 | -5.6 | -7.9 | -9.0 | -9.5 | -9.5 | -9.7 | -10.2 |
| Exports | 33.5 | 43.2 | 52.7 | 54.6 | 54.5 | 54.9 | 56.0 | 56.5 | 57.6 |
| Imports | 45.4 | 50.8 | 58.3 | 62.4 | 63.5 | 64.4 | 65.4 | 66.3 | 67.7 |
| Foreign direct investment balance | 7.2 | 2.7 | 4.1 | 4.0 | 4.1 | 4.8 | 5.4 | 5.8 | 6.1 |
| Gross external financing requirement | 57.5 | 45.0 | 36.5 | 30.2 | 29.9 | 28.6 | 29.8 | 28.4 | 26.8 |
| Gross official reserves (millions of euro) | 12,919 | 12,977 | 13,349 | 15,173 | 14,813 | 16,282 | 15,824 | 16,419 | 17,124 |
| ST debt at original maturity (percent of reserves) | 94 | 87 | 75 | 66 | 68 | 62 | 64 | 63 | 60 |
| ST debt at remaining maturity (percent of reserves) | 126 | 118 | 95 | 86 | 85 | 84 | 86 | 78 | 74 |
| Terms of trade (merchandise) | -5.4 | 3.2 | 0.7 | -0.6 | -1.0 | -1.5 | -0.5 | -0.1 | -0.1 |
| Exports of goods (volume, growth rate) | -12.6 | 5.9 | 17.7 | 1.3 | 3.9 | 7.3 | 8.8 | 8.3 | 8.8 |
| Imports of goods (volume, growth rate) | -28.3 | -5.2 | 11.3 | 4.1 | 4.8 | 6.4 | 8.0 | 8.5 | 9.1 |
| Exports of goods (prices, growth rate) | -11.9 | 25.7 | 10.7 | 5.5 | 0.5 | -1.0 | -0.2 | 0.3 | 0.7 |
| Imports of goods (prices, growth rate) | -6.9 | 21.8 | 9.9 | 6.1 | 1.4 | 0.5 | 0.3 | 0.4 | 0.9 |
| GDP (millions of euro) | 34,932 | 36,052 | 38,483 | 39,667 | 41,451 | 43,665 | 46,550 | 50,104 | 53,929 |

Sources: Bulgarian authorities; and IMF staff estimates.

Table 5. Bulgaria: External Financial Assets and Liabilities, 2009–17

| | 2009 | 2010 | 2011 Est. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. | 2016 Proj. | 2017 Proj. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | (Millions of euros) | | | | | |
| International investment position | -35,568 | -34,384 | -32,943 | -33,446 | -34,548 | -35,576 | -36,993 | -39,126 | -41,219 |
| Financial assets | 22,330 | 23,445 | 24,936 | 27,249 | 27,267 | 29,139 | 29,018 | 30,078 | 31,284 |
| Foreign direct investment | 971 | 1,171 | 1,298 | 1,100 | 894 | 677 | 446 | 197 | -71 |
| Portfolio investment | 1,848 | 2,566 | 2,670 | 3,324 | 3,863 | 4,431 | 4,943 | 5,594 | 6,295 |
| Other investments | 6,591 | 6,730 | 7,620 | 7,652 | 7,697 | 7,750 | 7,806 | 7,869 | 7,936 |
| Gross international reserves | 12,919 | 12,977 | 13,349 | 15,173 | 14,813 | 16,282 | 15,824 | 16,419 | 17,124 |
| Financial liabilities | 57,897 | 57,829 | 57,879 | 60,695 | 61,814 | 64,716 | 66,012 | 69,204 | 72,502 |
| Foreign direct investment | 34,170 | 35,347 | 36,778 | 38,333 | 40,290 | 42,649 | 45,407 | 49,171 | 52,748 |
| Equity | 20,674 | 21,922 | 23,197 | 24,727 | 26,618 | 28,927 | 31,685 | 34,825 | 38,402 |
| Intercompany debt | 13,496 | 13,426 | 13,581 | 13,605 | 13,672 | 13,722 | 13,722 | 14,346 | 14,346 |
| Portfolio investment | 1,755 | 1,639 | 1,479 | 2,429 | 1,393 | 2,158 | 1,671 | 1,185 | 937 |
| Loans | 14,941 | 14,666 | 14,651 | 15,040 | 15,317 | 15,170 | 14,267 | 14,235 | 14,298 |
| General government | 1,806 | 1,869 | 1,989 | 2,298 | 2,431 | 2,187 | 1,176 | 991 | 897 |
| Banks | 2,923 | 1,999 | 1,908 | 1,938 | 1,938 | 1,938 | 1,938 | 1,938 | 1,938 |
| Other sectors | 10,212 | 10,797 | 10,754 | 10,804 | 10,948 | 11,044 | 11,152 | 11,305 | 11,463 |
| Other liabilities | 7,031 | 6,177 | 4,971 | 4,893 | 4,814 | 4,738 | 4,667 | 4,613 | 4,518 |
| | | | | (Percent of GDP) | | | | | |
| International investment position | -101.8 | -95.4 | -85.6 | -84.3 | -83.3 | -81.5 | -79.5 | -78.1 | -76.4 |
| Financial assets | 63.9 | 65.0 | 64.8 | 68.7 | 65.8 | 66.7 | 62.3 | 60.0 | 58.0 |
| Foreign direct investment | 2.8 | 3.2 | 3.4 | 2.8 | 2.2 | 1.6 | 1.0 | 0.4 | -0.1 |
| Portfolio investment | 5.3 | 7.1 | 6.9 | 8.4 | 9.3 | 10.1 | 10.6 | 11.2 | 11.7 |
| Other investments | 18.9 | 18.7 | 19.8 | 19.3 | 18.6 | 17.7 | 16.8 | 15.7 | 14.7 |
| Gross international reserves | 37.0 | 36.0 | 34.7 | 38.3 | 35.7 | 37.3 | 34.0 | 32.8 | 31.8 |
| Financial liabilities | 165.7 | 160.4 | 150.4 | 153.0 | 149.1 | 148.2 | 141.8 | 138.1 | 134.4 |
| Foreign direct investment | 97.8 | 98.0 | 95.6 | 96.6 | 97.2 | 97.7 | 97.5 | 98.1 | 97.8 |
| Equity | 59.2 | 60.8 | 60.3 | 62.3 | 64.2 | 66.2 | 68.1 | 69.5 | 71.2 |
| Intercompany debt | 38.6 | 37.2 | 35.3 | 34.3 | 33.0 | 31.4 | 29.5 | 28.6 | 26.6 |
| Portfolio investment | 5.0 | 4.5 | 3.8 | 6.1 | 3.4 | 4.9 | 3.6 | 2.4 | 1.7 |
| Loans | 42.8 | 40.7 | 38.1 | 37.9 | 37.0 | 34.7 | 30.6 | 28.4 | 26.5 |
| General government | 5.2 | 5.2 | 5.2 | 5.8 | 5.9 | 5.0 | 2.5 | 2.0 | 1.7 |
| Banks | 8.4 | 5.5 | 5.0 | 4.9 | 4.7 | 4.4 | 4.2 | 3.9 | 3.6 |
| Other sectors | 29.2 | 29.9 | 27.9 | 27.2 | 26.4 | 25.3 | 24.0 | 22.6 | 21.3 |
| Other liabilities | 20.1 | 17.1 | 12.9 | 12.3 | 11.6 | 10.9 | 10.0 | 9.2 | 8.4 |
| Memorandum items: | | | | | | | | | |
| Gross external debt | 108.3 | 102.8 | 91.9 | 94.0 | 87.9 | 84.7 | 76.3 | 69.7 | 64.3 |
| Public 1/ | 8.1 | 8.0 | 7.2 | 10.2 | 7.6 | 8.4 | 4.6 | 3.0 | 2.1 |
| Private | 100.2 | 94.8 | 84.7 | 83.8 | 80.3 | 76.3 | 71.7 | 66.8 | 62.2 |
| Short-term | 34.7 | 31.2 | 25.9 | 25.2 | 24.5 | 23.2 | 21.9 | 20.5 | 19.2 |
| Long-term | 65.4 | 63.6 | 58.8 | 58.6 | 55.9 | 53.1 | 49.8 | 46.3 | 43.0 |

Sources: BNB; NSI; and IMF staff estimates.

1/ General government, excluding publicly-guaranteed private debt.

Table 6a. Bulgaria: General Government Operations, 2009–17 1/

(Millions of leva, unless otherwise indicated)

| | 2009 | 2010 | 2011 Est. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. | 2016 Proj. | 2017 Proj. |
|---|---|---|---|---|---|---|---|---|---|
| Revenue | 24,087 | 23,053 | 24,435 | 26,716 | 29,070 | 31,090 | 33,721 | 36,612 | 39,672 |
| Taxes | 14,898 | 14,044 | 15,085 | 16,128 | 17,246 | 18,353 | 19,666 | 21,208 | 22,889 |
| Taxes on profits | 1,762 | 1,353 | 1,496 | 1,524 | 1,593 | 1,687 | 1,788 | 1,915 | 2,061 |
| Taxes on income | 2,051 | 2,031 | 2,180 | 2,265 | 2,525 | 2,669 | 2,852 | 3,082 | 3,334 |
| Value-added taxes | 6,433 | 6,267 | 6,612 | 7,232 | 7,774 | 8,357 | 8,957 | 9,666 | 10,449 |
| Excises | 3,844 | 3,568 | 3,860 | 4,139 | 4,342 | 4,574 | 4,876 | 5,248 | 5,649 |
| Customs duties | 122 | 119 | 131 | 141 | 148 | 156 | 166 | 178 | 192 |
| Other taxes | 686 | 705 | 806 | 827 | 864 | 910 | 1,027 | 1,118 | 1,203 |
| Social contributions | 4,321 | 4,091 | 4,567 | 4,628 | 4,836 | 5,102 | 5,443 | 5,848 | 6,290 |
| Grants | 1,326 | 1,603 | 1,463 | 2,539 | 3,554 | 4,128 | 5,060 | 5,732 | 6,377 |
| Other revenue 2/ | 3,543 | 3,315 | 3,321 | 3,422 | 3,433 | 3,508 | 3,553 | 3,824 | 4,116 |
| Expenditure | 24,714 | 25,835 | 25,923 | 27,686 | 30,145 | 31,538 | 33,764 | 36,071 | 38,616 |
| Expense | 20,926 | 21,573 | 22,483 | 23,057 | 24,728 | 25,583 | 26,773 | 28,224 | 29,896 |
| Compensation of employees | 4,103 | 4,146 | 4,152 | 4,207 | 4,312 | 4,442 | 4,708 | 5,047 | 5,426 |
| Use of goods and services | 4,296 | 4,266 | 4,421 | 4,633 | 4,894 | 5,020 | 5,201 | 5,548 | 5,975 |
| Interest | 521 | 486 | 547 | 615 | 874 | 784 | 819 | 819 | 819 |
| External | 364 | 336 | 350 | 494 | 654 | 498 | 486 | 486 | 486 |
| Domestic | 157 | 150 | 197 | 120 | 220 | 285 | 333 | 333 | 333 |
| Subsidies | 1,204 | 1,317 | 1,518 | 1,149 | 1,261 | 1,294 | 1,321 | 1,355 | 1,390 |
| Grants 3/ | 746 | 670 | 779 | 824 | 908 | 968 | 1,037 | 1,037 | 1,037 |
| Social benefits | 9,955 | 10,583 | 10,949 | 11,521 | 12,368 | 12,962 | 13,572 | 14,303 | 15,134 |
| Pensions | 6,439 | 6,971 | 7,108 | 7,254 | 7,874 | 8,260 | 8,485 | 8,792 | 9,152 |
| Social assistance | 1,855 | 1,797 | 1,915 | 2,109 | 2,083 | 2,000 | 2,060 | 2,122 | 2,185 |
| Transfers to Health Insurance Fund | 1,661 | 1,815 | 1,927 | 2,158 | 2,412 | 2,702 | 3,026 | 3,390 | 3,797 |
| Other expense | 101 | 104 | 117 | 109 | 110 | 114 | 114 | 114 | 114 |
| Contingency 4/ | 302 | 1,317 | 490 | 382 | 388 | 393 | 401 | 401 | 401 |
| Net acquisition of nonfinancial assets /5 | 3,487 | 2,945 | 2,950 | 4,248 | 5,030 | 5,562 | 6,590 | 7,447 | 8,320 |
| Net lending/borrowing 1/ | -627 | -2,782 | -1,488 | -970 | -1,076 | -448 | -42 | 541 | 1,056 |
| Primary balance | -106 | -2,296 | -941 | -355 | -202 | 336 | 777 | 1,360 | 1,875 |
| Financing | 627 | 2,782 | 1,488 | 970 | 1,076 | 448 | 42 | -541 | -1,056 |
| Privatization proceeds | 60 | 46 | 239 | 148 | 141 | 150 | 22 | 0 | 0 |
| Net external financing | 627 | 161 | 133 | 2,676 | -1,004 | 2,163 | -1,512 | 154 | -2,314 |
| Disbursements | … | … | 430 | 2,881 | 812 | 2,491 | 648 | 578 | 0 |
| Amortization | … | … | -297 | -205 | -1,816 | -329 | -2,160 | -424 | -2,314 |
| Net domestic financing | -69 | 2,592 | 1,120 | -1,310 | 2,315 | -1,680 | 1,726 | -501 | 1,452 |
| Bank credit / Securities issuance | … | … | … | 1,014 | 1,199 | 1,200 | 1,000 | 1,300 | 1,400 |
| Amortization | … | | … | -970 | -257 | -786 | -183 | -943 | -1,084 |
| Fiscal Reserve Account | 709 | 1,661 | 1,013 | -1,355 | 1,372 | -2,094 | 910 | -858 | 1,136 |
| Net lending and other items | 10 | -19 | -4 | -543 | -376 | -185 | -194 | -194 | -194 |
| Memorandum items: | | | | | | | | | |
| Fiscal reserve account | 7,673 | 6,012 | 4,999 | 6,232 | 4,835 | 6,901 | 6,034 | 6,892 | 5,756 |
| Gross debt | 9,444 | 10,532 | 11,629 | 14,350 | 14,289 | 16,865 | 16,169 | 16,681 | 14,683 |
| Nominal GDP (percent change) | -1.4 | 3.1 | 6.7 | 3.1 | 4.5 | 5.3 | 6.6 | 7.6 | 7.6 |
| Real GDP (percent change) | -5.5 | 0.4 | 1.7 | 1.0 | 1.5 | 2.5 | 3.5 | 4.5 | 4.5 |
| HICP inflation (percent change) | 2.5 | 3.0 | 3.4 | 2.6 | 3.0 | 2.8 | 3.0 | 3.0 | 3.0 |
| Nominal private consumption (percent ch.) | -6.2 | 2.6 | 3.2 | 5.3 | 5.4 | 5.4 | 5.9 | 7.9 | 8.1 |
| Nominal imports (percent change) | -30.0 | 10.2 | 18.6 | 10.0 | 6.0 | 6.6 | 8.0 | 8.6 | 9.6 |

Sources: Ministry of Finance; and staff estimates.

1/ On cash basis.

2/ Includes dividends.

3/ Contribution to EU budget.

4/ The contingency reserve in 2012 includes BGN 261 million for the Health Insurance Fund.

5/ Includes only acquisitions of nonfinancial assets, i.e., capital expenditure.

Table 6b. Bulgaria: General Government Operations, 2009–17 1/
(Percent of GDP, unless otherwise indicated)

| | 2009 | 2010 | 2011 Est. | 2012 Proj. | 2013 Proj. | 2014 Proj. | 2015 Proj. | 2016 Proj. | 2017 Proj. |
|---|---|---|---|---|---|---|---|---|---|
| Revenue | 35.3 | 32.7 | 32.5 | 34.4 | 35.9 | 36.4 | 37.0 | 37.4 | 37.6 |
| Taxes | 21.8 | 19.9 | 20.0 | 20.8 | 21.3 | 21.5 | 21.6 | 21.6 | 21.7 |
| Taxes on profits | 2.6 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Taxes on income | 3.0 | 2.9 | 2.9 | 2.9 | 3.1 | 3.1 | 3.1 | 3.1 | 3.2 |
| Value-added taxes | 9.4 | 8.9 | 8.8 | 9.3 | 9.6 | 9.8 | 9.8 | 9.9 | 9.9 |
| Excises | 5.6 | 5.1 | 5.1 | 5.3 | 5.4 | 5.4 | 5.4 | 5.4 | 5.4 |
| Customs duties | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Other taxes | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Social contributions | 6.3 | 5.8 | 6.1 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Grants | 1.9 | 2.3 | 1.9 | 3.3 | 4.4 | 4.8 | 5.6 | 5.8 | 6.0 |
| Other revenue 2/ | 5.2 | 4.7 | 4.4 | 4.4 | 4.2 | 4.1 | 3.9 | 3.9 | 3.9 |
| Expenditure | 36.2 | 36.6 | 34.4 | 35.7 | 37.2 | 36.9 | 37.1 | 36.8 | 36.6 |
| Expense | 30.6 | 30.6 | 29.9 | 29.7 | 30.5 | 30.0 | 29.4 | 28.8 | 28.3 |
| Compensation of employees | 6.0 | 5.9 | 5.5 | 5.4 | 5.3 | 5.2 | 5.2 | 5.2 | 5.1 |
| Use of goods and services | 6.3 | 6.1 | 5.9 | 6.0 | 6.0 | 5.9 | 5.7 | 5.7 | 5.7 |
| Interest | 0.8 | 0.7 | 0.7 | 0.8 | 1.1 | 0.9 | 0.9 | 0.8 | 0.8 |
| Subsidies | 1.8 | 1.9 | 2.0 | 1.5 | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 |
| Grants 3/ | 1.1 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 |
| Social benefits | 14.6 | 15.0 | 14.5 | 14.8 | 15.3 | 15.2 | 14.9 | 14.6 | 14.3 |
| Pensions | 9.4 | 9.9 | 9.4 | 9.3 | 9.7 | 9.7 | 9.3 | 9.0 | 8.7 |
| Social assistance | 2.7 | 2.5 | 2.5 | 2.7 | 2.6 | 2.3 | 2.3 | 2.2 | 2.1 |
| Transfers to the Health Insurance Fund | 2.4 | 2.6 | 2.6 | 2.8 | 3.0 | 3.2 | 3.3 | 3.5 | 3.6 |
| Other expense | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Contingency 4/ | 0.4 | 1.9 | 0.7 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |
| Net acquisition of nonfinancial assets /5 | 5.1 | 4.2 | 3.9 | 5.5 | 6.2 | 6.5 | 7.2 | 7.6 | 7.9 |
| Net lending/borrowing 1/ | -0.9 | -3.9 | -2.0 | -1.3 | -1.3 | -0.5 | 0.0 | 0.6 | 1.0 |
| Primary balance | -0.2 | -3.3 | -1.3 | -0.5 | -0.2 | 0.4 | 0.9 | 1.4 | 1.8 |
| Financing | 0.9 | 3.9 | 2.0 | 1.3 | 1.3 | 0.5 | 0.0 | -0.6 | -1.0 |
| Privatization proceeds | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 |
| Net external financing | 0.9 | 0.2 | 0.2 | 3.4 | -1.2 | 2.5 | -1.7 | 0.2 | -2.2 |
| Disbursements | … | … | 0.6 | 3.7 | 1.0 | 2.9 | 0.7 | 0.6 | 0.0 |
| Amortization | … | … | -0.4 | -0.3 | -2.2 | -0.4 | -2.4 | -0.4 | -2.2 |
| Net domestic financing | -0.1 | 3.7 | 1.5 | -1.7 | 2.9 | -2.0 | 1.9 | -0.5 | 1.4 |
| Securities issuance | … | … | … | 1.3 | 1.5 | 1.4 | 1.1 | 1.3 | 1.3 |
| Amortization | … | … | … | -1.2 | -0.3 | -0.9 | -0.2 | -1.0 | -1.0 |
| Fiscal Reserve Account | 1.0 | 2.4 | 1.3 | -1.7 | 1.7 | -2.5 | 1.0 | -0.9 | 1.1 |
| Net lending and other items | 0.0 | 0.0 | 0.0 | -0.7 | -0.5 | -0.2 | -0.2 | -0.2 | -0.2 |
| Memorandum items: | | | | | | | | | |
| Gross debt | 13.8 | 14.9 | 15.5 | 18.5 | 17.6 | 19.7 | 17.8 | 17.0 | 13.9 |
| Structural fiscal balance | 0.4 | -2.4 | -1.1 | -0.4 | -0.6 | -0.2 | 0.0 | 0.6 | 1.0 |
| Output gap | -3.5 | -4.3 | -2.7 | -2.2 | -1.8 | -0.8 | -0.1 | 0.0 | 0.0 |
| Nominal GDP (millions of leva) | 68,322 | 70,511 | 75,265 | 77,581 | 81,072 | 85,402 | 91,043 | 97,994 | 105,476 |

Sources: Ministry of Finance; and IMF staff estimates.

1/ On cash basis.

2/ Includes dividends.

3/ Contribution to EU budget.

4/ The contingency reserve in 2012 includes BGN 261 million for the Health Insurance Fund.

5/ Includes only acquisitions of nonfinancial assets, i.e. capital expenditure.

## Table 7. Bulgaria: Monetary Accounts, 2009–17
(In billions of leva, unless otherwise stated)

| | 2009 Dec. | 2010 Dec. | 2011 Dec. | 2012 Dec. Proj. | 2013 Dec. Proj. | 2014 Dec. Proj. | 2015 Dec. Proj. | 2016 Dec. Proj. | 2017 Dec. Proj. |
|---|---|---|---|---|---|---|---|---|---|
| Monetary Survey | | | | | | | | | |
| Net foreign assets | 14.7 | 17.1 | 21.1 | 27.6 | 27.0 | 30.1 | 29.3 | 30.7 | 32.2 |
| Net domestic assets | 47.4 | 49.2 | 52.6 | 53.8 | 57.7 | 59.9 | 64.9 | 68.2 | 75.2 |
| Domestic credit | 47.6 | 50.0 | 53.7 | 55.0 | 58.8 | 61.0 | 66.0 | 69.3 | 76.2 |
| General government | -4.0 | -2.3 | -0.5 | -1.5 | -1.0 | -2.4 | -1.7 | -3.8 | -4.0 |
| Non-government | 51.6 | 52.3 | 54.3 | 56.5 | 59.8 | 63.4 | 67.7 | 73.1 | 80.2 |
| Other items, net | -0.2 | -0.8 | -1.2 | -1.2 | -1.1 | -1.1 | -1.1 | -1.0 | -1.0 |
| Broad money (M3) | 47.7 | 50.7 | 57.0 | 61.2 | 65.0 | 69.0 | 73.9 | 80.0 | 88.2 |
| Currency outside banks | 7.1 | 7.4 | 7.8 | 8.3 | 9.0 | 9.9 | 10.6 | 11.4 | 12.3 |
| Reserve money | 12.9 | 14.1 | 14.9 | 16.0 | 17.3 | 18.7 | 19.9 | 21.5 | 23.4 |
| Deposits 2/ | 40.6 | 43.4 | 49.2 | 53.0 | 56.0 | 59.1 | 63.3 | 68.6 | 75.9 |
| Lev | 19.8 | 22.1 | 26.8 | 29.0 | 30.8 | 32.6 | 35.1 | 38.2 | 42.5 |
| Foreign currency | 20.8 | 21.2 | 22.3 | 24.0 | 25.2 | 26.5 | 28.2 | 30.4 | 33.5 |
| Other Longer term items (not included in M3) 1/ | 14.4 | 15.6 | 16.7 | 20.2 | 19.7 | 20.9 | 20.4 | 18.9 | 19.2 |
| Accounts of the Bulgarian National Bank | | | | | | | | | |
| Net foreign assets | 23.9 | 24.0 | 24.6 | 29.6 | 28.9 | 31.7 | 30.8 | 31.9 | 33.2 |
| Net domestic assets | -7.1 | -5.5 | -5.0 | -5.2 | -5.2 | -6.0 | -6.3 | -7.3 | -8.5 |
| Net claims on government | -6.1 | -5.3 | -4.2 | -5.2 | -5.5 | -6.2 | -6.4 | -7.4 | -8.5 |
| Net claims on rest of economy 2/ | -1.2 | -0.5 | -0.9 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 |
| Other items, net | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Base money | 12.9 | 14.1 | 14.9 | 16.0 | 17.3 | 18.7 | 19.9 | 21.5 | 23.4 |
| Currency in circulation | 7.1 | 7.4 | 7.8 | 8.3 | 9.0 | 9.9 | 10.6 | 9.9 | 8.7 |
| Banks reserves | 5.8 | 6.8 | 7.1 | 7.8 | 8.3 | 8.7 | 9.3 | 11.6 | 14.8 |
| Cash in vault | 0.9 | 0.9 | 0.9 | 1.2 | 1.2 | 1.3 | 1.4 | 1.5 | 3.6 |
| Deposit money bank deposits with BNB | 4.9 | 5.8 | 6.2 | 6.6 | 7.0 | 7.4 | 7.9 | 10.1 | 11.2 |
| Capital and reserves (not included in M0) | 3.8 | 4.3 | 4.7 | 8.4 | 6.4 | 7.1 | 4.6 | 3.1 | 1.3 |
| Deposit money banks | | | | | | | | | |
| Net foreign assets | -9.2 | -6.9 | -3.5 | -2.0 | -1.8 | -1.6 | -1.4 | -1.3 | -1.1 |
| Net domestic assets | 53.3 | 54.2 | 56.5 | 58.8 | 62.9 | 65.9 | 71.1 | 75.4 | 83.4 |
| Domestic credit | 53.6 | 55.2 | 57.9 | 60.1 | 64.2 | 67.2 | 72.3 | 76.6 | 84.6 |
| Credit to government | 2.1 | 3.0 | 3.7 | 3.7 | 4.5 | 3.9 | 4.7 | 3.6 | 4.5 |
| Credit to non-government | 51.5 | 52.2 | 54.2 | 56.4 | 59.7 | 63.3 | 67.6 | 73.0 | 80.1 |
| Fixed assets and other items, net | -0.4 | -1.0 | -1.4 | -1.4 | -1.3 | -1.3 | -1.3 | -1.2 | -1.2 |
| Reserves at BNB, net | 5.8 | 6.8 | 7.1 | 7.8 | 8.3 | 8.7 | 9.3 | 10.1 | 11.2 |
| Deposits 3/ | 39.3 | 42.8 | 48.2 | 52.7 | 56.0 | 59.1 | 63.2 | 68.4 | 75.7 |
| Long term Deposits and Debt Securities (not included in M3) | 1.2 | 1.3 | 1.6 | 4.4 | 3.6 | 4.6 | 3.7 | 1.9 | 1.8 |
| Capital and Reserves | 9.4 | 10.0 | 10.4 | 7.4 | 9.7 | 9.3 | 12.1 | 13.9 | 16.1 |
| | | | | (Annual percentage change) | | | | | |
| Memorandum items: | | | | | | | | | |
| Base money | -8.7 | 9.0 | 5.6 | 7.6 | 7.7 | 8.0 | 6.8 | 7.9 | 9.0 |
| Broad money | 4.2 | 6.4 | 12.3 | 7.5 | 6.2 | 6.2 | 7.0 | 8.3 | 10.3 |
| Domestic non-government credit | 3.8 | 1.3 | 3.8 | 4.1 | 5.8 | 6.0 | 6.8 | 8.0 | 9.8 |
| Domestic deposits | 7.5 | 6.9 | 13.3 | 7.8 | 5.7 | 5.5 | 7.1 | 8.4 | 10.7 |
| Domestic currency | 0.6 | 11.9 | 21.1 | 8.2 | 6.2 | 5.9 | 7.5 | 8.8 | 11.1 |
| Foreign currency | 15.0 | 2.2 | 5.2 | 7.2 | 5.2 | 5.0 | 6.5 | 7.9 | 10.2 |
| | | | | | (Ratio) | | | | |
| Money multiplier | 3.7 | 3.6 | 3.8 | 3.8 | 3.8 | 3.7 | 3.7 | 4.0 | 4.4 |
| Velocity (M3) | 1.4 | 1.4 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| GDP (millions of leva) | 68,322 | 70,511 | 75,265 | 77,581 | 81,072 | 85,402 | 91,043 | 97,994 | 105,476 |

Sources: Bulgarian National Bank, National Statistics Institute, and Fund staff estimates and projections.

1/ Includes long term deposits and bank capital and reserves
2/ Includes deposits at central bank.
3/ Includes repurchase agreements.

Table 8. Bulgaria: Financial Soundness Indicators, 2009–12
(In percent)

| | 2009 Dec | 2010 Dec | 2011 March | 2011 June | 2011 Sep | 2011 Dec | 2012 March | 2012 June |
|---|---|---|---|---|---|---|---|---|
| Core indicators | | | | | | | | |
| Capital adequacy | | | | | | | | |
| Capital to risk-weighted assets | 17.0 | 17.5 | 17.7 | 17.7 | 17.8 | 17.5 | 17.4 | 16.7 |
| Tier 1 capital to risk-weighted assets | 14.0 | 15.2 | 15.4 | 15.5 | 15.6 | 15.7 | 15.6 | 15.2 |
| Asset quality | | | | | | | | |
| Nonperforming loans to total gross loans | 6.4 | 11.9 | 12.9 | 13.5 | 14.5 | 14.9 | 16.2 | 16.9 |
| Nonperforming loans net of provisions to capital | 15.1 | 28.1 | 30.8 | 32.4 | 34.7 | 36.9 | 41.0 | 43.1 |
| Large exposures to capital | 58.7 | 87.9 | 88.9 | 95.9 | 99.8 | 112.2 | 110.2 | 120.2 |
| Earnings and profitability | | | | | | | | |
| Return on assets | 1.1 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.9 | 0.8 |
| Return on equity 1/ | 10.2 | 7.9 | 8.0 | 7.9 | 8.0 | 7.1 | 8.5 | 7.9 |
| Net interest income to gross income | 75.1 | 74.2 | 75.9 | 75.4 | 74.1 | 73.3 | 71.6 | 70.9 |
| Noninterest expense to gross income | 50.0 | 49.1 | 49.9 | 50.0 | 49.4 | 50.4 | 52.4 | 52.2 |
| Personnel expense to total income | 18.4 | 17.8 | 18.7 | 18.6 | 18.5 | 18.5 | 19.3 | 19.4 |
| Trading and fee income to total income | 23.6 | 24.7 | 22.5 | 22.7 | 24.2 | 25.0 | 24.5 | 27.3 |
| Liquidity | | | | | | | | |
| Liquid assets to total assets | 18.8 | 20.9 | 20.9 | 21.6 | 22.3 | 21.9 | 22.1 | 22.6 |
| Liquid assets to short-term liabilities | 26.6 | 30.1 | 30.6 | 31.2 | 25.7 | 25.4 | 25.6 | 26.0 |
| Liquid assets to total liabilities | 21.8 | 24.2 | 24.3 | 24.9 | 31.9 | 28.9 | 29.1 | 30.2 |
| Encouraged indicators | | | | | | | | |
| Deposit-taking institutions | | | | | | | | |
| Capital to assets 2/ | 10.8 | 10.5 | 10.6 | 10.6 | 10.6 | 10.8 | 10.6 | 10.3 |
| Trading income to total income | 4.2 | 5.4 | 3.4 | 3.2 | 4.5 | 4.9 | 5.3 | 7.3 |
| Personnel expenses to noninterest expenses | 36.9 | 36.3 | 37.5 | 37.2 | 37.4 | 36.6 | 36.9 | 37.3 |
| Customer deposits to total (non-interbank) loans | 83.0 | 87.8 | 90.3 | 91.5 | 94.3 | 95.2 | 97.0 | 97.3 |
| Foreign currency denominated loans to total loans | 58.6 | 61.3 | 61.6 | 62.1 | 63.3 | 63.8 | 64.1 | 64.6 |
| Foreign currency denominated liabilities to total liabilities | 64.4 | 58.6 | 57.6 | 56.8 | 56.4 | 54.8 | 54.0 | 54.1 |

Source: Bulgarian National Bank.

1/ Return on equity is calculated with Tier I capital as denominator.

2/ Capital to assets is based on Tier I capital.

# ANNEX I: INTERCONNECTEDNESS AND SPILLOVERS FROM THE EURO AREA TO BULGARIA[1]

*With significant and increasing trade links with the euro area (EA), the slowdown in EA growth has a strong impact on growth in Bulgaria, particularly as its business cycle has become more synchronized with the core. Increased domestic savings led to rapid domestic deposit growth that allowed banks to reduce external debt substantially. Spillovers to sovereign debt spreads have also been limited.*

## A. Trade Channels

1. **Bulgaria's trade linkages with the euro area are strong** (Figure 1)**.** In 2011, exports to the euro area accounted for 44 percent of Bulgaria's total exports and 23 percent of the country's GDP. Bulgaria's market share in the euro area trade has increased steadily for 10 years. Real export growth to the EU–15 since 2010 has been faster than during the pre-crisis years, with growth touching a 10 year high 24 percent in 2011 as trade with Germany expanded. Exports to the European Union's New Member States and the Balkans have also grown rapidly. In 2011, Bulgaria exported 63 percent of its total exports to the European Union and 77 percent to the combined European Union and the Balkans. In contrast, Bulgaria's share in Asian markets has been relatively flat since 2009.

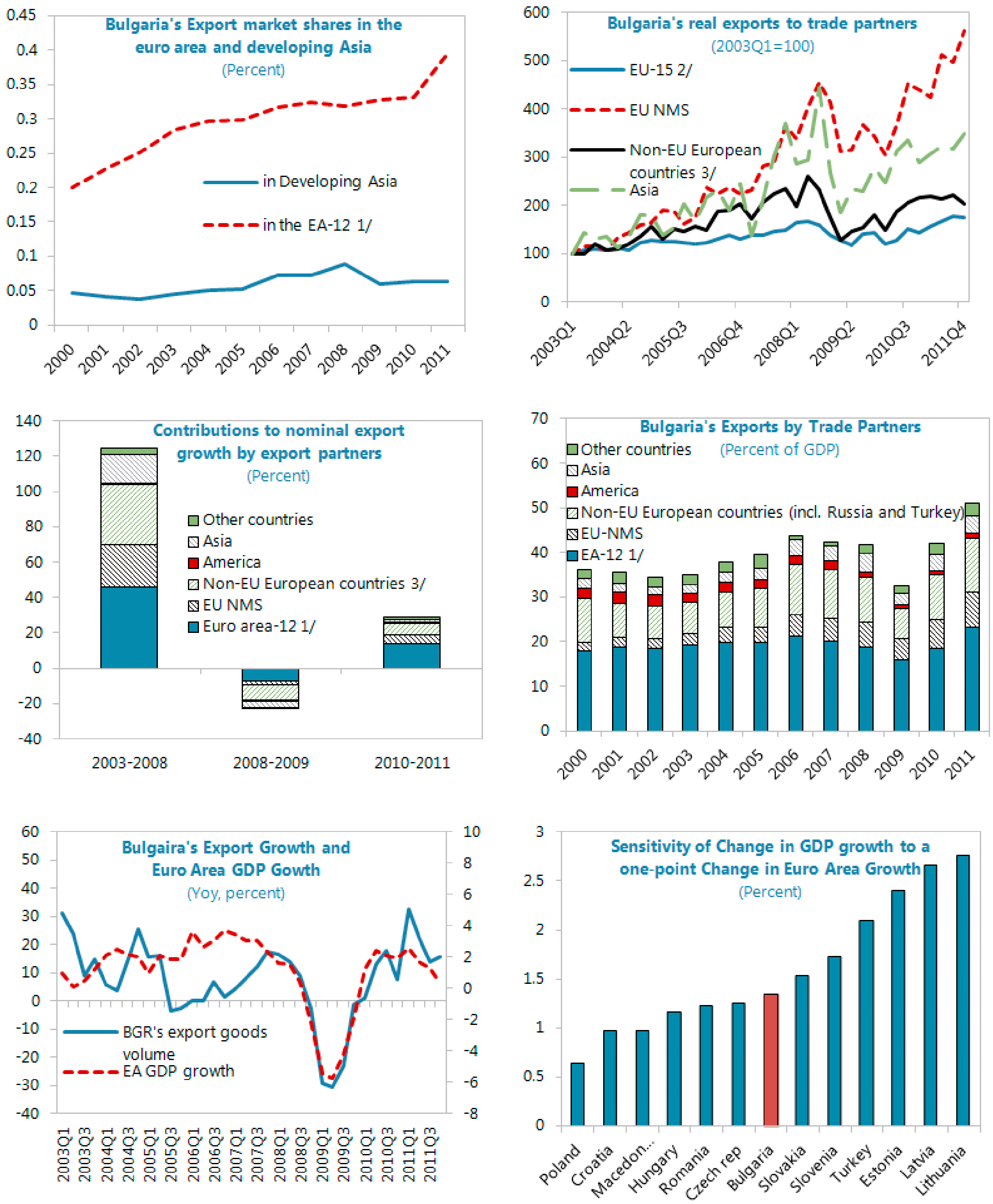
2. **Therefore, Bulgarian growth is very sensitive to developments in the euro area.** The elasticity of Bulgarian export growth to euro area GDP growth is high: when the euro area GDP grows by 1 percent, Bulgarian exports grow by 3.5 percent in volume terms. Signs of the effect of the euro area slowdown are already visible as the volume of goods export growth eased to 16.4 percent year-on-year by end-2011 from 33.1 percent in the first quarter. In addition, the correlation of the Bulgarian business cycle with the euro area's has increased over 2008/2011 compared to 2001/2007 period with twice as high an elasticity of Bulgarian GDP growth to the euro area growth during the latter period.

## B. Capital Flows Channel, Increased Domestic Savings and Banking Sector Deleveraging

3. **The crisis saw a dramatic increase in domestic deposit growth that allowed a rapid decline in banks' foreign liabilities while credit growth remained positive.** Amid weak credit demand owing to weak sentiment, the impact on credit supply has been muted with credit growth to the non-government non-financial sector reaching 3.9 percent in 2011. The rapid growth in non-financial domestic customer deposits of around 30 percent since 2010 (Figure 2), reflected rising savings, and has more than offset the decline in commercial banks' foreign liabilities (which

[1] Prepared by Cyril Pouvelle (EUR), with input from Heiko Hesse (MCM) and Borja Gracia (EUR) and research support from Robert Peterson. The authors would like to acknowledge the helpful comments provided by the BNB and Ministry of Finance.

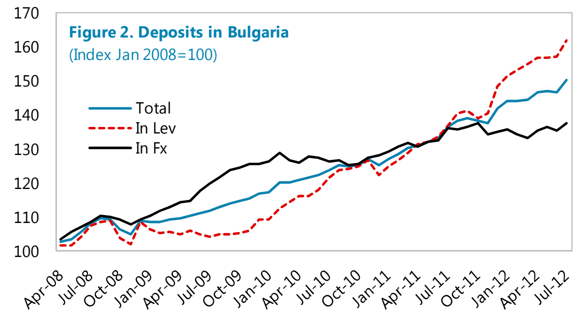
## Figure 1. Bulgaria: Interconnections to the EU Via Trade, 2000-11




1/ 11 Euro area founding members + Greece.
2/ EU–15 taken as a proxy for the EA in order to calculate the export deflators as Bulgarian exports by categories of goods are not available for exports to the euro area.
3/ Includes Russia and Turkey.

Sources: BNB; WEO; IFS; Haver Analytics; and IMF staff estimates.

are registered as a capital outflow in the BOP). This allowed banks' total liabilities to grow by 8 percent between end-2009 and end-2011 and the loan-to-deposit ratio to fall from 120 to 105 percent, with growth in lev deposits outstripping euro deposit growth. Banks' funding is thus shifting from a parent based to a domestic deposit-based model, with the retrenchment of some foreign banks benefitting domestically-owned banks in terms of asset and deposit market share

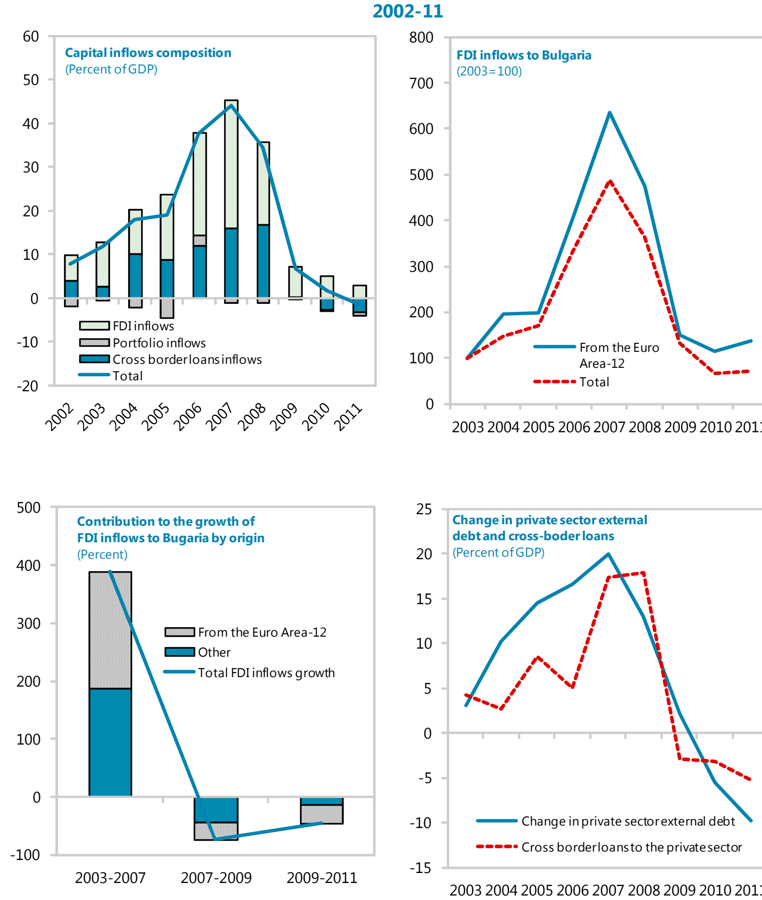



Source: BNB

**4. As a result of the crisis and the repayment of banks' external funding lines Bulgaria has experienced a dramatic fall in capital inflows** (Figure 3)**.** Capital flows shifted from inflows of 44 percent of GDP in 2007 to outflows of 1½ percent of GDP in 2011. This reflects the collapse in cross-border banking flows by 23 percent of GDP between 2008 and 2011, which in contributed to the private external debt falling from 94 percent of GDP at end-2008 to 81 percent at end-2011. Only FDI remained positive but still substantially below the elevated pre-crisis boom levels, reflecting the collapse in FDI into the financial and real estate sectors.

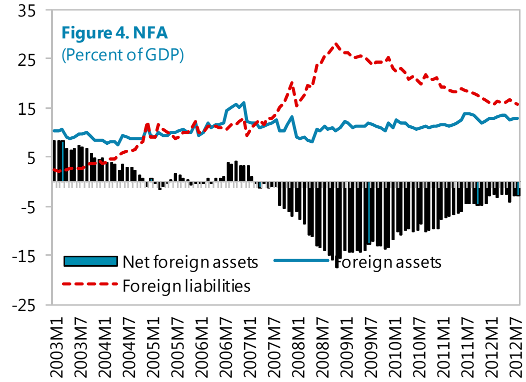
**5. The decline in cross-border banking flows is evident in banks' net foreign position that is now closer to balance.** Bulgarian banks' foreign liabilities have exhibited a clear downward trend since the start of the crisis in 2008, with a level in December 2011 at 36 percent lower compared to the 2008 peak, a decline equivalent to 9 percent of 2011 GDP. During the same period, banks' foreign assets grew by 28 percent. Consequently, banks' net foreign liabilities narrowed to 4.6 percent of GDP in December 2011 compared to 17.7 percent of GDP in November 2008 (Figure 4).

**Figure 3. Bulgaria: Interconnections to the Euro Area Via Capital Flows, 2002-11**




Source: Bulgaria National Bank.

**6. The decline in Western banks' foreign claims, mostly from the euro area, on Bulgaria has been large in proportion to Bulgarian GDP.** After rising by 24 percent of GDP during the boom, foreign liabilities of the banking system have fallen by 12 percent of GDP since 2009. Data from the BIS (Consolidated Banking Statistics, September 2012) show that euro area banks, primarily Greek banks, drove most of the fall during the 2010–11 period. This contrasts with developments observed after the 2008 Lehman failure when euro area banks, led by Greek banks, maintained their level of exposures to Bulgaria due to their profitable operations there that partly offset their losses in home markets. The asset market share of domestic banks increased from 16 percent in 2009 to 25 percent in 2012Q2 at the expense of particularly Greek banks (their market share fell from about 30 percent in 2009 to 22 percent in 2012Q2).



Source: BNB.

**7. Deeper analysis confirms the limited impact of the decline in foreign liabilities on credit supply.** A bank-by-bank panel data regression for Bulgaria shows that funding from credit institutions, the bulk of which is composed of euro area parent funding, had a significant but limited effect on credit growth (Table 1). Contrasting the pre and post-crisis periods shows that the growth in funding from credit institutions has a significant effect on credit growth during the pre-crisis period only, while non-financial customers' deposit growth has a significant effect over the whole period (3rd and 4th columns). By contrast, real GDP growth has a significant and very large effect in the post-crisis period only, with a one point GDP growth entailing a 1.83 percentage point increase in credit growth. The results are confirmed by a macro regression using monthly monetary survey data on credit and deposits.

**Table 1. Bulgarian banks' dynamic panel real credit growth estimation, 2004-2011**

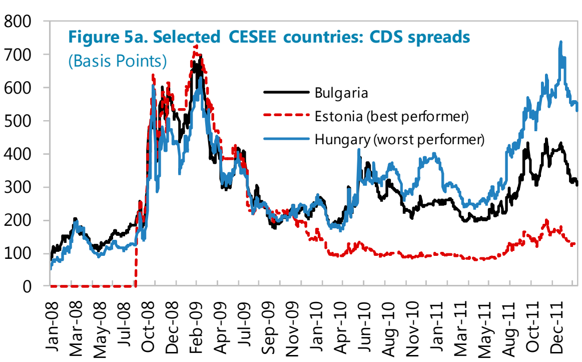
| | Initial model | Significant variables | 2004Q1-2008Q3 | 2008Q4-2011Q4 |
|---|---|---|---|---|
| GDP growth % | 1.60*** | - | -0.91 | 1.80*** |
| | (4.26) | | (-1.01) | (2.90) |
| Loan growth (t-1) % | 0.38*** | 0.70*** | 0.56*** | 0.10** |
| | (5.42) | (13.21) | (10.01) | (2.06) |
| Growth in funding from credit institutions % | 0.04*** | 0.06*** | 0.05*** | 0.02 |
| | (3.01) | (3.27) | (3.64) | (0.94) |
| NPL ratio % | 0.24 | - | -0.09 | -0.23 |
| | (0.40) | - | (-0.28) | (-0.61) |
| Lending rate change (in pps) | 0.02 | - | -0.61 | -0.31 |
| | (0.04) | | (-0.51) | (-0.91) |
| Non-financial customers' deposit growth % | 0.07** | 0.24*** | 0.12** | 0.12*** |
| | (2.08) | (4.11) | (2.05) | (3.42) |
| Leverage change (in pps) | 0.01 | - | 0.002 | -0.02 |
| | (0.86) | | (0.52) | (-1.12) |
| ECB rate change (pps) | -0.91 | - | 16.45*** | -3.56*** |
| | (-0.94) | | (2.81) | (-4.63) |
| No. of obs. | 636 | 749 | 343 | 293 |
| Sargan over-identification test (p-value) | 1 | 1 | 1 | 1 |
| Test of auto-correlation of order 1 (p-value) | 0.14 | 0.12 | 0.15 | 0.32 |

Note: *** significant at the threshold of 1 %, ** 5%; * 10 %; t-statistics in brackets.

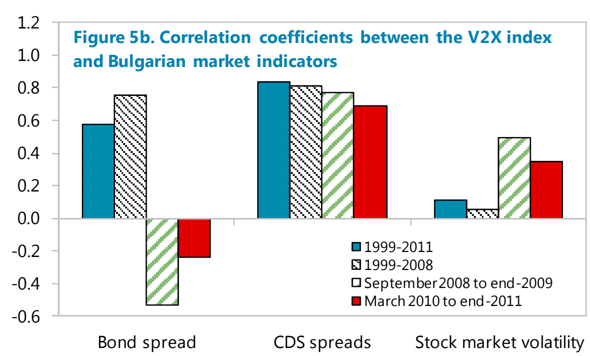
**8. The results imply that the decline in foreign liabilities had a cumulative negative effect of 2 percentage points on credit flows during 2010–11.** This assumes banks' wholesale funding is made up exclusively of foreign funding, and uses the average year-on-year growth in attracted funds from credit institutions over 2010/2011 (-18.8 percent) and the regression coefficient (column 2 Table 1). The combined effect of the funding from credit institutions variable and the deposit variable on credit growth is estimated to be equal to 1.4 percentage point each year over 2010/2012, compared to an average annual credit growth of 3.1 percent, with the difference reflecting the autoregressive behavior of credit growth as shown in the econometric results.

## C. Financial Markets Linkages

**9. The widening of spreads on Bulgarian debt has been contained compared to regional peers** (Figures 5a and b)**.** The increase in CDS spreads has evolved in line with global risk aversion and regional peers, remaining below Bulgaria's March 2009 own crisis high. A correlation analysis shows that the increase in regional risk aversion has impacted Bulgarian bond spreads and CDS less negatively than the stock market, as the latter was largely driven by domestic factors. The correlation between the V2X index (volatility of the Euro Stoxx 50 index) and Sofia stock market volatility has risen dramatically since the onset of the 2008 crisis. By contrast, the correlation of the V2X with Bulgarian sovereign CDS spreads and with 10-year sovereign bond spread declined and even turned negative for bond spreads. A Garch model estimating co-movements in financial variables confirms that Bulgarian indicators have been less vulnerable than others in the region to contagion (see Box 1).




Sources: Bloomberg; and Markit.

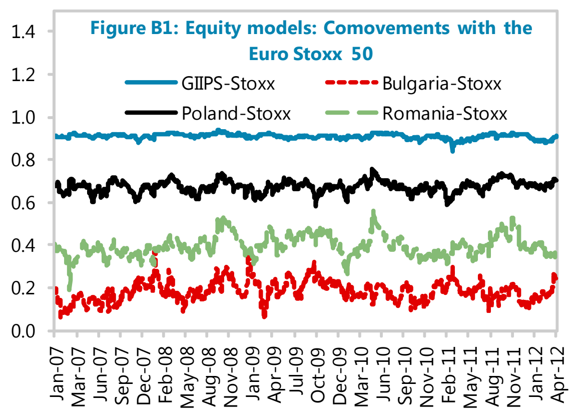


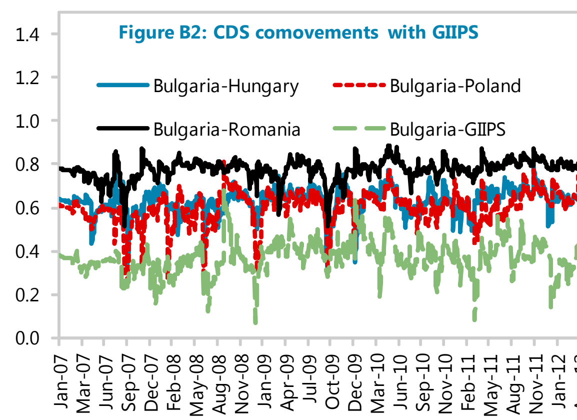
## Box 1: Co-Movements in Financial Markets: A GARCH Approach

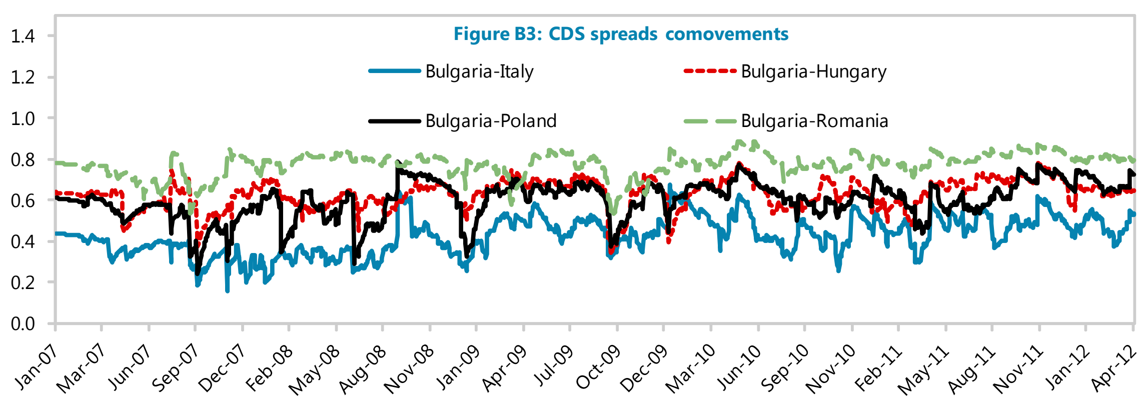
- Bulgaria's stock market displays a lower co-movement with the GIIPS equity and Euro Stoxx than Poland or Hungary (Figure B1). This reflects its underdevelopment and low liquidity even prior to the crisis.

- Bulgaria's CDS spread co-moves more with Hungary, Poland, and Romania than with the GIIPS (Figure B2), but Bulgaria does not seem to be more influenced by CDS shocks in the GIIPS than its neighboring countries. Therefore, a common factor such as rising risk aversion in Europe seems to be a major driving factor.

- Comparing the EMBI spreads of Bulgaria, Hungary, and Poland against the average GIIPS 10-year bond spread over Germany indicates that Bulgaria has been moving closely to Hungary and Poland against the 10-year bond spread of the GIIPS during the last 2 years, expect in the very recent period (Figure B3).

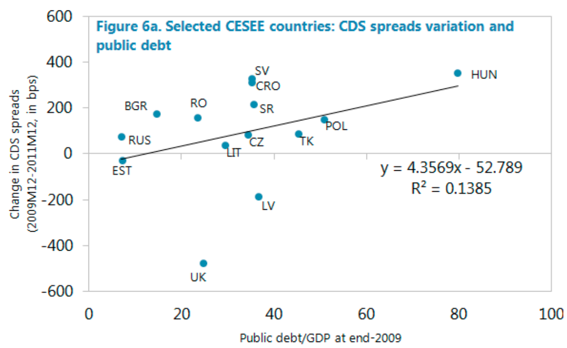


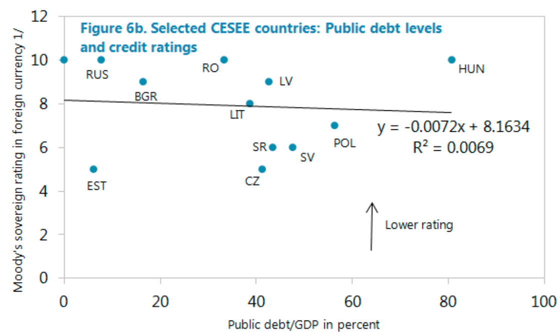




Source: Bloomberg; and IMF staff estimates

**10. The greater resilience of the sovereign bond and CDS spreads reflects the strict fiscal discipline enshrined in the CBA.** Bulgaria maintains a fiscal reserve as a buffer against external shocks which helped contain the rise in sovereign spreads. In addition to the limited size of the Bulgarian bond market and regular domestic issuances, good policies have helped Bulgaria decouple from the euro area, while the 10-year Bulgarian government bond interest rate has converged towards the Maastricht criterion showing greater discrimination between emerging markets by international investors on basis of debt levels (Figures 6a and b).




1/ 5=A1-; 6=A2; 7=A3; 8=Baa1-; 9=Baa2; 10=Baa3

Sources: Bloomberg; Haver Analytics; Moody's; and IMF staff estimates.

# ANNEX II. THE PURPOSE OF THE FISCAL RESERVE[1]

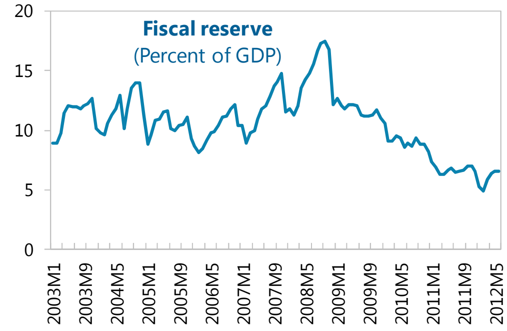
*This annex explores the reasons for Bulgaria to maintain a fiscal reserve.*

## A. Background

**1. The fiscal reserve was set up in 1997 at the inception of the Currency Board Arrangement (CBA).** It was (and is), however, not a formal requirement of the CBA. The minimum level of the fiscal reserve was initially fixed at the amount of debt payments over the next year (around €1 billion or about 10 percent of GDP).[2] Fund programs included a performance criterion on the minimum balance in the fiscal reserve account (FRA).[3]

**2. The fiscal reserve soon exceeded the minima related to debt repayments.** Public debt declined rapidly in the 2000's and the FRA was boosted *inter alia* by privatization revenues and inclusion of the government's cash resources. Budget surpluses in the boom years of the mid 2000's flowed into the FRA, which subsequently helped finance budget deficits resulting from the global crisis that began in 2008.

**3. The fiscal reserve is kept as liquid deposits with the BNB.** It amounted to BGN 6.9 billion (8.9 percent of GDP) at end-August 2012. This includes proceeds from the eurobond issued in July 2012 (2.4 percent of GDP) that will be used for the repayment of a eurobond in January 2013 (2.0 percent of GDP). Increases in the FRA increase international reserves, although less than one-for-one.[4] International reserves at



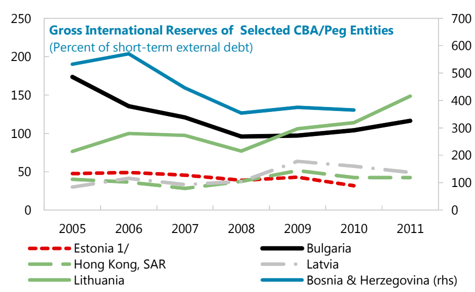

Sources: Haver; IMF staff estimates.

Bulgaria. Gross International Reserves

| | 2011 est. | 2012 proj. |
|---|---|---|
| Gross international reserves (GIR) | | |
| In millions of euro | 13,349 | 15,173 |
| In percent of GDP | 35 | 38 |
| In percent of reserve money | 175 | 185 |
| In percent of risk-weighted metric 1/ | 128 | 128 |
| In percent of short-term external debt 2/ | 106 | 117 |
| In percent of BGN-denominated deposits | 98 | 102 |
| In months of imports (goods & nf services) | 5.7 | 6.1 |
| Memorandum item: | | |
| Fiscal reserve (percent of GDP) 3/ | 6.6 | 8.2 |

1/ See "Assessing Reserve Adequacy" (IMF Policy Papers, 2/14/2011).
2/ At remaining maturities.
3/ Includes July 2012 proceeds of new eurobond (2.4 percent of GDP) for eurobond repayment in January 2013 (2.0 percent of GDP).

Sources: BNB; and IMF staff estimates.




1/ Adopted euro at beginning of 2011.

Sources: IFS; WEO.

Note: The ratio of GIR to short-term debt is one metric for comparison. A more comprehensive analysis, which is beyond the scope of this annex, would consider other metrics and take into account that currency board arrangements and risks vary across countries.

[1] Prepared by Frank Lakwijk (EUR). The annex also benefited from useful suggestions by the BNB and Ministry of Finance.

[2] See "Government Debt Management Strategy for the Period 2006–08."

[3] For example, the 2002 Stand-By Arrangement referred to a minimum FRA of 90 percent of next year's gross public debt service requirements.

mid-2012 were 90 percent above the CBA requirement of covering reserve money.

**4. The FRA comprises various sub accounts the use of which is often dedicated:**

- **The FRA includes the State Fund for Guaranteeing the Stability of the State Pension System ("Silver Fund").** This fund amounted to BGN 2.1 billion (2.7 percent of GDP) at end-August 2012 or just under one-third of the total FRA. It is dedicated to meeting future needs in pillar I of the pension system, which restricts the short-term usability of its resources without legislative changes. The Silver Fund started accumulating resources in 2007, when the fiscal surplus and FRA were rising, to lock in part of the gain.[5]

- **The FRA includes the single treasury account.** Use of the FRA has to take into account the operational needs of the government, which may be around 2–3 months of non-transfer spending (around BGN 2.5 billion or 3 percent of GDP). The single treasury account also holds balances of some organizations with budgets that are not part of the state budget, as well as certain funds.[6]

- **An end-year legal minimum for the FRA is specified in the budget.** For end-2012 this is set at BGN 4.5 billion (5.8 percent of 2012 GDP), and the proposed 2013 budget sets the same nominal minimum for end-2013. No legal minimum applies during the year.

## B. The Fiscal Reserve as a Shock Absorber

**5. Bulgaria's faces certain vulnerabilities.** A key vulnerability is the short-term external debt (25 percent of GDP at mid-2012) which needs to be rolled over within a year. The Risk Assessment Matrix (see main text) summarizes staff's views on the major risks facing Bulgaria, and Annex I discusses its trade and financial interconnections with the euro area as possible channels through which shocks can spillover to Bulgaria. More generally, Bulgaria is an emerging economy that is still building credibility: risk premiums have come down but this is a recent development that cannot be taken for granted. In terms of its policy framework, while the currency board is well supported by policies, it limits the policy options to address shocks, including the lender-of-last-resort function. Fiscal policy in the case of a shock may be constrained by limited financing room (the domestic market is small and the external market may not necessarily be open when needed), which could force severe short-term budget adjustment.

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[4] In the case of external borrowing that is placed in the FRA, the effect on international reserves is reduced below one-for-one to the extent that residents finance part of the external borrowing immediately or soon after (with the July 2012 eurobond, residents were not allowed as primary purchasers but secondary market purchases did take place). In the case of fiscal surpluses generating the increase in the FRA, the effect on international reserves depends on factors such as the reduction in import demand brought about by the fiscal surplus.

[5] By law, the Silver Fund receives privatization receipts, 25 percent of each annual budget surplus, revenues from concessions, and other revenues to be decided ("State Fund for Guaranteeing the Stability of the State Pension System Act," Article 11(1)).

[6] The "2012 State Budget of the Republic of Bulgaria Act" lists these organizations. Funds in the single treasury account include the Nuclear Facilities Decommissioning Fund and the Radioactive Waste Fund (see "Safe Use of Nuclear Energy Act").

**6. The fiscal reserve is a tool in Bulgaria's policy framework that can act as a buffer of last resort to help absorb shocks in two dimensions.** They include shocks to the government finances and the financial system that could generate liquidity or financing needs. These are examined in turn.

**FRA and Government Finances**

**7. A conservative fiscal policy is the first line of defense against the impact of shocks on government finances.** It can (i) reduce the financing needs of unexpected fiscal shocks, (ii) create space to absorb a shock without breaching national or EU-level fiscal rules, and (iii) build up savings in good times that can be used to finance the budget in bad times. In the two years from 2008 to 2010, the (cash) fiscal balance deteriorated to a deficit of only 3.9 percent of GDP because the starting position was a surplus of 2.9 percent of GDP. As a result, the cumulative financing need was reduced and the fiscal reserve could finance a substantial part of it. Moreover, it allowed fiscal policy to play a more active role in supporting the economy in the downturn.[7] Without the reserve a more abrupt adjustment to curtail the widening of the fiscal deficit would have been required, which would have compounded the economic downturn.

**8. The anticipated level of the FRA would likely be insufficient to cope with large shocks to the budget.** The FRA's peak-to-trough decline was about 12 percentage points of GDP, whereas the FRA by January 2013 will be just around 6 percent of GDP, and only part of it is usable given the constraints mentioned above. In addition, recent simulations showed a potential funding need for Bulgaria over a 3-year period in worst-case scenarios amounting to 7 to 9 percent of GDP.[8] Both the recent experience and the simulations provide indications of the amount of liquid, available FRA resources that might be needed in an adverse downside scenario that caused a significant shock to growth and the budget balance.

**9. The most natural and least costly way to rebuild the FRA is by using fiscal surpluses when the economic cycle turns up.** This would be consistent with the stabilizing objective of the FRA over the economic cycle. If future growth accelerates and the output gap becomes positive again, the appropriate policy response would be to have fiscal surpluses and rebuild the FRA. At a minimum, limiting the size of the deficit will help preserve the current size of the reserve. But saving privatization proceeds and any over performance relative to budget targets while adhering to domestic debt issuance plans would allow for a gradual build-up of the reserve without increasing net debt.

[7] The benefit of using the FRA in terms of smoothing GDP over the cycle depends on the multiplier. For example, Annex II provides an estimated revenue multiplier in the downturn of 0.5 and in the upturn of 0.4 (with opposite signs). This implies a small net positive impact on GDP over the cycle from financing a revenue decline in the downturn and clawing it back in the upturn.

[8] See Andritzky, "Evaluating Designs for a Fiscal Rule in Bulgaria" (IMF, WP/11/272, November 2011), Table 2.

**10. In the current international environment, tail risks—unrelated to cyclical factors and not necessarily Bulgaria-specific—that could involve a severe fiscal deterioration and high financing requirement cannot be ruled out.** The size of the fiscal buffer potentially needed to finance deficits in such an extreme case could be very large and costly to accumulate and maintain. Thus, the cost at this time of building up such self-insurance from borrowing, combined with the low probability of needing it, needs to be weighed against alternatives, including potential bilateral or multilateral support.

**FRA and Financial System**

**11. Bulgaria pursues conservative financial supervisory policies as its main defense against the impact of shocks.** The modest size of the financial system in Bulgaria, with total banking system assets at around 75 percent of GDP, helps contain risks. The stability of the banking system in recent years, following the unwinding of the domestic demand boom, attests to the adequate policy framework and its successful implementation. However, given that the currency board strictly circumscribes the BNB's ability to act as lender of last resort by limiting the amount of reserve money to no more than international reserves, strong defenses are appropriate.

**12. Conservative supervisory policies have resulted in high capital, provisions, and liquidity in the banking system to cope with shocks.** Bulgaria sets capital requirements well above EU minimums and requires banks to set aside additional buffers in the form of specific provisions. Banks are required to hold a high level of minimum reserves, and at present, hold additional excess reserves at the BNB. Under certain circumstances, banks can tap the BNB as a lender of last resort provided they have high-quality collateral to pledge.[9] In extremis, the BNB has strong pre-emptive intervention powers, and the deposit insurance fund holds resources worth 2 percent of GDP (almost 5 percent of covered deposits). Ways to further strengthen the ability of the financial system to address non-performing assets, including by improving the insolvency framework as well as strengthening the BNB's resolution tool-kit in line with the proposed EU Directive on Bank Resolution and Recovery, are also under consideration.

**13. Given the existing defenses, the potential role of the FRA in backstopping the financial system is as an additional resource**. Existing defenses are supplemented by the authorities' preference for private sector involvement. However, without going into the circumstances and conditions under which public liquidity or capital support may be provided, the available resources in the FRA are potentially a factor in the degree of flexibility available to the authorities in their crisis response. The flexibility provided by the FRA is also noted by the rating agencies.

[9] To summarize, in case of liquidity risk the BNB may only extend short-term credits to solvent banks against highly liquid assets up to the amount of excess international reserves (see "Law on the BNB," Article 33).

## C. The Fiscal Reserve as a Saving Vehicle

**14. The FRA could be used as a tool to save and address the financial consequences of population aging.** An aging population puts pressure on government finances which can be prepared for in part by building up assets. To this end, Bulgaria has established pillar II of the pension system along traditional lines, with resources being built up and invested with the aim of generating long-term returns. To complement the state pension system, the Silver Fund (which is part of the FRA) was established to set aside savings. Although designated as a pension fund, it does not operate along these lines as its resources are limited, kept very liquid (only short-term deposits) and, as a consequence of their being liquid, do not generate a return in the current low interest rate environment.[10] More importantly, its structure and legal framework do not conform to those of a pension fund.

**15. The role of the FRA and the Silver Fund in saving for aging pressures could be reexamined.** A savings fund could be a useful instrument of macro-fiscal management provided fiscal policy generates enough savings and it is fully integrated in the policy framework. That is to say, the accumulation of financial assets in a fund with intergenerational objectives should be derived from the actual fiscal surpluses determined in the policy framework. Significant legal changes would be required for the Silver Fund to play this role, if it is desired. In this context, the asset/debt nexus would also need to be examined. Generating savings when net public debt is positive may seem premature but possibly be defensible if maintaining a gross public debt has other functions, for example underpinning domestic financial market development.

## D. Fiscal Reserve Comparison

**16. Comparisons with other countries are fraught with difficulty because Bulgaria's combination of a currency board and fiscal reserve is uncommon.** One economy that is comparable in these respects, although it differs significantly in many respects including size and level of development, is Hong Kong SAR, which is briefly examined.

**17. For Hong Kong SAR, the Asian crisis illustrated the utility of, and way to manage fiscal reserves.** They were drawn down to help finance budget deficits, and once budget surpluses returned they were rebuilt. The recent decline in Bulgaria's fiscal reserve could similarly be followed by a rebuilding.

**18. Hong Kong SAR's fiscal reserves are placed with the Hong Kong Monetary Authority (HKMA), which invests them as part of its management of the international reserves.** This is similar to the present arrangement in Bulgaria. A difference is that the HKMA is explicitly managing its international reserves partly as a liquid portfolio and partly for the longer term. This

[10] Existing room to invest in other than short-term deposits (for example, foreign shares and investment grade foreign government bonds within limits specified in the law) is not being used (see "State Fund for Guaranteeing the Stability of the State Pension System Act," Article 13).

reflects the primary role of the international reserves as backing the currency board and also that Hong Kong SAR has decided to dedicate its fiscal reserves for multiple purposes: they are a buffer against the volatile public revenues, function as a potential backstop for the financial system (in addition to the Hong Kong Monetary Authority's role as lender of last resort), and are a resource for anticipated age-related spending. In Bulgaria, if any changes in the investment of the FRA were to be contemplated, they should be preceded by a re-examination of the purposes of the FRA, including as a saving vehicle for aging. However, the resources available in the FRA for the shock absorption functions with respect to the government finances and financial system, discussed above, would need to be safeguarded.

## E. Conclusions

**19. The fiscal reserve is an integral part of Bulgaria's policy framework that has served Bulgaria well.** In practice, it has a stabilizing backstop financing function which, in uncertain times, may imply actively using its resources. Its size should be increased through the saving of privatization proceeds and fiscal over performance, and over the longer-term through fiscal savings as output strengthens. Its purposes, including as a buffer for aging, are somewhat unclear and should be further examined to ensure that the FRA is appropriately structured and financed to meet its multiple objectives.

# ANNEX III. MAKING THE FISCAL FRAMEWORK AND POLICY MORE SUPPORTIVE OF GROWTH[1]

*With fiscal adjustment proceeding quickly in Bulgaria and given the weak economic environment, there is keen interest in making the budget composition more growth friendly. This annex quantifies the impact of fiscal policy on economic activity in Bulgaria using an econometric approach,[2]and calibrating the IMF's Global Integrated Monetary and Fiscal model (GIMF) for Bulgaria.[3] While the impact has been modest in the past, as can be expected in a small open emerging economy, the effect on output is not independent of the speed of adjustment and the specific consolidation measures used. The impact of fiscal policy on economic activity is larger in downturns than in expansions and capital spending and direct taxes are associated with the largest effects on output, while non-targeted government transfers and indirect taxes are associated with a smaller impact.*

## A. Fiscal Multipliers in Bulgaria—an Empirical Approach

**1. The short-term impact of fiscal policy on output is frequently referred to as the fiscal multiplier.** This is defined as the change in output following an exogenous change in the fiscal deficit with respect to their respective baselines (Spilimbergo and others, 2009). Fiscal multipliers are smaller in more open economies and when monetary policy offsets the impact of the fiscal shock. Little research so far has been done to determine fiscal multipliers in emerging economies. For the advanced economies, Spilimbergo and others (2009) suggest that as a rule of thumb, government consumption multipliers are 0.5 or less in small open economies, with smaller values for revenue and transfers and slightly larger ones for investment.

**2. In Bulgaria fiscal multipliers have been modest, especially on the expenditure side** (Table 1). We estimate a structural VAR using quarterly accrual data from 1999 to 2011 on general government revenues and expenditure, as well as GDP, all deflated with the GDP deflator.[4] First year spending multipliers are found to lie around zero and first year revenue multipliers are 0.3, but are statistically insignificant. We therefore estimate the same model with monthly 2003–11 cash-based data with industrial production as a proxy for GDP.[5] Over the sample, the impact on GDP growth of revenue measures is now significant with an increase in taxes decreasing economic activity, while expenditure multipliers remain insignificant. Further splitting the sample into a pre-and post-EU accession period, shows that prior to 2007 both revenue and expenditure multipliers were significant and positive with first-year multipliers of 0.4 and 0.2 respectively, meaning that a rise in spending and cut in taxes had a positive effect on growth and vice versa.

[1] Prepared by Anke Weber (FAD) and Dirk Muir (RES). The authors would like to acknowledge the helpful comments provided by the BNB and Ministry of Finance.

[2] For more details on the methodology of this approach, see Appendix 1, Fiscal Monitor, April 2012.

[3] For more details on the model, see Kumhof and others (2010).

[4] See Blanchard and Perotti (2002) for definitions of revenue and expenditure used in this analysis.

[5] Industrial production growth and real GDP growth move together over time with a correlation of 0.4.

**Table 1. Historical Fiscal Multipliers in Bulgaria**

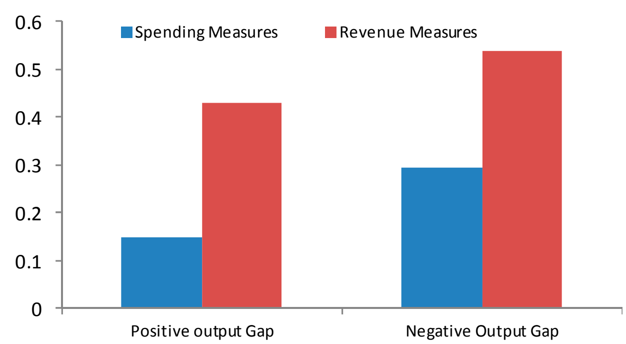
| *Frequency* | *Quarterly* | *Monthly* | *Monthly* |
|---|---|---|---|
| Time period | 1999–2011 | 2003–011 | 2003–2006 |
| Revenue | 0.33 | 0.32* | 0.42* |
| Spending | 0.04 | 0.31 | 0.16* |

Source: IMF Staff estimates.

Notes: * denotes significance on impact according to a 95 percent confidence interval.

3. **The impact of fiscal policy varies with the business cycle, with multipliers being larger in downturns than in expansions.** This is intuitive since in times of a negative output gap, the proportion of credit-constrained households and firms, which adjust spending in response to a change in disposable income, is higher. The endogenously determined threshold values of the output gap above and beyond which the effect of fiscal policy on output changes is -1.73 percent. In a downturn revenue and expenditure first year multipliers are 0.5 and 0.3 respectively and in an upturn they are 0.4 and 0.2 respectively (Figure 1). The results are in line with the previous literature (see Baunsgaard and others, 2012, Ilzetzki, 2011) that find multipliers are mostly quite small in emerging economies.

**Figure 1. Bulgaria: First Year Fiscal Multipliers**




Source: IMF Staff Estimates

4. **However, the results for overall multipliers should be treated with caution.** For instance, the spending multiplier captures the effect of productive and unproductive spending on output and the effects could have opposite directions decreasing the overall multiplier. Moreover, the results are averages over time and since Bulgaria's economy has seen significant structural changes, a model based approach that takes into account the current features of the economy is needed.

## B. Is There a Better Way to Structure the Budget to Support Growth in Bulgaria in the Future?

5. **With most of the adjustment needed to reach a balanced budget by 2015 already completed, making the budget composition more growth friendly is the priority**. A DSGE model, such as the IMF's GIMF, is well suited for this analysis since it is not subject to data

constraints and by calibrating the economy around its steady state, it gives us an insight into the effects of future fiscal consolidation on output going forward.

6. **We use a 3-region model; Bulgaria, the euro area and the rest of the world.** The calibration is based on a variety of sources. We use national account ratios, tax revenues for the different components, and general lump-sum transfers for 2011 (based on WEO data); trade decomposition data for 2011 (based on WEO data, direction of trade statistics, and U.N. COMTRADE data). The debt-to-GDP ratio is chosen to be 16 percent (equal to its medium-term value). The share of liquidity constraint consumers is set to be 50 percent. We assume that Bulgaria faces nominal rigidities in line with the rest of the world, unlike the euro area, where nominal rigidities are 50 percent higher than the rest of the world.

7. **We consider the case where there is a permanent 1 percent of GDP decrease in the budget balance, financed by one of seven fiscal instruments**. On impact, the fiscal instrument will change by 1 percent of GDP. However, as the fiscal consolidation leads to a lower level of government debt, interest payments will decrease, providing the government with additional fiscal space. We assume the government will use that additional fiscal space to reverse as much as possible the change in the fiscal instrument being used in the consolidation process. In what follows, we will assume that the fiscal consolidation is credible. The adjustment path under full credibility is really a lower limit on the short-run costs from fiscal consolidation, as a temporarily noncredible adjustment will be more costly.

8. **A ranking of the output loss associated with different consolidation measures can be established based on GIMF**. Multipliers differ significantly across instruments (Table 2). On the spending side, investment has the highest multiplier, as a decrease in government investment in infrastructure will act as a negative shock to the productivity of the economy. This is followed by government wages and government purchases, which enter directly into GDP; although there is an offset provided as there is less crowding out of domestic investment. General (non-targeted) transfers to households are associated with the lowest output impact among spending instruments, as this is a decrease in a lump sum instrument, which has the fewest economic

**Table 2. Fiscal Multipliers based on 1 Percent of GDP Permanent Change in the Budget Balance**

(Percent Deviation from Baseline)

| | *Year 1* | *Year 2* | *Year 3* | *Year 4* | *Year 5* |
|---|---|---|---|---|---|
| Government Consumption | 0.51 | 0.33 | 0.13 | 0.02 | 0.01 |
| Government Investment | 0.61 | 0.55 | 0.49 | 0.54 | 0.71 |
| General Lump sum Transfers | 0.30 | 0.13 | -0.12 | -0.28 | -0.31 |
| Targeted Lump sum Transfers | 0.45 | 0.23 | -0.07 | -0.28 | -0.35 |
| Consumption Taxes | 0.38 | 0.32 | 0.17 | 0.07 | 0.05 |
| Labor Income Taxes | 0.40 | 0.44 | 0.42 | 0.41 | 0.43 |
| Corporate Income Taxes | 0.53 | 0.56 | 0.51 | 0.58 | 0.80 |

Source: IMF staff calculations.

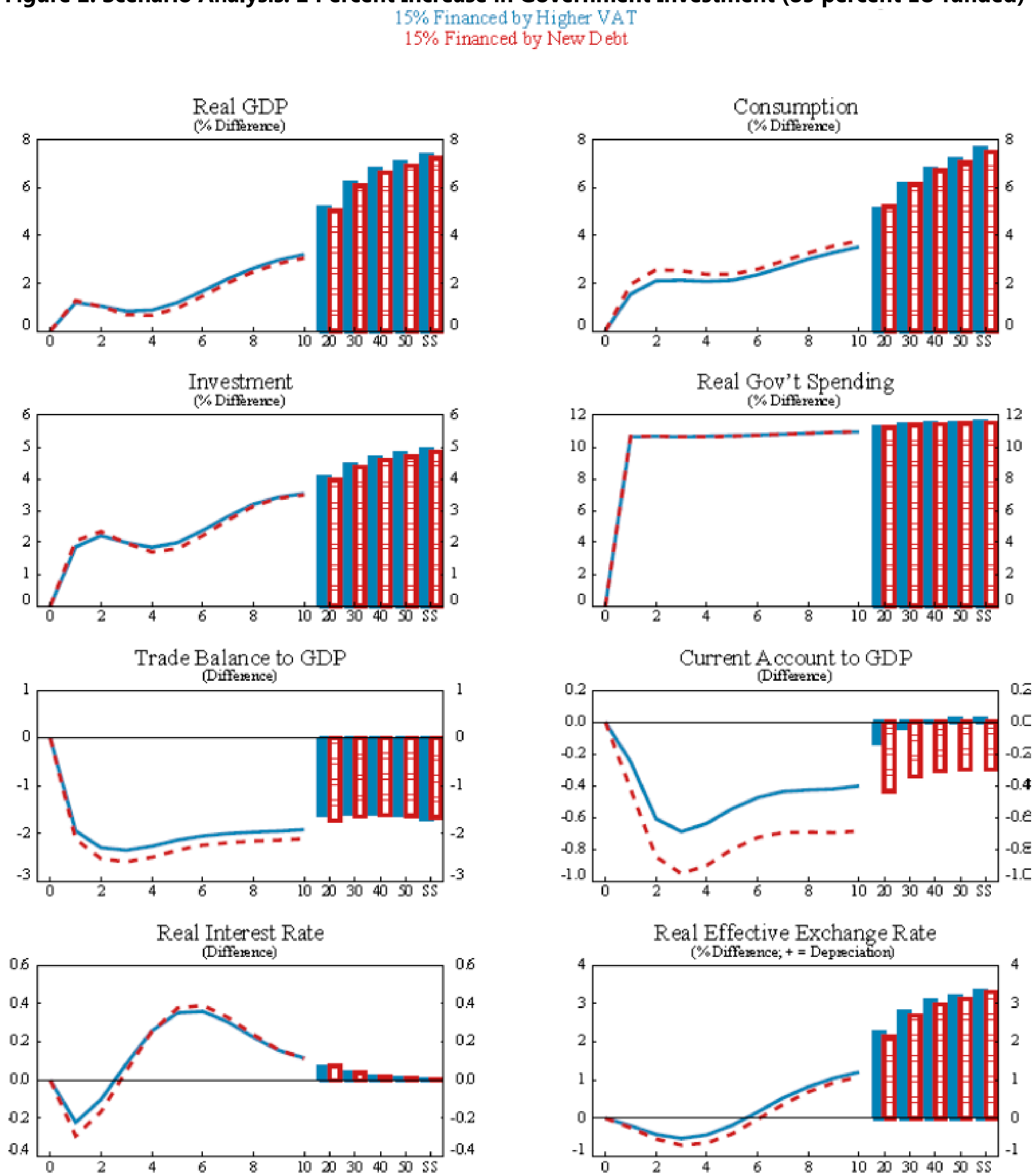
distortions. On the revenue side, corporate income taxes have the most negative effect on GDP, followed by personal income taxes and consumption taxes have the lowest impact on GDP.

**9. We also investigate an increase in public investment financed by EU funds.** More specifically, the following is simulated: (i) a permanent 2 percent of current GDP increase in public investment of which 85 percent is financed by grants, since EU-financed investment spending is subject to a 15 percent co-payment. The 15 percent co-payment is financed in a budget neutral way by a broadening of the tax base. (ii) The same as above except that the co-payment is financed by a higher deficit.

**10. Increasing capital expenditure permanently raises real GDP**. An increase by 2 percent in the stock of public infrastructure increases the productivity of factors of production in the economy and leads to permanent increases in GDP of about 3 percent of GDP after 10 years (Figure 2). Moreover, a permanent increase in government investment can be more effective than an increase in private investment, as government investment is typically on infrastructure such as roads, hospitals, public institutions, etc., which depreciate at a slower rate than the stock of machinery and equipment. Private investment begins rising immediately. Consumption also increases since higher productive capacity lowers prices. The currency board means that while nominal interest rates remain unchanged, real interest rates eventually fall, providing additional stimulus. As the short-run level of aggregate demand in Bulgaria increases, there are greater domestic inflationary pressures, leading to an appreciation of the real exchange rate in the short-run. However, in the long-run there is a significant real depreciation (about 3 percent) since the increase in government investment behaves the same as a permanent economy-wide increase in productivity, making Bulgaria-produced goods cheaper to its trading partners.

**11. Financing the increased public investment in a budget neutral way (through a broadening of the indirect tax base) is preferable to letting the deficit increase.** The results under the two methods of financing are qualitatively the same, but there are some quantitative differences. In the short-run, consumption will be lower under the broader tax base than under deficit financing, as the increase in the VAT has a direct impact on consumption. However, in the medium term, deficit financing will lead to higher government demand for debt in local markets (crowding out funding for private investment) and also a larger current account deficit, relative to the case of a broader tax base. Without the downward pressure on investment from the higher debt load, there is a stronger expansion of the economy's productive capacity, allowing for higher wage income and household wealth, and higher consumer spending (despite the drag of the higher VAT). This is reinforced by the greater depreciation of the real exchange rate resulting from less Bulgarian demand for foreign funding for its government debt when broadening the tax base.

**Figure 2. Scenario Analysis: 2 Percent Increase in Government Investment (85 percent EU funded)**




Source: IMF staff calculations.

## C. Policy Implications

**12. The fact that multipliers differ significantly by instrument has important implications for the optimal budget composition.** Currently, the Bulgarian budget is growth friendly on the revenue side: direct taxes rates are low and most revenues are collected through indirect taxes. However, the tradition of underperforming on capital spending is clearly undesirable. In terms of future plans, the analysis suggests the undesirability of raising government consumption, whereas a strategy of increasing indirect tax revenues through base broadening and raising capital spending has sizeable growth effects over the medium and long-term.

**13. The analysis points to several steps to make the budget more growth friendly:**

- The authorities should address barriers to EU funds absorption to increase capital spending on infrastructure. Tackling the large shadow economy to broaden the tax base would also create resources for higher productive spending on infrastructure.
- Subsidies and other non-targeted government transfers need to be reviewed to make room for more growth enhancing expenditure. Subsidies of SOEs in particular have been growing over time but are associated with small multipliers.
- Further pension reforms that increase the length of working lives will also have a salutary effect on potential growth (Karam and others, 2010) with a relatively small short term multiplier while helping contain projected spending increases.

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# APPENDIX I. EXTERNAL AND PUBLIC DEBT SUSTAINABILITY ANALYSES

1. **External debt peaked in 2009 and has since declined.** With public external debt falling marginally from 8 percent of GDP at end-2009 to 7 percent of GDP at the end of 2011, the decline in total external debt from 108 percent of GDP to 92 percent of GDP over this period was due to private sector deleveraging. The main contributor was the external debt of banks, which fell from 24 percent of GDP at the end of 2009 to 15 percent of GDP at end-2011.

2. **Intra-company lending has been stable.** Amortization falling due has been fully offset by new lending in 2010 and 2011. As a result, the stock of intercompany lending relative to GDP fell slightly, from 42 percent of GDP at end-2009 to 38 percent of GDP at end-2011, due to rising nominal GDP.

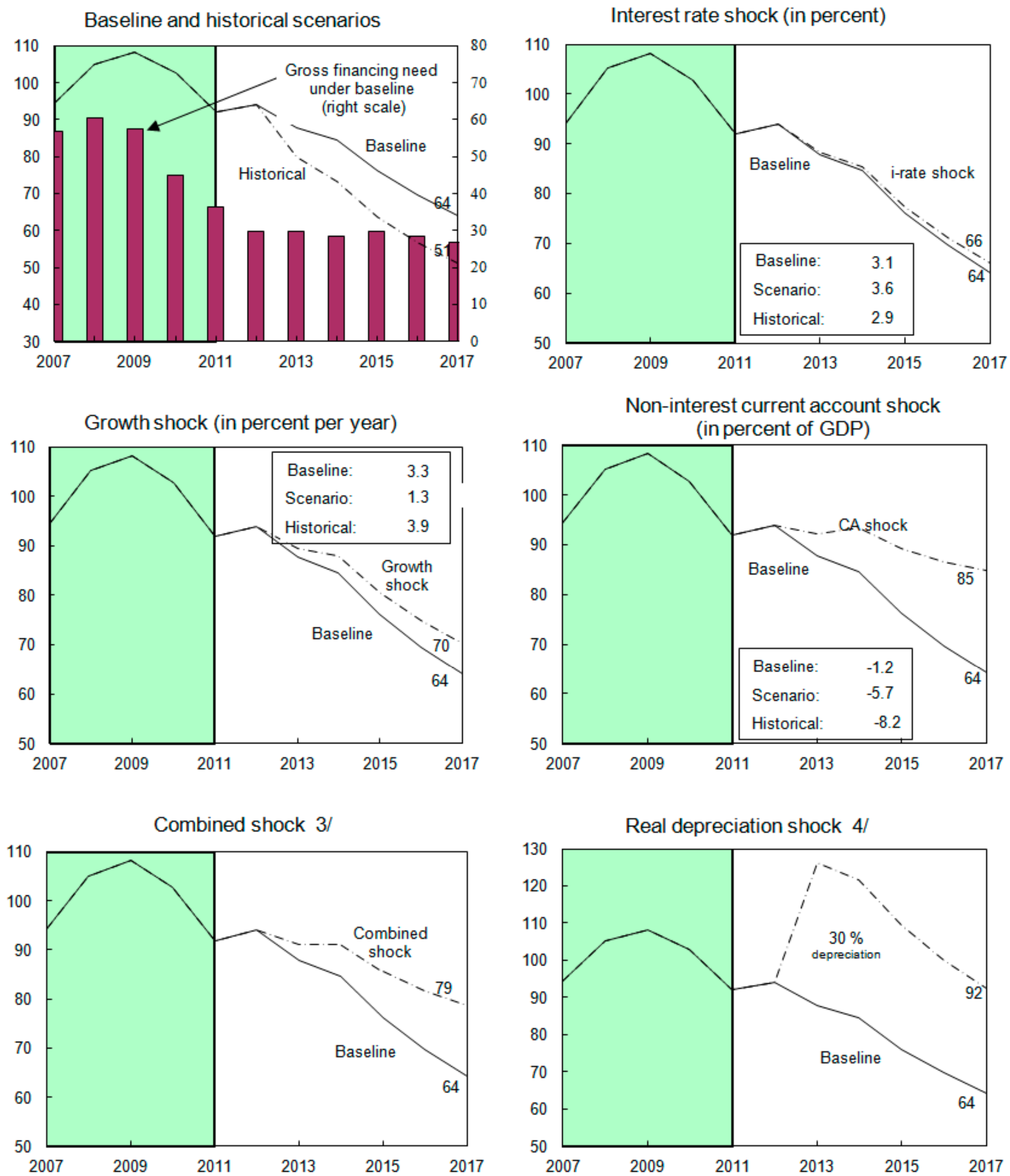
3. **The counterpart of the private sector deleveraging was the reduction in the current account deficit.** The current account moved from a deficit of 25 percent of GDP in 2007 and 9 percent of GDP in 2009 to a slight surplus in 2011. Baseline medium-term balance of payments projections indicate the current account returning to deficit, financed by foreign direct investment flows.

4. **Projected external debt in the baseline projections declines further.** It reaches around 65 percent of GDP by 2017 primarily due to nominal GDP growth, with relatively little change in nominal external debt (which falls by just 2 percent from 2011 to 2017). In the historical scenario the denominator effect on the debt-to-GDP ratio is even stronger because historical growth is higher than projected growth (Figure 1 and Table 1).

5. **The decline in external debt relative to the size of the economy appears well anchored.** Shocks applied to the interest rate, the growth rate and the current account deficit would shift the trajectory of external debt relative to GDP upwards. However, in these scenarios the highest level of external debt reached by 2017 is 85 percent of GDP, which would still imply declines in the ratio of external debt to GDP in coming years.

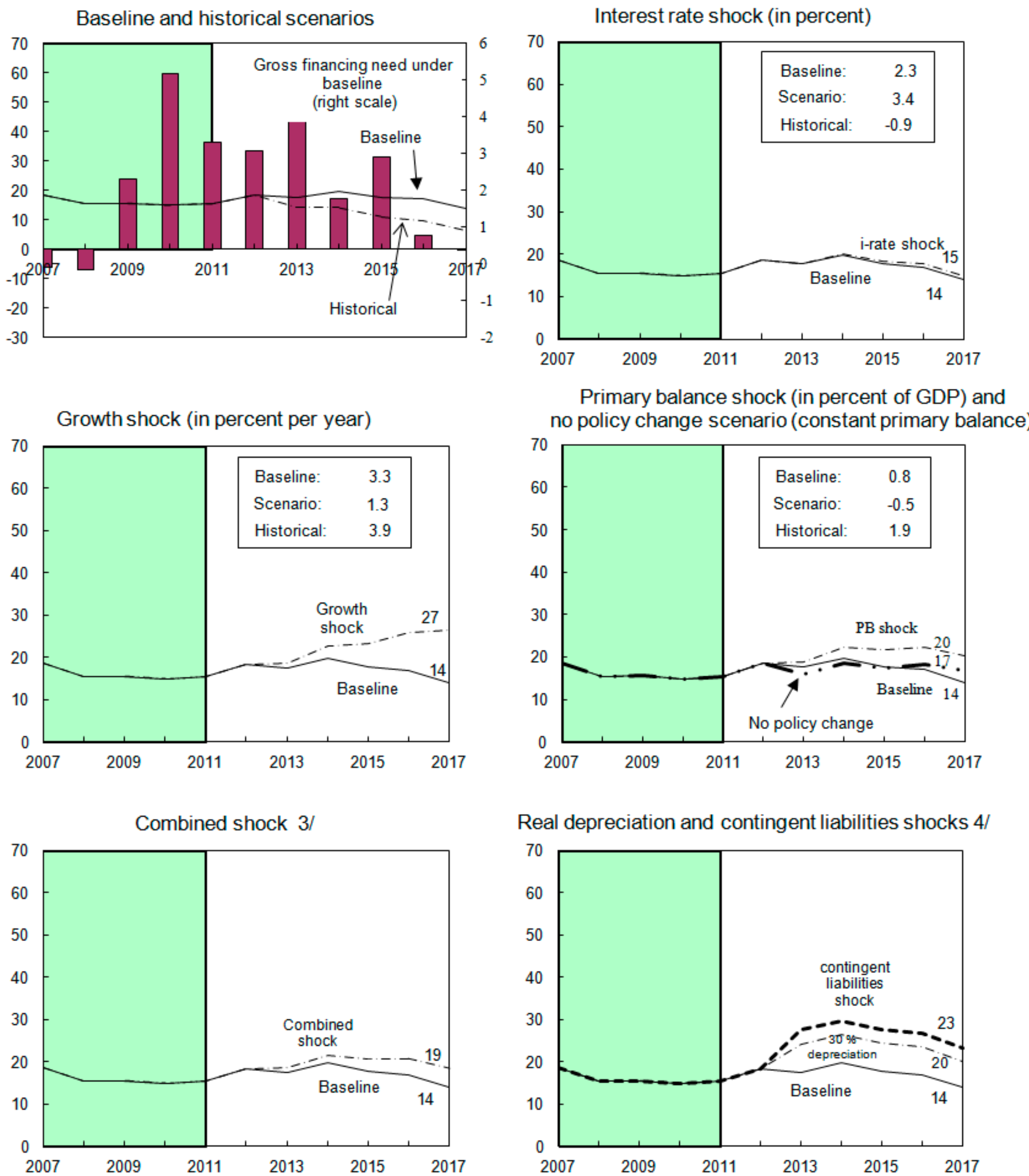
6. **Public debt remains at very manageable levels.** At well below 20 percent of GDP at present and in the baseline projections, Bulgaria's indebtedness is small by international standards. Assuming shocks to the baseline projections, the public debt ratio increases but remains below 30 percent of GDP in all scenarios considered (Figure 2 and Table 2). Risks from unaccounted contingent liabilities (and worse-than-assumed downside scenarios) could result in higher outcomes.

## Figure 1. Bulgaria: External Debt Sustainability: Bound Tests 1/ 2/
(External debt in percent of GDP)




Sources: Bulgarian authorities; and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2013.

## Figure 2. Bulgaria: Public Debt Sustainability: Bound Tests 1/ 2/
(Public debt in percent of GDP)




Sources: Bulgarian authorities; and staff estimates.
1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.
4/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Table 1. Bulgaria: External Debt Sustainability Framework, 2007-2017
(In percent of GDP, unless otherwise indicated)

| | Actual | | | | | Projections | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 **Baseline: External debt** | 94.3 | 105.1 | 108.3 | 102.8 | 91.9 | **94.0** | **87.9** | **84.7** | **76.3** | **69.7** | **64.3** |
| 2 Change in external debt | 12.1 | 10.8 | 3.1 | -5.5 | -10.8 | 2.0 | -6.1 | -3.2 | -8.4 | -6.6 | -5.5 |
| 3 Identified external debt-creating flows (4+8+9) | -13.0 | -6.0 | 12.0 | 0.0 | -14.7 | -3.0 | -3.1 | -4.2 | -4.9 | -5.4 | -5.3 |
| 4 Current account deficit, excluding interest payments | 22.8 | 20.7 | 6.9 | 0.0 | -1.9 | -1.1 | 0.5 | 1.2 | 0.6 | 1.5 | 2.2 |
| 5 Deficit in balance of goods and services | 19.7 | 20.5 | 8.2 | 2.5 | -0.4 | 1.8 | 3.1 | 3.7 | 3.8 | 4.2 | 4.8 |
| 6 Exports | 59.4 | 58.1 | 47.6 | 57.1 | 66.6 | 67.9 | 68.5 | 68.7 | 69.6 | 69.8 | 70.6 |
| 7 Imports | 79.1 | 78.6 | 55.8 | 59.5 | 66.1 | 69.7 | 71.6 | 72.5 | 73.4 | 74.0 | 75.4 |
| 8 Net non-debt creating capital inflows (negative) | -20.7 | -10.9 | -4.7 | -3.2 | -3.5 | -3.8 | -4.6 | -5.3 | -5.9 | -6.3 | -6.6 |
| 9 Automatic debt dynamics 1/ | -15.0 | -15.8 | 9.7 | 3.2 | -9.3 | 1.9 | 0.9 | -0.2 | 0.4 | -0.7 | -0.8 |
| 10 Contribution from nominal interest rate | 2.4 | 2.2 | 2.2 | 1.4 | 1.7 | 2.9 | 2.3 | 1.9 | 3.2 | 2.5 | 2.1 |
| 11 Contribution from real GDP growth | -4.2 | -4.7 | 6.2 | -0.4 | -1.5 | -1.0 | -1.4 | -2.1 | -2.8 | -3.2 | -2.9 |
| 12 Contribution from price and exchange rate changes 2/ | -13.2 | -13.3 | 1.4 | 2.3 | -9.4 | ... | ... | ... | ... | ... | ... |
| 13 Residual, incl. change in gross foreign assets (2-3) 3/ | 25.0 | 16.8 | -8.8 | -5.5 | 3.9 | 5.0 | -3.0 | 1.0 | -3.5 | -1.2 | -0.2 |
| External debt-to-exports ratio (in percent) | 158.8 | 181.0 | 227.6 | 180.1 | 138.2 | 138.4 | 128.4 | 123.2 | 109.7 | 99.9 | 91.0 |
| **Gross external financing need (in billions of US dollars) 4/** | 24.0 | 31.5 | 28.0 | 21.5 | 19.5 | 15.2 | 15.3 | 15.4 | 17.1 | 17.4 | 17.6 |
| in percent of GDP | 56.8 | 60.4 | 57.5 | 45.0 | 36.5 | 30.2 | 29.9 | 28.6 | 29.8 | 28.4 | 26.8 |
| **Scenario with key variables at their historical averages 5/** | | | | | | **94.0** | **80.1** | **73.4** | **63.9** | **56.9** | **51.1** |
| **Key Macroeconomic Assumptions Underlying Baseline** | | | | | | | | | | | |
| Real GDP growth (in percent) | 6.4 | 6.2 | -5.5 | 0.4 | 1.7 | 1.0 | 1.5 | 2.5 | 3.5 | 4.5 | 4.5 |
| GDP deflator in US dollars (change in percent) | 19.2 | 16.4 | -1.3 | -2.1 | 10.1 | -5.9 | -0.8 | 2.5 | 2.6 | 2.6 | 2.6 |
| Nominal external interest rate (in percent) | 3.7 | 2.9 | 1.9 | 1.3 | 1.8 | 3.0 | 2.5 | 2.3 | 4.0 | 3.6 | 3.2 |
| Growth of exports (US dollar terms, in percent) | 23.1 | 20.9 | -23.6 | 18.0 | 30.6 | -3.0 | 1.5 | 5.4 | 7.6 | 7.6 | 8.5 |
| Growth of imports (US dollar terms, in percent) | 27.5 | 22.8 | -33.8 | 4.9 | 24.3 | 0.1 | 3.5 | 6.3 | 7.6 | 8.2 | 9.2 |
| Current account balance, excluding interest payments | -22.8 | -20.7 | -6.9 | 0.0 | 1.9 | 1.1 | -0.5 | -1.2 | -0.6 | -1.5 | -2.2 |
| Net non-debt creating capital inflows | 20.7 | 10.9 | 4.7 | 3.2 | 3.5 | 3.8 | 4.6 | 5.3 | 5.9 | 6.3 | 6.6 |

1/ Derived as $[r - g - \rho(1+g) + \varepsilon\alpha(1+r)]/(1+g+\rho+g\rho)$ times previous period debt stock, with r = nominal effective interest rate on external debt; $\rho$ = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, $\varepsilon$ = nominal appreciation (increase in dollar value of domestic currency), and $\alpha$ = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as $[-\rho(1+g) + \varepsilon\alpha(1+r)]/(1+g+\rho+g\rho)$ times previous period debt stock. $\rho$ increases with an appreciating domestic currency ($\varepsilon > 0$) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

Table 2. Bulgaria: Public Sector Debt Sustainability Framework, 2007-2017
(In percent of GDP, unless otherwise indicated)

| | Actual | | | | | Projections | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 **Baseline: Public sector debt 1/** | 18.6 | 15.5 | 15.6 | 14.9 | 15.5 | **18.5** | **17.6** | **19.7** | **17.8** | **17.0** | **13.9** |
| o/w foreign-currency denominated | 14.5 | 12.1 | 12.2 | 11.1 | 11.0 | 14.5 | 12.6 | 12.1 | 9.8 | 8.8 | 7.7 |
| 2 Change in public sector debt | -4.9 | -3.1 | 0.1 | -0.6 | 0.5 | 3.0 | -0.9 | 2.1 | -2.0 | -0.7 | -3.1 |
| 3 Identified debt-creating flows (4+7+12) | -8.9 | -6.0 | 1.0 | 3.1 | -0.2 | 1.3 | 0.8 | -0.3 | -1.0 | -1.6 | -2.0 |
| 4 Primary deficit | -4.3 | -3.7 | 0.2 | 3.3 | 1.3 | 0.5 | 0.2 | -0.4 | -0.9 | -1.4 | -1.8 |
| 5 Revenue and grants | 38.2 | 38.0 | 35.3 | 32.7 | 32.5 | 34.4 | 35.9 | 36.4 | 37.0 | 37.4 | 37.6 |
| 6 Primary (noninterest) expenditure | 33.9 | 34.3 | 35.4 | 36.0 | 33.7 | 34.9 | 36.1 | 36.0 | 36.2 | 36.0 | 35.8 |
| 7 Automatic debt dynamics 2/ | -3.6 | -2.4 | 1.0 | -0.1 | -1.1 | 0.3 | 0.3 | 0.0 | -0.3 | -0.4 | -0.4 |
| 8 Contribution from interest rate/growth differential 3/ | -2.2 | -1.6 | 1.0 | 0.2 | -0.2 | 0.3 | 0.3 | 0.0 | -0.3 | -0.4 | -0.4 |
| 9 Of which contribution from real interest rate | -0.9 | -0.6 | 0.1 | 0.3 | 0.0 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 |
| 10 Of which contribution from real GDP growth | -1.3 | -1.0 | 0.9 | -0.1 | -0.2 | -0.1 | -0.3 | -0.4 | -0.6 | -0.7 | -0.7 |
| 11 Contribution from exchange rate depreciation 4/ | -1.4 | -0.8 | 0.0 | -0.3 | -0.9 | ... | ... | ... | ... | ... | ... |
| 12 Other identified debt-creating flows | -1.0 | 0.2 | -0.1 | 0.0 | -0.3 | 0.5 | 0.3 | 0.0 | 0.2 | 0.2 | 0.2 |
| 13 Privatization receipts (negative) | -1.0 | -0.8 | -0.1 | -0.1 | -0.3 | -0.2 | -0.2 | -0.2 | 0.0 | 0.0 | 0.0 |
| 14 Recognition of implicit or contingent liabilities | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 Other (specify, e.g. bank recapitalization) | -0.1 | 0.9 | 0.0 | 0.0 | 0.0 | 0.7 | 0.5 | 0.2 | 0.2 | 0.2 | 0.2 |
| 16 Residual, including asset changes (2-3) 5/ | 4.0 | 2.9 | -0.9 | -3.8 | 0.7 | 1.7 | -1.7 | 2.5 | -1.0 | 0.9 | -1.1 |
| 17 *of which*: Change in fiscal reserves | 2.7 | 1.3 | -1.0 | -2.4 | -1.3 | 1.7 | -1.7 | 2.5 | -1.0 | 0.9 | -1.1 |
| Public sector debt-to-revenue ratio 1/ | 48.6 | 40.6 | 44.2 | 45.7 | 47.6 | 53.7 | 49.2 | 54.2 | 48.0 | 45.6 | 37.0 |
| **Gross financing need 6/** | -0.5 | -0.6 | 1.9 | 4.8 | 2.9 | 2.7 | 3.7 | 1.4 | 2.5 | 0.4 | 0.0 |
| **Scenario with key variables at their historical averages 7/** | | | | | | **18.5** | **14.4** | **14.3** | **10.9** | **9.6** | **6.4** |
| **Scenario with no policy change (constant primary balance) in 2012-2017** | | | | | | **18.5** | **15.8** | **18.5** | **17.5** | **18.2** | **16.9** |
| **Key Macroeconomic and Fiscal Assumptions Underlying Baseline** | | | | | | | | | | | |
| Real GDP growth (in percent) | 6.4 | 6.2 | -5.5 | 0.4 | 1.7 | 1.0 | 1.5 | 2.5 | 3.5 | 4.5 | 4.5 |
| Average nominal interest rate on public debt (in percent) 8/ | 5.2 | 5.2 | 4.9 | 4.6 | 5.2 | 5.3 | 6.1 | 5.5 | 4.9 | 5.1 | 4.9 |
| Average real interest rate (nominal rate minus change in GDP deflator | -4.0 | -3.2 | 0.6 | 1.8 | 0.2 | 3.2 | 3.1 | 2.7 | 1.9 | 2.1 | 1.9 |
| Nominal appreciation (increase in US dollar value of local currency, in | 8.5 | 6.4 | 0.1 | 2.6 | 9.0 | -7.8 | -3.6 | -0.3 | -0.4 | -0.4 | -0.4 |
| Inflation rate (GDP deflator, in percent) | 9.2 | 8.4 | 4.3 | 2.8 | 5.0 | 2.1 | 3.0 | 2.8 | 3.0 | 3.0 | 3.0 |
| Growth of real primary spending (deflated by GDP deflator, in percent) | 11.3 | 7.6 | -2.5 | 1.9 | -4.6 | 4.5 | 5.0 | 2.2 | 4.0 | 3.9 | 4.1 |
| Primary deficit | -4.3 | -3.7 | 0.2 | 3.3 | 1.3 | 0.5 | 0.2 | -0.4 | -0.9 | -1.4 | -1.8 |

1/ Gross debt including guarantees through 2009.
2/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; $\pi$ = growth rate of GDP deflator; g = real GDP growth rate;
α = share of foreign-currency denominated debt; and $\varepsilon$ = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi(1+g)$ and the real growth contribution as -g.
4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $\alpha\varepsilon(1+r)$.
5/ For projections, this line includes exchange rate changes.
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.
7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.
8/ Derived as nominal interest expenditure divided by previous period debt stock.

INTERNATIONAL MONETARY FUND

# BULGARIA

## STAFF REPORT FOR THE 2012 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

November 13, 2012

Prepared By

European Department
(in consultation with other departments)

## CONTENTS

# FUND RELATIONS

(as of September 30, 2012)

## 1. Membership Status

Joined on September 25, 1990. Article VIII status assumed on September 24, 1998.

## 2. General Resources Account

| | SDR Million | Percent Quota |
|---|---|---|
| Quota | 640.20 | 100.00 |
| Fund holdings of currency | 606.11 | 94.68 |
| Reserve position in Fund | 34.10 | 5.33 |

## 3. SDR Department

| | SDR Million | Percent Allocation |
|---|---|---|
| Net cumulative allocation | 610.88 | 100.00 |
| Holdings | 610.92 | 100.01 |

## 4. Outstanding Purchases and Loans: None.

## 5. Latest Financial Arrangements

| | Date of Arrangement | Expiration Date | Amount Approved | Amount Drawn |
|---|---|---|---|---|
| | | | SDR million | |
| Stand By | 8/6/2004 | 3/31/07 | 100.00 | 0.00 |
| Stand By | 2/27/2002 | 3/15/04 | 240.00 | 240.00 |
| EFF | 7/25/1998 | 9/24/01 | 627.62 | 627.62 |

## 6. Projected Payments to the Fund

(SDR million; based on existing use of resources and present holdings of SDRs)

| | Forthcoming | | | | |
|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| Principal | -- | -- | -- | -- | -- |
| Charges/Interest | -- | 0.01 | 0.01 | 0.01 | 0.01 |
| Total | -- | 0.01 | 0.01 | 0.01 | 0.01 |

## 7. Exchange Rate Arrangement:

The currency of Bulgaria is the lev. Since July 1, 1997, the Bulgarian National Bank has operated a currency board arrangement. From July 1, 1997 to December 31, 1998, the lev was pegged to the

Deutsche Mark at BGN 1000 per Deutsche Mark. Since January 1, 1999 the lev has been pegged to the euro at BGN 1.95583 per euro. Bulgaria joined the European Union (EU) on January 1, 2007. Bulgaria has accepted the obligations of Article VIII, Sections 2–4, and maintains an exchange system free of restrictions on the making of payments and transfers for current international transfers.

**8. Article IV Consultations**

The 2011 Article IV Board discussion took place on June 29, 2011. The Staff Report was published on July 15, 2011 (Country Report No. 11/179).

**9. Resident Representative**

Mr. Lybek is the Regional Resident Representative, based in Bucharest. He took up the position on March 31, 2009.

# IMF-WORLD BANK RELATIONS

## A. Partnership in Bulgaria's Development Strategy

1. **The World Bank has been leading the policy dialogue in structural and institutional reforms aimed at Bulgaria's successful EU integration and convergence.** On May 17, 2011 the Board of Directors discussed the Country Partnership Strategy (CPS) of the Bank which outlined the roadmap for the Bank's country support for the period 2011–13. The CPS maintains a strong focus on Bulgaria making the most of its EU membership. It aims to partner with Bulgaria in strengthening national institutions and capacity to meet EU targets and in accelerating the absorption of EU grant funds. The objective of the CPS is to support Bulgaria in strengthening institutions and policies to achieve smart, sustainable, and inclusive growth. The CPS proposes a program dominated by knowledge and advisory services complemented by a modest lending program. World Bank knowledge and advisory services focus on policy reforms, sector strategies and strengthening institutional capacity for increased EU funds absorption. The Bank continues to undertake substantial knowledge and advisory services on policy reforms in select sectors and themes of Bulgaria's National Reform Program 2011–2015 such as innovation, education, business regulation, transport, water, climate change, and social inclusion.

## B. IMF-World Bank Collaboration in Specific Areas

2. **The Fund team led by Ms. Purfield (mission chief) meets regularly with the World Bank Bulgaria team led by Mr. Markus Repnik (Country Manager for Bulgaria, the Czech Republic and Slovakia), to discuss macro-critical structural reforms and to coordinate the two teams' work.** The most recent meeting took place in late September 2012.

3. **Bulgaria's main macroeconomic challenges are to maintain stability and enhance growth in a difficult external environment.** Fiscal discipline and growth enhancing public spending are key to supporting the currency board arrangement and improving growth prospects. Continued prudent regulation and adequate capital buffers will help maintain financial system stability, while improvements in the business climate will facilitate more sustainable tradable-based growth.

4. **Based on this shared assessment, the teams identified five structural reform areas as macro critical** in view of their central role in achieving fiscal consolidation and enhancing growth.

- **EU funds absorption.** Increased absorption of EU funds through improvements of administrative capacity and upgrading planning, execution, and monitoring systems will play a vital role in supporting growth and investment. Rationalization of public administration through elimination of unnecessary or duplicated units and restructuring staff will also be important.

- **Healthcare reform**. Mispricing and other distorted incentives have created financing pressures for the public health insurance fund, calling for a comprehensive reform focusing on efficiency and quality of the system—including through rationalizing in-patient care.

- **Education reform**. Building on past achievement, education reforms should focus on improving results. The areas of reform include measures to enhance the quality of student learning and to improve access to education.

- **Improving the environment for growth.** Anchoring wage growth in productivity growth and strengthening the business environment by improving the insolvency framework and reducing the regulatory costs for doing business are called for.

- **Development of basic infrastructure and energy.** Sustaining development of basic infrastructure and energy are a high priority to improve the transportation network and strengthen energy security, and hence improve competitiveness of the economy.

5. **The teams agreed that the Bank and the Fund share responsibility on financial sector issues, revenue administration, and pension reforms, while the Bank will lead EU funds absorption, basic infrastructure, business environment, education reforms, and social inclusion.** Both teams will keep the other apprised of upcoming missions and assessments. World Bank country economists participated in the Article IV Consultations in May 2011 and September 2012, and IMF staff has assisted with World Bank work on competitiveness.

| Bulgaria: Bank and Fund activities, April 2011– June 2014 | | |
|---|---|---|
| Work Program | Products | Delivery Date |
| World Bank | Technical assistance on pensions (analytic work and workshops) | April 2011 |
| | Water Sector Strategy (advisory) | June 2011 |
| | Poverty & Social Policy Monitoring (analytic work) | January 2012 |
| | Competitiveness Through Innovation (analytic work) | February 2012 |
| | Public Expenditures for Growth and Competitiveness (analytic work) | March 2012 |
| | Gas Sector Policy Issues (analytic work) | October 2012 |
| | Health Sector Policy (analytic work) | October 2012 |
| | Railway Infrastructure Rehabilitation Project (lending) | On hold pending Government decision |
| | Pre-University Education support (analytic work) | June 2013 |
| | Support for the implementation of the National Roma Integration Strategy (analytic work) | June 2013 |
| | Regulatory Reform (analytical work) | June 2013 |
| | Higher Education support (regional analytic work) | June 2014 |
| Fund | TA provision on public debt management (Spring 2011) | October 2011 report |
| | Staff visit | May 2012 |
| | TA provision on national accounts | October 2012 |
| | 2012 Article IV Consultation | November 2012 Board |
| | Staff visit | Spring 2013 |
| | 2013 Article IV Consultation | Fall 2013 |

## C. The World Bank Group Strategy and Lending Operations

**6. The Bank's Country Partnership Strategy (CPS) for Bulgaria,** discussed by the Bank's Board on May 17, 2011, is anchored in Bulgaria's National Reform Program to implement the Europe 2020 Strategy and focused on three main pillars: (i) policy reforms for the National Reform Program to implement Europe 2020 Strategy, (ii) strategies and institutions to accelerate EU funds absorption, and (iii) complementing EU financing.[1]

**7. The current active Bank portfolio in Bulgaria consists of 4 operations at the original loan amount of US$353 million equivalent.** The World Bank's lending program in Bulgaria to date comprises 46 IBRD operations with a total original commitment of US$3,003 million equivalent, consisting of 15 adjustment loans (US$1,725.8 million), 24 investment projects (US$1,123 million), one debt reduction loan (US$125 million), four Bank-managed Global Environmental Fund (GEF) grants, and two Bank-managed Prototype Carbon Fund (PCF) operations. Of these 46 operations, 42 have been completed (of which 13 have been fully or partially cancelled during implementation), and 4 operations are currently under implementation (Table 1).

Table 1. Bulgaria: Active World Bank Operations (Net of Cancellations)

| | Operation | US$ million | Board date |
|---|---|---|---|
| 1. | Second Trade and Transport Facilitation in Southeast Europe (TTFSE 2) | 50.9 | 2007 |
| 2. | Road Infrastructure Rehabilitation Project | 122.5 | 2007 |
| 3. | Social Inclusion Project | 59.0 | 2008 |
| 4. | Municipal Infrastructure Development Project | 118.7 | 2009 |

**8. Economic and Sector Work.** The World Bank country diagnostic work completed over the last two years focuses on assessing the quality of education in Bulgaria and review of the Bulgaria's school autonomy reform, long-term care policies for older populations, programmatic crisis monitoring, and better regulation topical studies on: (i) administrative and regulatory barriers to business, (ii) ex-post impact assessment of the Act on Limiting Administrative Regulation and Administrative Control on Economic Activity, and (iii) reforming the regime of state fees. Recently

[1] International Bank for Reconstruction and Development and International Finance Corporation Country Partnership Strategy for Bulgaria for the period 2011-2013 (April 20, 2011).

completed analytical work includes an Innovation Policy report and reports on Household welfare during the 2010 recession and recovery and Public Expenditures for Growth and Competitiveness. Two fee-based service agreements for provision of World Bank advisory services in development of the National Strategy for Water Supply and Sanitation and the "Smart Specialization Strategy" for innovation were signed in July 2012, while a third one, for the road sector, is expected to be signed in October 2012.

**9. As of August, 2012, the IFC had 37 projects (completed and ongoing) in Bulgaria with total commitments of over US$895 million.** The single biggest investment of IFC in the country is in the field of renewable energy in the form of a loan for the construction of the largest wind park in Bulgaria. IFC is also involved in the development of the *Galata* gas field near the Black sea cost. In line with the IFC's strategic goals for Bulgaria, IFC has supported a company investing in agricultural land and promoting land consolidation. In the financial sector, IFC is supporting two specialized SME banks; it established Bulgaria's first micro-lending bank and has invested in a venture fund, which is also targeting the SME sector. In other industries, IFC had contributed to key manufacturing projects—it has supported the modernization and expansion of an electronics producer, a large steel mill, and two glass processing plants. Some IFC projects entail an important environmental component. One of the manufacturing plants, for example, is purchasing equipment which would reduce its GHG emissions and the electronics producing company is making sensors for cars that monitor the emission of polluting gases and improve fuel efficiency.

*Questions on World Bank activities in Bulgaria may be referred to Ms. Stella Ilieva (322–504–0998) and Ms. Sylvia Stoynova (3592–9697–220).*

# STATISTICAL ISSUES

*Data provision is adequate for surveillance purposes. Bulgaria participates in the SDDS since 2003.*

**Real Sector**

1. **The National Statistical Institute (NSI) is responsible for compiling national accounts, based on a system consistent with the *System of National Accounts 1993* (*SNA 1993*) and the *European System of Accounts 1995*.** GDP data by activity and expenditure categories are compiled and reconciled within an annual supply and use framework. However, government output and final consumption are estimated on a cash basis. Published national accounts include current and capital accounts for the five main domestic sectors (general government and its sub-sectors, financial corporations, non-financial corporations, nonprofit institutions serving households, and households). The INS publishes financial accounts and balance sheets by institutional sectors and sub-sectors on an annual basis.

2. **The NSI has compiled estimates of quarterly GDP by the production and expenditure approaches in current and constant prices since 1994.** The preliminary flash estimates of GDP and its components by production and expenditure side are produced and disseminated 42–44 days after the reference period, although persistent inconsistencies in the data have limited their usage. The quarterly updates are disseminated 70 days after the end of the reference quarter with final figures disseminated after approximately 5 quarters. The annual data are disseminated about 5 quarters after the end of the reference year. The estimates at constant prices, which follow international standards, use chain-linked indices. Problems remain in the coverage of private sector activities as well as regarding constant price estimates of capital formation and external trade, although progress has been made in the development of export and import deflators. Recent IMF TA advised on improving the seasonal adjustment procedure of quarterly GDP and volume measures of taxes on products.

3. **Regarding price data, the NSI produces a domestic consumer price index (CPI), a harmonized consumer price index (HICP) according to Eurostat methods, and a producer price index (PPI).** All are updated monthly. The CPI series begins in 1995, the PPI in 2000 and the HICP in 2005 (for earlier years it is set equal to the CPI). The coverage of the consumer price indices was extended, although they still exclude some important sectors, mainly owner-occupied housing

and health and life insurance. Since 2004, financial services are included. Work has started on inclusion of owner-occupied housing in the CPI under a Eurostat project. The geographical coverage of the index is restricted to 27 urban areas that account for an estimated 65 percent of sales.

4. **The flow of customs data has improved significantly in recent years and a new system for processing customs records is near completion.** The development of export and import unit value indices is progressing smoothly and additional support is expected from Eurostat in this area. The current indices are used as deflators for the import and export components of the national accounts. Each month the Foreign Trade Statistics Department of the NSI is in contact with the BNB to review data issues and ensure consistency between the NSI export and import data and the balance of payments data.

5. **The national account data on employment and hours worked are compiled by the NSI based on a Labor Force Survey and Enterprises' survey on employment**—"Quarterly survey on employees, hours worked, wages and salaries, and other expenditures paid by the employers" and "Annual enterprises survey on employment, wages and salaries, and other labor cost" and adjusted according to the ESA95 methodology. The NSI also obtains current monthly and quarterly estimates from a quarterly survey of establishments using all public enterprises and a sample of private employers. The sample includes 13,000 private employers out of approximately 191,000 qualifying private enterprises. The NSI household labor force survey is an alternative source of data, but improvements are needed to make it more consistent with the establishment survey, especially regarding agricultural employment. Since the beginning of 2003 a quarterly continuous Labour force survey, providing average quarterly results, is implemented.

6. **The NSI also compiles and publishes wage data for various economic sectors.** The main shortcomings include: (i) under-reporting of private sector wages; and (ii) reporting of average gross earnings only and not wages by occupation. Since 2002, every four years a survey on earnings is conducted which provides information about average monthly and hourly earnings by economic activity, by occupation, by gender and by education. The household budget survey could provide an alternative source of data for private sector wages.

7. **A Population Census was conducted in early 2001 and is a source for redesigning the household surveys conducted by the NSI,** particularly the household budget survey and the labor force survey.

**Government finance**

**8. In recent years, following the recommendations of a combined STA/FAD mission and within the framework of fiscal reporting requirements for EU accession, the authorities have made significant progress on implementing accrual accounting for government, budgetary and statistical systems.** Consolidated data on a cash basis, covering general and central government operations, are routinely reported for publication in the *GFS Yearbook/Annual CD-ROM* and in *IFS*. In addition, quarterly accrual GFS data for the whole general government are reported for publication in *IFS*, through Eurostat. The major part of the GFS data is compiled by NSI and the transmissions to Eurostat are carried out by NSI. Since September 2008, the Ministry of Finance (MOF) prepares and submits the SDDS indicators for the central government finances in the IMF's GFSM 2001 format. The same indicators are published on the MOF's website on a monthly and quarterly basis.

**9. The Ministry of Finance prepares data on the execution of the consolidated government budget on a monthly basis, following the national presentation.** These data are not according to *GFS* standards. Aggregate data on revenue, expenditure, balance of the general government and composition of financing (in national formats) are published in the monthly bulletin and posted on the MOF's website, in addition to the GFSM 2001 data. Progress has been made in presenting data on a disaggregated basis, including expenditure by functional classification. In addition, a full economic classification of expenditure is now available, and the authorities have provided such data on an annual basis back to 1998.

**Money and banking statistics**

**10.** The BNB reports monetary data for publication in *IFS* based on the ECB framework for the collection and compilation of monetary data.

**Balance of payments**

**11. Bulgaria provides quarterly balance of payments (BOP) statistics for dissemination in *IFS* on a timely basis.** Yearly BOP data are disseminated in the Balance of Payments Statistics Yearbook up to 2011. The BNB derives other sectors' investment income data on reinvested earnings (debit) from the annual direct investment surveys of the NSI, as well as through surveys of the largest foreign-owned enterprises for preliminary estimates. Starting from 2002, data series on freight were revised according to a new methodology introduced jointly by the BNB and the NSI.

Since joining the EU in January 2007, the trade data with EU countries are being collected following the INTRASTAT system. Data for imports and exports of goods with non-EU member states are based on SAD (Single Administrative Document) collected by Customs Agency while the movement of goods within the EU is based on Intrastat declarations collected by the National Revenue Agency.

## Bulgaria: Table of Common Indicators Required for Surveillance

(as of October 31, 2012)

| | Date of latest observation | Date received | Frequency of data[6] | Frequency of reporting[6] | Frequency of publication[6] | Memo Items: Data Quality – Methodological soundness[7] | Memo Items: Data Quality Accuracy and reliability[8] |
|---|---|---|---|---|---|---|---|
| Exchange Rates | 10/31/2012 | 10/31/2012 | M | M | M | | |
| International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1] | September 2012 | 10/22/2012 | M | M | M | | |
| Reserve/Base Money | September 2012 | 10/29/2012 | M | M | M | O, O, LO, LO | O, O, O, O, O |
| Broad Money | September 2012 | 10/29/2012 | M | M | M | | |
| Central Bank Balance Sheet | October 2012 | 10/29/2012 | M | M | M | | |
| Consolidated Balance Sheet of the Banking System | September 2012 | 10/29/2012 | M | M | M | | |
| Interest Rates[2] | September 2012 | 10/29/2012 | M | M | M | | |
| Consumer Price Index | September 2012 | 10/12/2012 | M | M | M | O, LO, O, O | LO, LO, O, O, O |
| Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4] | 2011 | 04/23/2012 | A | A | A | O, LO, O, LO | LO, O, O, O, NO |
| Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4] | September 2012 | 10/31/2012 | M | M | M | | |
| Stocks of General Government and General Government-Guaranteed Debt[5] | August 2012 | 10/22/2011 | M | M | M | | |
| External Current Account Balance | August 2012 | 10/16/2012 | M | M | M | LNO, LO, O, LO | LNO, LNO, LNO, LO, LO |
| Exports and Imports of Goods and Services | July 2012 | 10/9/2012 | M | M | M | | |
| GDP | 2012 Q2 | 9/5/2012 | Q | Q | Q | O, LO, O, LO | O, O, O, O, O |
| Gross External Debt | August 2012 | 10/24/2012 | M | M | M | | |
| International Investment Position | 2012 Q2 | 10/2/2012 | Q | Q | Q | | |

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions. [2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds. [3] Foreign, domestic bank, and domestic nonbank financing. [4] On a gross cash basis. The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and local governments. [5] Including currency and maturity composition. [6] Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA). [7] Reflects the assessment provided in the data ROSC published in December 2003, which is based on the findings of the mission that took place during January 15-30, 2003 for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning (respectively) concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO). [8] Same as footnote 7, except referring to international standards concerning (respectively) source data, statistical techniques, assessment and validation of source data, assessment and validation of intermediate data and statistical outputs, and revision studies.

INTERNATIONAL MONETARY FUND
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December 13, 2012

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# IMF Executive Board Concludes 2001 Article IV Consultation with Bulgaria

On November 30, 2012, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Bulgaria.[1]

**Background**

Growth has been lackluster since the crisis leaving unemployment high and output below its pre-crisis levels. Real GDP growth in the first half of 2012 was positive, but low—at 0.9 percent. Domestic demand gained some traction on improved EU funds absorption and consumption, but the slowdown in external demand led to a negative external sector contribution. With little change foreseen for the second half of 2012, real GDP growth is expected to grow by 1 percent in 2012 and gain pace in 2013 provided external conditions improve. The current account, which registered a small surplus of 0.3 percent of GDP in 2011, has moved into deficit as imports outpace exports. Headline inflation is expected to average 2½ percent in 2012 due to higher food and fuel prices. The unemployment rate has continued to rise reaching 11.5 percent in September and, absent strong growth, will stay in this range.

Strong buffers and steadfast policy implementation have allowed Bulgaria to maintain stability in a challenging environment. The fiscal deficit has continued to decline and is on

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

track to fall below the budget target of 1.5 percent of GDP; public debt is the second lowest in the EU. The fiscal adjustment, which amounted to a cumulative structural improvement in 2011-12 of 2 percent of GDP, was largely expenditure-based. In the financial sector, the difficult economic environment has worsened profitability and asset quality (non-performing loans reached 16.9 percent of loans in mid 2012). However, reflecting prudent supervisory policies, the overall capital adequacy ratio (16.7 percent in June) comfortably exceeds the already large 12 percent regulatory minimum with additional cushions available in the form of specific provisions.

Some progress has been made in tackling structural bottlenecks to growth but more needs to be done to boost productivity, raise growth prospects, and create jobs. Reforms of the public administration and public pension system have contributed to more sustainable public finances over the long term. Streamlining of administrative processes and the new public procurement law facilitated a marked step-up in EU funds absorption, particularly for infrastructure. These reforms combined with a stable macro environment improved Bulgaria's ranking on some international competitiveness scoreboards. Still unemployment, particularly among the young and less skilled, remains very high, labor productivity has lagged real wage growth since the crisis, and firms are reluctant to hire given the unpredictable business environment and high debt burden.

**Executive Board Assessment**

Executive Directors commended the authorities' prudent policy implementation, which has ensured macroeconomic and financial stability in a difficult external environment. Nevertheless, Directors noted that this subdued external environment is limiting near–term economic growth and that unemployment remains high, especially among the young and low–skilled. Further, rollover risks related to private external debt and rising nonperforming bank loans present vulnerabilities, while aging pressures and the income gap with other European Union members pose longer-term challenges. Accordingly, Directors emphasized that this uncertain environment calls for maintaining prudent policies and buffers, and that bolder structural reforms will be needed to revive growth.

Directors broadly agreed that the currency board arrangement has served Bulgaria well. They welcomed the fiscal adjustment that has been achieved, with the budget currently close to structural balance, and encouraged the authorities to preserve this achievement in the forthcoming election year. Directors viewed the 2015 target of budget balance as appropriate, and agreed that it provides space for automatic stabilizers to work in the event of a shock. They considered that rebuilding the fiscal reserve through saving fiscal over-performance or privatization receipts would strengthen Bulgaria's defenses, and recommended a review to appropriately tailor its structure and funding.

Directors observed that the financial system is stable with high buffers but that the low growth environment poses challenges. They emphasized the need for continued vigilance and sustained efforts to ensure sufficient capital and liquidity buffers in the weaker pockets of the system. Directors underlined that banks should actively address non-performing loans to support the recovery, and encouraged the authorities to continue to press for conservative provisioning and improve in- and out-of-court procedures. Further, the authorities' resolution powers and toolkit should be expanded.

Directors considered that improving the composition of the budget, through increased spending on infrastructure investment and active labor market policies, would support growth. To preserve budget targets, this should be financed via EU funds absorption, better tax compliance, and reductions in subsidies. The absorption of EU funds is key, due to their size, the large grant element, and the potential impact on growth and employment. Directors also encouraged the improvement of the insolvency framework to support the business environment, in particular by eliminating backdating of insolvencies. Ensuring the proper functioning of the labor market, notably at the lower end, would help reduce differences in unemployment and income, as would more targeted education and training. Finally, Directors welcomed the upcoming review of social insurance thresholds and minimum wages to encourage job creation, and underscored that future wage increases should be anchored in productivity gains.

## Bulgaria: Selected Economic and Social Indicators, 2008–12

| | 2008 | 2009 | 2010 | 2011 Est. | 2012 Proj. |
|---|---|---|---|---|---|
| Output, prices, and labor market (percent change, unless otherwise indicated) | | | | | |
| Real GDP | 6.2 | -5.5 | 0.4 | 1.7 | 1.0 |
| Real domestic demand | 6.4 | -12.8 | -5.1 | -0.3 | 2.8 |
| Consumer price index (HICP, average) | 12.0 | 2.5 | 3.0 | 3.4 | 2.6 |
| Consumer price index (HICP, end of period) | 7.2 | 1.6 | 4.4 | 2.0 | 3.5 |
| Unemployment rate (percent of labor force) | 5.7 | 6.9 | 10.3 | 11.3 | 12.4 |
| Nominal wages (national accounts definition) | 16.3 | 9.4 | 11.2 | 7.3 | 5.5 |
| General government finances (percent of GDP) | | | | | |
| Revenue | 38.0 | 35.3 | 32.7 | 32.5 | 34.4 |
| Expenditure | 35.2 | 36.2 | 36.6 | 34.4 | 35.7 |
| Balance (net lending/borrowing on cash basis) | 2.9 | -0.9 | -3.9 | -2.0 | -1.3 |
| External financing 1/ | -1.0 | 0.9 | 0.2 | 0.2 | 3.4 |
| Domestic financing (incl. fiscal reserve) | -1.9 | 0.0 | 3.7 | 1.8 | -2.2 |
| Gross public debt | 13.7 | 13.8 | 14.9 | 15.5 | 18.5 |
| Financial net worth | 11.1 | 6.6 | 4.0 | 2.2 | 2.1 |
| Money and credit (percent change) | | | | | |
| Broad money (M3) | 8.8 | 4.2 | 6.4 | 12.3 | 7.5 |
| Domestic private credit | 31.6 | 3.8 | 1.3 | 3.8 | 4.1 |
| Interest rates (percent) | | | | | |
| Interbank rate, 3-month SOFIBOR | 7.1 | 5.7 | 4.1 | 3.8 | … |
| Lending rate | 10.9 | 11.3 | 11.1 | 10.6 | … |
| Balance of payments (percent of GDP, unless otherwise indicated) | | | | | |
| Current account balance | -23.0 | -8.9 | -1.5 | 0.3 | -1.6 |
| Capital and financial account balance | 33.2 | 4.8 | -1.1 | -0.8 | 6.2 |
| o/w: Foreign direct investment balance | 17.5 | 7.2 | 2.7 | 4.1 | 4.0 |
| International investment position | -98 | -102 | -95 | -86 | -84 |
| o/w: Gross external debt | 105 | 108 | 103 | 92 | 94 |
| o/w: Gross official reserves | 36 | 37 | 36 | 35 | 38 |
| Exchange rates | Currency board peg to euro at lev 1.95583 per euro | | | | |
| Leva per euro | | | | | |
| Leva per U.S. dollar (end of period) | 1.44 | 1.34 | 1.48 | 1.45 | … |
| Real effective exchange rate (percent change) | | | | | |
| CPI based | 9.3 | 4.4 | -3.9 | 2.7 | 0.7 |
| GDP deflator based | 6.4 | 3.2 | 1.9 | 3.8 | 0.4 |

Social indicators (reference year in parentheses):

Per capita GNI (2011): US$ 6,550; income distribution (Gini index, 2007): 28.2; poverty rate (2007): 10.6 percent.

Primary education completion rate (2009): 95.5.

Births per woman (2010): 1.5; mortality under 5 (per 1,000) (2011): 12.1; life expectancy at birth (2010): 73.5 years.

Sources: Bulgarian authorities; World Development Indicators; and IMF staff estimates.

1/ Reflects €950 million Eurobond issued in 2012 and another assumed in 2014.

**Statement of Mr. Snel and Mr. Manchev on Bulgaria**
**November 30, 2012**

1. The Bulgarian authorities highly appreciate the constructive dialogue with the Fund and broadly share the staff's appraisal. They remain committed to prudent macroeconomic policies. Bulgaria weathered the crisis relatively well which is testimony to the strength of the policy framework and its implementation. Under the Currency Board Arrangement, the authorities will continue implementing strict fiscal policies, stringent prudential regulations, as well as maintain the financial sector buffers in order to counter potential shocks.

## Recent Macroeconomic Developments and Outlook

2. In view of the adverse external developments since the last Article IV consultation, the authorities have made substantial policy efforts to maintain macroeconomic stability and sustainability. They continued with the fiscal consolidation committed under the 2012 Budget Law to further lower the deficit. In July 2012, the authorities took advantage of the temporary window and successfully issued Eurobonds at a favorable rate. This should secure smooth repayment of the existing Eurobond in January 2013. Some important structural reforms were boosted further.

3. The real economy has yet to recover from the pre crisis output level. The most recent flash GDP estimates suggested that during the Q3, economic growth remained moderate at 0.5 percent (seasonally adjusted data) compared to the same quarter of the previous year. The indicator's movement is determined mainly by the increase recorded in the agricultural sector (by 6.3 percent) and industry (by 3.5 percent). The services sector declined by 1 percent over the observed period.

4. During 2012, Bulgaria's terms of trade deteriorated due to external spillovers. Between January and September 2012, exports grew modestly by 2.2 percent year-on-year, compared to 34.2 percent during the same period last year. As a result, the trade deficit widened and reached EUR 2.7 billion (6.9 percent of GDP) in the first nine months of 2012, against a deficit of EUR 1.3 billion (3.3 percent of GDP) in January – September 2011.

5. The competitiveness of the economy has been preserved. Labor productivity continues to grow after the decline in employment and subsequent moderation in wage growth. Sustained faster growth rates of productivity in Bulgaria compared to the EU average attracted foreign investments. However, the seasonal labor market revival decelerated during the second and third quarters, and remained unable to reverse the negative annual trend in unemployment. Expectations for labor market developments in 2013 are related to the stabilization of the main indicators around their 2012 levels.

6. While showing some signs of recovery, domestic demand remains suppressed. According to flash GDP estimates, in Q3 the recovery in final consumption decelerated to 2.9 percent (seasonally adjusted data) compared to the same quarter of the previous year, and down from 3.2 percent in Q2. The still high unemployment rate and uncertainty about future income were also factors that affected consumer demand.

7. Investment activity appears to be stabilizing, supported mainly by public projects and some recovery in FDI, especially in the energy sector. After a slowdown in the rate of decline during the last three quarters, the gross fixed capital formation increased by 1 percent (seasonally adjusted data) in Q3, compared to the same quarter in 2011. For the first nine months of 2012, FDI in Bulgaria totaled EUR 971.8 million (2.5 percent of GDP), against EUR 711.9 million (1.8 percent of GDP) in the same period of 2011. Next year, investment is expected to be initially supported by public sector projects funded by the EU.

8. The pressures from the earlier surge in world energy prices are easing, following the stabilization in international oil prices. Since June 2012, the annual average HICP inflation remained flat at 2.3 percent. In October, the HICP inflation reached 2.7 percent since the beginning of the year.

**Fiscal Policy**

9. The authorities deserve credit for implementing another round of fiscal consolidation, and further lowering the deficit during a slow economy in late 2011 and early 2012 (in seasonally adjusted terms). Bulgaria exited the EU's excessive deficit procedure in mid-2012. Performance up till now suggests that the 2012 deficit target of 1.3 percent of GDP (ESA 95 methodology) will be comfortably met. Bulgaria has now one of the lowest deficits and public debt ratios in the EU, far below the thresholds set by the Treaty, the new EU Fiscal Compact, and national limits. As pointed by staff, reaching the 2015 target for a structurally balanced budget will require only 0.4 percent of GDP in additional structural measures. This provides the government with some degree of flexibility in the next election year.

10. In the current highly uncertain environment, the authorities are well aware that a strong fiscal policy is critical to sustain macroeconomic stability and ensure stable footing for growth. The 2011–12 restructuring of the tax and customs administration has already provided revenue stabilization, greater efficiency of tax collection, and eradication of financial fraud and tax evasion in key sectors. The tax policy will remain broadly unchanged until 2015, as part of the strategy to provide a stable and predictable environment for businesses. On the expenditure side, the authorities will maintain restrictive medium-term budgetary framework in line with the 2012 Convergence program of the Republic of Bulgaria. In addition, risks from contingent liabilities in the energy and transport sectors have been reduced by cancelling the construction of the Belene nuclear power plant, and the reform of the railway system to eliminate public subsidies by 2013.

11. The authorities' fiscal strategy in 2013 is to continue spending optimization in the national budget in order to release the necessary co-financing for accelerated absorption of funds under EU programs, in view of the approaching end of the programming period 2007–2013. The increase in the national budget balance by 0.7 percent of GDP due to a decrease in administrative expenditure will be offset by higher absorption of the EU funds, which results in a balance deterioration of 0.7 percent of GDP. The overall general government deficit in 2013 will remain almost unchanged from 2012. Among the priorities

of the 2013 budget are some social and growth-enhancing policies. Average pensions will be indexed by 9.3 percent in April 2013 to compensate for the inflation of the last three years. Public wages will remain largely frozen for a fourth year. At the same time, interest income from term bank deposits will be included in the income tax base and the minimum social security contributions thresholds will be raised by 10 percent to counter under-recording of incomes.

12. The authorities welcomed staff's analysis on fiscal multipliers. They agreed that the results should be treated with caution, especially when the model-based policy proposals ought to serve policymakers in such highly uncertain external environment. They also noted that, in general, the Dynamic Stochastic General Equilibrium Models are known as being driven by the pre-analytic belief in validity of a certain model, and subject to a number of calibration problems. The authorities remain open for further discussions on fiscal multipliers based on empirical data research and country experiences.

13. The fiscal reserve has served the authorities well as a liquidity buffer during the crisis. In their view, it remains sufficient to meet the current liquidity needs of the budget. The authorities found staff's analysis on fiscal reserves and its role in the macroeconomic adjustment consistent with their own long-term policy strategy. They plan to rebuild the reserves over time, but do not consider a substantial debt issuance in 2013. It is the authorities' view that fiscal reserve could do little as a shock absorber, given the high degree of openness of the Bulgarian economy and the magnitude of external spillovers. In case of a further deterioration of the external environment or of revenue performance, as a first line of defense the authorities will consider compensatory expenditure measures, and faster than initially envisaged optimization in public finance management.

**Monetary and Macro-prudential Policies and Financial Sector Development**

14. The strong commitment of all political players to the Currency Board Arrangement (CBA)—supported by a more than adequate reserve level (coverage of imports of above 6 months)—is an additional buffer against shocks. The CBA has proved its flexibility and sustainability both during the boom prior to the crisis and in the cyclical downturn. The authorities agreed with staff that CBA remains the appropriate anchor for policies until the eventual euro adoption. It also has continuous support from macro—prudential policies during the current economic adjustment.

15. The authorities remain vigilant. They are aware that since the global crisis has erupted, the Bulgarian financial system has operated in a challenging low-growth environment. The BNB continues its policy from the pre-crisis period towards strengthening the accumulated capital and liquidity buffers. In return, the financial system, dominated by the banking sector, remains stable, well capitalized and highly liquid, and so are individual banks.

16. The strong and persistent risk-aversion of the supervisory authorities led to a more diversified funding structure with less reliance on foreign funding in the post-crisis period. The majority of the banks remained profitable following the restructuring of their operating

expenses, which additionally boosted credibility in the system. The authorities intend to properly address the problems in the existing insolvency framework, in particular those related to the backdating of insolvencies.

**Structural Reforms**

17. The authorities are fully aware that sustainable economic growth requires further structural reforms. They remain committed to provide strong financial footing to the pension, healthcare, education and railroad transportation systems. In compliance with the recommendations from the European Commission's and the IMF to accelerate pension reform, a more comprehensive package of policy measures became effective from January 1, 2012. A procedure to privatize the state railroad cargo company has been re-launched. Progress with other reforms, however, has been limited or is lagging behind due to a combination of factors like unfavorable market conditions, insufficient institutional capacity, and constrained financial resources.