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II. BULGARIA: FISCAL POLICY CHALLENGES[1]

A. INTRODUCTION

1. **As recognized by the government, Bulgaria's fiscal situation is challenging, as the revenue boom has come to an end, while expenditure pressures are considerable.** Its pre-crisis revenue boom, which was fuelled by higher receipts on goods and services on the back of Bulgaria's rapid domestic demand growth, has halted. Returning to pre-crisis revenue ratios will be a major challenge, not only because the economy is expected to recover slowly but also because the growth pattern will need to shift, with less contribution from domestic demand and more contribution from the external sector, which will result in lower tax revenues. At the same time, financing pressures on the social security system have risen, reflecting sharp pension increases in recent years, cuts in social security contribution rates, and structural problems in the health care system. The pressures are projected to mount over the long run as a result of the impact of aging. Moreover, sluggish absorption of EU funds has left the large agenda to upgrade Bulgaria's public infrastructure unfinished, with much need for public investment going forward.

2. **In this environment, fiscal policy has to make difficult choices between sometimes conflicting objectives.** These goals include boosting competitiveness, lowering the size of government and level of taxation, ensuring the sustainability of the security systems, maintaining medium-term structural budgetary surpluses, improving the quality of public services, and the efficiency of their provision. Bulgaria's past prudent stance of fiscal policy has put it in a relatively comfortable position to address these challenges.

3. **This paper highlights these fiscal policy challenges, their trade-offs, and discusses policy options.** Section II analyses Bulgaria's revenue boom and bust and the challenges with maintaining the revenue ratios. Section III reviews the developments and pressures having emerged in the social security systems. Section IV highlights areas for possible expenditure cuts but identifies also new pressures. Section V discusses the fiscal policy options for supporting competitiveness. And lastly, Section VI brings these challenges together with a view to back the currency board arrangement and provides options for institutional fiscal arrangements in its support. Section VII concludes.

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[1] Prepared by Andrea Schaechter.

B. Policy Challenge 1: Maintaining Revenues

Developments

4. **During the economic booms years, Bulgaria's public finances benefited from a sharp increase in revenue.** Real total revenue surged by about 51 percent from end-2002 to 2007 (Figure 1). While this fell short of the even sharper increases in the Baltics and Romania, Bulgaria experienced the strongest rise in its revenue-to-GDP ratio among the new EU member states of about 4½ percent of GDP. Tax revenue rose rapidly, in particular tax receipts on goods and services, reflecting the strong domestic demand as well as increases in excise rates on tobacco and fuel in line with EU requirements. About a third of additional revenue came from higher grants in light of EU membership. Part of the revenue increase was offset, however, by lower social security contributions as rates were cut by 6 percentage points from 2002 to 2007 (for the pension and unemployment funds) and a further 2.4 percentage points in 2009.[2]

5. **In 2009, revenues slumped.** The drop in tax and nontax revenues (by 8.2 percent) was partly compensated by higher grants (20 percent).[3] Most of the revenue losses came from tax-intensive activities and sectors, in particular, lower VAT on imports and consumption as well as reduced profit taxes. Only the Baltics experienced higher real and nominal losses in revenue in 2009 than Bulgaria.

6. **Bulgaria relies heavily on indirect taxes.** With 55 percent of total taxation (including social security contributions) it has not only the highest share of indirect taxes in the new member states but also in the EU (Figure 2). The reliance on this type of tax has sharply increased in the pre-crisis years. The VAT (standard rate of 20 percent) is applied to a broad tax base with fewer exceptions than in other EU countries and a reduced VAT rate (7 percent) was not introduced until 2007 (and applies to a narrow tax base only).[4] As a result, Bulgaria has a high VAT C-efficiency, i.e. a high share of VAT revenue collection in relation to consumption (Figure 3).

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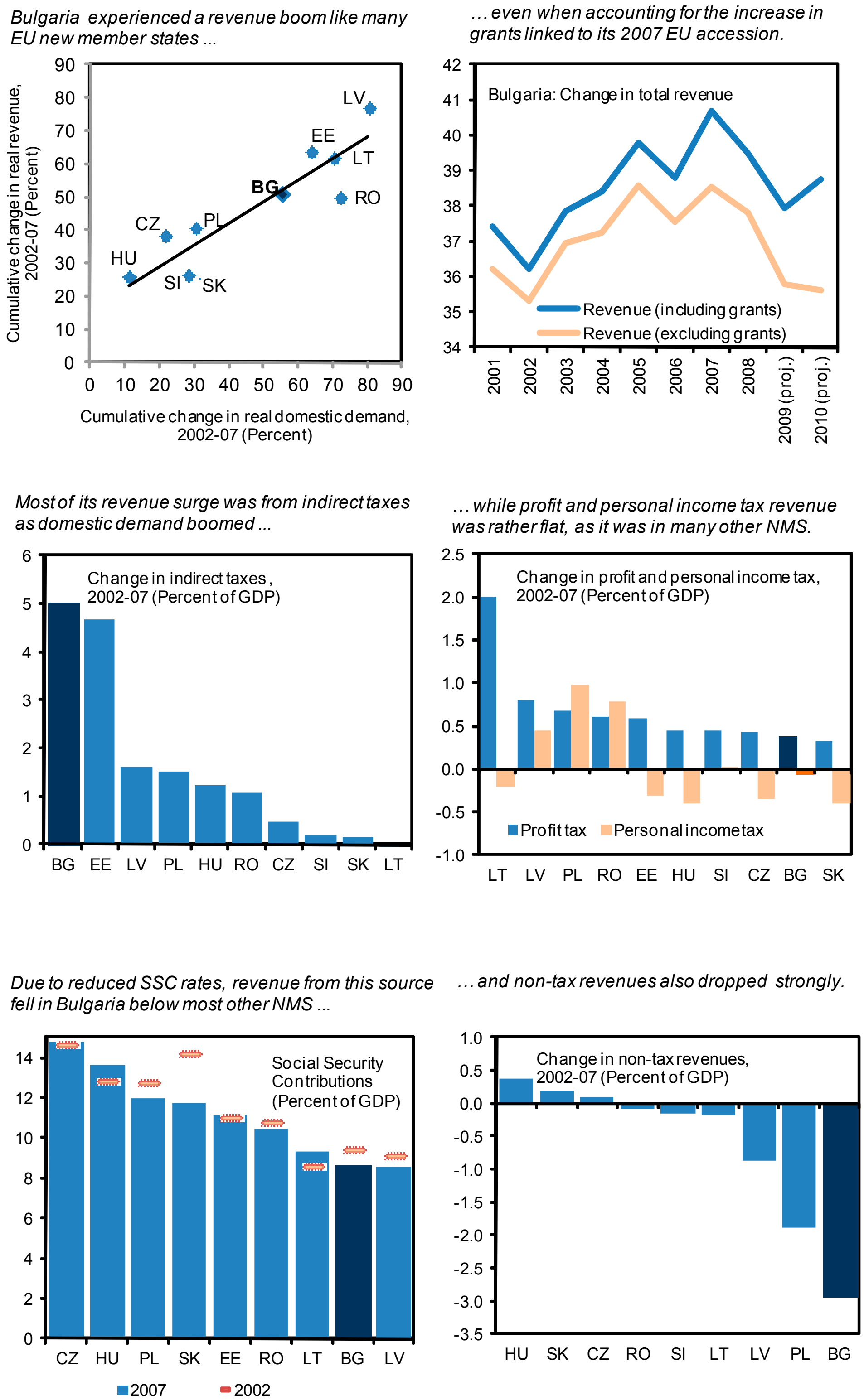
[2] In 2009 the rates were: 18 percent Pension Fund (Pillar I); 5 percent Additional Obligatory Pension Insurance for those born after 1959 (Pillar II); 8 percent National Health Insurance Fund; 3.5 percent General Disease and Maternity Fund; 1 percent Unemployment Fund; 0.4 to 1.1 percent Accidents at Work and Occupational Disease Fund; 4.3 percent Teacher's Pension Fund and 0.1 percent Guaranteed Receivables Fund.

[3] In the Baltics, GDP collapsed even more than revenues, so that the revenue (including grants)-to-GDP ratios increased in 2009.

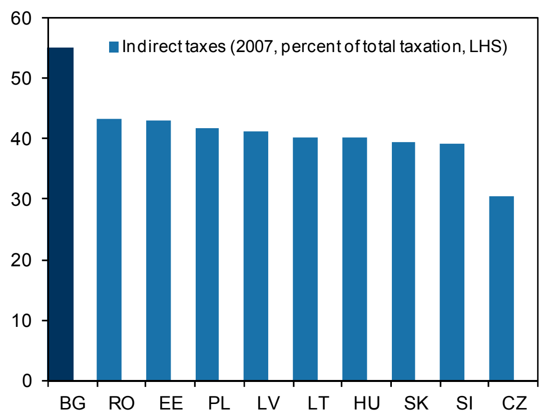
[4] The reduced VAT rate of 7 percent applies only to hotel services (when they form part of a tourist package); and the zero rate is applicable to exports, intra-community deliveries and international transportation, and exemptions apply for financial, health, educational, religious, cultural, and postal services.

Figure 1. Revenue Developments in Bulgaria and the EU New Member States



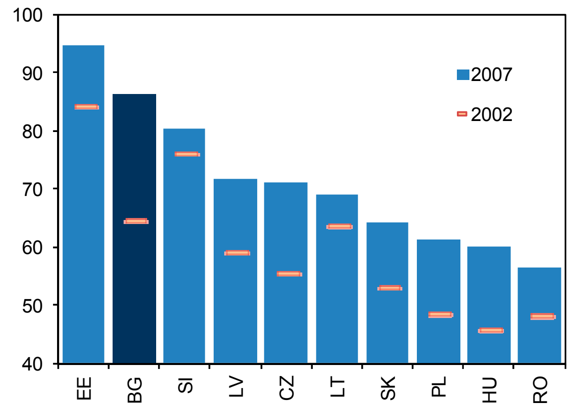
Sources: Bulgarian Ministry of Finance; IMF World Economic Outlook; and IMF Government Finance Statistics.

Figure 2. The Role of Indirect Taxation



Source: European Commission, DG TAXUD, *Taxation Trends in the European Union*, 2009 edition.

Figure 3. VAT C-Efficiency (Percent) 1/



Source: Sancak, Velloso and Xing (2010).
1/ VAT C-effiency = (Revenue from VAT / Consumption) / Standard rate * 100

7. **Tax compliance continues to be low despite substantial tax reforms.** Bulgaria still suffers from large tax avoidance which is in part linked to its large shadow economy. While difficult to capture, a few indicators reflect the degree of tax avoidance (Center for the Study of Democracy, 2009): about 28½ percent of employees surveyed in September 2009 indicated that their social security contributions were based on a lower official remuneration than they were actually paid (this is up from 21¾ percent in March 2004; e.g. in the agricultural sector about 90 percent of employees pay social security contributions based on the minimum social security threshold);[5] and 13 percent indicated that they receive a higher remuneration in their primary employment than stated in their contract. On the other hand, the simplification in the tax system, including the introduction of the flat taxes for corporate and personal income (at tax rates of 10 percent from January 1, 2007 and 2008, respectively) appears to have brought some money "out of the shadow." The corporate income tax-to-GDP ratio increased by 0.6 percentage points during 2007–08 despite a reduction in the tax rate, in an environment of relatively stable economic growth.[6] Moreover, the number of registered tax payers increased (by 33 percent for VAT between 2007–09 and 14 percent for profit tax).

8. **Reforms have aimed to improve tax compliance.** Long-standing revenue administration reforms have improved the efficiency of revenue collection. As the number of

[5] The threshold is even lower with agricultural (tobacco) producers paying contributions based on one half (one quarter) of the minimum insurance threshold. This practice was introduced in 2002; before they paid social security contributions as self-employed.

[6] The impact of introducing the flat tax on personal income is more difficult to judge given not even two full years of observations under "normal circumstance" (as the economy and wage growth slowed rapidly in 2009). However, it seems that the lowering of the average personal income tax rate has, at a minimum, outweighed any better tax compliance as the tax-to-GDP ratio dropped by 0.2 percentage points in 2008 despite an acceleration of wage growth.

field offices was reduced from 340 in 2002 to 27 in 2009 and staff reduced by 25 percent over the same period, revenue per staff tripled and collection costs (0.8 percent of revenue) were kept at the lowest level among EU new member states (see World Bank, 2009a).[7] Most recent steps toward better tax compliance include intensified onsite controls particularly of large taxpayers, the restructuring of the National Revenue Agency and the customs agency as well as the linking of their information systems. Moreover, in the 2010 budget the minimum insurance income for self-insured and agricultural and tobacco producers was raised as the vast majority paid social security contributions at the minimum level despite strong indications of higher incomes.

Policy Options

9. **How can Bulgaria sustain its relatively high revenue ratio?** The downturn has affected to a large degree tax-intensive activities and sectors, in particular imports and consumption, and reversed the pre-crisis windfall revenues. As Bulgaria emerges from the crisis, its composition of growth is likely to change with a shift toward more export-led growth. Thus, its great reliance on indirect taxes and low tax compliance will be key challenges.

10. **Strengthening further tax administration and bringing economic activities out of the shadow are long-term requirements.** A number of structural measures have been proposed of which many are in the process of being implemented.[8] They include a greater focus on large taxpayers using a more flexible risk-based approach and covering more large tax payers in the specific directorate.[9] Resources for such a refocus could be freed, for example, by moving away from the 100 percent of VAT refund checks. At the beginning of 2010, the NRA changed the criteria for large taxpayers, which would more than double the number of enterprises to be considered in that category compared to 2009.[10] Eventually a shift toward greater voluntary compliance is needed, which includes improving the customer service and reducing the compliance costs of those who are willing to pay. More generally, intensifying efforts to reduce the large share of the shadow economy will be key to create a sustainable revenue base.

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[7] The revenue administration reforms were co-financed by the World Bank and included simplified tax laws and procedures, integrated revenue collection for taxes and social security contributions, improved taxpayer/contributor services, increased use of e-filing and e-payment, more focus on large and medium-size taxpayers and contributors (see World Bank, 2009a). The IMF also provided technical assistance.

[8] The IMF's Fiscal Affairs Department provided technical assistance.

[9] Under the current definition large tax payers dealt with by the directorate accounted only for 28 percent (2009) of total revenue, while typically large taxpayer offices capture between 60-80 percent of revenues.

[10] The criteria are: (i) more than BGN 20 million sales income (previously BGN 30 million), (ii) at least 120 employees (before 250), (iii) more than BGN 2 million of paid taxes and insurance payments, and (iv) more than BGN 2 million refunded taxes. To be considered a large taxpayer two of the above criteria need to be met. These changes put 1,430 companies in the category of large taxpayers compared to 680 in 2009 providing about 40 percent of revenues.

11. **The room to induce better tax compliance through lower rates appears low.** Bulgaria's corporate and personal income tax rates are already the lowest in the EU and there is little space to lower them further without reducing tax receipts. Experience with the cuts in the rates for social security contributions (in 2006 and 2007)[11] and personal income tax (in 2008) are indicative that they have not been self-financing, neither through better compliance nor greater economic activity. The two percentage point cut in the contribution rate to the pension fund in 2010 is expected to create revenue shortfalls of at least BGN 300 million. Lowering the VAT rate would likewise lower tax receipts.

12. **Thus, maintaining the revenue ratio calls for reassessing the tax rates and tax structure also in light of other policy objectives.** As lower VAT and SSC rates would not be revenue neutral and would not be consistent with the government's medium-term structural budget surplus target, offsetting adjustments would have to be considered on the expenditure side (see Section III), in particular as regards entitlement reform to ensure the sustainability of the social security systems. An alternative option would be in principal to change the tax structure in a revenue neutral way. Economic theory and model simulations indicate that a revenue neutral shift from direct to indirect taxes (or a shift from labor to consumption taxes) can be growth and employment-enhancing, in particular when the tax burden on labor is relatively high and hinders competitiveness and a large share of work is undeclared.[12] This is the case for Bulgaria. Moreover, consumption taxes seem to be better complied with than social security contributions and tend to provide a more stable tax basis over the medium term. However, a shift toward indirect taxation, while at the same time lowering direct taxation, would further raise Bulgaria's reliance on indirect taxes and it is unclear whether such a shift would still have the envisaged effects. Model simulations by the European Commission for Bulgaria (D'Auria et al., 2009) indicate that the effect is relatively small. A reduction in labor taxes by 1 percent of GDP and an increase in consumption taxes by the same amount (under the assumption of benefit and transfer indexation to consumer prices) is estimated to raise GDP in Bulgaria by about 0.35 percent over 20 years. This compares to up to about 0.9 to 1.1 percent in other countries where labor taxes are much higher (France, Italy, and Poland) (see also Section IV for the role of tax policy for Bulgaria's competitiveness).[13] Against this backdrop, Bulgaria may need to consider an increase in tax rates (VAT, income or profit) if no sufficient adjustment on the expenditure side can be realized.

[11] Social security contribution rates were lowered by 6 percentage points in 2006 and another 3 percentage points in 2007. As a result, social security revenues declined compared to 2005 by 1.1 percentage point of GDP.

[12] A shift from labor taxation to VAT affects the economy through several channels. It broadens the tax base which allows lower tax rates to obtain the same amount of revenues. Moreover, an increase in VAT that is translated into consumer prices reduces transfer payments and could encourage greater labor supply. At the same time lower labor taxation reduces real labor cost in the presence of nominal rigidities. The latter effects are only temporary, however, until nominal wages and transfer payments adjust.

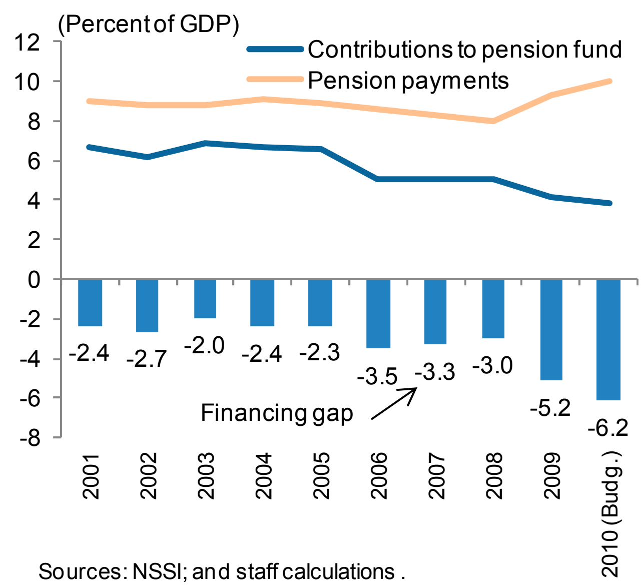
[13] Over the medium term also other revenue sources should be contemplated, including a "green tax."

C. Policy Challenge 2: Ensuring the Sustainability of the Social Security System

Pension System

13. **Recent changes in pension system parameters have put significant pressure on Bulgaria's pension finances.**[14] Until 2008 budget transfers to close the financing gap of the pension fund had averaged about 3 percent of GDP. This increased to about 5 percent of GDP in 2009 and for 2010 the budget foresees a transfer of more than 6 percent of GDP (Figure 4).[15] While this is partly a result of the recession, it also reflects a number of policy changes. First, pensions were increased strongly. In addition to the increase by 9 percent under the Swiss indexation rule from July 1, 2009 the minimum pension was raised by 10 percent from January 1, 2009, the weight of each year of insurance contribution in the pension formula was raised from 1 percent to 1.1 percent as of April 1, 2009, and the maximum pension was raised by about 40 percent as of April 1, 2009. These measures are estimated by the NSSI to have raised pension payments by about 17 percent in 2009. At the same time, the compulsory pension contribution rate was lowered from 22 percent to 18 percent. In combination with the economic downturn this has reduced pension contributions by over 11 percent.

Figure 4. Bulgaria: Pension Fund Contributions and Pension Outlays, 2001-10



Sources: NSSI; and staff calculations.

14. **The policy changes will have a medium-term impact.** With the pension contribution rate lowered by another 2 percentage points in 2010, the financing gap is expected to widen even with a general pension freeze in 2010 (and a 0.5 percent of GDP increase in special pensions). The budget foresees a gap of 6.2 percent of GDP in 2010. Estimates by the National Social Security Institute (NSSI) indicate that this gap would

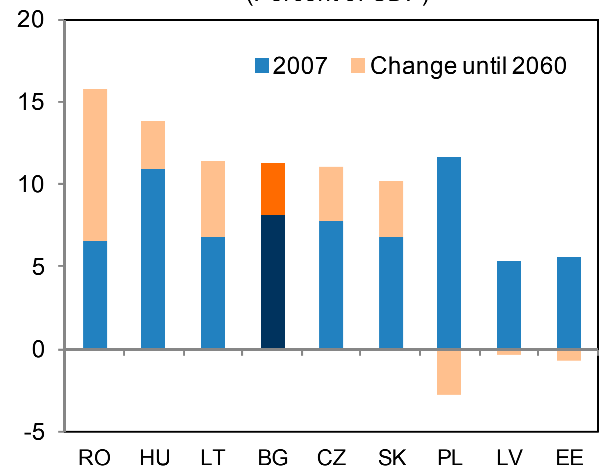
[14] For a description of the Bulgarian pension system see Vassilev et al. (2009).

[15] Since 2009, the central budget is required to transfer 12 percent of the insurable income of all insured pension to the pension fund. It also covers the deficit through budgetary transfers. Until 2009, the pension fund had relied only on the latter. As long as the pension fund runs deficits, there is de facto no change for its finances. However, it is assured the 12 percent transfer also for times when less would be needed for its finances allowing it to build up reserves.

remain broadly unchanged until 2012, if pension increases return to the indexation rule for 2011-12. This development is creating trade-offs with other policy targets of the government, notably to lower the tax burden, support other spending priorities, and maintain a balanced budget.

15. **Before these recent changes were made, Bulgaria's pension system had in the past received generally good marks as regards its long-term sustainability.** The NSSI projected, based on the commonly-agreed assumptions by the European Commission, until 2060 an increase of pension outlays by 3 percent of GDP compared to 2007. The impact of an ageing society would raise pension expenditure particularly during 2030-50 (see Vassilev et al., 2009, and European Commission, 2009 a,c). The projected change and the level of pension expenditure for Bulgaria are at about the average of the new member states and the EU (Figure 5). Given its low public debt and favorable budgetary position such an increase was considered sustainable.[16] One concern was that the relatively low benefit ratio (i.e., average pension in percent of average wage) would drop even further. But when accounting also for Bulgaria's second and third pillar of the pension system the drop is projected to be contained at 3 percentage points, keeping the benefit ratio above most new member states.

Figure 5. Projected Pension Expenditure
(Percent of GDP)



Source: European Commission (2009c), Pension Schemes and Pension Projections in the EU-27 Member States .

16. **However, as a result of the revisions the outlook over the long run has become much less rosy.** By end-2010, the pension-to-GDP ratio is expected to have risen already by 2.3 percentage points compared to 2007 (more than two thirds of the estimated long-term increase). Moreover, the economic crisis has substantially reduced the level of output and it may take a while to return to the pre-crisis growth path. Simulations by the European Commission (2009a) for a "lost decade" scenario show that this could raise pension spending by an additional 1 percent of GDP until 2020 and 1.6 percent until 2060.[17] Also, the Commission estimates do not explicitly consider the financing side of the pension system. As mentioned above, the cuts in social security contributions rates have substantially raised the financing gap and put pressure on the general government.

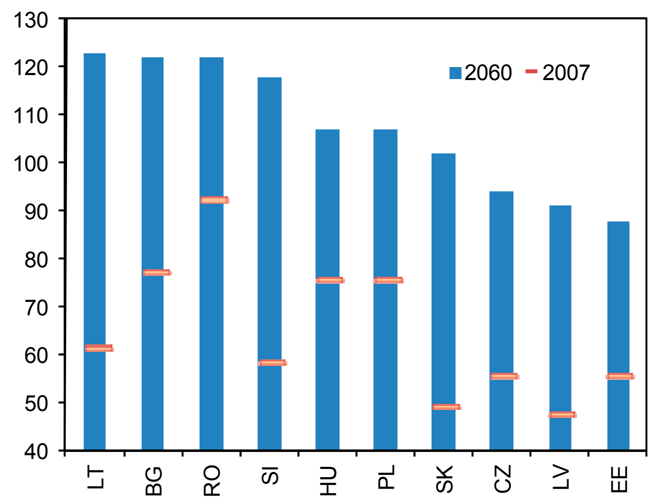
[16] See the assessment in the European Commission's Sustainability Report (2009b).

[17] The scenario assumes that it takes until 2020 to get back to the projected GDP growth path. The above reported impact on pension expenditure is for the EU average (no country-specific estimates are reported).

17. **The financing gaps need to be contained through revenue and/or expenditure measures.** Freezing public pensions, as envisaged by the government, is recommended for 2010. On the revenue side there is no room for further rate reductions. Rather, raising the rates could help stabilize the public pension finances though a trade-off with other government objectives would arise (such as boosting competitiveness; see Section V).

18. **Moreover, parametric adjustments and structural reforms are called for to address the sharp increase in the dependency ratio.** Most of the additional pension spending is projected to come from an increase in the dependency ratio (i.e., the ratio of pensioners to contributors), which would rise to one of the highest levels across the new member states and the EU (only for Lithuania and Romania is such a level estimated) (Figure 6). Raising the retirement age, in particular bringing the retirement age for women (60 years) at par with that of men (63 years) and eventually raising it further for both groups should therefore be considered. Also, the system of disability and early retirement pensions needs to be reviewed[18] and be part of pension reforms for which options are currently being discussed by an advisory council of experts set up by the government. Other policies should aim at further raising Bulgaria's labor market participation rate which is still somewhat below the new member states' average. Another issue is how to strengthen contributions. At present, wages and tax liabilities are frequently underreported, in particular from self-employed and agricultural workers (see Section II). The increase in the minimum insurance income for self-insured, agricultural, and tobacco producers to pay social security contributions in 2010 is one step taken that aims to correct this but more efforts are needed to raise the contribution base over the long run.

Figure 6. Dependency Ratio 1/



Source: European Commission, 2009 Ageing Report.
1/ Ratio of pensioners to contributors.

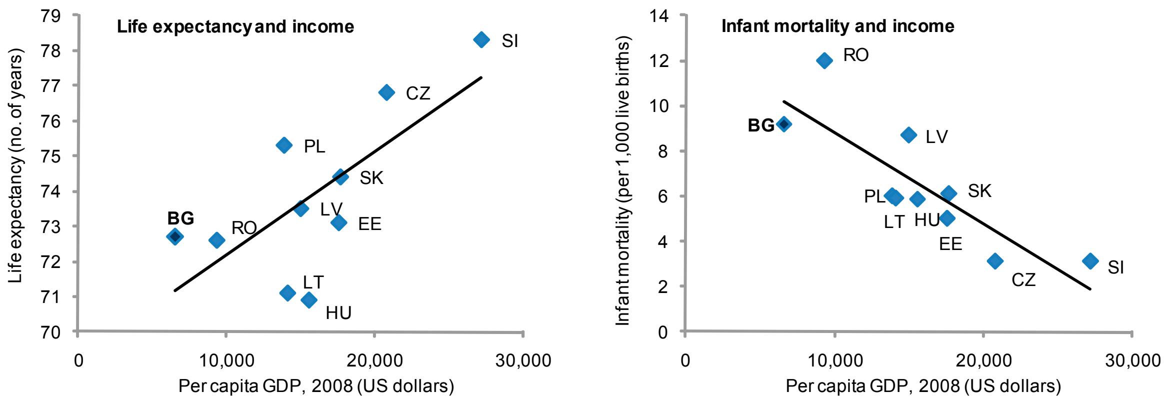
Health Care System

19. **Health care output indicators for Bulgaria indicate that a gap remains with the EU and its new member states, to some extent reflecting its economic catch-up space.** Output indicators, such as life expectancy and infant mortality, are still below the new

[18] The number of disability pensions more than doubled since the comprehensive pension reform in 2000 to about 423,000.

member states' average. But accounting for Bulgaria's lower per capita income, as one of the factors generally associated with better health outcomes, it fares above average (Figure 7). Nevertheless, only one third of Bulgarian citizens are satisfied with the availability of quality health care in Bulgaria (compared to about one half in the new member states and two thirds in the EU).

Figure 7. Health Outcome Indicators



Sources: Eurostat and IMF World Economic Outlook.

20. **Public health expenditure is low and reliance on private health spending is high in Bulgaria.** At about 3 percent of GDP public health care spending in Bulgaria was less than two thirds of the new member states and half of the EU average in 2007 (Table 1).[19] When accounting also for private health outlays, Bulgaria still spends less than most other EU countries on health care, but at 40 percent the share of private spending is one of the highest in the EU.[20] This is also reflected in the significant share of out-of-pocket spending in Bulgaria of 38 percent (Table 1). In addition to the compulsory health insurance system, there are also private insurers constituting a second pillar of the health insurance system. At less than 1 percent of spending of health care services their role is still small, however.

[19] The data on public health care spending are from Eurostat to allow for international comparisons. Bulgaria's national data indicate somewhat higher public spending on healthcare of 4.2 percent of GDP in 2007 and 2008.

[20] It is higher only in Greece and Latvia.

Table 1. Selected Indicators of Health Care Financing

	General government expenditure on health (Percent of GDP), 2007	General government expenditure on health (Percent of total government expenditure), 2007	Private expenditure on health (Percent of total expenditure on health), 2006	Private households' out-of-pocket expenditure (Percent of private expenditure on health), 2005
Bulgaria	3.1	7.5	40.2	38.0
Czech Republic	7.1	16.6	12.1	10.9
Estonia	4.4	12.7	25.8	20.5
Hungary	4.9	9.8	29.2	25.3
Latvia	4.5	12.5	36.8	38.6
Lithuania	4.4	13.2	30.0	32.2
Poland	4.5	10.8	30.1	26.1
Romania	4.3	11.8	29.0	25.3
Slovakia	6.5	18.7	26.1	22.6
Slovenia	5.8	13.7	27.0	12.4
Average	5.0	12.7	28.6	25.2

Sources: Eurostat and World Health Organization, Statistical Information System.

21. **An area in which costs have surged over the past years is the hospital sector.** The number of hospitals has risen sharply from 308 in 2004 to 430 in 2009. During 2002–07, the number of hospitalizations rose by 33 percent and average costs per case surged by 44 percent in real terms. As a result Bulgaria has one of the highest numbers of hospitals and an above average number of hospital beds per capita in the EU as well as longer hospital stays, lower bed occupancy rates, and an above average share of non-wage spending. Moreover, Bulgarian hospitals spent a much higher share of their budget on medication than in other EU countries. Distorted incentives have led to this proliferation of hospitals, including the requirement by the National Health Insurance Fund to contract all new providers, no ceilings on reimbursement, mispriced procedures and medications, the high hospital-to-hospital referral rates, and weaknesses in the primary care sector (see Smith, 2009 and Georgieva et al., 2007).

22. **Another risk factor for rising costs derives from the spending on medication.** In 2009 costs for the NHIF increased by 10 percent, which was partly due to a positive drug list introduced in June 2009 and which includes new and expensive drugs. For 2010 the NHIF budget foresees, however, a reversal in this trend with a reduction in payments for medicine by about 2 percent. This is aimed to be achieved by capping prices for medication as of April 1, 2010.

23. **Rising financing pressures are a risk for the National Health Insurance Fund (NHIF) and the general government.** Public health care spending in Bulgaria is financed primarily from compulsory insurance contributions but also from taxation (see Georgieva et al., 2007). Financing gaps of the NHIF, which pools the resources for purchasing health services, had opened up in 2005 and were plugged over the next years with government budgetary transfers. To put the financing on a more sustainable footing, in 2009 the compulsory contribution rate was raised from 6 to 8 percent and was split between employers

and employees at a rate of 60:40.[21] Health insurance for pensioners, unemployed, children, and socially vulnerable are covered by the state and accounted for about one third of total NHIF revenues. In 2009, the NHIF realized a surplus, however, much lower than budgeted. Similarly, for 2010 a surplus is projected but this assumes a rising share of government transfers (to reach 37 percent of total NHIF revenue) and a sharp reduction in health care costs (see Table 2). The NHIF budget includes a drop of health insurance payments by 11 percent, including a cut by 27 percent in payments for hospitals.[22] However, if these cuts do not materialize, even higher transfers from the government may be needed.

Table 2. Bulgaria: National Health Insurance Fund (NHIF): Financial Operations

	2005	2006	2007	2008	2009 (Proj.)	2010 (Budget)	2005	2006	2007	2008	2009 (Proj.)	2010 (Budget)
	(In billions of leva)						(In percent of GDP)					
Revenue and transfers	**971.7**	**1,065.9**	**1,551.2**	**1,793.8**	**2,207.5**	**2,519.2**	**2.3**	**2.2**	**2.7**	**2.7**	**3.4**	**3.8**
Health insurance contributions	683.1	757.1	894.1	1,107.9	1,515.1	1,560.0	1.6	1.5	1.6	1.7	2.3	2.4
Health insurance transfers 1/	258.2	275.3	291.9	452.8	664.6	941.1	0.6	0.6	0.5	0.7	1.0	1.4
Other	30.4	33.5	365.2	233.2	27.7	18.1	0.1	0.1	0.6	0.3	0.0	0.0
o/w: General budget transfers	0.0	0.0	338.7	206.4	0.0	0.0	0.0	0.0	0.6	0.3	0.0	0.0
Expenditure and transfers	**1,070.7**	**1,352.8**	**1,541.7**	**1,747.8**	**1,752.8**	**1,689.4**	**2.5**	**2.7**	**2.7**	**2.6**	**2.7**	**2.6**
Health insurance payments	1,039.9	1,323.9	1,507.8	1,705.7	1,696.7	1,511.9	2.4	2.7	2.7	2.6	2.6	2.3
Reserve	0.0	0.0	0.0	0.0	0.0	125.1	0.0	0.0	0.0	0.0	0.0	0.2
Other	30.7	29.0	33.9	42.1	56.1	52.4	0.1	0.1	0.1	0.1	0.1	0.1
Balance	**-99.0**	**-286.9**	**9.5**	**46.0**	**454.7**	**829.8**	-0.2	-0.6	0.0	0.1	0.7	1.3

Source: National Health Insurance Fund.
1/ Health insurance for pensioners, unemployed, children, and socially vulnerable are covered by the state.

24. **Over the long term, pressures from age-related health care spending are projected to rise further.** In the 2009 Ageing Report, the European Commission estimates nine scenarios for the development of public health care spending until 2060 using assumptions and methodologies agreed among the EU member states. For Bulgaria, under unchanged health care policies the pressures could be substantial (see Table 3), including from demographic factors but mostly from cost convergence and technological impact of medical developments. The recently introduced positive drug list, which includes new and expensive drugs, is one example of the technological impact that could impinge on future costs already in the short term. When developing the government's medium-term budgetary strategy, which aims for a balanced budget while reducing the tax and social security contribution rates, these additional spending pressures need to be considered.

[21] During the crisis, lower compliance with compulsory contribution has emerged as a problem. With more than three payments overdue over the past twelve months, the insured lose their right for health care payments. To increase the collection rate, this was tightened with effect as of January 1, 2010 to the past 36 months. The NRA indicated that as a consequence 380,000 persons risk being without insurance coverage.

[22] The consolidated budget, however, includes a contingency of BGN 125 million for the health care sector that would broadly keep health care spending in 2010 at par with the outlays in 2009.

Table 3. Bulgaria: Projections on Public Health Spending by the European Commission and Agency for Economic Forecasting (AEAF)

Change in Public Health Spending, 2007-2060 (Percent of GDP)			
1. Pure demographic scenario	0.7	6. Labor intensity scenario 4/	1.6
2. High life expectancy scenario	1.0	7. Cost convergence scenario 5/	3.4
3. Constant health scenario 1/	0.0	8. Technology scenario 6/	2.8
4. Death-related cost scenario 2/	0.6	9. Baseline scenario 7/	0.7
5. Income elasticity scenario 3/	1.2	10. AEAF scenario 8/	2.0

Sources: European Commission, 2009 Ageing Report; and Bulgaria Convergence Progamme 2008-11.

1/ Assumes constant number of years spent in bad health.
2/ Uses an average profile of death-related costs by age.
3/ Uses an income elasticity of 1.1 in the base year that converges to 1.0 in 2060 (based on the demographic scenario).
4/ Assumes costs evolving in line with labor productivity.
5/ Assumes convergence toward health care provision per person (expressed in percent of GDP per caital spending) of the EU-15.
6/ Includes the impact of technological change on per capita health care spending.
7/ This is the reference scenario of the European Commission's Working Group on Ageing. It combines demographic factors, an income effect, and the development of the health status but does not include the technological impact.
8/ Change between 2010-60 as shown in Bulgaria's Convergence Programme for 2008-10. Does not account for the technological impact.

25. **Completing the comprehensive health care sector reform should become a policy priority.** The health care sector in Bulgaria has undergone substantial reforms since the late 1990s but in recent years additional financial pressures have emerged, partly because of distorted incentives created by earlier changes. Comprehensive reform plans have therefore been drawn up with a view to raise the system's efficiency while improving quality of care and should soon be realized to achieve the financial and other targets of the National Health Care Strategy.[23]

26. **A number of areas require particular attention.**[24] This includes first rationalizing the hospital sector to undo the proliferation of hospitals and reduce in-patient cases and costs. Measures already taken by the government include the tightening of eligibility criteria for hospitals to receive funds from the NHIF (in particular, defining the number of clinical pathways for each hospital). As a result, the NHIF expects a great number of small underutilized hospitals to close in 2010 due to lack of funding. Second, and complementary to rationalizing the in-patient care, the primary care sector needs to be strengthened. The share of spending on this sector in Bulgaria is far below that in the EU. Thus, a shift from in-

[23] The National Health Care Strategy for 2008–13 spells out key strategic objectives for the health care sector while a recent joint memorandum by the Ministries of Finance and Health as well as the NHIF (January 2010) focuses on key priorities to improve the finances. This includes changing the payment methods to health care providers, setting criteria for hospitalization, introducing medical audits, strengthening overall governance, and monitoring the quality of medical services.

[24] These proposals follow the recommendations by the World Bank on the health sector (see World Bank, 2009b; Smith, 2009).

patient to out-patient care would contribute to greater efficiency of the overall health system while improving the health status of the population. Third, consideration should be given to a medium-term pharmaceutical reform agenda to address inappropriate prescribing patterns, weaknesses in the oversight of the procurement of drugs by hospitals, and pricing policies. Fourth, the organizational and legal model of negotiating the National Framework Contract can be strengthened. And finally, options for a multiple insurer model (i.e., a greater role for private insurers) should be considered only within a comprehensive reform package that tackles the above mentioned issues. Discussions about reforms in all of these areas are currently on-going within the government.

D. Policy Challenge 3: Finding Room for Other Expenditure Cuts

27. **With upward pressure on social security spending, expenditure rationalization, efficiency gains, and reprioritization in other spending areas need to be sought.** Analysis, for example by the World Bank (2006, 2009b) and the European Commission (2009d, see also Box 1), has identified areas of spending inefficiencies and shortcomings that could create future bottlenecks. This includes, in addition to the social security systems discussed above, public administration, public infrastructure, and the education system.[25] The government's Action Plan provides an opportunity to address those reform needs in a comprehensive way in support of Bulgaria's economic recovery and putting growth on a sustainable and more balanced path, i.e. shifting the focus toward more export-led growth.

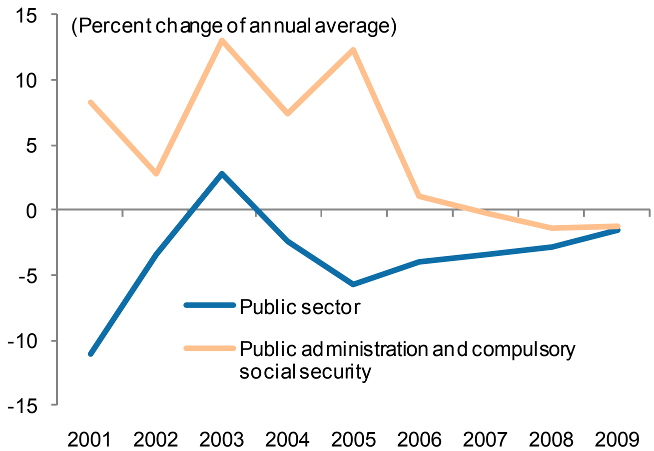
Public Administration

28. **Strengthening the capacity and raising the efficiency of Bulgaria's public administration is one key reform area.** Bulgaria spends more than most new EU member states on general services as well as public order, safety, and defense (see Table 4), with a particular surge of outlays on general services occurring in 2007.[26] At the same time, the number of employees in public administration increased significantly until 2007 which stood in contrast to the overall reduction of public sector employees (Figure 8). Nevertheless, provision of public services is considered to be weak, including the administrative capacity to absorb EU funds. More generally, there is a perception of a high waste of public resources (Figure 9) and corruption, notably in the judiciary, police, and health care system (Figure 10).

[25] The analysis below focuses on public administration and public infrastructure. As regards the education system, Bulgaria has recently introduced sweeping reforms of its secondary education system with a view of promoting more autonomy and accountability of schools for better learning outcomes and improved efficiency of public spending. This has led to the closure of a number of schools and reduction in the number of teachers which has helped to contain Bulgaria's spending on education, which is one of the lowest among the new EU member states at about 4 percent of GDP (see Table 4). The reforms still have to show results as regards the quality of education, however. Going forward further reforms should focus on the vocational training and education as well as the tertiary education system (World Bank, 2009b).

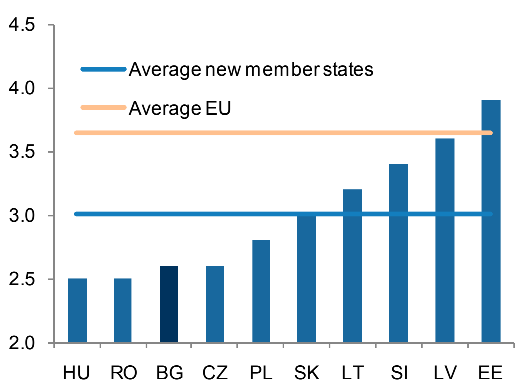
[26] Public spending on general services rose from 4.5 percent of GDP in 2006 to 8.2 percent in 2007 according to Eurostat data. This is surpassed only by Hungary with 9.3 percent in 2007.

Figure 8. Bulgaria: Number of Employees in the Public Sector and Public Administration 1/



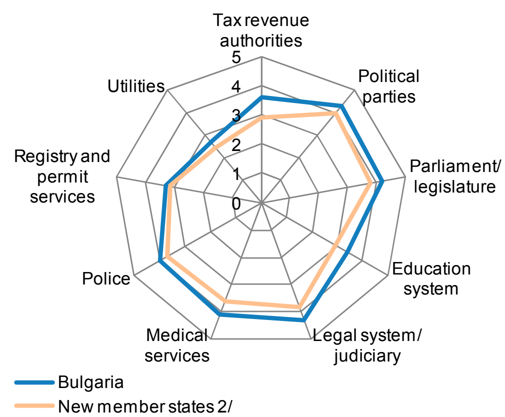
1/ Jan.-Sep. for 2009.
Source: Bulgarian National Statistical Institute.

Figure 9. Wastefulness of Government Spending 1/



1/ Survey with index ranging from 1 to 7 with lower values indicating higher wastefulness.
Source: World Economic Forum, "Global Competitiveness Report 2007-08".

Figure 10. Bulgaria: Corruption Impact on Public Services 1/, 2007



1/ The Global Corruption Barometer is a a public opinion survey that assesses the general public's perceptions and experience of corruption. The index ranges from 1 to 5 (1: not at all corrupt; 5: extremely corrupt).
2/ Available only for BG, CZ, EE, LT, LV, PL, RO.
Source: Transparency International, Global Corruption Barometer 2007.

29. **Public administration reform has stalled and a comprehensive strategy is lacking.** Reform efforts in 2008 aimed for an across-the-board cut in public employees by 12 percent by end-2008. The reduction by about 3 percent in the public sector and about 1½ percent in the public administration was much lower, however (Figure 8). Nevertheless, this contributed to stabilizing the public wage bill at 5.7 percent of GDP in 2008 (despite sharp public wage increases) after it had risen by 1.2 percent of GDP since 2003. Similarly, the new government announced to further reduce overcapacity in the public sector by reducing staff by another 3 percent in 2010 with cuts of 15 percent within ministries and state agencies. While the government's objective for staff cuts is warranted, ad hoc across-the-board cuts could undermine the long-term effectiveness of public services. It is thus

advisable to develop a comprehensive reform strategy for the public sector, including the public administration, and spell out sector-specific targets and timelines. Carrying-out the originally envisaged, but now delayed, public expenditure review by the World Bank would be a useful supportive tool in this respect.

Table 4. General Government Expenditure by Function (Percent of GDP), average 2005-2007

	General government expenditure	Social protection	Health	Education	General services	Economic affairs	Public order, safety, and defense	Other
				(Percent of GDP)				
Bulgaria	39.1	12.1	4.7	4.0	6.1	4.8	4.7	2.8
Czech Republic	43.8	12.8	7.2	4.8	4.7	7.0	3.5	3.8
Estonia	34.6	9.8	4.3	6.2	3.0	4.4	3.5	3.4
Hungary	50.6	17.3	5.4	5.7	9.4	6.2	3.4	3.2
Latvia	36.3	9.3	4.1	5.6	6.2	4.1	4.1	2.9
Lithuania	34.0	10.3	4.7	5.4	4.1	4.2	3.4	2.0
Poland	43.0	16.5	4.5	5.9	5.9	4.2	3.0	2.9
Romania	35.1	9.8	3.9	4.0	3.5	6.3	4.9	2.8
Slovakia	36.6	12.1	5.8	4.0	4.9	4.0	3.6	2.2
Slovenia	44.1	16.6	6.0	6.2	6.2	4.0	3.0	2.2
Average	39.7	12.7	5.1	5.2	5.4	4.9	3.7	2.8
				(Percent of total general government expenditure)				
Bulgaria	100.0	31.0	11.9	10.1	15.5	12.3	11.9	7.2
Czech Republic	100.0	29.2	16.4	11.0	10.8	15.9	8.1	8.7
Estonia	100.0	28.3	12.4	17.8	8.8	12.6	10.1	9.9
Hungary	100.0	34.2	10.6	11.2	18.6	12.3	6.8	6.3
Latvia	100.0	25.7	11.4	15.3	17.0	11.4	11.3	8.0
Lithuania	100.0	30.3	13.8	15.8	12.0	12.2	10.0	5.9
Poland	100.0	38.4	10.5	13.8	13.8	9.8	7.0	6.7
Romania	100.0	27.9	11.1	11.3	9.9	18.0	13.9	7.9
Slovakia	100.0	33.0	15.9	10.8	13.3	10.9	9.9	6.1
Slovenia	100.0	37.6	13.6	14.0	14.1	9.0	6.7	4.9
Average	100.0	31.6	12.8	13.1	13.4	12.5	9.6	7.1

Source: Eurostat.

Box 1: The EU's Recommendations on Structural Fiscal Issues for Bulgaria

EU Council Opinion on Bulgaria's Convergence Programme (March 2009) 1/

- Further strengthen the efficiency of public spending, in particular through full implementation of program budgeting, reinforced administrative capacity and reforming the areas of labor and product markets, education and healthcare in order to increase productivity.

EC Council Recommendations on the Implementation of the Lisbon Strategy (January 2009) 2/

(…), it is recommended that Bulgaria:

- urgently further strengthens the efficiency and the effectiveness of the public administration, in particular by focusing on key government functions, including the competition, supervisory and regulatory authorities, and the judiciary, and continues taking all measures necessary to ensure effective financial controls and sound management of structural funds;

- maintains a tight fiscal policy, improves the quality and efficiency of public expenditure, keeps wage developments in line with productivity gains, and enhances effective competition; (…)

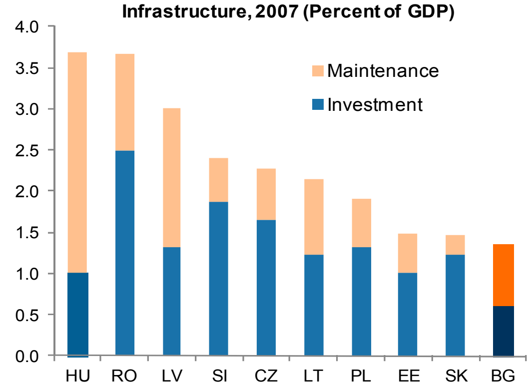
- as part of an integrated flexicurity approach, focuses on increasing the quality of labor supply and the employment rate by improving the efficiency, effectiveness and targeting of active labor market policies and by further modernizing and adapting the way education is governed to raise skills to levels that better match labor market needs, and reducing early school leaving.

1/ European Commission, Council Opinion of 10 March 2009 on the Updated Convergence Programme of Bulgaria, 2008-2011 (2009/C 62/01) (http://ec.europa.eu/economy_finance/sgp/convergence/programmes/2008-09_en.htm).
2/ European Commission, Council Recommendation on the 2009 Up-Date of the Broad Guidelines for the Economic Policies of eth Member States and on the Implementation of Member States' Employment Policies, COM(2009) 34 final, (January 28, 2009) (http://ec.europa.eu/growthandjobs/documentation/index_en.htm#annual).

Public Transportation

30. **Completing the upgrades of Bulgaria's public transportation infrastructure is one of the key requirements for shifting to more export-led growth.** While progress has been achieved in the Bulgarian transportation infrastructure sector (see World Bank, 2009b), a number of challenges remain. Completion of highway construction, largely financed by EU funds, has stalled.[27] National roads are in poor

Figure 11. Spending on Road and Rail Transport Infrastructure, 2007 (Percent of GDP)



Source: International Transport Forum.

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[27] A prominent example is the delays in the construction of the Lyulin highway linking Sofia and Pernik. The government envisages completion of this highway as well as the Trakiya and Martiza highways and tangible progress on the Struma and Black Sea highways by the end of its term in office in 2013. Delays in infrastructure projects also impact transportation on the Danube.

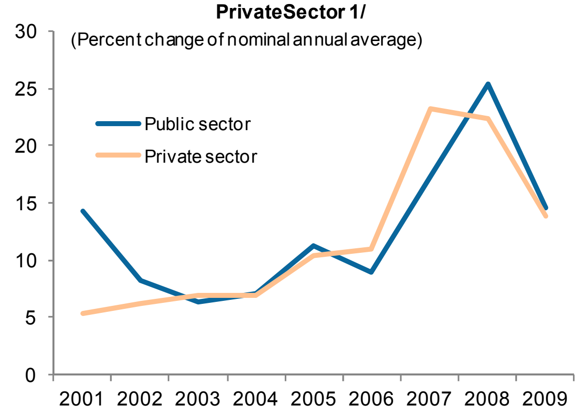
condition and require maintenance or rehabilitation.[28] Governance and management of the National Road Infrastructure Agency (NRIA) need to be strengthened. Despite massive reforms and staff reductions in the railway sector, productivity levels still compare unfavorably with the EU and the infrastructure requires substantial investment to be upgraded (see World Bank, 2009b and Nikolova, 2008). Thus, in addition to EU funds, which also need to be co-financed, pressures are emerging for additional public investment in the sector to avoid that transportation becomes a bottleneck to long-term economic growth. According to data from the International Transport Forum, Bulgaria's has spent less on road and railway infrastructure than other new EU member states reflecting the stalled investment process.

F. Policy Challenge 4: Staying competitive

Developments

31. **Private and public sector wage developments in the past two years have contributed to the recent sharp real effective exchange rate appreciation.** Since 2006, the unit labor cost-based real effective exchange rate appreciated by 37 percent; the CPI-based REER appreciated by 20 percent. While public nominal wages grew annually at 8.4 percent on average between 2002 and 2006, since then they surged by over 19 percent annually (Figure 12).

Figure 12. Bulgaria: Wages in the Public and PrivateSector 1/



1/ Jan.-Sep. for 2009.
Source: Bulgarian National Statistical Institute.

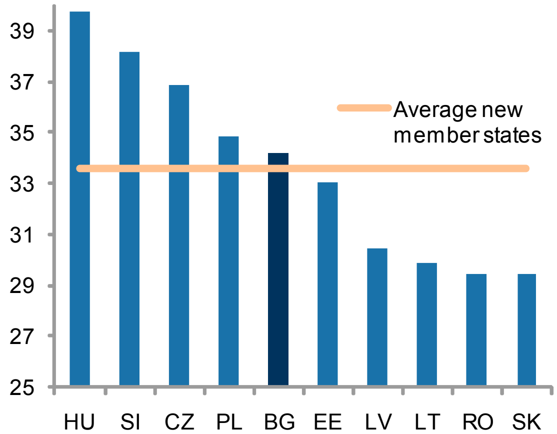
32. **The reduction in tax and social security contribution rates has helped Bulgaria's competitiveness.** Rate reductions included those from the introduction of flat taxes on corporate profit and personal income with tax rates of 10 percent as well as the lowering of social security contribution rate by 10½ percentage points since 2002 (see Sections II and III for more details). At the same time the VAT rate was held constant at 20 percent since 1999.

33. **The tax to GDP ratio is relatively low in Bulgaria.** Bulgaria finds itself above but close to the average of new member states as regards the tax-to-GDP ratio (including social security contributions) (Figure 13). Importantly, most of Bulgaria's revenues are collected from VAT which accounted for the recent surge (see Section II). Abstracting from those, the tax burden in Bulgaria is below that of most EU transition economies (Figure 14). Since

[28] Nearly 30-40 percent of Class I-III roads are in poor condition (World Bank, 2009b). The cut of maintenance spending by the NRIA by two thirds in 2009 compared to 2008 further postpones addressing the problem.

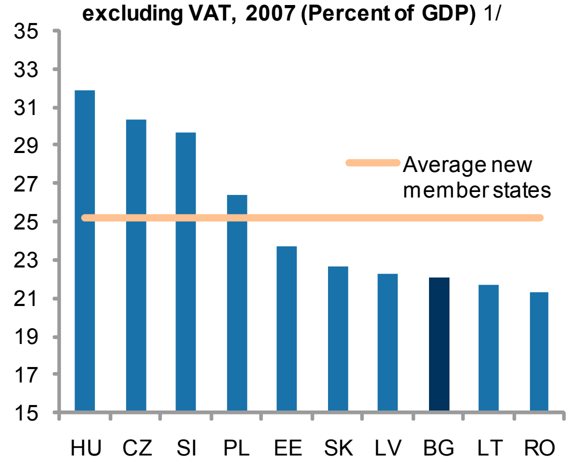
VAT plays less of a role for competitiveness (as a zero rate is applied to exports) there is no indication that Bulgaria's tax policy has contributed to the deterioration of competitiveness in the past.

Figure 13. Total Taxes and Social Security Contributions, 2007 (Percent of GDP) 1/



Source: European Commission, DG TAXUD, *Taxation Trends in the European Union*, 2009

Figure 14. Taxes and Social Security Contributions excluding VAT, 2007 (Percent of GDP) 1/



Source: European Commission, DG TAXUD, *Taxation Trends in the European Union*, 2009

Policy Options

34. **Wage growth needs to slow to preserve competitiveness and public wage policy can play an important role in this.** With the nominal exchange rate fixed, adjustment will have to come through domestic wages and prices. The wage increases in the public and private sector have been clearly unsustainable and the proposed public wage freeze for 2010 is welcome as it should have a signaling effect for lower private sector wage growth, including in the tradable sector.

35. **Fiscal policy making should put greater focus on how to strengthen the supply conditions of the Bulgarian economy.** As laid out in Section IV, there is a need to strengthen the public infrastructure to ensure that it does not become a bottleneck for economic growth. Similar considerations regard the education system. The expenditure needs that may arise in those areas, in particular for more public investment, would also counterbalance the pro-cyclical tightening that would result from a tight public wage policy and thus ease concerns about undermining the economic recovery with wage moderation.

36. **Further lowering social security contributions with a view to boost competitiveness is not advisable at this stage.** As indicated above, social security rates in Bulgaria have already been lowered substantially. The burden from social security contribution (measured in percent of GDP) is one of the lowest in the EU. At the same time, cost pressures have emerged for the social security systems and financing gaps would rise

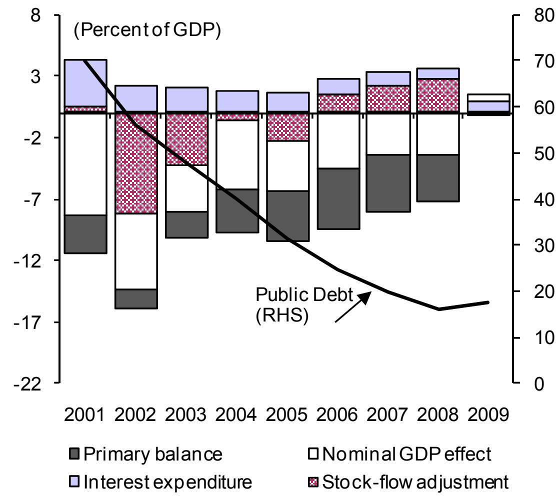
further without also revising entitlements. Thus, reducing social security rates should only be considered as part of an overall reform package of social security systems.

G. Policy Challenge 5: Supporting the Currency Board Arrangement[29]

Developments

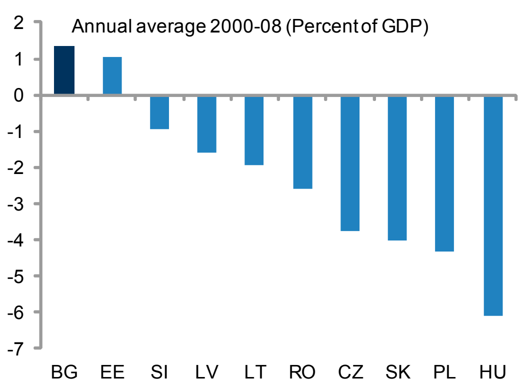
37. **Since its introduction in 1997, the currency board arrangement in Bulgaria has been supported by prudent fiscal policy.** Bulgaria's fiscal position averaged annual surpluses of 1.4 percent between 2000–08, was nearly unprecedented among EU transition economies; only Estonia followed a similar tight stance (Figure 16). As a result, Bulgaria's public debt-to-GDP ratio fell from 77 percent in 2000 to 17 percent in 2009 (Figure 17) which was the second lowest of the EU new member states (after Estonia). While rapid catch-up growth also helped this reduction, the fiscal contribution was significant (Figure 15).

Figure 15. Bulgaria: Contributions to Changes in the Public Debt Ratio



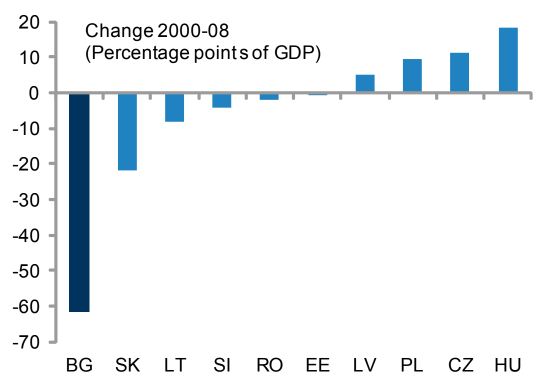
Sources: Bulgarian Ministry of Finance; and staff calculations.

Figure 16. General Government Balance in the EU New Member States



Source: IMF World Economic Outlook.

Figure 17. Change in Public Debt in the EU New Member States



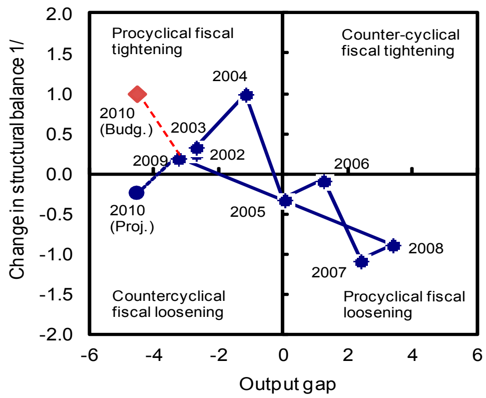
Source: IMF World Economic Outlook.

38. **But fiscal policy has at times been pro-cyclical.** Until 2004, the fiscal stance was tightened despite negative output gaps (Figure 18), with a view to consolidate the budgetary

[29] This section focuses only on how the fiscal stance has and can support the currency board arrangement. What role revenue and expenditure policies play in this respect has been discussed in Section II-IV with the contribution of fiscal policy to competitiveness analyzed in Section V.

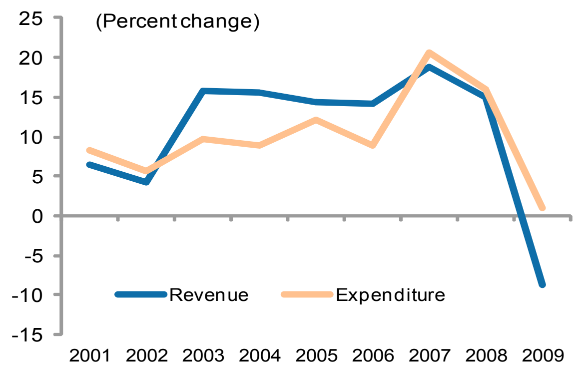
position, drive down public debt, and support the credibility of the currency board. During 2006–08 however, fiscal policy contributed to fuelling the demand boom, despite the significant nominal fiscal surpluses as revenue surges were mirrored by significant expenditure increases (Figure 19).[30] In 2009, fiscal policy was tightened in the second half of the year to close the widening financing gap and to adhere to the constraints of the currency board in an environment of high risk of contagion of balance of payment crises in the region. However, much of the tightening was achieved through ad hoc expenditure cuts, sharp reductions in capital spending as well as the build-up of arrears.

Figure 18. Bulgaria's Fiscal Stance, 2002-2010



Sources: Bulgarian Ministry of Finance; and staff calculations and projections.
1/ Actual fiscal balance adjusted for the automatic effects of internal imbalance (output gap) and external imbalance (absorption gap) on fiscal position.

Figure 19. Bulgaria: Revenue and Expenditure Growth, 2001-09



Sources: Bulgarian Ministry of Finance; and staff calculations and projections.

39. **Bulgaria's fiscal rules have not played an important role in guiding policy making.** Two fiscal rules are in place: a debt rule, in force since 2003 and an expenditure rule, in force since 2006. The debt rule, enshrined in law, sets a ceiling of general government debt at 60 percent of GDP.[31] Its adoption reflected the commitment to comply with the Stability and Growth Pact and the Maastricht criteria. The expenditure rule defines a ceiling for general government expenditure, excluding contributions to the EU budget, at 40 percent of GDP. This rule was motivated largely by a desire to streamline the government sector and strengthen fiscal discipline. In fact, when it first took effect in 2006, the real expenditure growth was contained and the expenditure ratio dropped by 1 percentage point of

[30] While measuring the cyclicality of fiscal policy is complicated by determining the output / absorption gap especially in a country that is still undergoing structural changes, expenditure increases in 2006-08 were large (52 percent) nearly matching those of revenue increases (55 percent).

[31] The rule was drawn up during 2002 when the debt ratio was still above 60 percent. In principle, it requires that the general government debt-to-GDP ratio cannot exceed that of the previous year until a ratio of 60 percent has been reached.

GDP compared to 2005. However, none of the rules has been binding and they have not played a specific role in fiscal policy decisions since.[32]

40. **Similarly, the medium-term fiscal framework has only to a small extent served as a guidepost for fiscal policy.** With its EU membership, Bulgaria has prepared annually three year budgetary projections which have been extended to a four-year horizon under the new government. While the macro projections and fiscal policy assumptions have in the past been prepared before the budget discussions, the detailed fiscal projections were produced at a later time and fed into Bulgaria's Convergence Programme provided to the European Commission. Medium-term targets have been revised annually, reflecting changes in policy priorities as well as macroeconomic projections. Thus, except for certain structural changes in the social security system the medium-term orientation provided by this framework has been limited. This is a weakness shared with many other EU member states.[33]

Policy Options

41. **Going forward fiscal policy making could be aided by a greater focus on fiscal rules and medium-term budgetary frameworks (MTBFs).**[34]

- A greater medium-term orientation of fiscal policy would help reduce the large ad hoc adjustments of the past that also went along with high intra-year volatility, complicating the planning process in particular for capital spending. With a greater medium-term perspective policies could then focus on structural adjustment needs and reforms, such as a public administration reform, reforms of the social security systems, and investment in public infrastructure projects.

- Stronger institutional arrangements may also ease the potential trade-off between the constraints from the currency board on the one hand and the quest to support short-

[32] Expenditure under the expenditure rule is defined to include the contributions of the government to the social security fund (i.e., expenditure is defined in gross rather than net terms; the latter is the methodology used for data presented in this paper).

[33] See for an assessment of medium-term budgetary frameworks in the EU, European Commission (2007a). In cases where the ceilings are fixed over the medium term they have tended to be more binding. One example is the Dutch framework with fixed expenditure ceilings for four years; another is Sweden's rolling framework, which adds a new third year annually (without adjusting the previous targets). For more details of these cases see Box 3 and, for example, Ljungman (2008).

[34] A fiscal rule is defined as a permanent constraint on fiscal policy through simple numerical limits on budgetary aggregates (Kopits and Symansky, 1998). A medium-term budgetary framework (MTBF) provides a mechanism for operationalizing medium-term fiscal objectives or rules by translating them into a credible and detailed plan for the evolution of expenditure and revenue. Thus, the main difference between fiscal rules and MTBFs lies in the degree of permanence and level of detail. In practice, however the delineation may not be clear cut. For a recent paper on the experience with fiscal rules around the world and the role that they can play in anchoring expectations see Kumar et al. (2009). For the EU member states, the ECOFIN council has repeatedly highlighted the importance of national fiscal rules and institutions.

and long-term growth, on the other hand, by providing a transparent path of fiscal policy making and encouraging fiscal reforms.

42. **Fiscal rules have different properties as regards economic objectives.** As elaborated in Box 2, it depends on the budgetary aggregate that is targeted, how close the link is with economic objectives, such as debt sustainability, economic stabilization, or government size. For Bulgaria the key challenges that have emerged are maintaining credibility about prudent fiscal performance while limiting pro-cyclicality and a proliferation of government spending.

43. **Fiscal challenges in Bulgaria could be addressed by a greater focus on expenditure targets, either in the form of fiscal rules or MTBFs.** Setting real spending growth in line with cautious estimates of potential GDP would contribute to containing the overall spending envelope while allowing for cyclical adjustments: if real GDP grows faster than potential, public expenditure growth would help dampen domestic demand; if real GDP growth lags behind potential growth expenditure growth would contribute to stimulating the economy. Such a framework would also provide some clear-cut multi-annual guidance for fiscal policy without annual revisions as under the current framework.[35] An operational challenge, however, is to determine potential growth as the Bulgarian economy is still undergoing structural adjustments, but comprehensive work has been undertaking on this at the AEAF, the Bulgarian National Bank and the European Commission.

44. **A medium-term expenditure orientation could be reinforced through budget balance targets.** Limiting real expenditure growth to potential output growth by itself should already contribute to prudent fiscal policy making, reduce the deficit bias, and ensure debt sustainability. For example, revenue windfalls could only be spent to the extent that real expenditure growth is in line with potential growth. However, when for structural reasons revenues fall permanently short of expenditure, such an expenditure rule alone would not prevent the build-up of fiscal deficits. Thus, an additional budget balance rule could help debt sustainability.

45. **A potential trade-off between transparency and responsibility to shocks needs to be taken into account when considering the type of budget balance targets.** Targets on the headline budget balance are easy to understand and monitor, would be in line with the EU's Stability and Growth Pact and Maastricht requirements, and are particularly a focus of financial markets–an important consideration under Bulgaria's currency board. Budget balance targets, however, when defined in headline figures have no good economic stabilization property. In times of economic downturns, they would require pro-cyclical tightening when the budget balance limit has been breached and in good economic times,

[35] For examples of multi-year expenditure rules see Box 3; for an overview of national fiscal rule in place in the EU see Appendix I.

they would not prevent pro-cyclical fiscal loosening. Economic shocks can be taken into account when the budget balance is defined in structural terms. This is the case of Bulgaria's medium-term budgetary objectives (MTOs) that it sets under the requirements of the EU's fiscal framework.

Box 2: Fiscal Rules and Their Key Properties

Budget balance rules can help ensure that the debt-to-GDP ratio converges to a finite level. Primary balance rules are less linked to debt sustainability as increases in interest payments would not require an adjustment even if they affect the budget balance and public debt, but they allow for interest rate fluctuations. The "golden rule," which targets the overall balance net of capital expenditures, is even less linked to debt. With regard to output shocks, budget balance rules defined in terms of headline balances do not allow for cyclical flexibility. However, a cyclically adjusted or structural balance rule allows the full operation of automatic stabilizers, though it does not provide room for discretionary fiscal stimulus. Rules defined "over the cycle" leave room for both discretionary and cyclical adjustments but they are harder to monitor.

Debt rules set an explicit limit or target for public debt in percent of GDP. This type of rule is, by definition, the most effective in terms of ensuring convergence to a debt target. However, it does not provide sufficient guidance for fiscal policy when debt is well below its ceiling.

Expenditure rules usually set permanent limits on total, primary, or current spending in absolute terms, growth rates, or in percent of GDP. As such, these rules are not linked directly to the debt sustainability objective since they do not constrain the revenue side. They can provide, however, an operational tool to trigger the required fiscal consolidation consistent with sustainability when they are accompanied by debt or budget balance rules. Expenditure rules also allow for cyclical flexibility as they are consistent with cyclical and discretionary reductions in tax revenues, but they do not normally permit discretionary expenditure stimulus. Containing the size of government can also be a key function of expenditure rules.

Revenue rules set ceilings or floors on revenues and are aimed at boosting revenue collection and/or preventing an excessive tax burden. These rules are also not directly linked to the control of public debt, as they do not constrain spending. Revenue rules do not generally account for the operation of automatic stabilizers on the revenue side in a downturn (or in an upturn for revenue ceilings). As automatic stabilizers are stronger on the revenue side, these rules per se tend to result in procyclical fiscal policy. However, revenue ceilings can contain the size of government. Revenue rules have also been introduced to limit spending of revenue windfalls or help protect priority spending by earmarking funds for specific sectors (e.g., health and education).

Properties of Different Types of Fiscal Rules Against Key Objectives 1/

	Objectives		
Type of fiscal rule	Debt sustainability	Economic stabilization	Government size
Overall balance	++	-	0
Primary balance	+	-	0
Cyclically adjusted balance	++	++	0
Balanced budget over the cycl	++	+++	0
Public debt-to-GDP ratio	+++	-	-
Expenditure	+	++	++
Revenue			
Revenue ceilings	-	-	++
Revenue floors	+	+	-
Limits on revenue windfalls	+	++	++

Source: Kumar et al. (2009).
1/ Positive signs (+) indicate stronger property, negative signs (-) indicate w eaker property, zeros (0) indicate neutral property w ith regard to objective.

46. **Giving greater prominence to the MTO in policy making should be considered.** Bulgaria's MTO of a 0.5 percent of GDP structural fiscal surplus would ensure long-term debt sustainability when accounting for the impact of population ageing.[36] But in the public debate or in the budget discussions the MTO has not featured prominently. This may be due to the difficulty of determining and communicating the concept of the structural balance, which requires assessing the cyclical position of the economy and the budget elasticity, and/or the fact that the budget process and the determination of Bulgaria's medium-term fiscal policy under the EU's fiscal framework are delinked. The budget has to be submitted by end-October and adopted by end-December, while Bulgaria's Convergence Programme for the EU is typically prepared by end-January. Also, the Convergence Programme is not presented to or discussed in parliament. Considering better linking the two and strengthening the communication on the MTO could usefully give fiscal policy an additional anchor role.[37]

[36] According to the EU's fiscal framework, for euro-area and ERM II members MTOs cannot be less than -1 percent of GDP. Currently, MTOs vary between -1 percent of GDP and +2 percent of GDP (Finland). If countries deviate from their MTOs, the Stability and Growth Pact foresees an annual adjustment effort (defined in structural terms) of 0.5 percent of GDP as a benchmark for euro-area and ERM II members but there is no sanction mechanism for non-compliance.

[37] See European Commission (2007b). In its Communication to the 2007 Public Finance Report it proposes measures along these lines for EU member states with a view to better adhere to medium-term fiscal plans, in particular in good economic times, as a way to strengthen the preventive arm of the SGP.

Box 3: Expenditure Ceilings in Finland, the Netherlands and Sweden

Finland, the Netherlands, and Sweden all set expenditure ceilings. The frameworks have been regarded broadly successful in ensuring prudent fiscal policy making with a medium-term orientation in those countries. Nevertheless, they are not free from shortcomings. For example, tax expenditure has been used at times to circumvent ceilings. The main features of the frameworks are summarized in the table below.

Main Elements of Expenditure Rules in Finland, the Netherlands and Sweden

	Time Horizon	Statutory Basis	Items excluded from Expenditure Ceiling	Inflation Adjustment	Flexibility Instruments
Finland	Four year fixed ceiling for the government term	Coalition agreement	Interest expenditure, unemployment benefits, and some non-employment benefits	Real ceiling converted with a government expenditure deflator	Possibility to carry over an ex post budget margin
The Netherlands	Four year fixed ceiling for the government term	Coalition agreement	Interest expenditure	Real ceiling converted with a national income deflator	Small contingency margin
Sweden	Three-year rolling ceiling	Political commitment, parliamentary decision	Interest expenditure	Nominal ceiling	Contingency margin

Source: Based on Ljungman (2008).

H. Conclusions

47. **Bulgaria's public finances face a number of challenges.** The end of the revenue boom has added a further constraint to fiscal policy making in the pursuit of the government's short and medium-term policy objectives. These goals include boosting competitiveness, lowering the size of government and level of taxation, ensuring the sustainability of the security systems, maintaining medium-term structural budgetary surpluses, improving the quality of public services, and the efficiency of their provision. Bulgaria's past prudent stance of fiscal policy has put it in a relatively comfortable position to address these challenges. However, some of the envisaged policy measures imply trade-offs as regards the various objectives, but there are policy options that would alleviate them.

48. **What are the main trade-offs?** A key conflict derives from the government's objective to boost Bulgaria's competitiveness and economic growth by reducing social security contribution and VAT rates. If not accompanied by other measures, however, such a step would widen the fiscal deficit, undermine the public finances of the social security systems, and would not be coherent with the medium-term objectives of a structural budget surplus and support of the currency board system. These risks result from the strong reliance of Bulgaria on VAT receipts which surged under the unsustainable domestic demand boom and the recently emerged financing gaps of the social security systems due to a proliferation of costs in the health care system sharp pension increases and social security contribution reductions. The trade-off is further accentuated by the need for public investment to ensure that the public infrastructure does not become a bottleneck for long-term economic growth, in particular toward more export orientation.

49. **What are the policy options?**

- A fiscal policy alternative in support of competitiveness, without creating budgetary pressures, is a moderate public wage policy with wage freezes in the short run and increases in line with productivity over the medium term.
- In part, such financing pressures could be compensated by measures that strengthen tax compliance and help lift parts of the economy from the shadow thereby creating a larger tax base. However, such policies and effects take time, especially when implemented during a difficult economic situation, and the size of the impact is difficult to judge. They should therefore be treated as complementary and not be viewed as fully compensating revenue shortfalls from rate cuts.
- Similarly, efforts to boost absorption of EU funds could create room for much needed additional expenditure for upgrading Bulgaria's public infrastructure and for other investment needs to ensure that the supply conditions are conducive for long-term economic growth.

- More generally, public administration needs not only to become more effective but there is also room for streamlining, as Bulgaria spends more on general public services than most other EU new member states. Savings should come from a comprehensive public administration reform (rather than ad hoc across-the-board cuts).
- Financial pressures on the social security systems, which are bound to increase over time as a result of the aging population, also need to be urgently addressed. A comprehensive reform of the health care system is needed as distorted incentives have resulted in a surge of spending while satisfaction with the quality of services remains low. As regards the pension system, freezing public pensions—as envisaged by the government—is recommended for 2010. Moreover, gradually raising the retirement age—in particular, bringing the retirement age for women at par with that of men—should be considered as well as reviewing and reforming disability and early retirement pensions.
- Framing fiscal policy more strongly within a set of fiscal rules and a medium-term budgetary framework is an option to support the above objectives. Greater medium-term orientation could help avoid large ad hoc adjustments and pro-cyclicality of fiscal policy, and partly ease the constraints from the currency board by providing a transparent path of fiscal policy making. In particular, setting fiscal expenditure targets complemented by a greater role of the government's structural balance objective should be considered.

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Appendix 1. National Fiscal Rules in the EU Member States, 2008 1/

Country	Type of National Rules (Start Date) 2/	Statutory Base	Coverage 3/	Time Frame	Other Features of Rules
Austria	BBR (1999)	Statutory	GG, CG	Multiyear (ER), Annual (BBR,DR)	BBR: Deficit targets for the CG, RG (Länder), and LG contained in a National Stability Pact within a multiyear budgetary setting. Formal enforcement procedures. ER: An expenditure rule was adopted in 2007 and took effect with the 2009 budget.
Bulgaria	ER (2006), DR (2003)	Political commitment; Statutory	GG	Annual	ER: Ceiling on the expenditure-to-GDP ratio of 40 percent. DR: Ceiling on the public debt-to-GDP ratio of 60 percent.
Czech Republic	ER (2005)	Statutory	GG, CG	Multiyear for ER	ER: Expenditure limits inserted in a medium term expenditure framework (MTEF), covering 2 years beyond the budget year. The government may change the MTEF for the originally second and third years when a state budget bill is introduced. Nevertheless, this is possible only in defined cases. The government has to provide reasons in case of deviations from the approved MTEF to the parliament, and have these approved.
Denmark	ER (1994), RR (2001), BBR, DR (1992)	Political commitment	GG	CA or Multiyear	BBR: At least balance on the structural budget balance in 2015. ER: Real public consumption on a national account basis must not increase by more than certain amounts per year. Besides, total ceiling of 26.5 percent of cyclically adjusted GDP in 2015. RR: Direct and indirect taxes cannot be raised.
Estonia	BBR (1993)	Political commitment	GG	Annual	BBR: Balanced budget for GG.
France	ER (1998), RR (2006), DR (2008)	Statutory; Political commitment	GG, CG	Multiyear for ER	ER: Targeted increase of CG expenditure in real terms. RR: CG to define the allocation of higher than expected tax revenues ex ante. DR: Each increase in the Social Security debt has to be matched by an increase in revenues.
Finland	ER (1999), BBR (1999)	Political commitment	GG, CG	Multiyear for ER	ER: Spending limits in the Spending Limits Decision 2010-2013 from March 2009. Unemployment-related appropriations and similar automatic stabilizers are outside the spending limits (about ¼ of total spending). BBR: Target of structural surplus of 1 percent of potential GDP. Cyclical or other short-term deviations allowed, if they do not jeopardise the reduction of the CG debt ratio. CG deficit must not exceed 2.5 percent of of GDP. The government decided in Feb, 2009 that it can temporarily deviate from the CG deficit target if structural reforms are undertaken to improve general government finances (in the medium or longer term).
Germany	BBR (1972), ER (1982)	International Treaty; Constitutional	GG, CG	Multiyear for ER	National rules: BBR: "Golden rule" which limits net borrowing to the level of investment except in times of a "disturbance of the overall economic equilibrium." A new structural balance rule was enshrined in the constitution in June 2009. After a transition period, starting in 2011, it will take full effect in 2016 for the Federal government and 2020 for the states. The rule calls for a structural deficit of no more than 0.35% of GDP for the Federal government and structurally balanced budgets for the Laender.
Hungary	BBR (2007)	Statutory	GG	Annual	BBR: Primary budget surplus balance target. BBR, DR: In November 2008, Hungary adopted a primary budget balance rule and a real debt rule. which will take effect in 2012. Transition rules call for a reduction of the budget deficit (in percent of GDP) and limit real expenditure growth in 2010 and 2011.
Lithuania	ER, RR (2008), DR (1997)	Statutory	GG, CG	Annual	ER: If the GG budgets recorded a deficit on average over the past 5 years, the annual growth of the budget appropriations may not exceed 0.5 percent of the average growth rate of the budget revenue of those 5 years. RR: The deficit of the budget shall be reduced by excess revenue of the current year. DR: Limits set on CG net borrowing.