

Report No. 36156-BA

Bosnia and Herzegovina Addressing Fiscal Challenges and Enhancing Growth Prospects

A Public Expenditure and Institutional Review

September 2006

Poverty Reduction and Economic Management Sector Unit
Europe and Central Asia Region



Document of the World Bank

CURRENCY AND EQUIVALENT UNITS

(As of September 13, 2006)

Currency Unit = Convertible Mark (KM)

US\$1 =KM1.5390

€1=KM1.95583

WEIGHTS AND MEASURES

Metric System

FISCAL YEAR

January 1 to December 31

Vice President:	Shigeo Katsu (ECAVP)
Country Director:	Orsalia Kalantzopoulos (ECCU4)
Sector Director:	Cheryl W. Gray (ECSPE)
Sector Manager:	Bernard Funck (ECSPE)
Task Team Leader:	Ivailo Izvorski (ECSPE)

ACKNOWLEDGEMENTS

This Public Expenditure and Institutional Review (PEIR) was sponsored by Orsalia Kalantzopoulos (Country Director), prepared under the direction of Bernard Funck (Sector Manager), and has benefited from the continuous involvement and encouragement by Ardo Hansson and from detailed comments by Dirk Reinermann and Robert Jauncey.

The preparation of the overall report was led by Ivailo Izvorski (Task Team Leader). Chapter 1 (The Strategic Setting) was written by Ivailo Izvorski and Irina Smirnov. Chapter 2 (Fiscal Background and Fiscal Sustainability) was written by Ivailo Izvorski. An early version of the fiscal sustainability analysis was presented and discussed at a state-building and fiscal sustainability meeting organized by the World Bank and the European Commission, held in Brussels on December 5-6, 2005. Chapter 3 (State Building) was prepared by Dana Frey, Michael Spackman (PKF consultants supported by DfID), Irina Smirnov and Ivailo Izvorski. Chapter 4 (Public Administration) was written by Bernard Myers. Chapter 5 (Education) was prepared by Michael Mertaugh with extensive contributions from Toby Linden and background research by Tanja Bošković. An early version of the chapter was discussed with the inter-ministerial Education Finance and Management Working Group at their meeting in Mostar in January 2006. Chapter 6 (Social Insurance and Protection) was prepared by Monika Huppi, Christian Bodewig, Csaba Feher and Pia Schneider. Chapter 7 (Transport) was prepared by Richard Martin Humphreys. Irina Smirnov led the effort to consolidate the fiscal data with initial input from Lejla Čatić, and followed up on numerous technical and data issues. Samra Bajramović helped with gathering the health data. Željka Njuhović helped with processing parts of the document and coordinated mission schedules, data requests and translation work. Ekaterina Stefanova also provided valuable assistance. Tijana Medić translated the document in local language.

The report has also benefited from discussions with, and comments from colleagues at different stages of preparation, in particular: Asad Alam, Arup Banerji, Francois Decaillet, Vesna Frančić, Cheryl Gray, Juan Carlos Ginarte, Betty Hanan, Satu Kahkonen, Elena Kantarovich, Franz Kaps, Mirjana Karahasanović, Sanjay Kathuria, Dušan Kidrić, Tracey Lane, Zorica Lešić, Sanja Madžarević-Šujster, Ali Mansoor, Alia Moubayed, Vikram Nehru, Camille Lampart Nuamah, Anand Rajaram, Jekaterina Rojaka, Anita Schwarz, Willem van Eeghen, Olga Vybornaia, Deborah Wetzell and Matthias Zeeb. The peer reviewers were Santiago Herrera and Vera Songwe.

The team is indebted to officials from the BH governments at all levels and the central bank, to government agencies and non-governmental organizations, for providing key inputs, data and help with the analysis. Support from the DfID for the PKF consultants who worked on Chapter 3 is gratefully acknowledged. The team also benefited from comments and discussions with colleagues from the IMF, the DfID, the OHR, the EC, the USAID, the U.S. Treasury, the U.S. State Department, the EBRD, the KfW, the EUPM, the NATO, PWC, and other organizations.

ACRONYMS AND ABBREVIATIONS

BFP	Budget Framework Paper
BH	Bosnia and Herzegovina
CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CIT	Corporate Income Tax
COM	Council of Ministers
CSA	Civil Service Agency
CSW	Center for Social Work
DfID	(UK) Department for International Development
DPA	Dayton Peace Accord
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECA	Europe and Central Asia
EI	Employment Institute
EMSAC	Economic Management Structural Adjustment Credit
EU	European Union
FBH	Federation of Bosnia and Herzegovina (BH entity)
FIB	Federation Investment Bank
FTA	Free Trade Agreement
FTE	Full-Time Equivalent
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GNI	Gross National Income
HIF	Health Insurance Fund
HJPC	High Judicial and Prosecutorial Council
HR	High Representative
ILO	International Labor Organization
IMF	International Monetary Fund
IPH	Institute for Public Health
ITA	Indirect Tax Authority
KM	Convertible Mark
LSMS	Living Standards Measurement Survey
MoD	Ministry of Defense
MoF	Ministry of Finance
MoH	Ministry of Health
MoLVA	Ministry of Labor and Veterans' Affairs
MTDS	Medium-Term Development Strategy
MTEF	Medium-Term Expenditure Framework
NATO	North Atlantic Treaty Organization
NEER	Nominal Effective Exchange Rate

NFC	National Fiscal Council
NHA	National Health Accounts
NMS	New Member States (EU)
NOE	Non-Observed Economy
NPV	Net Present Value
OECD	Organization for Economic Cooperation and Development
OHR	Office of the High Representative
PIO	Pension Insurance Fund
PAR	Public Administration Reform
PEIR	Public Expenditure and Institutional Review
PfP	Partnership for Peace (NATO)
PHC	Primary Healthcare
PIC	Peace Implementation Council
PIT	Personal Income Tax
PPP	Purchasing Power Parity
REER	Real Effective Exchange Rate
RS	Republika Srpska (BH entity)
SAA	Stabilization and Association Agreement
SaM	Serbia and Montenegro
SAP	Stabilization and Association Process
SEE	Southeast Europe
SWCP	Social Welfare and Child Protection
ULC	Unit Labor Costs
UNECE	United Nations Economic Commission for Europe
US	United States
USAID	United States Agency for International Development
VAT	Value Added Tax
VNI	Vital National Interests
WHO	World Health Organization

CONTENTS

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY	i
OVERVIEW	iii

INTRODUCTION	1
---------------------------	----------

1. THE STRATEGIC SETTING

A. Introduction	1
B. Political Background	3
C. The Macroeconomic Setting	5
D. The Non-Observed Economy	11
E. Conclusion	13

2. FISCAL BACKGROUND AND FISCAL SUSTAINABILITY

A. Introduction	15
B. Recent Fiscal Developments	15
C. Government Revenues	17
D. The Level of Public Spending	18
E. The Composition of Public Spending and the Quality of Government	20
F. Fiscal Sustainability	24
G. The ‘Stronger Reform’	27
H. The ‘Slower Reform’ Scenario	39
I. Recommendations	44

3. STATE BUILDING – A KEY CHALLENGE AND AN OPPORTUNITY

A. Introduction	47
B. The Current State of Institution Building	48
C. The Baseline Scenario: Methodology	49
D. The Baseline Scenario: Results	51
E. Conclusion	53

4. STRATEGIC ISSUES IN MANAGING THE PUBLIC

ADMINISTRATION

A. Introduction	55
B. The Cost of Public Sector Employment	56
C. The Impact of Current Pay Practices	62
D. Managing the Cost of the Public Administration	68
E. Recommendations	71

5. EDUCATION

A. Introduction	73
B. Institutional Arrangements and Educational Spending	73
C. Education Outcomes	75
D. Recommendations for Improving Efficiency and Outcomes	79
Improving the Efficiency of Resource Use	80
Improving Education Performance	82

6. SOCIAL INSURANCE AND PROTECTION.....	85
A. Introduction	85
B. Overall Spending on Social Insurance and Protection	86
C. Social Security Contribution Rates.....	86
Recommendations.....	88
D. Social Insurance.....	89
D1. Pensions.....	89
Recommendations.....	94
D2. Unemployment Insurance.....	95
Recommendations.....	99
D3. Healthcare.....	100
Recommendations.....	109
E. Social Programs Financed From General Revenues	111
E1. Veterans' Benefits.....	111
Recommendations.....	113
E2. Social Welfare and Child Protection Benefits	114
Recommendations.....	116
7. TRANSPORT	117
A. Introduction	117
B. Institutional Context and Public Expenditures on Transport.....	118
C. The Quality of Transport Infrastructure.....	121
D. How Efficient is the Expenditure Process for the Transport Sector.....	124
E. The Expenditure Requirements and Revenues of the Transport Sector	125
F. Recommendations	129

TABLES

Table 1.1 BH: Selected Indicators, 2001-2006.....	6
Table 1.2 BH: Wages, Employment and Unit Labor Costs, 2000-2004	8
Table 1.3 Adjustments for the Non-Observed Economy in GDP Statistics	12
Table 2.1 BH: General Government Fiscal Developments, 1999-2005	16
Table 2.2 BH: Entity Budgets, 2005-2006	17
Table 2.3 Tax Revenues in a Comparative Perspective, 2004	17
Table 2.4 Social Security Contribution Rates	18
Table 2.5 General Government Revenues and Spending for Selected Countries	19
Table 2.6 BH: General Government Spending, 2002-2005	21
Table 2.7 Measures of Quality of Government Outcomes	22
Table 2.8 General Government Spending, Economic Classification, 2004	23
Table 2.9 General Government Spending, Functional Classification, 2004	24
Table 2.10 General Government Debt.....	25
Table 2.11 Debt Stabilizing Primary Balance	25
Table 2.12 Fiscal Sustainability Scenarios: Key Assumptions	26
Table 2.13 BH: Quantifying Fiscal Pressures, 'Stronger Reform' Scenario, 2005-2010.....	27
Table 2.14 BH: The Stock of Domestic Claims, 'Stronger Reform' Scenario.....	28
Table 2.15 BH: Payments to Settle Domestic Claims, 'Stronger Reform' Scenario.....	29
Table 2.16 BH: Defense Reform, 'Stronger Reform' Scenario.....	31
Table 2.17 BH: Police Reform, 'Stronger Reform' Scenario.....	33
Table 2.18 BH: Quantifying Spending Measures, 'Stronger Reform' Scenario, 2005-2010.....	34
Table 2.19 BH: Wage Bill, 'Stronger Reform' Scenario	35

Table 2.20 BH: Education Outlays, 'Stronger Reform' Scenario, 2005-2010	36
Table 2.21 BH: Outlays on Social Welfare, Child Protection and Veterans Benefits, 'Stronger Reform' Scenario, 2005-2010	37
Table 2.22 BH: General Government Pension Outlays, 2005-2010	37
Table 2.23 BH: Summary of the 'Stronger Reform' Scenario, 2005-2010.....	39
Table 2.24 BH: Quantifying Fiscal Pressures, 'Slower Reform' Scenario, 2005-2010	40
Table 2.25 BH: Stock of Domestic Claims, 'Slower Reform' Scenario	41
Table 2.26 BH: Payment to Settle Domestic Claims, 'Slower Reform' Scenario.....	41
Table 2.27 BH: Quantifying Spending Measures, 'Slower Reform' Scenario, 2005-2010	42
Table 2.28 BH: Summary of the 'Slower Reform' Scenario	43
Table 3.1 BH: State Building, 2002-2005	49
Table 3.2 BH: New Institutions and Functions Needed in the Near to Medium Term	52
Table 3.3 BH: New Institutions and Functions Needed in the Longer Term	52
Table 3.4 BH: Increased Funding for Existing Institutions, State BFP, 2006-2008.....	52
Table 3.5 BH State Building: Cost Summary.....	53
Table 4.1 Public Employment and Wages by Level of Government, 2005	59
Table 4.2 Estimated Functional Allocation of the 2005 Wage Bill.....	60
Table 4.3 Net Compensation in the Private Sector Compared to the State and the FBH, 2004 ...	63
Table 4.4 Comparison of Total Net Compensation with Neighboring Countries	64
Table 4.5 Comparison of Average Net Pay in Selected Cantons, 2004	65
Table 4.6 Compensation within the Core Civil Administration, 2004	67
Table 4.7 Estimated Savings in Wage Bill from Different Policy Options.....	69
Table 5.1 Education Spending: Overall and on Wages in Selected Countries	74
Table 5.2 BH: General Government Education Spending	75
Table 5.3 Student/Teacher Ratios, BH and Selected Comparators, 2003	76
Table 5.4 Education Coverage in Selected Countries	76
Table 5.5 BH: Net Enrollment Rates.....	77
Table 5.6 BH: Private Outlays on Education	77
Table 5.7 Projected Budget Savings and Estimated Outlays for Education, 2005-2010.....	79
Table 6.1 BH and NMS: Expenditures on Social Protection, 2004.....	86
Table 6.2 BH: Summary of Social Protection Benefits and Financing Sources	87
Table 6.3 Core Parameters of BH Pension Systems.....	89
Table 6.4 BH PIOs: Revenues and Expenditures, 2003-2005.....	91
Table 6.5 BH: Composition of Pension Beneficiaries.....	91
Table 6.6 BH: Registered Unemployed by Beneficiary Category, 2005	96
Table 6.7 BH: Entity Employment Institutes, 2004	97
Table 6.8 BH: HIF Revenues, 2002-2004	101
Table 6.9 BH: Health Sector Arrears, 2004.....	102
Table 6.10 Health Outlays, Selected Countries, 2004.....	102
Table 6.11 FBH Health Expenditures, 2002-2004	103
Table 6.12 BH: Number of Health Workers, 2002 and 2004.....	103
Table 6.13 BH: HIF Membership by Enrollment Category, 2004	103
Table 6.14 Number of Beds and Physicians, Selected Countries, 2003.....	105
Table 6.15 BH: Public Health Providers, 2004	106
Table 6.16 Hospital Productivity, Selected Countries.....	106
Table 6.17 BH: Registered Private Providers, 2004.....	107
Table 6.18 BH: Estimated Pharmaceutical Expenditures, 2004.....	107
Table 6.19 Health Indicators for Selected Countries, 2002.....	108
Table 6.20 BH: General Revenue Funded Cash Transfer Spending, 2002-2005	111
Table 6.21 BH: Beneficiaries of Social Welfare and Child Protection Programs, 2004.....	114
Table 7.1 BH: Transport Sector Expenditures, 2000-2005	119

Table 7.2	BH: Transport Expenditures by Sector, 2000-2005	120
Table 7.3	Expenditure Outlays in Transport, Government and Private	120
Table 7.4	Coverage of Road Infrastructure	121
Table 7.5	Condition of the Main and Regional Road Network, 2004	122
Table 7.6	BH: Characteristics of the Railway Network, 2005	123
Table 7.7	BH: Passenger and Freight Volumes, 1999-2004	123
Table 7.8	Selected Productivity Indices for Selected Railways, 2003	124
Table 7.9	Ratings of Infrastructure Quality, Selected Countries.....	124
Table 7.10	BH Road Network: Estimated Maintenance Expenditure Needs, 2006-2010.....	126
Table 7.11	BH Railways: Projected Expenditures, 2006-2010	127
Table 7.12	BH: Road and Railroad Revenues and Financing Gap, 2006-2010	129

FIGURES

Figure 1.1	BH: Percent of Firms Indicating a Problem to Doing Business.....	4
Figure 1.2	BH: Selected Economic Indicators	7
Figure 2.1	Non-Interest Expenditures and Average GNI per Capita.....	20
Figure 4.1	BH: General Government Wage Bill	56
Figure 4.2	Comparisons of the General Government Wage Bill, 2004.....	57
Figure 4.3	BH: Composition of the Overall and Cantonal Wage Bills, 2005	59
Figure 4.4	Wage Outlays on Defense and Public Order, 2004.....	61
Figure 4.5	Distribution of Employment by Functions in the Cantons, 2004.....	61
Figure 4.6	General Government Employment, 2004	62
Figure 5.1	Percent of Students Achieving Below Minimum Standard in Mathematics Assessment by Region, 2003-2004.....	78
Figure 6.1	Replacement Rates for Selected Countries	92
Figure 6.2	BH: Pension Replacement Rates.....	93
Figure 6.3	BH: Employment Replacement Rates.....	96
Figure 6.4	BH: Outlays by Active and Passive Employment Programs	97
Figure 6.5	FBH EI: Revenue and Expenditure Projections.....	98
Figure 6.6	RSEI: Revenue and Expenditure Projections	99
Figure 6.7	BH: HIF Expenditures by Functional Categories	104
Figure 6.8	Annual Outpatient Contact Rates, Selected Countries.....	105
Figure 6.9	Spending on Social Welfare in Selected Countries	112
Figure 6.10	BH: Veterans Beneficiaries by Category, 2004	112
Figure 6.11	FBH Cantons: Social Assistance Spending Per Recipient, 2004	116
Figure 7.1	BH: Recurrent and Capital Expenditures, 2000-2005.....	118
Figure 7.2	BH: Traffic Deaths per 10,000 Vehicles.....	122

ANNEXES

Annex A:	The Debt-Stabilizing Primary Balance	133
Annex B:	State Building.....	135
Annex C:	Education	145

REFERENCES	147
-------------------------	------------

EXECUTIVE SUMMARY

Bosnia and Herzegovina (BH) has made substantial progress in economic reconstruction and nation building since the end of the 1992-1995 war, and fiscal consolidation has been strong through 2004. Recent progress has culminated in the start of negotiations in early 2006 with the European Commission on a Stabilization and Association Agreement (SAA). SAA negotiations have the potential of helping catalyze the pace of political and economic change needed to strengthen the single economic space, create an efficient government and boost living standards.

The authorities should be commended for the progress achieved, but more remains to be done to further strengthen government institutions, advance transition to a market economy and reduce risks to hard-won fiscal stability. Government institutions remain cumbersome, excessively decentralized and expensive. General government expenditures relative to GDP are still substantially larger than in countries with similar levels of income per capita and higher than in almost all countries in southeast Europe, while outcomes are in general poorer. The bulk of spending, moreover, seems inefficiently distributed across government functions, resulting in excess spending on wages and untargeted social transfers, and a dearth of funds for targeted social welfare and child protection and for maintenance of existing capital projects.

The governments of BH will be well advised to build on progress achieved and move forward with determination to address the key fiscal challenges. This Public Expenditure and Institutional Review (PEIR) presents specific recommendations on how to do this over both the near and medium term, as summarized in the following overview section and elaborated in greater detail in the main report. Recommended measures include broad-based efforts to strengthen state-level government institutions, ensure fiscal sustainability and reduce the government burden on the economy. The report also urges the authorities to take steps to settle the outstanding stock of domestic claims and resolve property restitution in a manner that balances the private and public interest. The proposed reforms of the public administration, education, social spending and transport will also allow BH to improve the quality of government spending and thereby contribute to boosting the economy's supply potential.

Successfully addressing the noted medium-term challenges will require up-front reforms in a range of areas discussed in the report. The following ten-point agenda highlights some of the most crucial areas for immediate action:

- (1) Establish a realistic target for reducing public employment by prioritizing key functions and activities of government institutions and implementing a partial hiring freeze.
- (2) Enhance performance incentives by decompressing the base salary structure, folding allowances into the base wage and reducing nominal salaries for positions with remuneration rates that most exceed those for private-sector comparators.

- (3) Implement per-student or capitation financing in education and reduce or moderate the growth of teacher salaries. Use part of the savings from these measures to help improve education outcomes.
- (4) Seize the opportunity offered by stronger than projected revenues from the value-added tax to reduce social security contribution rates, combined with broadening the contribution base and harmonizing the contribution rates across the entities. Reduce exemptions from contributions and shift to the entity budgets the responsibility for paying contributions for exempt individuals.
- (5) Help ensure the fiscal sustainability of the pension systems by legislating pension indexation based on the consumer price index (CPI). Abolish transitory arrangements allowing for retirement before the age of 65.
- (6) Rescind the recent changes to the Employment Law of the Federation of BH (FBH) and limit the maximum duration of unemployment benefits to 12 months. Discontinue unemployment insurance-financed soft loans to enterprises administered through the FBH Employment Institutes and the FBH Investment Bank.
- (7) Focus veterans' programs on the most vulnerable: limit disability benefits to categories I-VI and stop implementing the untargeted benefits system for holders of military decorations in the FBH. Reallocate resources in a targeted fashion to currently underfunded social welfare and child protection and centralize financing at the entity level.
- (8) Restructure and rationalize hospital care and limit high-cost procedures to a few hospitals. At the same time, strengthen primary healthcare providers as gatekeepers to hospital care and ensure efficient referrals.
- (9) Centralize drugs procurement to at least the entity level. Limit reimbursement for non-innovative drugs to the generic equivalent and for new drugs to the lowest cost therapeutic equivalent.
- (10) Ensure that priority in spending within the transport sector is placed on improving the condition of the current transport network, including on reducing the backlog maintenance. Develop a comprehensive strategy and policy for the transport sector to identify priorities and to ensure that all debt-financed public investments are consistent with the medium-term fiscal envelope available to the government. In particular, ensure that developing the road infrastructure along corridor Vc and procurement of rolling stock are consistent with this strategy and the fiscal envelope available.

OVERVIEW

1. Bosnia and Herzegovina (BH) has made substantial progress in economic reconstruction and nation building since the end of the 1992-1995 war, and fiscal consolidation has been strong from the late 1990s through 2004. A lot more needs to be done to help narrow the gap with the more advanced reformers in the region, however, and to resume fiscal consolidation that has stalled in 2005 and 2006. Recent progress has culminated in the start of negotiations in early 2006 with the European Commission on a Stabilization and Association Agreement (SAA). SAA negotiations, together with negotiations on constitutional change among the key political parties that commenced in late 2005 and that hopefully will be resumed after recent failings, have the potential of helping catalyze the pace of political and economic change needed to strengthen the single economic space, create an efficient government and boost living standards. Whether this potential is realized will depend on the authorities' will to press ahead with reforms.

2. The authorities should be commended for the progress achieved, but a lot more remains to be done to further strengthen government institutions, advance transition to a market economy and reduce risks to hard-won fiscal stability. Government institutions remain cumbersome, irrationally decentralized and expensive. General government expenditures relative to GDP are still substantially larger than in countries with similar levels of income per capita, while outcomes are in general poorer. The bulk of spending, moreover, seems inefficiently distributed across government functions, resulting in a dearth of funds for targeted social welfare and child protection and insufficient resources for maintenance of existing capital projects. The state government has been strengthened since the signing of the Dayton Peace Accords (DPA) that ended the war, but remains substantially weaker than the two constituent entities formed along ethno-religious lines: the Bosniak-Croat dominated Federation of Bosnia and Herzegovina (FBH) and the Serb-dominated Republika Sprska (RS).

3. This Public Expenditure and Institutional Review (PEIR) analyzes the key issues that bear on the level and composition of public spending and the stance of fiscal policy. Understanding these issues is all the more important given the substantial fiscal pressures that are emerging and are set to multiply over the coming years. These pressures include the need to strengthen the institutions of the state level of government, outlays needed to settle the large stock of domestic claims, and the ultimate start of property restitution. Government plans to embark on large infrastructure projects would also place substantial demands on fiscal resources. The analysis of the level and composition of spending and the stance of fiscal policy serves as the basis for the report's recommendations, with the overriding objective of helping achieve stronger growth in output and employment, reduce poverty and ensure fiscal sustainability.

4. The complex institutional structure emerging from the DPA and the institutionalized divisions along ethnic and religious lines, help create additional challenges to reform implementation in BH. Vested interests within the three constituent peoples, the Bosniaks, the Croats and the Serbs, have resisted changes to the DPA for longer than initially envisioned, hampering much-needed progress towards a modern and efficient government. The indirect costs to BH from failing to reform and modernize the DPA ten years after the war are probably large, but hard to quantify. The

report finds, however, that the direct costs of the DPA, as measured in terms of higher than optimal government spending, are rather small; it is inefficient and ineffective spending and not the DPA that is the key drain on public resources.

A. THE MACROECONOMIC SETTING

5. Economic activity has remained robust over the last several years despite a slowdown of structural reform implementation. Real GDP growth is likely to have eased modestly to 5.3 percent in 2005 from 6.2 percent in 2004. Inflation rose moderately in 2005 and is likely to increase to 5 percent or more in 2006, following the introduction of the VAT from the start of 2006. Unemployment and poverty have remained high and little changed over the last several years, as the share of employment in the informal economy has continued to rise. Companies in the informal sector pay substantially lower wages and do not make social security contributions, keeping poverty high despite robust real GDP growth. The rising informalization of economic activity, in turn, has been in response to rigid labor markets and a business environment that continues to be perceived as unfriendly.

6. The large current account deficit remains a key macroeconomic challenge. With the general government budget in rough balance, the deficit reflects a dearth of savings among companies and, of late, households. Corporate performance appears to have improved somewhat over the last few years, but probably one-half of all companies in BH are loss-making, paying little if any in taxes and social security contributions. As a result, renewed efforts on structural reforms are essential, especially in advancing privatization and corporate restructuring, improving the business and regulatory environment and carrying out labor market reforms. Growth in bank lending to households remains strong and, combined with increases in formal sector wages that consistently outstrip inflation and productivity gains, has contributed to boosting imports and the current account deficit.

B. FISCAL BACKGROUND AND FISCAL SUSTAINABILITY

7. BH's fiscal position has improved markedly since the end of the war, but many issues need to be resolved to limit risks to fiscal stability and growth. The commitment-basis general government deficit narrowed from 6.3 percent of GDP adjusted for the size of the non-observed economy in 1999 to near balance over the last several years, while general government expenditures decreased to 40.5 percent of adjusted GDP. However, expenditures rose again in 2005 as a share of GDP and are set to increase further in 2006 ahead of the parliamentary elections scheduled for October, reversing part of the earlier consolidation. At current levels, government expenditures are a full 5 percent of GDP higher than in countries with similar levels of income per capita and 4 percent higher than average of the countries in Southeast Europe (SEE). Government spending is significantly higher than in faster growing and wealthier economies including Ireland, South Korea and the Baltic states. Outcomes of government spending, meanwhile, tend to be substantially poorer. An important priority for the governments going forward would be to ease the government's burden on the economy and improve the delivery of public services.

8. The challenges to reducing government spending relative to GDP will be multiplied by the need to simultaneously tackle emerging new fiscal pressures. Doing so will require that the governments implement ambitious and wide ranging spending reforms, including curbing and reducing existing spending. Careful trade-offs among competing priorities need to be made to balance the private and the public interest. The capacity for settling, coordinating and implementing fiscal policy should be strengthened substantially to give credibility to the government reform agenda. All told, the measures to reduce or curb spending would need to go beyond those currently considered by the governments and their implementation would require significant political courage. The strong and

coordinated support from all members of the international community will also be vital for successful reform implementation.

9. The PEIR carries out a fiscal sustainability analysis by quantifying the likely fiscal pressures and the potential savings from a subset of the recommendations informed by the analysis of specific issues and sectors. A ‘stronger reform’ scenario assumes ambitious spending reforms, in line with the measures proposed in the report, while a ‘slower reform’ scenario assumes a more modest implementation effort. Under the ‘stronger reform’ scenario, both government spending and debt are placed on a downward path, with a temporary financing gap emerging in the near term. Private creditors may be willing to fund the gap provided the governments’ agenda is credible. Alternatively, the authorities will need to implement either more ambitious spending reduction measures, stronger efforts to curb spending pressures or accept that state building may take longer than currently anticipated. Under the ‘slower reform’ scenario, government debt is set on an upward path, with a widening fiscal deficit that is unlikely to be financed. In summary, how much the authorities can accomplish in terms of state building and tackling the remaining fiscal pressures will ultimately be constrained by their political courage and ambition for reform.

C. STATE BUILDING

10. Strengthening the institutions of the central level of government, which were left deliberately diminutive under the DPA, is both a key challenge and an opportunity for the BH authorities. To help ensure fiscal sustainability, the authorities would be well advised to advance institution building only within strict budget constraints. The recently adopted reforms of police and defense are welcome achievements but present potential fiscal risks. As the authorities finalize these reforms, the prospect of a substantial and permanent increase in wage outlays would need to be carefully weighed against alternative priority spending and the broader macroeconomic effects of such decisions. Principles to guide institution building could include, first, the restriction that when institutions of the sub-national level of government are shifted to the national level without adding functions, the shift must be cost-neutral. Further, if adding functions or capacities within existing institutions results in costs, there should be an offsetting saving elsewhere. **Furthermore, EU integration is not a reason *per se* to increase spending.** To the contrary, the experience of the new EU member states (NMS) shows that government spending relative to GDP was reduced in the ten or so years preceding accession, in some cases such as Estonia and the Slovak Republic quite substantially. BH should learn from this experience.

11. The link between institution building and fiscal sustainability is often not acknowledged and sometimes state building is portrayed as a *sine qua non* that needs to be pursued regardless of fiscal costs. Such an approach will ultimately have detrimental consequences for BH’s hard-won fiscal and financial stability and the authorities are strongly urged not to pursue it. Were the authorities to decide to advance institution building at a more rapid pace than envisaged in this study, for example, other spending reductions would need to be found to help ensure fiscal sustainability. As with the other fiscal pressures the country faces, state building is largely about establishing a process of agreeing and setting government priorities, along with the ability to muster the consensus needed to bring forth change.

D. CHALLENGES IN MANAGING THE PUBLIC ADMINISTRATION

12. Strengthening the quality of public administration remains a key challenge for BH. Despite efforts over the past few years to reduce the burden of public employment, the wage bill relative to GDP is larger than in almost all countries in the broader region, while outcomes remain

substandard. The outsized share of wages in GDP primarily reflects wage rates that are out of line, especially for lower grade employees at the state and, to a lesser extent, at the FBH level. The size of overall public employment is not large relative to the country's population, but is excessive relative to total employment in the economy. However, given the substantial outsized employment in police, defense, the judiciary and education, as well as the duplication arising from the fragmented administrative structure, the size of the core public administration is very small, with negative consequences for the delivery of public services.

13. Reducing the cost of the public administration over the medium term will necessitate tight control, including a reduction in the salary levels of some categories of employees. Because the bulk of public employment is at the lower levels, excessive pay levels for these positions can have a significant impact on the overall wage bill. At the state level in particular, further assessment needs to be carried out as to whether the planned but as yet unrealized reduction in salary levels for 2006 by 10 percent should not be augmented to reduce public sector employment costs. Moreover, without good coordination between the levels of government, there is a risk that fiscal costs will rise even further, as employees are shifted to the state level as state building advances. Even within the current entity structures, there is a need to avoid over-paying for positions that are less essential to the core functions of government.

14. Difficult trade-offs need to be made to reduce the levels of employment at some levels of government. With wage outlays for defense, public order, the judiciary and education together accounting for about three-fourths of the overall wage bill, any serious attempt to reduce costs must include those sectors. Setting a realistic budgetary target for savings is one strategy to compel a prioritization of functions and activities across all levels of government. Incentives for performance must also be strengthened if there is to be any genuine improvement in the quality of public management. Though substantial progress has been made in introducing merit-based appointment in the civil service, the pay system remains largely unreformed.

Public Administration: Summary of Recommendations 1/

- Create a pay system that embodies transparency and accountability.
- Progressively decompress the salary structure, including through decreasing wages in nominal terms for some categories of public employees. Eliminate and/or consolidate most allowances into the base salary. Revise salary laws and ensure consistency across all levels.
- To help public administration management, develop consolidated personnel databases.
- Increase oversight for promotion and career advancement. Refine the criteria for entry into the civil service.
- Establish a realistic target for reducing public employment. Implement a partial hiring freeze.
- Follow through with significant reforms in defense, police and the judiciary.

1/ See Chapter 4, pp. 68-69 for the full list of recommendations.

E. EDUCATION

15. BH spends more on education than most countries in the broader region, including Croatia, SaM and Poland. Nonetheless, inefficient education spending within an institutionally complex structure has resulted in unacceptably poor education outcomes. Forty percent of students do not acquire basic skills and knowledge, while the large numbers of students enrolled in costly vocational schools graduate ill-equipped to meet the demands of BH's changing economy. Secondary and university enrollment remain low. Institutions of higher education, meanwhile, allow publicly-

funded students to take a long time to graduate, resulting in a waste of resources and in poorly-motivated graduates. Further, institutional fragmentation has enshrined significant regional differences in spending and educational achievements, making it hard for the single economic space to take firmer hold.

16. The education system needs substantial improvement, but more resources would not necessarily help improve education outcomes. A priority for the governments should be to implement measures to improve the efficiency of spending and streamline the organization and financing of education. Provided that they materialize, part of the savings from improved efficiency should be used to help improve education outcomes. A plan to improve outcomes could include measures to improve the classroom environment through increased availability of textbooks and other materials, to strengthen teachers' effectiveness through training, and to provide additional incentives and penalties to encourage school attendance by children from the poorest households. The agenda considered in the PEIR is undoubtedly ambitious and would require substantial political will to implement. It is, however, central to the future welfare of the country. Whether it could be implemented in the current fragmented institutional framework is a question that deserves careful consideration.

Education: Summary of Recommendations 1/

- Adopt policies to decrease teacher numbers in line with the decline in enrollments.
- Move to the recommended average class size for primary education in both entities.
- Implement per-student or capitation financing.
- Reduce or moderate the growth of teacher salaries.
- Restructure secondary education to reduce costs and improve its relevance.
- Move toward unified higher education management as a tool for major savings.
- In higher education, increase fees for repeating students and raise fees for foreign students.
- Use a part of these savings to help improve education outcomes.

1/ See Chapter 5, pp. 76-80 for the full list of recommendations.

F. SOCIAL PROTECTION

17. BH's overall spending on social protection is somewhat larger relative to GDP than in the faster growing European countries but broadly similar to the average for the NMS. The composition of spending is different, however. Smaller pension outlays have kept overall outlays for social insurance (pensions, unemployment benefits, health insurance and, in the RS, child benefits) relatively low despite higher health expenditures. By contrast, expenditures on social protection financed from general revenues are larger, thanks to sizable categorical benefits, mostly for those affected by the war.

18. The social insurance system suffers from persistent noncompliance, reflecting evasion, poor collection and low formal sector employment. With revenues falling short of legal entitlements, social insurance schemes regularly require general revenue transfers. Nonetheless, social security contribution rates tend to be higher than in most NMS and the OECD countries, underpinning the substantial informalization of the economy. Reducing social security contribution rates, while broadening and harmonizing the tax base across the entities should be a priority for the governments.

Social Security Contributions: Summary of Recommendations 1/

- Reduce social security contribution rates, while broadening the contribution base and harmonizing the contribution rates across the entities.
- Reduce exemptions from paying contributions. Shift to the entity budgets the responsibility for paying contributions for exempt individuals.
- Improve administration to increase collection efficiency and contribute to a transparent system.
- Unify the base and the administration for personal income taxation and social security contributions.

1/ See Chapter 6, p. 84 for the full list of recommendations.

19. High dependency ratios and low coverage rates in both entity pension systems are a threat to their financial sustainability, so far ensured by application of the coefficient rule. Long-term reform is needed, but further parametric changes in the system need to be implemented sooner.

Pensions: Summary of Recommendations 1/

- Abolish transitory arrangements allowing for retirement before the age of 65.
- Introduce CPI-based, legally anchored pension indexation.
- Limit recognition of pension rights to those whose contribution history has been fully covered.
- Modify the accrual schedule to give more weight to the later years of contribution.

1/ See Chapter 6, p. 90 for the full list of recommendations.

20. Generous unemployment benefits, especially in the FBH, tend to discourage the unemployed from searching for work. It is not so much cash unemployment benefits as free health insurance coverage for all registered unemployed that has been a major incentive to register with the employment services, draining public resources and confusing policy choices. Reducing generous unemployment benefits and inefficient spending on active labor market programs should facilitate a substantial reduction in unemployment contribution rates in the FBH and, in turn, support efforts to reduce the informalization of the economy.

Unemployment Insurance: Summary of Recommendations 1/

- Rescind the recent changes to the FBH Employment law and limit the maximum duration of unemployment benefits to 12 months.
- Reduce expenditure on untargeted and unevaluated active labor market programs in the FBH.
- Fully discontinue enterprise credit programs.
- Reduce the FBH unemployment contribution rate.

1/ See Chapter 6, p. 95 for the full list of recommendations.

21. The health system is fragmented and burdened with substantial duplication, excess employment and inefficient use of available resources. Access to healthcare, moreover, is inequitable, with informal payments larger than legally-mandated co-payments, implicit rationing and limited portability of insurance being the main causes. Substantial differences in resources and small risk pools in the FBH are also a factor. Preventable and high-cost diseases rank highly in the burden of disease. Inadequacies in the organization and delivery of care further contribute to concerns about equity in access. Inefficiencies in healthcare spending are further illustrated by the fragmented process of drug procurement.

Health: Summary of Recommendations 1/

- Restructure and rationalize hospital care. Limit high-cost procedures to a few hospitals.
- Strengthen primary healthcare providers as gatekeepers to hospital care. Ensure efficient referrals.
- Ensure insurance portability and a common benefit package at least at the entity level.
- Create a central drug agency in charge of quality control, positive list and pricing.
- Centralize drugs procurement to at least the entity level. Limit reimbursement for non-innovative drugs (new drugs) to the generic equivalent (lowest cost therapeutic equivalent).
- Target low income groups with services such as immunization and prevention of tuberculosis.

1/ See Chapter 6, pp. 105-106 for the full list of recommendations.

22. Transfers financed from general revenues are high by international standards as a share of GDP, but the share of these transfers that are means-tested with the explicit goal of reducing poverty is smaller than in any other country in the broader region. Crowded out by veterans' benefits, the system of social welfare and child protection is unfunded, with the exception of the children's fund in the RS. One in five individuals in BH benefits from some type of social transfer, but such transfers reach only one-fourth of the poor and have a smaller poverty alleviating effect than in Croatia or Bulgaria. Cash transfers to individuals are budgeted to increase further in 2006, notably in the FBH, due to a continued proliferation and expansion of largely untargeted benefits. Given overall fiscal pressures and considerations of fairness, BH should aim to reduce the overall share of resources allocated to social transfers, while restructuring the system to ensure that it provides an effective social safety net.

Transfers Financed from General Revenues: Summary of Recommendations 1/

- Focus veterans' programs on the most vulnerable. Adjust benefit levels downward in line with benefits to civilian victims of war and the disabled.
- Limit veterans' disability benefits to disability categories I-VI.
- Refrain from implementing the FBH system for holders of military decorations.
- Prevent "double dipping" by all beneficiaries.
- Discontinue additional cantonal and municipal veterans' benefits programs.
- Centralize financing for the core social welfare and child protection benefits at the entity level.
- Merge the benefits for social welfare, refugees and internally displaced persons.
- Improve targeting, including through greater reliance on means- and proxy means-testing.

1/ See Chapter 6, p. 109 and p. 112 for the full list of recommendations.

G. TRANSPORT

23. The overall condition of the transport infrastructure remains poor and inadequate for a country of the size of BH despite considerable expenditures in the sector over the last decade. The ungainly institutional structure of the sector, especially of the road sub-sector, has substantially raised transaction costs and blunted the efficiency of spending. Moreover, expenditures on transport have fallen over the last several years, especially on rehabilitation and maintenance, resulting in a large maintenance backlog. Going forward, demand for both road and railroad freight transport is projected to increase substantially. Passenger railroad traffic, by contrast, appears unlikely to recover to even pre-war levels. Since the return on investment in rehabilitation is currently considerably higher on average than the return on upgrading or new road construction, priority needs to be given to expenditures to clear the backlog maintenance and rehabilitate the network. The issues are similar for the railroad sub-sector.

24. Recent developments are cause for concern. The FBH government is in the process of procuring passenger rolling stock at a cost that does not appear to take fiscal constraints fully into account, with technical characteristics far in excess of the capacity of the railroad network. Other fiscal concerns are raised by the authorities' intentions to develop rapidly the road infrastructure of corridor Vc, an undertaking that is likely to cost a sum equivalent to one-half of BH's GDP. In light of these developments, the PEIR argues that any public investment should be advanced only within prioritized national and sector investment strategies, consistent with the available fiscal envelope. Involving the private sector is important, but a substantially improved institutional framework for public private partnerships (PPP) and open and transparent competitive bidding are pre-requisites to ensuring that best value is obtained for the public resources available.

Transport: Summary of Recommendations 1/

- Develop a comprehensive national strategy for the transport sector, with priorities and timing.
- Carefully weigh public investment plans against other alternatives within the overall fiscal envelope. Proceed with such plans only within national and sector strategies.
- Give priority to clearing the maintenance backlog and rehabilitating the existing road network.
- Strengthen the institutional framework for PPP.
- Work toward consolidating policy making and operational responsibilities at all levels.
- Revise the existing provision in the FBH law on roads to enable a shift of resources to the main road networks carrying the most traffic.
- Retrench railways services and lines to a viable core network to improve performance.

1/ See Chapter 7, p. 126 for the full list of recommendations.

1. THE STRATEGIC SETTING

A. INTRODUCTION

1.1. Bosnia and Herzegovina (BH) has made substantial progress in economic reconstruction and nation building since the end of the 1992-95 war, but a lot more needs to be done to help narrow the gap with the more advanced reformers in the region. Recent progress has culminated in the start of negotiations in early 2006 with the European Commission on a Stabilization and Association Agreement (SAA). The SAA negotiations have the potential of helping catalyze the pace of political and economic reforms needed to strengthen the single economic space, create an efficient government and boost living standards. The ultimate success of SAA implementation and the further integration into the European Union (EU) will crucially depend on the authorities' determination to press ahead with reforms.

1.2. A lot more remains to be done to further strengthen government institutions, advance transition to a market economy and reduce risks to hard-won fiscal stability. Government institutions remain cumbersome, irrationally decentralized and expensive. General government expenditures relative to GDP are still substantially larger than in countries with similar levels of income per capita, while outcomes are in general poorer. The bulk of spending, moreover, seems inefficiently distributed across government functions, resulting in a dearth of funds for targeted social welfare and child protection and insufficient resources for maintenance of existing capital projects. The central government ("state government" thereafter) has been strengthened, but remains substantially weaker than the two constituent entities formed along ethno-religious lines: the Bosniak-Croat dominated Federation of Bosnia and Herzegovina (FBH) and the Serb-dominated Republika Sprska (RS).

1.3. Substantial fiscal pressures are emerging and are set to multiply over the coming years. These pressures reflect the need to strengthen the institutions of the state level of government (thereafter "institution building" or "state building") *en route* to EU integration, outlays needed to settle the large stock of domestic claims and the ultimate start of property restitution. Government intentions to embark on large infrastructure projects will also place substantial demands on fiscal resources. Coping with these challenges will require that governments make careful trade-offs among competing priorities while implementing bold measures to reduce or curb existing and new spending to lighten the government's burden on the economy. These policy challenges will need to be tackled while addressing the critical issues of efficiency and equity.

1.4. This Public Expenditure and Institutional Review (PEIR) analyzes the key issues and sectors that bear on the level and composition of public spending and the stance of fiscal policy. The overriding objective of the recommendations presented on the basis of the analysis, and the key motivation of the PEIR, is achieving stronger growth in output and employment, reducing poverty and ensuring fiscal sustainability. The remainder of Chapter 1 presents the strategic background for the analysis. The complex institutional structure emerging from the Dayton Peace Accords (DPA) and the institutionalized divisions along ethno-religious lines help explain the challenges to reform implementation in BH. Economic developments have been broadly favorable since the end of the war and fiscal adjustment has been substantial, but delays in advancing structural reforms have limited scope for growth in production, exports and employment. As measured by the EBRD's

structural reform indicators, BH is behind all other countries in central and eastern Europe (CEE) and southeast Europe (SEE). Macroeconomic challenges remain, notably the outsized current account. Poverty and unemployment are high, moreover, and broadly unchanged since 2001, creating social exclusion that needs to be addressed urgently.

1.5. Chapter 2 discusses the level and composition of public spending. Fiscal consolidation has been strong from 1999 through 2004, but general government spending relative to GDP is still high and the composition of expenditures does not appear to be growth-enhancing. Outcomes of government spending tend to be poorer than among countries at a similar stage of economic development, moreover, and spending itself is often ill-targeted. Using the recommendations in the remainder of the report and a detailed assessment of the forthcoming fiscal pressures, the chapter carries out a fiscal sustainability analysis. The forthcoming fiscal pressures can be effectively tackled and vulnerabilities to public finances contained if the authorities carry out an ambitious and determined reform program to curb or reduce existing spending. Such a program, as detailed in the rest of the report, would need to go beyond what is currently considered by the BH governments. The governments, moreover, need to accelerate building the capacity necessary for setting, coordinating and implementing fiscal policy to lend credibility to any government reform agenda. Changing the constitutional setup established as a result of the DPA may help reduce costs, but the PEIR is working within the confines of the existing arrangements.

1.6. State-building, a key input in the fiscal sustainability analysis, is discussed in Chapter 3. The chapter presents a medium- to long-term scenario of strengthening the institutions of the state-level of government and estimates the accompanying costs. The chapter recommends that shifting institutions from the subnational to the state level of government should be at least cost-neutral, while increased costs as a result of strengthening the capacity of new institutions need to be offset by expenditure reductions in other areas.

1.7. Chapter 4 discusses public employment and wages and concludes that high average wage rates, especially for the lower grade employees at the state and the FBH level, result in a large general government wage bill. By contrast, the overall size of the public administration relative to the country's population is not larger compared with other countries. Given substantial duplication and outsized employment in police, defense and education, this suggests that the core public administration is small, with adverse consequences for public service delivery.

1.8. Chapter 5 analyzes government spending on education and proposes measures to improve both the efficiency of spending and the quality of education outcomes. While overall expenditures on education are larger than in other countries in the region, wage outlays dominate overall spending, crowding out outlays on capital improvements and operations and maintenance. Low secondary and university enrollment, together with the existence of costly but ineffective vocational secondary schools, leave graduates ill equipped for the challenges facing BH's economy.

1.9. Chapter 6 analyzes social spending funded both from social security contributions and from general revenues. Relative to GDP, BH's overall spending on social protection, including health, is similar to other CEE countries but the composition is different. Spending on pensions is substantially lower, while untargeted transfers to war veterans and surviving families are much larger. With the exception of the children fund in the RS, social welfare and child protection spending remains *ad hoc*, with payments in most cantons of the FBH below legally mandated benefits and even the latter too low to help the poorest members of society. The health sector is characterized by fragmented organization and financing, resulting in unequal access, inefficient spending and high arrears of health facilities. The chapter's key recommendations include measures to reduce social security contributions while improving prospects for the sustainability of the insurance schemes. For the programs funded from general revenues, the chapter proposes measures to improve targeting to help alleviate poverty and promote a more efficient use of resources.

1.10. The overall condition of the transport infrastructure remains poor and inadequate for a country of the size of BH despite considerable expenditures in the sector over the last decade. Chapter 7 analyzes public spending on transport and concludes that there are several reasons for the poor condition of infrastructure, including inadequate expenditures on both heavily traveled and local roads and an imbalance in allocations between capital outlays and expenditures on maintenance. Such an imbalance may be further exacerbated by proposed new investments. Improving the quality of infrastructure will require additional resources, but these need to be allocated within the overall budget envelope after a careful consideration of alternative demands for public money.

B. POLITICAL BACKGROUND

1.11. The DPA signed in December 1995 helped end the 1992-95 war and set the political framework for BH's development. The DPA (formally named the General Framework Agreement for Peace) was a necessary compromise to bring peace to BH and its three constituent peoples, the Bosniaks, the Croats and the Serbs, but at the cost of creating a complex, multi-layered and decentralized governance structure. Change to the DPA has been resisted for longer than initially envisioned, hampering much-needed progress toward a modern and efficient government. Under these challenging circumstances, BH has made substantial progress in rebuilding its war-torn economy, but the transition to a market economy has been uneven.

1.12. The governance structure established under the DPA is complex and expensive. In addition to the two entities, the internationally-supervised District of Brcko was created in 2000 following lack of agreement between the entities on how to govern the town with a population of 80,000. The FBH is further divided into ten cantons and 80 municipalities. The more ethnically homogenous RS is less decentralized, without cantons and with 62 municipalities. The DPA established the position of the High Representative (HR), supported by the Office of the HR (OHR) to oversee the implementation of the civilian aspects of the Peace Agreement.¹ The HR is directly overseen by the Peace Implementation Council (PIC), a body comprising 55 countries and international organizations. The powers of the HR were expanded in 1997 at the PIC meeting in Bonn, enabling the HR to remove from office public officials who violate legal commitments and the DPA, as well as to impose laws (the so-called Bonn Powers). It is intended that the role of the OHR diminish as administrative capacity is strengthened, with the Bonn powers of the HR, in particular, being scaled back fully perhaps in 2007.

1.13. Nationalist political parties have dominated the political process since the end of the war, with change often brought by pressure by the international community. Such an outcome has been supported by lack of willingness to move away from ethnic divisions, allow greater flexibility in the public administration and build a more efficient government. Decision making, as a result, has been driven to a substantial degree by the need to sustain the ethnic balance. This concern is enshrined, for example, in the following provisions:

- Two-thirds of the 42 members of the **state-level House of Representatives** (the parliament's lower chamber) are selected from the FBH and one-third from the RS. These percentages persist despite the lack of a population census since 1991.
- The 15 members of the **state-level House of Peoples** (the parliament's upper chamber) are selected in equal proportion by the three constituent peoples.
- The **state-level presidency** comprises three members rotating every 8 months, one from each of the three constituent peoples.

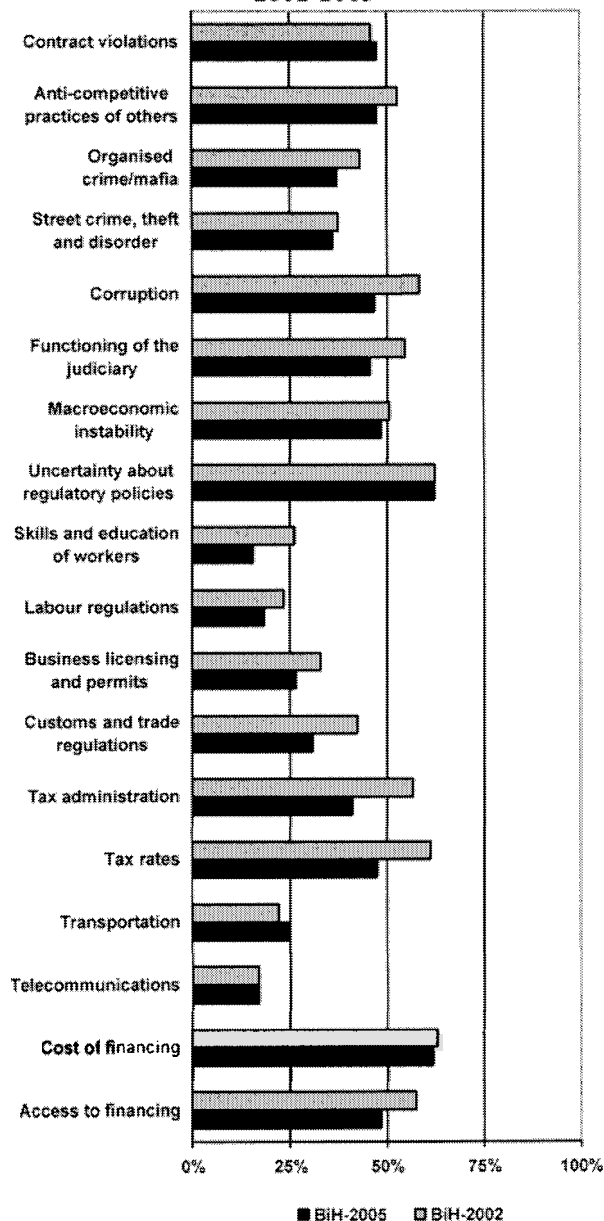
¹ Mr. Christian Schwarz-Schilling has been the current HR since February 1, 2006. Similarly to his predecessor, Mr. Paddy Ashdown, he is also the EU's Special Representative to BH.

- State and entity constitutions provide for protection of **Vital National Interests (VNI)**, thereby decisions regarding VNI, as listed in the constitutions, need a majority within the caucus of each of the constituent peoples.

1.14. BH has only recently shifted from focus on post-war reconstruction efforts to an emphasis on the transition to a market economy. Structural reform implementation, as a result, has been slow. As measured by the EBRD transition indicators, BH ranked only ahead of Belarus, Tajikistan, Turkmenistan and Uzbekistan in 2005. Negotiations on the SAA, together with negotiations on constitutional change among the key political parties that commenced in late 2005, hold promise that the transition to market economy will accelerate and the structure of governance will evolve towards a more rational model better suited to bring BH closer to the EU.

1.15. The complex institutional environment notwithstanding, governance appears to have improved over the last several years, as judged by surveys of BH companies (Figure 1.1). Nonetheless, BH remains among the countries in which poor governance and corruption is a substantial problem, with more than one-half of all firms in 2005 indicating that corruption is an obstruction to business.² Moreover, firms perceive state capture – corruption in the law-making process – to have increased over the last several years, making BH the country with the worst perception of state capture in eastern and central Europe.

Figure 1.1. BH: Percent of Firms Indicating a Problem to Doing Business, 2002-2005



Source: BEEPS, 2002 and 2005, The World Bank.

² BEEPS, 2002 and 2005, *EBRD-World Bank Business Environment and Enterprise Performance Survey*.

C. THE MACROECONOMIC SETTING

1.16. Economic activity has remained robust over the last several years despite slow reform implementation. Domestic demand has increased steadily, underpinned by strong wage and credit growth. Inflation picked up in 2005 and in early 2006 following the introduction of the single-rate Value Added Tax (VAT) set at 17 percent from the start of 2006, and reflecting higher energy import prices. Unemployment and poverty have remained high and little changed over the last several years, as informal employment continues to grow rapidly. Wages in the informal sector are lower and appear to grow more slowly than wages in the formal sector. The growing informalization of the economy has been in response to rigid labor markets and unfavorable business environment, underlining the importance of structural reforms.

Output, Employment and Inflation

1.17. Economic activity expanded strongly over the last several years, but at a slower pace than in the aftermath of the war. Real GDP growth is likely to have eased to 5¼ percent in 2005 after a robust increase in exports boosted growth to 6.2 percent in 2004 from 4 percent in 2003 (Table 1.1 and Figure 1.1). The decline in growth in 2005 reflected slow progress on structural reforms. Pre-emptive buying by companies and households surged, primarily of investment goods and durables. The strong increase in imports was also in response to continued rapid credit expansion, despite moves by the central bank to tighten the regulatory requirements for commercial banks.

1.18. Over the last decade, the pace of economic activity has been slower than among the CEE countries. Growth, moreover, has been insufficient to make a dent in the persistently high poverty and unemployment, leaving BH as one of the poorest European countries. A fifth of the population is jobless and a similar percentage is poor, with both ratios little changed since 2001. Moreover, an additional one-third of the population lives just above the poverty line, leaving them vulnerable to even modest adverse shocks to income.

1.19. Unemployment remained unchanged from 2001 through 2004. Moreover, four-fifths of the increase in employment has been in the informal sector, including in subsistence agriculture. Further, a large part of the increase in formal employment reflected the building up of the state level of government without offsetting reductions at the subnational level, and was accompanied by a substantial labor shedding among the state-owned enterprises. Employment in the informal economy rose to 42 percent of the total by 2004 from 37 percent in 2001, a remarkable widening of informality driven by inflexible labor markets, poor business environment and burdensome social security contribution rates.

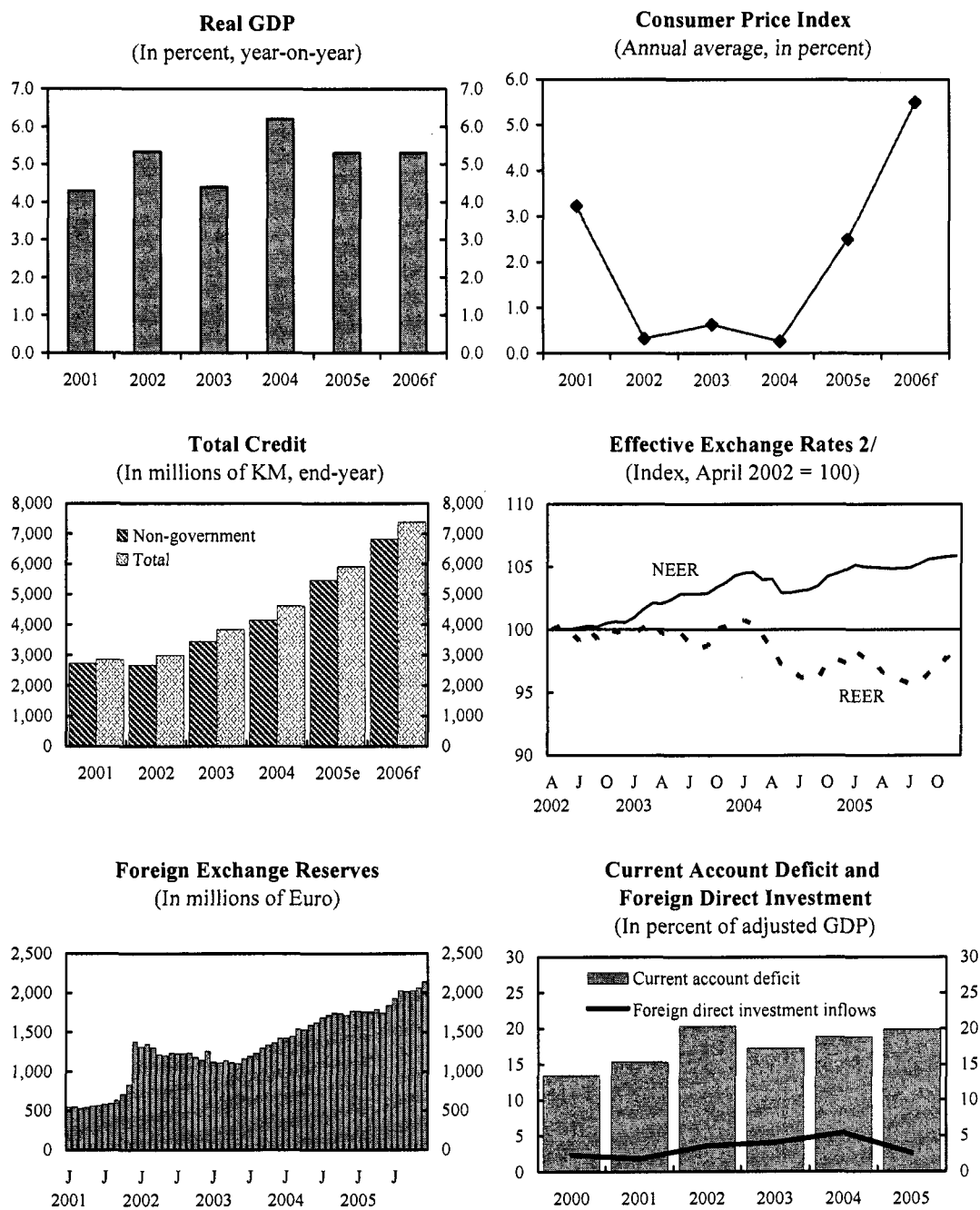
Table 1.1. Bosnia and Herzegovina: Selected Indicators, 2001-2006

	2001	2002	2003	2004	2005	2006
	(Percent change unless indicated otherwise)					
Nominal GDP (In millions of KM)	10,480	11,651	12,303	13,440	14,490	15,622
Real GDP growth	4.3	5.3	4.4	6.2	5.3	5.3
Consumer price inflation (Annual average)	3.2	0.3	0.6	0.3	2.5	6.1
Gross wages (Annual average)	10.9	10.4	8.6	4.4	5.9	...
	(In percent of official GDP)					
Consumption	111.0	114.1	114.2	117.2	116.3	113.2
Gross national savings	3.2	-0.8	-3.0	-2.8	-3.4	-2.3
Gross investment	18.9	20.4	21.5	19.7	20.5	21.0
Foreign savings	15.7	21.2	24.5	22.5	23.9	23.3
	(In millions of U.S. dollars)					
Merchandise exports	1,135	1,101	1,470	2,082	2,592	3,209
(Percent change year-on-year)	0.3	-3.0	33.6	41.6	24.5	23.8
Merchandise imports	4,095	4,419	5,612	6,647	7,648	8,767
(Percent change year-on-year)	5.0	7.9	27.0	18.4	15.1	14.6
Current account balance	-739	-1178	-1629	-1784	-2108	-1570
(In percent of GDP)	-15.4	-21.0	-23.0	-20.9	-22.9	-15.0
(In percent of adjusted GDP)	-11.8	-16.2	-17.7	-16.1	-17.6	-11.5
Gross official reserves	1234	1187	1604	2195	2668	...
(In months of imports goods and services)	3.4	3.0	3.2	3.7	4.0	...
Broad money (End of period, percent change)	89.3	8.6	8.4	24.3	18.2	...
Domestic credit (In KM million) 1/	3339	4281	5122	5464	7491	...
(Percent change year-on-year)	10.7	28.2	19.6	15.7	26.4	...
Credit to households	682	1456	1966	2628	3402	...
(Percent change year-on-year)	77.5	113.6	35.0	33.6	29.5	...
External debt (In millions of US dollars)	3010	3579	4436	5118	5556	...
(In percent of official GDP)	62.8	63.8	62.5	60.0	60.3	...
(In percent of adjusted GDP)	48.3	49.1	48.1	46.2	46.4	...
External public debt (In millions of US dollars)	2311	2250	2519	2755	2820	...
(In percent of GDP)	48.2	40.1	35.5	32.3	30.6	...
(In percent of adjusted GDP)	37.1	30.8	27.3	24.8	23.5	...
Exchange rate (KM per U.S. dollar, period average)	2.19	2.08	1.73	1.58	1.57	1.55

Sources: Statistics agencies; Central bank of BH; IMF; and World Bank staff estimates.

1/ Adjusted for debt assumption in 2004 of KM463 million of enterprise debt by the RS government.

Figure 1.2. Bosnia and Herzegovina: Selected Economic Indicators



Sources: Statistics agencies; Central bank of BiH; World staff estimates (e) and forecasts (f).
 1/ Net of government deposits and corrected for debt assumption in 2004 of KM463 million of enterprise debt by the Republic Srpska (RS) government.
 2/ An increase denotes appreciation.

1.20. With due allowance for poor data, nominal wages appear to have increased substantially faster than inflation and productivity over the last five years despite high unemployment. Average nominal wages rose by 8 percent a year from 2000 through 2005 compared with a 2.2 percent average annual inflation (Table 1.2). The increases reflect in large part rigid wage-setting and lack of qualified labor. Increases in average nominal wages have been substantially larger in the RS, but these have been accompanied by a strong growth in productivity. More moderate wage increases in the FBH, by contrast, coincided with a drop in productivity reflecting in part delayed reform implementation.

Table 1.2. BH: Wages, Employment and Unit Labor Costs, 2000-2004

	2000	2001	2002	2003	2004
FBH - Manufacturing					
Paid employment	41,607	46,359	51,922	52,057	60,858
Wages (In KM per month)	302	316	360	409	412
Unit Labor Costs (Index, 2000=100)	100.0	101.9	114.7	124.3	128.0
(Percent change year-on-year)	24.2	1.9	12.5	8.4	2.9
RS - Manufacturing					
Paid employment	30,391	24,761	26,816	23,043	22,399
Wages (In KM per month)	192	210	235	259	303
Unit Labor Costs (Index, 2000=100)	100.0	109.0	116.1	111.0	110.5
(Percent change year-on-year)	4.9	9.0	6.6	-4.4	-0.4
BH – Overall					
Unemployment rate 1/			21.6		22.2
Employment rate 2/			41.8		45.9
Employment in informal sector 3/			39.0		42.3

Sources: Statistical offices of the FBH and RS, IMF and World Bank staff estimates.

1/ In percent of the labor force.

2/ In percent of working age population.

3/ In percent of total employment.

1.21. The currency board arrangement introduced in 1997 has helped anchor price stability. After increasing strongly in the aftermath of the war, consumer price inflation slowed to industrial country levels by 2003. After remaining little changed at near 1 percent in 2003 and 2004, inflation picked up to 2½ percent in 2005. Consumer price inflation is set to rise further in 2006, reflecting mainly higher indirect tax rates and increases in regulated prices. Preliminary estimates suggest a substantially larger impact from the VAT than earlier believed, above levels seen in other countries in the region. While some of these effects may dissipate, consumer price inflation is likely to average about 5 percent in 2006.

Balance of Payments and External Debt

1.22. The large current account deficit remains a key macroeconomic challenge. With the general government budget in rough balance and nongovernment investment moderate, the deficit reflects a dearth of savings among companies and, of late, households. Corporate performance appears to have improved somewhat over the last few years, but one-half of all companies in BH

remain loss-making and a large share of the rest make little in profit, paying little if any in taxes and social security contributions. Households have also reduced savings and increased borrowing from domestic banks to fund purchases of real estate and consumer durables, the latter supporting the increase in imports.

1.23. Higher prices for imported petroleum and natural gas, together with pre-emptive imports ahead of the VAT introduction, widened the current account deficit further in 2005. The current account deficit is likely to have increased to 19 percent of adjusted GDP in 2005 from 17¼ percent in 2004. Terms-of-trade losses related to higher prices for imported energy appear to have worsened the external deficit by some 2 percent of adjusted GDP in 2005. Moreover, the surge of imports of capital and consumer goods in late 2005, ahead of the introduction of the VAT, probably added an additional 1 percent of adjusted GDP to the deficit.

1.24. Net capital inflows have consistently exceeded the current account deficit, boosting foreign exchange reserves. Reserves rose to \$2.7 billion by the end of 2005, equivalent to 4 months' imports of goods and services. The pace of reserve accumulation slowed in 2005, as the current account deficit widened, while capital inflows fell slightly. The decrease in capital inflows in 2005 reflected a reduction in foreign direct investment to 3 percent of GDP, after the privatization of BH Steel boosted inflows of foreign direct investment to about 7 percent of GDP in 2004. Another factor contributing to slowing down reserve accumulation was a slight reduction in bank borrowing from abroad.

Monetary and Exchange Rate Developments

1.25. Adherence to the currency board arrangement, tighter fiscal policy through 2005 and determined efforts to advance banking privatization to strategic foreign investors have underpinned financial stability. Deposits denominated in local currency have grown strongly, rising from 15 percent of the total deposits in 1997 to one-half by 2005.

1.26. Reserve requirements were tightened in 2004 and again in 2005 to help slow the pace of credit expansion. The central bank doubled reserve requirements on bank deposits to 10 percent in late 2004 and boosted them further to 15 percent in late 2005. These measures helped moderate twelve-month credit growth to 25 percent by December 2005 from 31 percent in December 2004. Lending to nongovernment borrowers slowed by less, to 25 percent from 28 percent over the same period. Lending to households remained buoyant amid further reductions in bank lending rates and strong demand for mortgages and consumer credit.

1.27. With the SaM dinar depreciating vis-à-vis the euro-pegged KM and the Croatian kuna remaining little changed, the nominal effective exchange rate (NEER) has appreciated modestly over the last several years. The NEER appreciated 6 percent from 2002 through 2005 at a broadly similar pace each year. With inflation in BH lower than in SaM and in Croatia over the last several years, however, the real effective exchange rate (REER) depreciated. The REER weakened 3 percent from 2002 through 2005. In contrast to real exchange rate depreciation, unit labor costs (ULC) in manufacturing have risen steadily. The increase has been moderate in the RS, with ULC in manufacturing rising 3 percent a year on average from 2000 through 2005, as strong productivity growth combined with labor shedding. In the FBH, by contrast, ULC in manufacturing rose by an outsized 9 percent a year on average over the same period, reflecting in large part reform delays.

Structural Reforms

1.28. Progress on structural reforms has been uneven. Reforms of the financial sector, trade policy and public finance have been advanced with determination. By contrast, progress has been slow in non-bank privatization and corporate restructuring, improvements of the business environment and labor market reforms. Overall, structural reform implementation has lagged substantially the pace among other countries in transition.

1.29. Bank privatization and other financial sector reforms have been well-advanced. Only 6 out of 33 banks, accounting for about 10 percent of banking system capital, are still government-owned. Banking supervision remains vested in two entity supervision agencies, however, an anomaly for a country with a population of 3.8 million. Efforts to merge the banking supervision agencies under the umbrella of the central bank have been ongoing.

1.30. Trade liberalization was pursued with determination earlier, but several restrictions were introduced in 2005. BH has concluded bilateral free trade agreements with all SEE countries and is negotiating to join the WTO. The average unweighted tariff rate amounts to 6 percent, among the lowest in the region, with the rate on agriculture products the lowest among the SEE countries. Under pressure from domestic agricultural producers unhappy with rising imports from Croatia, and in response to a decision by the SaM government to subsidize exports of meat and dairy products, the BH government suspended parts of the Free Trade Agreements (FTA) with these countries in early 2005. Although SaM revoked the export subsidies in May 2005, the counter-measures by BH are still in force. *Ad hoc* responses of this kind, in violation of the spirit of the bilateral FTAs, raise questions about the commitment of the authorities to free trade despite the start of SAA negotiations, especially as the core measures under the SAA cover free trade.

1.31. Significant progress has been made in the area of public finance, but much more remains to be done. Major achievements to date include successful harmonization of indirect taxation, culminating in the establishment of the Indirect Tax Authority (ITA) at the beginning of 2004 and the introduction of a state-wide single-rate VAT from the start of 2006. Draft laws on modernizing and harmonizing across the entities corporate and personal income taxation have been prepared and are in parliamentary procedures, with implementation of the laws planned for late 2006 or early 2007. The draft laws introduce a single-rate corporate income tax at 10 percent and a personal income tax with rates of 10 percent and 15 percent.

1.32. Efforts to improve public expenditure management are ongoing, with increasing local ownership over the preparation of the medium-term expenditure frameworks and enhanced coordination arrangements, including the establishment of the National Fiscal Council (NFC) in 2005.³ Introduction of public sector audit has led to increased transparency and accountability in public sector spending. Responsiveness to the audit reports and follow-ups to the recommended measures remain insufficient, however.

1.33. Non-bank privatization has been slow and the private sector generates only about one-half of GDP, a substantially smaller share than in most other countries in the broader region. Privatization has been well-advanced among smaller enterprises, while a substantial share of the larger or most indebted companies remain state-owned. Reflecting the extensive use of privatization certificates and other non-cash payment methods, together with the poor state of most companies that were privatized, cumulative cash receipts from privatization were modest and amounted to €230 million by the end of 2005.

³ As constituted at present, the NFC is composed of the state and entity prime ministers and finance ministers.

1.34. Corporate performance has been mixed and remains a key policy challenge. Reflecting lack of effective ownership, in part due to the reliance on mass and voucher privatization, and amid continued delays in corporate restructuring, loss-making companies abound, representing a significant drag on the economy. Efforts by the governments to grant unconditional debt write-offs have not produced results, as expected, but willingness to resort to bankruptcy has been weak, in particular in the FBH. After delays, the RS authorities made substantial progress in advancing privatization and other corporate restructuring in 2004 and 2005. Overall, the business environment is not perceived as investor-friendly, despite recent improvements in the areas of business registration, bankruptcy and business inspection.⁴ A large number of companies still see obtaining licenses, dealing with the governments, economic policy uncertainty and corruption as the most burdensome constraints to development and operations.

1.35. High unemployment, high and strongly rising wages in the formal sector and the increasing share of the informal economy are the key labor market challenges facing BH. Wage setting remains rigid within comprehensive collective agreements dominated by powerful trade unions. Labor laws, moreover, remain inflexible and steeped in labor practices reminiscent of those in former Yugoslavia. Rigidities and gaps in the regulatory framework contribute to persistent overstaffing combined with skills mismatches, but yet generous wage increases. All this underpins the urgency of advancing labor market reforms.

D. THE NON-OBSERVED ECONOMY

1.36. BH national accounts data are not adjusted for the size of the non-observed economy (NOE). By contrast, most countries in Europe and central Asia (ECA) make such adjustments. Ratios to GDP, therefore, would appear less accurate for BH if GDP without at least some adjustment for the NOE is used. This PEIR attempts to correct officially estimated GDP to help address this issue and make more accurate comparisons across countries.

1.37. Adjustments for the NOE are large and range from 12 percent of the observed economy on average for the new EU member states (NMS)⁵ to 30 percent for the countries of the Commonwealth of Independent States (CIS) (Table 1.3). Albania's officially published national accounts include a sizable adjustment, while the adjustments made in FYR Macedonia and Croatia are substantially smaller. The national accounts for SaM, by contrast, do not include an adjustment.

1.38. According to what is by now well-established OECD methodology for measuring the NOE, the NOE comprises of underground, informal and illegal production.⁶ Underground production includes activities that are not observed either because of underreporting, lack of registration or various statistical reasons. Informal production includes unregistered production, while illegal activities cover corruption, prostitution and some others.

1.39. Several studies have estimated that the NOE in BH is large. An OECD report estimated that the NOE fluctuated from 57.7 percent of officially estimated GDP to 52.6 percent during 2001-2003.⁷ Excluding corruption and prostitution, the NOE is estimated to have amounted to 48.2 percent of officially estimated GDP in 2003. Further, an IMF statistical advisor to the central bank of BH

⁴ BEEPS, 2005.

⁵ The eight central and east European countries that joined the EU in 2004: the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

⁶ OECD, 2004, *Handbook for Measurement of the Non-Observed Economy*, www.oecd.org.

⁷ Dell'Anno, Roberto and Marje Piirisild, 2004, *Estimates of the Non-Observed Economy in Bosnia and Herzegovina*, OECD.

estimated that the gray economy amounted to 40 percent of GDP in 2002.⁸ Finally, an IMF report estimated via regression analysis that the nonobserved economy is equivalent to 30 percent of GDP.⁹

Table 1.3 Adjustments for the Non-Observed Economy in GDP Statistics
(In percent of published GDP and in percent of observed economy)

Country	Year	NOE included in GDP	
		In percent of GDP including NOE 1/	In percent of GDP excluding NOE 2/
SEE		20.8	27.6
Albania	2004	31.8	46.6
BH	...	This PEIR - 23.1	This PEIR - 30
Croatia	3/ 2002	14.2	16.6
SaM	...	none	none
FYR Macedonia	4/ 2003	16.3	19.5
NMS		13.8	16.4
Estonia	3/ 2002	9.6	10.6
Czech Republic	3/ 2000	4.6	4.8
Hungary	4/ 2000	11.9	13.5
Latvia	3/ 2000	13.6	15.7
Lithuania	3/ 2002	18.9	23.3
Poland	3/ 2002	15.7	18.6
Slovakia	4/ 1998	22.0	28.2
Accession countries		14.0	16.4
Bulgaria	3/ 2001	10.2	11.4
Romania	3/ 2002	17.7	21.5
CIS		23.2	29.8
Armenia	3/ 2003	28.9	40.6
Azerbaijan	3/ 2003	20.7	26.1
Belarus	3/ 2003	10.7	12.0
Georgia	3/ 2004	28.3	27.6
Kazakhstan	3/ 2003	21.6	27.6
Kyrgyzstan	3/ 2003	17.0	32.1
Moldova	3/ 2001	31.6	33.3
Russia	3/ 2003	24.3	32.1
Tajikistan	3/ ...	25.0	33.3
Ukraine	3/ 2003	17.2	20.8
Uzbekistan	3/ ...	29.5	41.8
Others			
Austria	3/ 2001	7.9	17.4
Italy	3/ 2003	14.8	17.4
Mexico	3/ 2003	12.1	13.8

Sources: UNECE (2003 and 2005) and IMF (05/158, 2005).

1/ $100 * \text{NOE} / (\text{NOE} + \text{OE})$, with NOE (OE) the non-observed (observed) economy.

2/ $100 * \text{NOE} / \text{OE}$, where NOE is the non-observed and OE the observed economy.

3/ UNECE, Non-Observed Economy in National Accounts, April 2006.

4/ UNECE, 2003 as quoted in IMF (05/158), 2005.

⁸ IMF, 2004, *Selected Economic Issues*, Report 05/54.

⁹ IMF, 2005, *Selected Issues*, Report 05/158.

1.40. While the ranges reported in these studies are large, this PEIR assumes conservatively that the NOE amounts to 30 percent of officially estimated GDP or 23 percent of the overall GDP including the NOE. Including an adjustment for the NOE would help improve the reliability of cross-country comparisons and fine-tune the analysis presented in the report. For fiscal sustainability issues, however, the adjustment is not relevant and the discussion tends to focus on unadjusted figures – adjusting the GDP affects only the level of spending or debt relative to GDP, but not the overall direction of change.

1.41. Comparisons of BH with other SEE countries need to be made with care, as this report does not carry out any explicit adjustment for other countries except where noted (Tables 2.5 and 2.8). In particular, were the GDP for SaM to include an adjustment for the NOE, or were the GDP for FYR Macedonia and Croatia to be adjusted upward by a larger amount than reported in the table below, ratios to GDP in SEE would be substantially lower. Foreshadowing the discussions in Chapter 2, general government spending relative to GDP adjusted for the NOE in BH was 40.5 percent in 2004, while the average for the SEE countries was 40.4 percent. Adjusting all countries' GDP to include estimates of the NOE equivalent to 30 percent of the observed economy, government spending among the SEE countries averaged 36.7 percent of GDP in 2004. (This involves an upward revision of 30 percent for BH and SaM and differential revisions for the other countries, as they already include estimates for the NOE in officially published GDP estimates.) **Thus, using a broadly comparable methodology, BH's spending to GDP is still very large compared to that of its neighbors, not to speak of the faster growing countries elsewhere in the world.**

E. CONCLUSION

1.42. This chapter presents the overall background against which the detailed fiscal discussion of the rest of the report is developed. The SAA negotiations with the EC hold the promise of helping accelerate the pace of reforms. Time will be needed, however, to take into account the interests of the three ethno-religious groups. Macroeconomic imbalances need to be tackled more speedily and structural reforms advanced with renewed rigor to create the conditions for stronger growth in output and help reduce poverty. The next chapter focuses on more in depth analysis of macro-fiscal developments and challenges.

2. FISCAL BACKGROUND AND FISCAL SUSTAINABILITY

A. INTRODUCTION

2.1. BH's fiscal position has improved significantly since the end of the war, but substantial issues remain unresolved with the potential to seriously undermine fiscal sustainability and prospects for improving living standards. These issues include inefficient duplication and fragmentation of government functions, poor quality of government services and an inefficient structure of government spending. Coordination mechanisms among the state and the entities, crucial for setting, executing and monitoring fiscal policy, remain underdeveloped. Over the medium term, the authorities would be well advised to redouble efforts to deal with these problems and build effective government institutions that should help consolidate the single economic space and advance EU integration. These efforts will be complicated by the need to tackle large fiscal pressures, including these related to the costs of building state institutions, settling domestic claims and handling property restitution.

2.2. This chapter examines fiscal policy developments in BH over the last several years and analyzes the level, composition and outcomes of government spending. Government revenues are also reviewed and recommendations are made on ways to reduce the government burden on the economy. The chapter proceeds with an analysis of fiscal sustainability, taking into account imminent pressures on fiscal resources and the key quantifiable recommendations made in the remainder of the report. The chapter concludes with additional recommendations on fiscal policy, government spending and institutional capacity.

B. RECENT FISCAL DEVELOPMENTS

2.3. The authorities deserve credit for the substantial fiscal adjustment since the general government deficit peaked in 1999. The commitment-basis general government deficit narrowed from 6¼ percent of GDP adjusted for the size of the NOE (8.1 percent of official GDP) in 1999 to broad balance in 2004 and 2005, as a large reduction in outlays more than offset a drop in revenues (Table 2.1). General government expenditures on a commitment basis fell from 52.6 percent of adjusted GDP in 1999 to 40½ percent in 2004. (As a share of official GDP, general government spending fell from 68 percent in 1999 to 52.6 percent in 2004.) Preliminary data suggest that expenditures rose again as a share of GDP in 2005, however, and are likely to increase further in 2006. General government revenues declined through 2004 almost entirely in line with a contraction in grants, mainly for foreign-funded investment projects, before rebounding in 2005 and further in 2006, as economic activity and tax collection strengthened.

2.4. A sharp decline in foreign-funded investment projects and a shift from accumulation of arrears to their repayment accounted for the bulk of the decrease in commitment-basis spending from 1999 through 2004. The remainder reflected cuts in outlays on wages, interest and other current spending. The gradual reduction in international assistance, both in grants and loans,

followed disbursements from official donors for post-war reconstruction that totaled \$5.1 billion during 1995-2000.¹ The shift to arrear repayment was largely due to the cessation of unauthorized spending by the different armies operating in the country in the late 1990s and the introduction of treasuries at the different levels of government.

Table 2.1. BH: General Government Fiscal Developments, 1999-2005
(In percent of officially-estimated GDP unless indicated otherwise)

	1999	2000	2001	2002	2003	2004	2005
Revenues	60.3	56.2	52.0	50.6	53.0	52.1	53.1
Tax revenues	42.5	42.6	40.2	38.5	40.3	40.4	41.7
Indirect taxes	17.1	16.2	14.0	16.2	17.4	18.1	20.6
Trade taxes	5.7	6.2	8.0	5.7	5.2	4.1	4.7
Direct taxes	3.9	4.3	3.5	3.2	3.4	3.4	3.8
Social security contributions	15.8	15.9	14.7	13.5	14.4	13.2	15.7
Nontax revenues	5.5	3.7	4.3	4.8	7.6	8.1	9.4
Grants	12.2	9.9	7.6	7.3	5.1	3.6	2.5
Expenditures on a commitment basis	68.4	63.5	55.5	56.4	54.3	52.6	53.1
Non-interest current spending	56.4	54.1	47.5	49.1	47.1	46.0	46.2
Capital spending	10.8	8.0	6.8	6.3	6.2	6.0	6.2
Foreign-funded capital projects	10.0	6.7	5.4	2.7	3.9	3.2	1.7
Other	0.8	1.3	1.4	3.6	2.3	2.8	4.5
Interest	1.2	1.4	1.2	1.0	0.9	0.7	0.7
Balance on a commitment basis	-8.1	-7.3	-3.5	-5.8	-1.3	-0.5	0.0
Memoranda:							
Expenditures relative to adjusted GDP	52.6	48.8	42.7	43.4	41.8	40.5	40.9
Balance relative to adjusted GDP	-6.3	-5.6	-2.7	-4.5	-1.0	-0.4	0.0

Sources: BH authorities, IMF (various publications) and World Bank staff estimates.

2.5. Wage outlays have fallen primarily because of army demobilization and a reduction in the size of the police, reforms that have been politically difficult and for which the authorities deserve substantial credit. Outlays on defense and security fell from 12 percent in 1999 to a still outsized 7 percent of officially measured GDP in 2004. *Ad hoc* reductions in spending on maintenance and operations, mostly on roads and other infrastructure reconstructed with donor funds in the aftermath of the war, also contributed to the decline in spending. Lower international interest rates and the restructuring of BH's external obligations to the Paris and London Clubs helped reduce interest outlays by two-thirds to ¾ percent of GDP by 2004.

2.6. Increased social expenditure caused general government spending to rise as a share of GDP in 2005. The pre-election 2006 entity budgets provide for double-digit increases in spending largely on the authorities' view that revenues from the VAT will be substantially larger than predicted

¹ Disbursements of foreign aid, grants and loans are not recorded in the state or the entity budgets. Similarly, budgets do not record outlays on government investment projects funded by foreign donors. Tackling this issue emerges as one of the top priorities for the authorities to help improve fiscal transparency and facilitate the targeting and execution of fiscal policy.

earlier and that the broad budget balance achieved in previous years is an overly restrictive fiscal stance (Table 2.2). Spending as a share of GDP will rise in both the FBH and the RS, as a result. Most of the planned increase in spending in the FBH reflects a jump in largely untargeted social transfers, reflecting increased veterans' benefits, the creation of new entitlements and the provision

Table 2.2. BH: Entity Budgets, 2005-2006 1/
(In millions of KM unless specified otherwise)

	RS		FBH	
	2005	2006	2005	2006
Spending	942	1,091	1,033	1,140
(In percent of GDP)	21.0	21.9	10.6	11.1
Adjustments:				
Debt repayment	...	71	2	138
Defense	66	...	180	...
Interest	...	38	2	62
Adjusted spending	876	981	853	940
(In percent of GDP)	20.4	20.5	8.8	9.8
(Percent change year-on-year)	...	12.0	...	10.2
Nominal Entity GDP	4,502	4,830	9,500	10,191

Sources: Ministries of finance and World Bank staff calculations.

1/ Adjustments made to put 2005 and 2006 on the same basis.

for a poorly targeted program for VAT mitigation. Higher salaries for teachers and the police, together with outlays on similarly poorly targeted program of VAT mitigation, account for the bulk of the increase in spending in the RS. **All told, the likely increase in spending relative to GDP in 2005 and 2006 would offset progress made in the last couple of years and make it difficult for the authorities to achieve the goal of reducing the burden of the government on the economy and cut tax rates.**

C. GOVERNMENT REVENUES

2.7. The high level of government spending remains supported by a larger than optimal tax burden, primarily reflecting onerous social security contributions (Table 2.3). Levied on a narrow base due to pervasive legal exemptions and rampant evasion, high social security contribution rates are a key cause of the high and rising informalization of economic activity.

Table 2.3. Tax Revenues in a Comparative Perspective, 2004

	Tax revenues and social security contributions 1/						PIT, CIT, SSC	Taxes on G&S
	Total	PIT	CIT	SSC	G&S	Other		
	(In percent of GDP)						(In percent of total)	
BiH								
official GDP	41.7	2.4	1.2	14.6	19.2	4.3	43.6	46.0
adjusted GDP	32.1	1.8	0.9	11.2	14.8	3.2	43.6	46.1
EU-15	40.6	10.5	3.5	10.3	12.5	3.8	59.7	30.8
OECD average	36.3	9.4	3.4	8.3	11.6	3.6	58.2	31.9
Ireland	28.4	7.4	3.7	4.0	11.2	2.0	53.4	39.5
Korea	24.4	3.1	3.1	4.6	9.5	4.1	44.4	38.8
Slovak Republic	30.2	2.6	2.4	12.4	11.4	1.4	57.6	37.7
Chile	18.2	...	...	1.4	...	...	...	...

Sources: The OECD, the IMF and World Bank staff calculations.

1/ PIT - personal income tax; CIT - corporate income tax; SSC - social security contributions; G&S - goods and services, includes VAT.

2.8. Social security contribution rates are higher than in most OECD and EU countries, and are substantially higher than the rates in fast growing economies such as Ireland, Chile, Estonia and Lithuania (Table 2.4). The authorities would be well advised to seize the opportunity afforded by potentially stronger than assumed revenues from the value-added tax (VAT) to reduce the social security contribution burden, should the pickup in these revenues prove to be permanent. Priority should be given to cutting the employment contribution rates. Other reductions could be made only in tandem with decisions on funding a portion of some social security benefits from general government revenues rather than payroll taxes. For example, if the obligation to pay health insurance contributions for pensioners were transferred from the pension funds to the entity governments, some reduction in pension contributions could be sustainable. The RS government should also reconsider financing child protection from general revenues and eliminating the child protection payroll contribution (see Chapter 6 for details).

Table 2.4. Social Security Contribution Rates
(In percent of gross wages)

	Insured	Employer	Total
BiH	29.9	5.8	35.6
RS	27.7	0	27.7
FBH	32.0	11.5	43.5
OECD average	11.4	18.1	29.5
of which:			
Ireland	8.0	10.8	18.8
Korea	7.1	8.8	15.8
New Zealand 1/	0.0	0.0	0.0
EU-8 average	12.8	27.3	38.1
of which:			
Lithuania	3.0	28.0	31.0
Poland	27.0	19.7	46.6
Slovakia	9.4	25.6	35.0
Chile	17.6	2.4	20.0

Source: US Social Security Administration.

1/ Paid out of general revenues.

2.9. Aside from distortionary social security contributions, the bulk of revenues is generated through less distortionary indirect taxes. Revenues from indirect taxes account for a larger share of tax revenues than in most EU and OECD countries, while income tax receipts account for one of the lowest shares in the world. The low share of income taxes relative to GDP reflects low tax rates, numerous tax holidays and evasion. Entity governments intend to enact in late 2006 or early 2007 harmonized corporate and personal income tax laws, a welcome development. If enacted and enforced, these laws would go a long way toward establishing a more equitable revenue base. The elimination of exemptions and tax holidays is likely to result in higher effective statutory rates of personal and corporate taxes and will probably result in larger revenues. The authorities should use this opportunity to cut social security contribution rates. After a successful introduction of the laws, over the medium-term the authorities would be well advised to consider increasing the personal income tax rate to provide room for further reductions in social security contribution rates.

D. THE LEVEL OF PUBLIC SPENDING

2.10. Fiscal adjustment since 1999 notwithstanding, general government spending remains high at 40½ percent of adjusted GDP. Spending is a full 5 percent of GDP higher than in countries with similar levels of income per capita. Comparisons with other SEE countries are more difficult because SaM makes no adjustment for the NOE in its GDP, while other countries make substantially different adjustments. For illustrative purposes, a uniform cumulative 30 percent adjustment for the NOE in all SEE countries (taking into account the adjustments these countries make at present) results in an average spending to GDP ratio of 36.7 percent a full 4 percent of GDP lower than in BH (Table 2.5). Similarly, using estimates from a regression of average primary expenditures on GNI per capita, BH's predicted level of primary expenditures is 5 percent of GDP percent lower than observed (Figure 2.1). The predicted level of primary expenditures is even lower if transition economies, typically more highly taxed and with larger spending levels reflecting the legacy of transition, are excluded from the analysis.

2.11. More importantly, general government spending as a share of GDP in BH exceeds substantially the levels in several fast growing and typically higher-income countries. Estonia

Table 2.5. General Government Revenues and Spending for Selected Countries 1/
(In U.S. dollars, in percent of GDP and in percent)

Country	GNI per capita (US\$ PPP, 2004)	Revenues (In percent of 2004 GDP)	Spending	Real GDP growth per capita (1999-2004)
BH				
Official GDP	7,430	52.4	52.6	3.2
Adjusted GDP		40.3	40.5	3.2
SEE average				
With BH official GDP 2/	7,663	41.0	42.8	3.6
With all adjusted 3/		35.0	36.7	
NMS	14,926	38.2	40.8	4.4
Ireland	33,170	34.5	34.3	4.9
Spain	25,070	40.0	39.6	2.0
Greece	22,000	43.6	48.3	3.4
Slovenia	20,730	41.7	43.1	2.8
South Korea	20,400	31.1	20.8	3.7
Czech Republic	18,400	38.6	41.9	3.3
Hungary	15,620	43.0	49.3	3.3
Slovak Republic	14,370	35.0	38.9	3.3
Estonia	13,190	39.6	37.9	6.3
Poland	12,640	41.4	44.2	3.0
Lithuania	12,610	31.4	33.6	6.1
Latvia	11,850	34.8	35.9	7.0
Croatia	11,670	47.2	51.5	4.0
Chile	10,500	23.3	21.1	3.2
Malaysia	9,630	23.5	28.8	1.4
Russian Federation	9,620	32.0	34.1	5.8
Romania	8,190	29.6	30.7	4.4
Thailand	8,020	17.1	16.8	3.4
Bulgaria	7,870	41.7	40.0	5.0
Turkey	7,680	42.2	47.2	2.5
FYR Macedonia	6,480	36.6	37.1	0.7
Ukraine	6,250	34.9	39.4	7.3
Albania	5,070	23.7	28.5	4.7
SaM	...	45.3	44.3	5.2

Sources: World Bank ECA PREM database and national authorities.

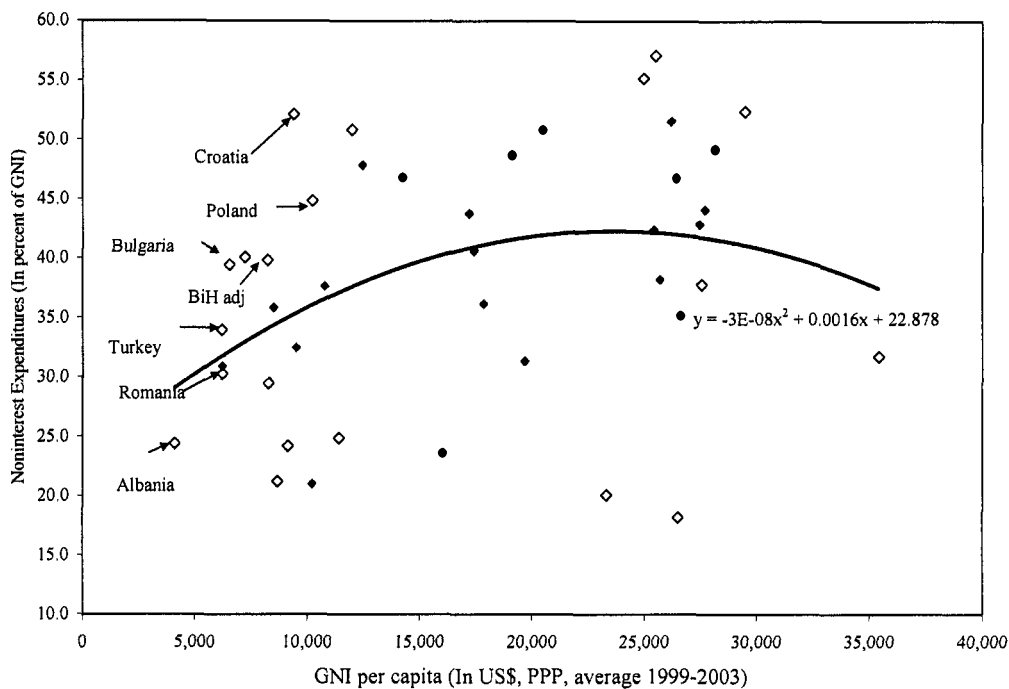
1/ Unless noted otherwise, ratios are relative to officially published GDP. Any adjustments made are working assumptions and do not reflect the official views of the governments or the World Bank. In this table, the SEE includes Albania, BH, Croatia, FYR Macedonia and SaM.

2/ All countries, including BH, relative to official GDP.

3/ For all countries, relative to GDP adjusted to include estimates of the NOE equivalent to 30 percent of the observed economy. This involves a 30 percent upward adjustment for BH and SaM and differential adjustment for the other countries, as their officially published estimates already include some adjustments for the NOE.

and Lithuania, for example, new EU member states with broadly similar population sizes and currency board arrangements, have general government spending roughly 5 percent of GDP lower than in BH, but incomes per capita that are 70 percent higher and real GDP growth rates that on average were twice as fast during 1999-2004. Government spending in Ireland, Chile and South

Figure 2.1. Noninterest Expenditures and Average GNI per Capita
(In percent of GNI and in US\$, PPP basis)



Korea is also lower, but incomes per capita and average real GDP growth rates are substantially higher. More generally, all countries in which real GDP growth averaged 6 percent or higher during 1999-2004 have much lower ratios of spending to GDP than BH.

E. THE COMPOSITION OF PUBLIC SPENDING AND THE QUALITY OF GOVERNMENT

2.12. The composition of spending reflects substantial duplication of functions across all governments and inefficiencies persisting ten years after the end of the war. The subsequent analysis and comparisons with other countries are based on the economic and functional classification of the consolidated general government prepared for this PEIR. In BH, the consolidated general government includes the state; the entities; the district of Brcko; the FBH cantons; the municipalities in both entities; the extrabudgetary pension, health, employment and child funds (the latter in the RS); and the road directorates at entity and cantonal levels (Table 2.6).² Outlays on foreign-funded investment projects are also included based on data from foreign donors.

2.13. The quality of government outcomes is lower than predicted by the level of overall spending or by spending in individual categories. The observed quality of outcomes in BH would be consistent with government spending of 30 percent relative to adjusted GDP, 10 percentage points lower than observed (Table 2.7). These results are only partial and need to be treated with caution, but they do indicate substantial inefficiencies in government spending. These inefficiencies need to be tackled before any new resources are committed to strengthening priority areas.

² The authorities do not produce consolidated general government accounts. The central bank has made progress in this direction, but data published on the central bank's web site as of early 2006 still do not include the municipalities, the road directorates and foreign-funded investment projects. The level of detail is also limited. See: http://www.cbbh.gov.ba/statistika/vladine_financije/vladina_statistika_metodologija_en.pdf.

Table 2.6. Bosnia and Herzegovina: General Government Spending, 2002-2005
(In percent of GDP)

	2002	2003	2004	2005b	2004	2005b
	(Official GDP)				(Adjusted GDP)	
Expenditures on a Cash Basis	56.4	54.3	52.6	53.1	40.5	40.9
Wages and contributions	16.4	14.6	14.2	13.5	10.9	10.4
Gross wages	11.8	11.1	10.9	10.4	8.4	8.0
Allowances	2.8	2.4	2.2	2.2	1.7	1.7
Contributions	0.9	1.1	0.9	0.8	0.7	0.6
Severance	0.8	0.0	0.1	0.0	0.1	0.0
Goods and services	10.7	12.6	11.5	10.4	8.8	8.0
Ousourced services	6.1	7.8	7.4	6.7	5.7	5.2
Utilities including energy	1.1	1.4	1.3	0.9	1.0	0.7
Procurement of materials	1.0	1.1	1.0	0.9	0.8	0.7
Current maintenance	1.3	1.5	1.0	1.0	0.8	0.7
Others 1/	0.8	0.9	0.8	0.8	0.6	0.6
Capital spending	6.3	6.2	6.0	6.2	4.6	4.8
Foreign-funded projects	2.7	3.9	3.2	1.7	2.4	1.3
Others	3.6	2.3	2.8	4.5	2.2	3.5
Subsidies and transfers	21.5	19.0	19.7	21.6	15.2	16.6
Subsidies	1.1	1.3	1.5	1.5	1.1	1.1
Transfers to individuals	13.7	13.7	14.4	15.2	11.1	11.7
Pensions	8.1	8.0	8.4	8.8	6.5	6.8
Veterans	3.6	3.5	3.3	3.1	2.5	2.4
Unemployment	0.2	0.1	0.1	0.1	0.1	0.0
Child protection	0.4	0.5	0.6	0.4	0.4	0.3
Social assistance	0.6	0.6	0.6	0.5	0.5	0.4
Refugees	0.7	0.7	0.5	0.4	0.4	0.3
Other individual transfers	0.2	0.3	0.7	0.9	0.5	0.7
Other transfers	6.7	4.1	3.9	4.9	3.0	3.8
Interest	1.0	0.9	0.7	0.7	0.5	0.5
Net lending	0.2	0.6	0.2	0.2	0.2	0.2
Arrears (+=cash outlays to settle)	0.3	0.3	0.4	0.4	0.3	0.3
Arrears (+=increase)	-0.3	-0.3	-0.4	-0.4	-0.3	-0.3
Expenditures on a commitment basis	56.1	54.0	52.2	52.7	40.2	40.5

Sources: World Bank staff estimates based on data from different levels of government.

1/ Per diems, transportation and fuel, rentals and insurance and banking services.

Economic Classification

2.14. Government spending does not appear to be growth-enhancing, with more than one-half of expenditures for categories of spending that are generally seen as only marginally conducive to economic growth. Such spending includes excessive outlays on wages compared with higher growth countries such as Slovakia, Chile or South Korea; small subsidies to state-owned companies; a large share of capital spending that ten year after the war tends to reflect projects carried out without proper overall sector strategies; and part of the substantial share of transfers to the health sector classified as “outsourced services” under operations and maintenance (Table 2.8).

Table 2.7. Measures of Quality of Government Outcomes

	Corruption Perception Index 1/	Infant Mortality per 1,000 2/	DTP Immun. 3/	Secondary Enrollment (Net) 4/
BH				
Actual	3.1	14.0	80	73
Predicted 5/	5.7	11.4	94	...
Albania	2.5	18.0	98	74
Croatia	3.5	6.0	95	87
FYR Macedonia	2.7	10.0	96	81
SaM	2.7	12.0	95	83
Estonia	6.0	8.0	97	87
Lithuania	4.6	8.0	95	93
Slovenia	6.0	4.0	92	93
Slovakia	4.0	7.0	99	87
Poland	3.5	6.0	99	91
Chile	7.4	...	...	79
Ireland	7.5	5.1	...	82
South Korea	4.5	5.0	97	...

Sources: Transparency International; WHO; and staff estimates.

1/ Transparency International. Higher score is better.

2/ WHO. Infant mortality per 1,000 live births. Lower is better.

3/ WHO. In percent of children 12-23 months. Higher is better.

4/ LSMS for BH and World Development Indicators for the rest.

5/ Regression of the indicator on government spending for 43 countries.

2.15. Outlays on public wages and capital spending are clear outliers relative to comparator countries, but other inefficiencies are also present.

- Relative to adjusted GDP, **spending on wages** is some 2½ percent larger than in the NMS on average and 5 percent larger than in Slovakia, Korea or Chile (Chapter 4). The larger wage outlays are in contrast to the poor performance of the public administration. BH scores below other SEE countries on some governance indicators.³ Moreover, the corruption perception index for BH from a regression on the level of government spending for 43 countries should be two times better than observed.

- **BH's level of capital spending is substantially higher than in other countries in the region.** While high capital spending is not unusual in countries recovering from war, observations from several projects throughout the country suggest that there is substantial inefficiency. Detailed work assessing efficiency in BH is needed for more definitive conclusions, but it is widely recognized that the public sectors in countries such as Chile and Ireland are highly efficient, indicating that even lower levels of capital spending in these countries can deliver equal or larger benefits than the much higher outlays in BH.⁴ Moreover, despite the large capital outlays, routine infrastructure maintenance does not appear to be carried out regularly and a large maintenance backlog has been accumulated (Chapter 7). Reducing the backlog and eliminating inefficiency in capital spending should be priorities.

- **Explicit subsidies are broadly in line with comparator countries, but implicit subsidies make the overall level of support to enterprises substantially larger.** Delays in advancing corporate restructuring and persistent losses of the railway companies have resulted in an increase in explicit subsidies from ¾ percent of adjusted GDP in 2002 to 1.1 percent in 2004. The latter is broadly in line with figures for the NMS, but subsidies among these countries tend to reflect to a larger extent support to agricultural producers. The cost of sustaining the substantial number of publicly owned or loss-making enterprises in BH is also certainly much higher. In addition, quasi-fiscal losses at the state-owned utilities have reappeared in recent years, as tariff rates have remained largely unchanged while the cost of inputs rose sharply. Quasi-fiscal losses probably amounted to ¼ percent of adjusted GDP in 2004. The size of the other implicit subsidies is difficult to quantify, however.

³ The World Bank, 2004, *Governance Matters*.

⁴ See Afonso et al., 2006, *Public Sector Efficiency: Evidence for New EU Member States and Emerging Markets*, European Central Bank, Working Paper No. 581.

Table 2.8. General Government Spending, Economic Classification, 2004 1/
(In percent of GDP)

	Spending		Goods and Services		Subsidies and Transfers		Capital	Interest
	Total	Primary	Total	Wages	Total	Subsidies		
BH								
Official GDP	52.6	51.9	25.7	13.0	19.7	1.5	6.0	0.7
Adjusted GDP	40.5	39.9	19.8	10.0	15.2	1.2	4.6	0.5
SEE average 2/								
With official BH GDP 3/	42.8	41.1	17.1	9.8	16.9	1.5	5.0	1.7
All adjusted 4/	36.7	35.1	14.5	8.4	14.4	...	4.4	1.6
Albania								
	28.5	24.9	9.4	6.3	10.6	...	4.9	3.6
Croatia								
	51.5	49.3	19.4	10.8	21.0	...	8.2	2.2
FYR Macedonia								
	37.1	36.2	13.1	8.5	11.2	...	3.2	0.9
SaM								
	44.3	43.1	17.7	10.4	22.1	...	2.5	1.2
NMS average								
	40.8	38.9	...	8.2	19.0	...	3.9	1.9
of which:								
Estonia								
	37.1	36.9	21.1	7.6	12.9	1.4	2.9	0.2
Lithuania								
	33.6	32.5	14.9	6.7	12.5	0.5	3.6	1.1
Slovenia								
	44.0	42.5	...	11.1	20.4	1.4	4.7	1.5
Slovakia								
	38.4	36.1	...	6.5	15.6	2.0	3.9	2.3
Poland								
	45.7	43.0	...	...	20.7	0.6	3.6	2.7
Others								
Chile								
	22.1	21.1	...	4.3	6.6	...	2.1	1.0
Ireland								
	32.7	31.5	14.8	8.7	12.2	0.7	3.6	1.2
South Korea								
	22.0	20.8	...	6.5	4.1	...	3.4	1.2

Sources: World Bank, IMF and World Bank staff calculations.

1/ Numbers may not add up to total because net lending and transfers to the EU budget are not included.

2/ In this table, SEE includes Albania, BH, Croatia, FYR Macedonia and SaM.

3/ Using spending relative to officially-estimated GDP in BH.

4/ For all countries, relative to GDP that includes a 30 percent cumulative adjustment for the NOE.

• As discussed earlier, the difference between the levels of observed general government spending in BH and spending predicted based on the quality of outcomes amounts to 10 percent of GDP. The analysis in this report suggests that the bulk of the difference is due to inefficient spending rather than the constraints imposed by the DPA. Wage outlays are as much as 6 percent of GDP higher than the outcomes of government services would suggest, and as Chapter 4 demonstrates, the larger wage bill primarily reflects high wage rates for lower grade employees, as well as excessive employment in the defense and police sectors, all of which are not greatly influenced by the DPA. Further, larger veterans' outlays reflect the legacy of the war and modest reform efforts rather than the DPA. Moreover, capital spending is higher than the average for the NMS without delivering the same quality of services, but again does not reflect costs imposed by the DPA. Therefore, the direct cost of the DPA appears limited to the relatively modest residual not to exceed 1-2 percent of GDP. The indirect costs of failing to reform and modernize the DPA ten years after the war, such as the lack of a single economic and political space, are probably larger and much harder to quantify.

Functional Classification

2.16. The legacy of the war still weighs heavily on the structure of public expenditures, with BH spending disproportionately more than the NMS on public order and veterans' benefits (Table 2.9). The key features of the analysis of the functional classification are as follows:

Table 2.9. General Government Spending, Functional Classification, 2004
(In percent of GDP)

	General Government		General Public Services	Defense and Public Order		Education	Health	Social Protection		Economic Affairs
	Overall	Primary		Total	Defense			Total	Pensions	
BH										
Official GDP	52.6	51.9	7.7	7.2	2.4	6.2	7.0	15.1	8.4	4.3
Adjusted GDP	40.5	40.0	5.9	5.5	1.8	4.8	5.4	11.6	6.5	3.3
NMS	40.8	38.9	6.1	3.5	1.7	5.1	4.7	15.9	8.8	4.5
Croatia	51.6	49.3	2.5	4.9	2.3	4.3	6.6	15.1	...	...
Estonia	38.9	36.9	...	...	2.0	5.7	...	14.3	6.1	3.8
Lithuania	32.9	32.5	4.6	3.6	1.6	5.9	3.8	15.2	6.2	4.4
Slovenia	44.0	42.5	8.5	3.4	1.4	5.9	6.8	18.3	11.6	3.5
Slovakia	38.4	36.1	5.0	3.8	1.8	1.8	4.4	8.4	7.6	4.7
Poland	45.7	43.0	7.0	2.2	1.8	5.6	4.1	22.1	11.6	3.2
Chile	22.1	21.1	0.3	2.7	...	3.8	3.0	7.5	2.9	2.7
Ireland	34.3	31.5	2.3	2.2	0.6	4.4	6.4	9.5	3.1	5.1

Sources: World Bank; IMF; World Bank: Bulgaria Public Finance Policy Review (2005); and World Bank staff calculations.

- Reflecting a substantially larger police force, **outlays on public order are substantially higher in BH than among the NMS**, or 5½ percent of adjusted GDP vs. 3½ percent. Ongoing demobilization has helped reduce spending on defense to the average for the NMS, the latter of which has risen to meet NATO commitments. The challenge for the BH authorities is to prepare for their objective of membership in the Partnership for Peace (PfP) and ultimately NATO, while keeping defense spending within prudent limits.

- **Social Protection:** Overall outlays on social protection are broadly similar to the levels in other countries in the region, but they are poorly balanced (See Chapter 6). Untargeted veterans' benefits consume a disproportionate share of public resources, with outlays as a share of GDP six times larger than in neighboring Croatia. Social welfare and child assistance programs, by contrast, appear underfunded.

- **Healthcare:** Overcapacity in the health care sector, combined with large duplication of the health care administration, results in larger but inefficient health outlays (see Chapter 6).

- **Education:** Net enrollment in secondary schools is substantially lower in BH than in the CEE countries, with negative consequences for growth prospects (see Chapter 5).

F. FISCAL SUSTAINABILITY

2.17. With the general government in near balance over the last several years, and with debt restructuring carried out with the Paris and London Clubs, government debt fell to 31½ percent of official GDP by 2005. All of government debt is owed to external creditors. Government debt is set to increase substantially, however, after the likely formalization in 2007 and 2008 of claims on the government for war damages, frozen foreign currency deposits ("frozen currency deposits" hereafter), unpaid liabilities and others (domestic claims). Current estimates suggest that the stock of domestic claims has a face value of about 25 percent of GDP, which, together with the existing stock of external government debt, would cause government debt to rise to about 56 percent of official GDP (see below for a discussion and calculations of the stock of domestic claims) (Table 2.10).

2.18. Calculations of the debt-stabilizing primary balances are useful, but they are an incomplete tool for fiscal sustainability analysis in the case of BH. (See Annex A for a brief description of the methodology for calculating the debt-stabilizing primary balance). Assuming the real interest rate (the nominal interest rate less inflation) is **lower** than real GDP growth by 1 percentage point, the stabilizing primary **deficit** is estimated to be roughly 0.6 percent of GDP (Table 2.11).⁵ Including interest outlays of 3.3 percent of GDP a year, this will imply a fiscal deficit of 3.9 percent, a magnitude lenders will be unlikely to finance. It is more informative, as a result, to assume a limit on government borrowing of 1½ percent of GDP a year. The required primary **surplus**, as a result, amounts to 1.8 percent. Fiscal policy would be guided by factors other than

Table 2.10. General Government Debt
(In percent of GDP, 2005)

	Total	Of which: External
BH 1/		
Official	56.3	31.7
Adjusted	43.3	24.4
SaM	60.2	52.9
Croatia	44.2	24.4
Albania	55.6	17.8
FYR Macedonia	37.6	26.9
Bulgaria	32.0	20.0
Romania	38.6	18.8

Sources: IMF and World Bank staff estimates.

1/ Includes domestic claims with face value of 29.6 percent of GDP.

Table 2.11. Debt Stabilizing Primary Balance 1/
(In percent and percent of GDP)

	Real interest rate less real GDP growth 2/ (In percent)	Primary	Fiscal
		Balance (In percent of GDP)	Balance
Fiscal outcome for 2005		0.7	0.0
1. No borrowing constraint			
	-2.0	-1.1	-3.9
	-1.0	-0.6	-3.9
2. Borrowing constraint: Max 1.5 percent of GDP a year			
	-2.0	1.3	-1.5
	-1.0	1.8	-1.5

1/ Real GDP growth of 5 percent; debt stock, including domestic claims, equal to 56.3 percent of GDP.

2/ Negative if the real interest rate is lower than growth.

those taken into account in this analysis, however. The large external deficit, uncertainties regarding both the policy variables and the stock of domestic claims, *inter alia*, are likely to imply a need for even tighter fiscal policy. Even abstracting from these factors, however, the simple model in this paragraph would require a tightening of about 1 percent of GDP relative to the 2005 outcome. The authorities' 2006 budgets are out of line with this calculation, however, making it necessary to carry out a larger adjustment in the following years.

2.19. A more complete picture of fiscal sustainability would require that the analysis take into account future fiscal pressures, and the need to reduce government spending and debt relative to GDP. Looming fiscal pressures include the need to formalize and settle the large stock of domestic claims, strengthen the institutions of the state government and handle property restitution. Moreover, the governments have expressed desires to engage in large infrastructure projects and have moved forward with purchases of rolling stock without a clear strategy for the railroad sector. Raising tax rates to cope with these challenges will be counterproductive, given the already large government burden on the economy. Neither is deficit spending an option because of the adverse consequences this will have on fiscal sustainability.

⁵ Reflecting the concessional nature of the existing stock of government debt and favorable international interest rates, the average nominal interest rate equaled 2.3 percent in 2005 (dividing interest payments by the average stock of debt during 2005). This rate is projected to rise to 5½ percent over the medium term. The average nominal rate on the bonds to be issued to settle domestic claims is assumed equal to 2½ percent, and the rate on new debt is assumed to rise to 7 percent, resulting in a nominal average rate of 5 percent on government debt.

2.20. Tackling the fiscal pressures would require that governments make careful trade-offs among competing priorities to limit new spending, while implementing bold measures to reduce or curb existing expenditures. Carrying out agreed reforms of defense and police, for example, would require that the authorities set wage rates for the new forces (see below). The authorities should seize the opportunity to set wage rates in a manner that would balance concerns about attracting and retaining a professional force and reducing the potential for corruption, with the need to ensure fiscal sustainability. Reforms that bring down employment in the police and the military and centralize command structures should reduce and not increase costs. By contrast, the governments will have substantially more room for maneuver in advancing property restitution, implementing a social program in support of corporate restructuring and limiting infrastructure spending.

2.21. Curbing new fiscal pressures will need to be supplemented by bold measures to cut existing spending. As the analysis below demonstrates, these measures would need to go beyond what is currently considered by the governments. Agreement on such measures should be supplemented by building the capacity for setting, coordinating and implementing fiscal policy. Only with such a capacity could the governments identify continuously areas that could be rationalized.

2.22. The rest of the chapter assesses fiscal sustainability by combining the effects of the fiscal pressures and savings measures using a 'stronger reform' and a 'slower reform' scenarios. The former assumes a bolder and determined reform effort, contributing to a more favorable macroeconomic environment and stronger growth prospects. The latter, by contrast, assumes a much more moderate reform effort. Given that the government will be constrained in financing a large fiscal deficit, the latter scenario illustrates the limits to modest reforms combined with large fiscal pressures and ambitious plans to boost spending. All told, these scenarios are illustrative and the authorities will face more intermediate choices. Intermediate choices will produce intermediate results and constraints on what can be accomplished, including in terms of state building.

Table 2.12. Fiscal Sustainability Scenarios: Key Assumptions

	2005	2006	2007	2008	2009	2010
A1. Revenues excluding grants remain constant as a share of GDP.						
A2. Grants decline in line with IMF assumptions (SM/05/164), the same under both scenarios.						
A3. Spending to GDP remains constant excluding interest and the categories with pressures and savings.						
A4. Interest rates on government debt are the same under both scenarios.						
A5. Principal repayments due on the external debt as of end-2005 are from the BiH MTEF 2006-08.						
A6. The change in the GDP deflator is constant at 2 percent a year.						
	(In percent of official GDP)					
Grants	3.3	2.3	1.8	1.2	0.8	0.7
	(In millions of KM)					
Principal repayments due on the end-2005 stock of external debt	157	194	168	146	183	183
	(In percent)					
Interest rate on the external debt as of end-2005	2.3	5.0	5.5	5.5	5.5	5.5
Interest rate on new loans						
Stronger reform		6.0	6.5	7.0	7.0	7.0
Slower reform		7.5	8.0	8.5	8.5	8.5
Real GDP growth						
Stronger reform		5.3	5.3	5.3	5.3	5.3
Slower reform		5.0	4.8	4.5	4.0	4.0

2.23. The savings measures considered under the ‘stronger reform’ scenario summarize the key quantifiable recommendations of the remaining chapters of the PEIR. Both scenarios assume the same levels of inflation and principal repayments due on the existing government debt (Table 2.12). Interest rates on new loans are assumed to be different, reflecting divergent perceptions among creditors about the country’s medium-term prospects. Interest payments are calculated based on the stock of government debt at the end of the preceding year. Also common to both scenarios is the assumption that revenues excluding grants remain unchanged relative to GDP, while grants decline as a share of GDP over the medium term. Real GDP growth, by contrast, is different across the scenarios, as are the magnitudes of the fiscal pressures and spending measures.

G. THE ‘STRONGER REFORM’ SCENARIO

Quantifying the Fiscal Pressures

2.24. The ‘stronger reform’ scenario assumes a substantial political will and effort to tackle the forthcoming fiscal pressures, reduce the government burden on the economy and lower government debt. The fiscal pressures BH faces are substantial. For reasons detailed below, in the absence of measures to reduce or curb spending, tackling these fiscal pressures would boost general government noninterest expenditures by 1.3 percent of GDP by 2010 relative to 2005, excluding principal repayments on domestic debt. Including the principal repayments, outlays are projected to increase by 2.3 percent of GDP by 2010 (Table 2.13). The key spending pressures are detailed in the following paragraphs.

Table 2.13. BH: Quantifying Fiscal Pressures, ‘Stronger Reform’ Scenario, 2005-2010
(In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Spending in categories with pressures (In percent of official GDP)	1697 11.9	2094 13.7	2471 15.0	2616 14.8	2717 14.3	2889 14.2
Spending in cat's with pressures excl. principal (In percent of official GDP)	1697 11.9	2014 13.2	2259 13.7	2372 13.4	2519 13.3	2686 13.2
Defense (In KM relative to 2005)	274	283 9	290 16	267 -7	267 -7	267 -7
Police (In KM relative to 2005)	610	610	610	627 17	632 22	641 31
Corporate restructuring (In KM relative to 2005)		19 19	19 19	19 19	19 19	19 19
Domestic claims		80	256	313	261	261
Interest			63	88	83	78
Principal		80	193	224	178	183
Restitution			29	29	29	29
Interest			10	10	9	9
Principal			18	19	19	20
Capital outlays (In percent of GDP)	813 5.7	1026 6.7	1102 6.7	1184 6.7	1271 6.7	1366 6.7
Institution building (In percent of GDP)		77 0.5	164 1.0	177 1.0	237 1.3	306 1.5

Sources: World Bank staff estimates.

2.25. There are risks that the size of the fiscal pressures identified in this section could increase and additional pressures could emerge. Such developments would need to be addressed by identifying additional spending reductions and further tightening of fiscal policy if institution building and the rest of the government agenda are to proceed as outlined. Within the identified

categories, key risks could result from larger costs of property restitution, corporate restructuring or settling domestic claims. Further, efforts to strengthen the municipal levels of government by allowing municipalities a higher borrowing ceiling, and thus larger outlays, may need to be offset by spending reductions at other levels of government.

State Building

2.26. Strengthening the central level of government is both a key challenge and an opportunity to improve efficiency and help advance EU integration. As detailed in Chapter 3, state-building includes consolidating at the state level of key institutions or functions that have heretofore been fragmented across the different levels of government, creating new institutions and strengthening the capacity of existing institutions. As estimated in Chapter 3, a modest pace of state-building will result in costs of ¾ percent of GDP a year. A modestly more ambitious agenda would boost costs to 1½ percent of GDP a year. The 'stronger reform' scenario assumes that costs amount to ½ percent of GDP in 2006 but rise to 1½ percent by 2010.

Domestic Claims

2.27. Substantial domestic claims were accumulated in BH as a result of the 1992-1995 war and the fiscal pressures in its wake (Table 2.14). In response to a surge of court filing by individual claimants and vastly different court awards for similar claims, both entities enacted laws specifying the type and size of valid claims. The laws were also enacted in response to earlier judgments of the Human Rights Commission (HRC) of the Constitutional Court (CC), which invalidated portions of the then existing settlement mechanisms enacted under the privatization laws. With minor exceptions, the laws divided the claims into three large groups: government spending arrears

Table 2.14. The Stock of Domestic Claims, 'Stronger Reform' Scenario
(In millions of KM unless specified otherwise)

	Laws 1/	Current Est 2/	Planned Settlement	
			Cash	Bonds
Total face value	4,731	3,308	211	3,097
Face value (In percent of 2004 GDP)	35.3	24.6	1.6	23.0
NPV (In percent of 2004 GDP)				17.8
FBH	2,969	1,654	100	1,561
General liabilities	948	93	93	
Liabilities for commercial bank loans	11	11		11
Liabilities for frozen currency deposits	1,110	1,150		1,150
War claims	900	400		400
RS	1,762	1,654	111	1,543
General liabilities	387	224	56	168
Liabilities for frozen currency deposits	775	830	55	775
War claims	600	600		600

Sources: BH authorities and World Bank staff estimates.

1/ Law on the Specification and Settlement of the Internal Debt of the FBH (2004) and Law on the Specification and Settlement of the Internal Debt of the RS (2004).

2/ Entity ministries of finance, OHR, IMF and World Bank staff estimates.

Table 2.15. BH: Payments to Settle Domestic Claims, 'Stronger Reform' Scenario
(In millions of KM unless specified otherwise)

	2006	2007	2008	2009	2010	NPV 1/
Total outlays (In percent of GDP)	80 0.5	256 1.6	313 1.8	261 1.4	261 1.3	17.8
Interest		63	88	83	78	
Principal	80	193	224	178	183	
General liabilities cash	52	52	52			
General liabilities bonds 2/		15	15	15	15	1.0
Bank credit FBH 2/		1	1	1	1	0.1
Frozen currency deposits 2/ 3/		161	161	161	161	11.3
Frozen currency deposits cash	28	28				
War claims 2/			84	84	84	5.4
Memo: Restitution 3/ of which: interest		29 11	29 10	29 9	29 9	

Sources: BH authorities and World Bank staff estimates.

1/ NPV as percent of 2004 nominal GDP.

2/ Fully amortized 15-year bonds with a 3 percent coupon.

3/ Assuming settlement with bonds with NPV of 2 percent of GDP.

(incurred from June 30, 1996 through December 31, 2002), liabilities for frozen currency deposits and liabilities for war damages (Table 2.15). The NPV of the bonds to be issued to settle domestic claims under the laws was limited to 10 percent of GDP.

2.28. The laws were challenged in the CC and the HRC. Regarding frozen currency deposits, the HRC ruled that settlement must be via bonds issued by the state government, carrying an explicit state guarantee, with maturity no longer than 15 years and with an interest rate that would adequately compensate bondholders for inflation. The current state framework law on settling frozen currency deposits provides for bonds with maturity of 13 years and a fixed interest rate of 2.5 percent.

2.29. War claims are potentially smaller in size than frozen currency deposits, but have been accompanied by equally substantial challenges. The CC ruled in December 2004 and the HRC reiterated afterwards that 50-year, zero-coupon bonds were incompatible with citizens' rights protected by the constitution. The HRC decision, however, provided no further guidance as to appropriate bond maturity consistent with the constitution and the European Convention on Human Rights. The analysis assumes bonds with maturity of 15 years and an interest rate of 2.5 percent, but the actual settlement may turn out more favorable, with longer maturity and a grace period.

2.30. With entity governments repaying domestic arrears, the stock of domestic claims has been reduced since late 2004. Together with further write-offs as a result of verification, the overall size of domestic arrears has been reduced substantially. Moreover, an upward revision of the size of domestic arrears is unlikely and the existing stock is taken as the basis for both the 'stronger reform' and the 'slower reform' scenarios. The authorities began verifying frozen currency accounts on August 11, 2005 in the RS and on September 11, 2005 in the FBH and expect to complete the process by the end of 2006. Both scenarios are based on the legally mandated limit, although experience from the neighboring countries suggests that the final amount is likely to be smaller.

2.31. A substantial reduction of the size of war claims in the FBH is likely. Exhaustive work by the OHR, including reviews of all claims submitted at cantonal and entity levels, suggests that the war claims that were estimated at KM 900 million in the FBH law are likely to amount to at most KM400 million. This is the figure used under the 'stronger reform' scenario. In contrast to the FBH claims, a further reduction of the RS war claims relative to the KM 600 million cap provided under the RS law is unlikely. The 'stronger reform' scenario uses the figure provided under the law and the 'slower reform' scenario assumes a much larger figure.

2.32. Under the 'stronger reform' scenario, the face value of domestic claims amounts to 24.6 percent of 2004 nominal GDP, with a NPV of 17.8 percent.⁶ Only a portion of the claims is assumed to be settled with cash and the rest with bonds. Bonds for settling the claims for frozen currency deposits are assumed to be issued in 2007 and for war claims in 2008. The bonds are assumed to be fully amortized during their lifetime, a conservative assumption.

Defense Reform

2.33. The authorities have embarked on an ambitious defense reform. A single command structure and a single budget were established at the state level from the start of 2006. The entity armed forces and ministries of defense (MoD) were unified at the same time, but staff levels and wage rates will remain unchanged through the end of September 2006. The authorities are committed to agree by the middle of 2006 on the staff levels and wages that will be in effect starting in October 2006. These wage rates will be provided under the state-level public wage law. The 'stronger reform' scenario assumes a substantially smaller increase in wage rates than implied by the 2006 budget. Achieving such a smaller increase would require substantial political will, especially ahead of the 2006 elections. The following assumptions are made:

- From October 2006, the armed forces will be reduced to 10,000 from 11,766 at present and the administrative staff to 1,000 from 1,364. Average wage rates for the army are assumed to increase to KM 1,137 per month (a 5 percent increase for the FBH armed forces, resulting in a 34 percent increase for the RS armed forces) and to KM 1,717 for the MoD staff. Such wage rates are still very high. For comparison, the average gross wage in the formal sector in BH amounted to KM 713 a month in 2004, while average wages in the growing informal sector are much lower.

- Reductions are accompanied by a severance package, under which the redundant soldiers and civil servants draw their current salaries for 12 months, from October 2006 until September 2007 (equivalent to KM 12,400 per person in the FBH army and KM 11,300 in the RS army).

2.34. Relative to a scenario of preserving the status quo and no changes in defense employment and wage rates, the 'stronger reform' scenario results in modest costs of 0.1 percent of GDP in 2006 and 2007. There are negligible savings thereafter, an achievement that reflects the assumed modest wage increases (Table 2.16). These results underline the importance of fiscal prudence when setting wage rates and severance packages for the army and the MoD.

⁶ To calculate the NPV of the claims, the analysis uses a discount rate which is the sum of the average yield on 10-year German bunds since 2001 (about 4 percent) and the spread on the recently-issued Eurobond by Ukraine relative to German bunds (250 basis points). The discount rate used, therefore, is 6½ percent. Under the 'stronger reform' scenario, the NPV of all domestic claims amounts to 17.8 percent of 2004 nominal GDP or 18.9 percent of 2003 nominal GDP. The latter figure is to be compared with the 10 percent of GDP NPV that the 2004 laws targeted to achieve.

Table 2.16. Bosnia and Herzegovina: Defense Reform, 'Stronger Reform' Scenario
(Employment in actuals, gross average monthly wages in KM)

	2005		2006		2007		2008		2009	
	empl	wage	Jan-Sept		Oct-Dec		empl	wage	empl	wage
			empl	wage	empl	wage					Total	wage
State										
Army										
Administration	158	1,717	158	1,717	10,000	1,384	10,000	1,384	10,000	1,384
FBH										
Army	7,937	1,034	7,937	1,034						
Administration	791	1,348	791	1,348	1,000	1,717	1,000	1,717	1,000	1,717
RS										
Army	3,829	813	3,829	813						
Administration	415	941	415	941						
	(In millions of KM)									
Total wage bill		156.6		117.4		46.7	164.1		186.7	186.7
Allowances		31.3		23.5		9.3	32.8		37.3	37.3
Severance 1/ Other costs of transition 2/						7.0	7.0		17.5	0.0
							3.3		5.0	
Overall cost of reform 3/ (in percent of GDP)							19.4		58.7	36.1
							0.1		0.4	0.2

Sources: Ministries of Defense, Defense Reform Commission and World Bank staff estimates.

1/ Starting in October 2006, all redundant staff will receive for an extra 12 months the gross wage they received until September 2006.

2/ Ministry of defense.

3/ Relative to a non-reform scenario under which wages are kept unchanged in nominal terms.

Police Reform

2.35. The authorities reached an agreement to embark on police reform in late 2005. Current proposals are for the process to be completed over five years, starting with administrative and legal preparations from 2006 through the end of 2007, to be followed by the unification and reduction of existing police forces from 2008 through 2010. There is substantial uncertainty as to the speed of the process, however. The following assumptions are used under the ‘stronger reform’ scenario (Table 2.17):

- From 2008 through 2010, the overall number of police will be reduced by 3,500 relative to 2005 levels (20 percent in 2008, 30 percent in 2009 and the rest in 2010) and the administrative staff by 2,000 (50 percent in 2008, 30 percent in 2009 and 20 percent in 2010), in line with the recommendations contained in the Report of the Police Restructuring Commission of BH from December 2004. The pace of shifting of the police and the administration to the new police regions is assumed to proceed in line with the above assumptions on the pace of staff reductions.

- In the absence of an official decision, the average wage of the new police force is assumed to increase 5 percent relative to the current average wage in the FBH. This is an ambitious assumption whose realization would require political will. Policemen will begin receiving the new salaries when they are shifted to the new force; until then, they are assumed to receive their existing salaries. Absent any other guidance from the authorities, redundant police are assumed to receive severance packages of KM 7,000 per person.

2.36. Under the ‘stronger reform’ scenario, the cost of police reform is projected to be modest and would amount to 0.1-0.2 percent a year from 2008 through 2010. The authorities would be well advised to set wage rates and employment level to generate savings over the medium term, rather than to increase costs.

Property Restitution

2.37. Property restitution is yet to begin. The state-level Restitution Commission established in 2004 has invited citizens and companies to present claims for property to be restituted, but there is no decision on what the next steps should be. The submitted claims thus far cover one-half of BH’s territory, with most of these for arable land and forests. Even with due allowance for overlapping or inflated claims, these numbers suggest that the potential costs of the process could escalate if not managed properly. With this in mind, the authorities would be well advised to agree to provide only monetary compensation and to devise mechanisms for settling restitution claims that balances private demands with the public interest. The analysis assumes that the NPV of debt issued to deal with restitution will amount to only 2 percent of 2004 nominal GDP and settlement is assumed to begin in 2007 via bonds with the same characteristics as those used to settle domestic claims. Risks are substantial, however, that the actual settlement may well be much larger than assumed. Uncertainty as to when the process will actually begin is also substantial.

Table 2.17. Bosnia and Herzegovina: Police Reform, 'Stronger Reform' Scenario 1/
(Actual employment; gross average monthly wages in KM)

		2005	2006	2007	2008	2009	2010
Ministry of Security 2/ of which:							
Administration	Avg wage	1,900	1,900	1,900	1,900	1,900	1,900
	Empl	51	51	51	2,001	3,171	3,951
Police	Avg wage				1,622	1,622	1,622
	Empl				2,161	5,403	10,805
RS							
Administration	Avg wage	750	750	750	750	750	750
	Empl	2,196	2,196	2,196	1,098	439	0
Police	Avg wage	850	850	850	850	850	850
	Empl	5,458	5,458	5,458	4,366	2,729	0
FBH							
Administration	Avg wage	1,545	1,545	1,545	1,545	1,545	1,545
	Empl	404	404	404	202	81	0
Police	Avg wage	1,545	1,545	1,545	1,545	1,545	1,545
	Empl	847	847	847	678	424	0
Cantons							
Administration	Avg wage	1,360	1,360	1,360	1,360	1,360	1,360
	Empl	3,300	3,300	3,300	1,650	660	0
Police	Avg wage	1,360	1,360	1,360	1,360	1,360	1,360
	Empl	8,000	8,000	8,000	6,400	4,000	0
Total							
Administration	Avg wage	1,152	1,152	1,152	1,451	1,695	1,900
	Empl	5,951	5,951	5,951	4,951	4,351	3,951
Police	Avg wage	1,176	1,176	1,176	1,247	1,368	1,622
	Empl	14,305	14,305	14,305	13,605	12,555	10,805
		(In millions of KM)					
Wage bill without reform		284	284	284	284	284	284
Reform scenario summary							
Wage bill 2/		284	284	284	290	295	300
Severance			0	0	12	12	15
Total wage cost		284	284	284	302	306	315
Net cost					17	22	31
(In percent of GDP)					0.1	0.1	0.2

Sources: EUPM, Ministries of Interior, Ministry of Security, IMF and World Bank staff estimates.

1/ Average wage is in KM per month.

2/ Excluding SIPA, SBS and Interpol.

Table 2.18. BH: Quantifying Spending Measures, 'Stronger Reform' Scenario, 2005-2010
(In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Spending in categories with measures (percent of GDP)	4134 29.0	4204 27.5	4209 25.6	4300 24.3	4417 23.3	4544 22.3
Narrow wage bill 1/ (In percent of GDP)	822	812 5.3	803 4.9	793 4.5	790 4.2	790 3.9
Education 2/ (In percent of GDP)	745	732 4.8	764 4.6	801 4.5	843 4.4	889 4.4
Subsidies (In percent of GDP)	210	205 1.3	200 1.2	195 1.1	195 1.0	195 1.0
Transfers to non-profits (In percent of GDP)	285 2.0	278 1.8	271 1.6	264 1.5	264 1.4	264 1.3
Social welfare 3/ (In percent of GDP)	623	697 4.5	630 3.8	641 3.6	653 3.4	665 3.3
Pensions (In percent of GDP)		1316 8.6	1369 8.3	1425 8.1	1482 7.8	1542 7.6
Pharmaceutical procurement (In percent of GDP)	184	164 1.1	172 1.0	181 1.0	190 1.0	199 1.0

Sources: BH authorities and World Bank staff estimates.

1/ Excludes public employees in defense, police and education.

2/ Includes all outlays on education, including wages.

3/ Includes social welfare, child protection and veterans benefits.

Capital outlays

2.38. To reflect increased prospects that the governments will engage in large-scale infrastructure investment, and to reflect the likelihood that spending will be increased to upgrade infrastructure at the sub-national level, the 'stronger reform' scenario assumes that capital outlays by the general government will rise from 5.7 percent of GDP in 2005 to 6.7 percent by 2010.

Quantifying the Spending Reduction Measures

2.39. To offset the spending pressures and allow for an overall spending retrenchment from 53 percent of official GDP to 49 percent, the proposed spending measures alone would reduce outlays by an estimated 6.7 percent of GDP by 2010 relative to 2005. These measures are a subset of the recommendations contained in the remainder of the report and represent a substantial reform effort (Table 2.18). While bold, the proposed spending reductions are certainly not unrealistic. These reductions could be compared with a reduction of general government spending equivalent to 6.2 percent from 1998 through 2002 in Lithuania and a cut of 4 percent of GDP in Serbia and Montenegro from 2002 through 2005. The identified spending measures, moreover, work within the existing constitutional arrangements. The authorities may decide to alter the existing system of governance over the longer term to reduce duplication and generate further savings, however.

- **Public wages and employment (see Chapter 4 for details).** The measures in the following paragraphs refer only to the existing government institutions, excluding defense, police, and

education (Table 2.19). The wage bill for defense, police and new institutions is discussed in the section on fiscal pressures. The wage bill for education is handled in the following section on education.

Table 2.19. Bosnia and Herzegovina: Wage Bill, 'Stronger Reform' Scenario
(In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Total	1953					
(In percent of GDP)	14					
Defense	234					
Police	284					
Education	613					
Narrow wage bill 1/	822	812	803	793	790	790
(In percent of GDP)	5.8	5.3	4.9	4.5	4.2	3.9
Judiciary	116	113	113	113	113	113
Health excl. medical professionals	42	42	39	36	33	33
All others	664	657	651	644	644	644

Sources: BH authorities and World Bank staff estimates.

1/ Excluding public employees in defense, police and education.

Measure 1: Reduce wage rates in the judiciary in line with proposals from the High Judicial and Prosecutorial Council. After a cut of 4.4 percent at the start of 2006 (KM2.9 million), nominal wage rates are assumed to remain frozen through 2010. In addition, benefits that were abolished and then partially reinstated are assumed to be permanently abolished.

Measure 2: Reduce employment in the health ministries, health insurance funds and public health institutes in line with the recommendations of the EU functional reviews. The wage bill among these institutions will decline by KM9.3 million over the next several years as a result. However, there is substantially more scope for reduction.

Measure 3: Reduce the wage bill for the remaining categories of public employees by 1 percent in nominal terms a year for three years, and then keep the wage bill frozen in nominal terms. This would be achieved by implementing measures to help prioritize functions and to reduce total employment gradually by 2-2½ percent a year. Savings would be offset by setting aside a modest amount (1-1½ percent) for wage decompression for priority posts.

- **Education:** All measures related to education are detailed in Chapter 5. Enacting all the measures proposed in this section will help reduce outlays by 0.9 percent of GDP by 2010 relative to 2005 (Table 2.20).

Measure 4: Move to per capita financing of primary and secondary schools.

Measure 5: Reorient students to general secondary education from technical and vocational education to help reduce outlays on education and improve the job market prospects of students.

Measure 6: Raise fees for university students that repeat years.

Measure 7: Raise fees for foreign students to cover fully the cost of their tuition.

Table 2.20. BH: Education Outlays, 'Stronger Reform' Scenario, 2005-2010
(In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Proposed measures 1/ (In percent of GDP)		65 0.4	92 0.6	119 0.7	143 0.8	168 0.9
Move to per capita financing		17	30	40	44	46
Reorient from technical to general sec. educ.		8	20	35	53	73
Raise fees for repetition		25	27	29	31	34
Integrate universities		15	15	15	15	15

Sources: BH authorities and World Bank staff estimates.

1/ Differences relative to 2005.

Measure 8: Integrate fully each university's separately managed faculties to reduce the widespread duplication of staff, facilities and programs.

- **Subsidies and transfers to non-profit organizations**

Measure 9: Reduce subsidies to railroads and freeze agriculture subsidies in nominal terms, resulting in a reduction of ½ percent of GDP in 2010 relative to 2005. Achieving cuts in subsidies to the railroads will require hard decisions to trim labor, services and the network. In addition, improved cost recovery from freight flows on the network will also improve the financial position of the railway companies, reducing the need for subsidies. Keeping agriculture subsidies unchanged will also require strong political commitment.

Measure 10: Reduce transfers to non-profit organizations. Entity and sub-entity governments transferred the equivalent of 1½ percent of GDP to veterans' associations, citizens' organizations and other non-profit entities in 2004.⁷ The authorities should consider reducing transfers to non-profit organizations by at least ½ percent of GDP by 2008 relative to 2005 to help improve transparency and reduce the inefficient use of public resources.

- **Veterans' benefits, social welfare and child protection (See Chapter 6 for details):** The measures proposed in the following paragraphs would more than offset the modest costs related to the enactment of laws on social welfare in the RS and child protection in the FBH and help reduce overall spending on veterans' benefits, social welfare and child protection by 1.1 percent of GDP by 2010 relative to 2005 (Table 2.21). Such savings could only be generated with substantially bolder reforms of the veterans' benefits systems than those supported in the last round of legislative changes. Reforms would require decisive action to improve targeting of benefits to the most disabled veterans and the neediest survivors and thus call for a reduction in the number of beneficiaries by over 40 percent. Reforms of this level of ambition would reach well beyond the nominal freeze of veterans' benefits spending that has been targeted with little success so far.

Measure 11: Tighten eligibility requirements for veterans and survivor families.

Measure 12: In the FBH, reduce the allocation for people with non-war-induced disabilities through cash rationing.

⁷ Transfers to non-profit organizations often include *bona fide* subsidies, such as the payments to Air Bosna by the FBH budget in 2004 and 2005. The PEIR adjusts for this misclassification.

Table 2.21. BH: Outlays on Social Welfare, Child Protection and Veterans Benefits, 'Stronger Reform' Scenario, 2005-2010 1/ (In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Total	623	697	630	641	653	665
(In percent of GDP)	4.4	4.5	3.8	3.6	3.4	3.3
Social welfare 2/	93	133	136	139	141	144
Child protection 3/	76	110	113	116	119	122
Veterans' benefits	455	453	381	387	392	398
(In percent of GDP)	3.2	3.0	2.3	2.2	2.1	2.0

Sources: BH authorities and World Bank staff estimates.

1/ General government.

2/ Includes outlays on social welfare, civilian victims of war and disability. Assumes enactment of a social protection law in the RS from the start of 2006.

3/ Assumes enactment of a child welfare law in the FBH in 2006.

- **Pensions (See Chapter 6 for additional details)**

Measure 13: Limit pension increases in both entities to the change in consumer prices. The shift to inflation indexation from implicit average wage indexation will help slow the increase in pension outlays in nominal terms and reduce them by 1¼ percent of GDP by 2010 compared with 2005 (Table 2.22).

Table 2.22. BH: General Government Pension Outlays, 2005-2010 (In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Total	1265	1316	1369	1425	1482	1542
(In percent of GDP)	8.9	8.6	8.3	8.1	7.8	7.6
FBH 1/	831	865	900	936	974	1013
(In percent of GDP)	5.8	5.6	5.5	5.3	5.1	5.0
RS 1/	434	452	470	489	509	529
(In percent of GDP)	3.0	2.9	2.9	2.8	2.7	2.6

Sources: World Bank staff estimates.

1/ From 2006 onwards, the analysis assumes an increase in the number of beneficiaries by 2 percent a year. Average annual pensions are also assumed to increase by 2 percent a year.

- **Pharmaceutical procurement (See Chapter 6 for additional details)**

Measure 14: Centralize pharmaceutical procurement, at least at the entity level; and convert the new system of procurement to a tender-basis. Centralized procurement of drugs through competitive tendering should help reduce total drug expenditures by up to 20 percent in the FBH, or a quarter percent of GDP by 2010 relative to 2005. Savings would be smaller in the RS because the system is already more centralized. Centralized and tender-based procurement, combined with measures to limit expansion of the positive drug list and encourage generic substitution, is assumed to help keep the increase in the overall pharmaceutical outlays covered by the health funds to 5 percent a year over the medium term after the initial decrease, which would require tight controls over drug expenditures.

Fiscal Sustainability: Putting Pressures and Measures Together

2.40. The ‘stronger reform’ scenario assumes that all of the above spending measures are implemented. Such a bold reform effort would enable the governments to meet the fiscal challenges identified in this chapter while reducing government spending and debt (Table 2.23). Government spending, as a result, is projected to decline from 41 percent of adjusted GDP to 38 percent by 2010. **This is a substantial reduction given the magnitude of the fiscal pressures assumed to be tackled under this scenario, but spending would still be higher relative to GDP than in countries with similar incomes per capita and higher than the SEE countries on average.** General government debt, including domestic claims, is projected to fall to 33 percent of adjusted GDP after rising to 41 percent in 2007. As a share of officially estimated GDP, government debt is projected to decline from 53 percent of GDP in 2006 to 43 percent by 2010.

2.41. Commitment to ambitious spending reductions along the lines of the ‘stronger reform’ scenario should strengthen investor confidence and contribute to improving BH’s creditworthiness. This should enable the governments to finance the temporary deficits over the next several years and the principal repayments due. Principal repayments due on the current stock of external debt are assumed to amount to 1-1¼ percent of GDP in 2006 and 2007 and decline thereafter, while principal repayments due on domestic claims and restitution are set to jump to 1.4 percent by 2008. The governments’ gross borrowing requirements are projected to increase from 3.5 percent of GDP in 2006 to 3.9 percent in 2007 before easing to 0.8 percent in 2010.

2.42. Part of the borrowing requirements could be funded via drawdowns of the governments’ deposits held with domestic banks. Provided the authorities agree to a credible medium-term program along the lines of this scenario, it is assumed that multilateral creditors will extend about \$80 million a year during 2006-2010.⁸

2.43. All told, even with the ambitious reforms considered thus far, a substantial funding need would remain. Assuming deposit drawdowns amount to \$100 million during 2006-2010 and gross multilateral disbursements to \$400 million, the remaining cumulative financing gap is projected to amount to \$850 million, with heavier concentration in the earlier years. Whether private foreign creditors would finance such a gap is unclear, but prospects would certainly improve were the authorities to agree and begin implementing an ambitious agenda of spending and structural reforms. Alternatively, the gap can be narrowed substantially if the authorities were to accept that the pace of institution building at the state level has to be slower than assumed and that capital outlays were to remain broadly unchanged rather than increase as projected.

⁸ This assumes disbursements in roughly equal proportions under the existing and new policy-based lending from the World Bank and under new stand-by arrangements with the IMF.

Table 2.23. BH: Summary of the 'Stronger Reform' Scenario, 2005-2010
(In percent of GDP unless specified otherwise)

	2005	2006	2007	2008	2009	2010
General government revenues and grants	53.5	52.5	52.0	51.4	51.0	50.9
Revenues	50.2	50.2	50.2	50.2	50.2	50.2
Grants	3.3	2.3	1.8	1.2	0.8	0.7
General government spending	53.5	54.0	53.6	52.3	51.0	49.8
In categories with fiscal pressures	11.9	13.2	13.7	13.4	13.3	13.2
In categories with savings	29.0	27.5	25.6	24.3	23.3	22.3
Other noninterest outlays	11.9	11.9	11.9	11.9	11.9	11.9
Interest	0.7	1.5	2.4	2.7	2.6	2.5
(In millions of KM)	100	224	388	469	492	500
General government balance	0.0	-1.5	-1.6	-0.9	-0.1	1.1
(In millions of KM)	0	-225	-261	-164	-10	217
Primary balance	0.7	0.0	0.8	1.7	2.5	3.5
Financing		1.5	1.6	0.9	0.1	-1.1
Principal repayments due on ext. debt as of end-2005		-1.3	-1.0	-0.8	-1.0	-0.9
Principal repayments due on dom. debt as of end-2005		-0.3				
Principal repayments due on dom. claims and restitution		-0.5	-1.3	-1.4	-1.0	-1.0
New borrowing		3.5	3.9	3.1	2.1	0.8
Government debt	31.7	48.9	53.2	50.4	47.0	42.7
External debt as of the end-2005	31.4	28.0	25.0	22.5	20.0	17.7
Domestic debt as of the end-2005	0.3					
Domestic claims and restitution		17.4	21.0	18.1	15.8	13.7
New loans		3.5	7.2	9.8	11.2	11.3
					(In percent of adjusted GDP)	
General government spending	41.2	41.5	41.2	40.2	39.3	38.3
General government debt	24.4	37.6	40.9	38.8	36.2	32.8

Sources: BH authorities and World Bank staff estimates.

H. THE 'SLOWER REFORM' SCENARIO

2.44. The 'slower reform' scenario assumes that weaker will for reform would result in larger costs of tackling the fiscal pressures and smaller savings from the implementation of a subset of the spending measures discussed under the 'stronger reform' scenario. These factors, combined with slower real GDP growth, are projected to result in a persistently large general government deficit that will leave government debt on an upward and unsustainable trend.

2.45. The differences in fiscal pressures under the 'slower reform' and the 'stronger reform' scenarios are detailed in the following paragraphs (Table 2.24). The 'slower reform' scenario assumes that the stock of domestic claims will amount to KM900 million in the FBH, in line with the FBH law, and to KM3 billion in the RS, or half as much as under the RS law (Tables 2.25 and 2.26). The larger amounts compared with the 'stronger reform' scenario reflect the risks that additional claims for war damages will appear, but the figures are certainly at the outer limits of what is possible. Under these assumptions, the face value of domestic debt would amount to 45 percent of GDP with NPV of 33.5 percent. Settlement of domestic claims is assumed to be carried out via bonds with the same parameters as under the 'stronger reform' scenario.

Table 2.24. BH: Quantifying Fiscal Pressures, 'Slower Reform' Scenario, 2005-2010
(In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Spending in categories with pressures (In percent of official GDP)	1697 11.9	2132 14.0	2675 16.4	3116 17.9	3219 17.4	3400 17.4
Spending in cat's with pressures excl. principal (In percent of official GDP)	1697 11.9	2053 13.4	2428 14.9	2670 15.3	2813 15.2	2982 15.2
Defense (In KM relative to 2005)	274	305 31	381 107	358 84	358 84	358 84
Police (In KM relative to 2005)	610	610 0	610 0	638 28	662 52	701 91
Corporate restructuring (In KM relative to 2005)		38 38	38 38	38 38	38 38	39 39
Domestic claims		80	311	660	608	608
Interest			83	206	194	182
Principal		80	228	427	386	397
Restitution			29	29	29	29
Interest			10	10	9	9
Principal			18	19	19	20
Capital outlays (In percent of GDP)	813 5.7	1023 6.7	1143 7.0	1218 7.0	1292 7.0	1371 7.0
Institution building (In percent of GDP)		76 0.5	163 1.0	174 1.0	231 1.3	294 1.5

Sources: BH authorities and World Bank staff estimates.

Table 2.25. BH: Stock of Domestic Claims, 'Slower Reform' Scenario
(In millions of KM unless specified otherwise)

	Laws 1/	Current Est 2/	Planned Settlement	
			cash	bonds
Total face value	4,731	6,208	196	6,012
(In percent of 2004 nominal GDP)	35.3	46.4	1.5	44.9
NPV (In percent of 2004 nominal GDP)				33.5
FBH	2,969	2,154	93	2,061
General liabilities	948	93	93	
Liabilities for commercial bank loans	11	11		11
Liabilities for frozen currency deposits	1,110	1,150		1,150
War claims	900	900		900
RS	1,762	4,054	103	3,951
General liabilities	387	224	48	176
Liabilities for frozen currency deposits	775	830	55	775
War claims	600	3,000		3,000

Source: BH authorities, OHR, and World Bank staff estimates.

1/ Law on the Specification and Manner of Settlement of the Internal Debt of the FBH (2004)

Law on the Specification and Manner of Settlement of the Internal Debt of the RS (2004).

2/ Entity ministries of finance, OHR, IMF and staff estimates.

Table 2.26. BH: Payments to Settle Domestic Claims, 'Slower Reform' Scenario
(In millions of KM unless specified otherwise)

	2006	2007	2008	2009	2010	NPV 1/
Total outlays	80	256	556	504	504	
(In percent of GDP)	0.5	1.6	3.1	2.7	2.5	33.5
Interest		63	171	161	150	
Principal	80	193	385	343	353	
General liabilities cash	52	52	52			
General liabilities bonds 2/		15	15	15	15	1.0
Bank credit FBH 2/		1	1	1	1	0.1
Frozen currency deposits 2/ 3/		161	161	161	161	11.3
Frozen currency deposits cash	28	28				
War claims 2/			327	327	327	21.2
Memo: Restitution 3/		29	29	29	29	
of which: interest		11	10	9	9	

Source: BH authorities and World Bank staff estimates.

1/ NPV as percent of 2004 nominal GDP.

2/ Fully amortized 15-year bonds with a 3 percent coupon.

3/ Assuming settlement with bonds with NPV of 2 percent of GDP.

2.46. For defense, under the 'slower reform' scenario average army wage rates are assumed to be increased to the level of the average wages for the state MoD, or to KM1,717 a month. The

costs of defense reform will be roughly double than under the 'stronger reform' scenario, or 0.2 percent of GDP in 2006, 0.7 percent in 2007 and ½ percent through 2010.

2.47. For police, the 'slower reform' scenario also assumes large increases in average wages. The average wage is assumed to increase by 20 percent for the operational police staff relative to the current level in the FBH and by 10 percent for the administrative staff relative to current state wage levels. Under these assumptions, the cost of police reform would increase to 0.4 percent of GDP by 2010 from 0.2 percent of GDP in 2008.

2.48. Outlays on the social program to facilitate corporate restructuring and capital expenditures are also assumed to be larger than under the 'stronger reform' scenario. On the social program, outlays are assumed to be three times as large as under the 'stronger reform' scenario but still modest at ¼ percent of GDP a year. Capital outlays are assumed to increase faster than under the 'stronger reform' scenario to 7 percent of GDP by 2007 and remain at that level through 2010. All remaining fiscal pressures are assumed to have similar magnitudes as under the 'stronger reform' scenario.

2.49. The 'slower reform' scenario assumes that a more limited set of spending measures will be implemented compared with the 'stronger reform' scenario. The three areas where reform implementation will be slower are public wages, subsidies and spending on social welfare, including on veterans' benefits (Table 2.27). The analysis assumes that public wages, other than those for the military, police, judiciary, education, and health, would increase by 2 percent a year in nominal terms. The narrowly defined wage bill is therefore projected to decrease by 1¼ percent by 2010 relative to 2005 rather than the roughly 2 percent of GDP under the 'stronger reform' scenario. Subsidies are

Table 2.27. BH: Quantifying Spending Measures, 'Slower Reform' Scenario, 2005-2010
(In millions of KM unless specified otherwise)

	2005	2006	2007	2008	2009	2010
Spending in categories with measures (In percent of GDP)	3301 23.1	3326 21.8	3420 20.9	3524 20.3	3644 19.7	3774 19.3
Narrow wage bill 1/ (In percent of GDP)	822	835 5.5	843 5.2	854 4.9	865 4.7	879 4.5
Education 2/ (In percent of GDP)	745	732 4.8	764 4.7	801 4.6	843 4.6	889 4.5
Transfers to non-profits (In percent of GDP)	285 2.0	278 1.8	271 1.7	264 1.5	264 1.4	264 1.3
Pensions (In percent of GDP)	1265	1316 8.6	1369 8.4	1425 8.2	1482 8.0	1542 7.9
Pharmaceutical procurement (In percent of GDP)	184	164 1.1	172 1.1	181 1.0	190 1.0	199 1.0

Sources: BH authorities and World Bank staff estimates.

1/ Excludes public employees in defense, police and education.

2/ Includes all outlays on education, including wages.

projected to remain unchanged at 1½ percent of GDP rather than be reduced by a third. All other spending measures considered under the 'stronger reform' scenario are assumed to be implemented in full. Overall, the measures assumed under the 'slower reform' scenario are projected to reduce general government spending by 3.9 percent of GDP by 2010 relative to 2006.

2.50. The moderate measures considered under this scenario will not be sufficient to offset the costs arising from the assumed fiscal pressures. Absent borrowing constraints, the fiscal deficit would rise to 5.8 percent by 2010 and leave general government debt on an upward path, increasing to 60 percent of adjusted GDP by 2010 (Table 2.28). Government borrowing requirements would rise steadily to 9 percent of GDP a year. However, such magnitudes are unlikely to be financed, thereby constraining what the governments will be able to accomplish. State building, as well as other initiatives, would need to be scaled back. The 'slower reform' scenario, therefore, serves to illustrate the limitations the authorities will face with state-building and other agenda if they are unable or unwilling to identify bolder measures than those considered in this section.

Table 2.28. Bosnia and Herzegovina: Summary of the 'Slower Reform' Scenario
(In percent of GDP unless specified otherwise)

	2005	2006	2007	2008	2009	2010
General government revenues and grants	53.5	52.5	52.0	51.4	51.0	50.9
Revenues	50.2	50.2	50.2	50.2	50.2	50.2
Grants	3.3	2.3	1.8	1.2	0.8	0.7
General government spending	53.5	54.4	56.1	57.1	56.9	56.7
In categories with fiscal pressures	11.9	13.4	14.9	15.3	15.2	15.2
In categories with savings	23.1	21.8	20.9	20.3	19.7	19.3
Other noninterest outlays	17.7	17.7	17.7	17.7	17.7	17.7
Interest	0.7	1.5	2.6	3.7	4.1	4.5
General government balance	0.0	-1.9	-4.2	-5.7	-5.9	-5.8
Primary Balance	0.7	-0.5	-1.6	-1.9	-1.7	-1.4
Financing	0.0	1.9	4.2	5.7	5.9	5.8
Principal repayments due						
On ext. debt as of end-2005	0.0	-1.3	-1.0	-0.8	-1.0	-0.9
On dom. debt as of end-2005		-0.3				
On domestic claims and restitution	0.0	-0.5	-1.5	-2.6	-2.2	-2.1
New borrowing	0.0	4.0	6.7	9.1	9.0	8.9
Government debt	31.7	49.5	74.4	75.4	77.0	78.4
External debt as of end-2005	31.4	28.0	25.2	22.8	20.5	18.4
Domestic debt as of end-2005	0.3					
Domestic claims and restitution		17.5	38.7	33.8	29.6	25.8
New loans		4.0	10.4	18.9	26.8	34.2
				(In percent of adjusted GDP)		
General government spending	41.2	41.9	43.2	43.9	43.7	43.6
Government debt	24.4	38.1	57.2	58.0	59.2	60.3

Source: BH authorities and World Bank staff estimates.

2.51. The ‘stronger reform’ and ‘slower reform’ scenarios presented in this chapter illustrate the key choices faced by the BH governments. Even if all the bold measures proposed therein are implemented, however, there will remain a substantial financing gap. Whether and at what cost this gap can be financed is the key constraint that will ultimately guide the choices the authorities make. Part of the gap reflects the assumption made in the chapter that revenues net of grants would remain unchanged relative to GDP over the medium-term. An ambitious implementation of structural reforms, implied under the ‘stronger reform’ scenario, should help boost economic activity and result in stronger revenues. These would afford the opportunity to reduce social security contribution rates, with a further beneficial effect on real GDP growth and revenues.

2.52. Agreeing and implementing a bolder agenda of spending reforms than proposed in this chapter should help reduce the gap and improve the governments’ credibility. There should be no illusion that this will be very difficult politically. Should such an agenda be agreed, access to capital markets will improve, making it more likely than not that a substantial part of the remaining gap will be financed. More ambitious spending reductions are all the more important, given that the potential cost of state level institution building is unknown. Should the cost amount to more than is assumed in this chapter, the authorities would need to find additional savings. While some savings could result from *ad hoc* measures to curb outlays on operations and maintenance, as done in the recent past, such an approach would only hinder further economic expansion and add to fiscal woes. Savings need to come from the areas that are the most inefficient, and these are plenty.

2.53. Delays implementing spending or structural reforms would have serious negative consequences for the pace of EU integration. With foreign investors unlikely to finance large fiscal deficits if no credible medium-term program of fiscal restraint and adjustment is adopted, the authorities will be forced to slow the pace of institution building and cut spending in an unplanned manner. The slower pace of building or strengthening government institutions will delay EU integration and limit scope for creation of a single economic and political space. All told, the authorities will miss the opportunity to reduce the very high unemployment and poverty and improve living standards. Fiscal and financial consequences will also be substantial should investors’ worries about fiscal sustainability intensify.

I. RECOMMENDATIONS

2.54. This chapter concludes with a summary of recommendations derived from the analysis of the level and structure of government spending. The recommendations do not include those that are presented in the following chapters and quantified in the fiscal sustainability analysis.

Government Spending

- **Reduce the level of government spending relative to GDP closer to the levels among the faster growing economies and countries with broadly similar incomes per capita.** This should help lighten the government’s burden on the economy and help tackle forthcoming fiscal pressures. All told, consider enacting and implementing a medium-term plan of fiscal consolidation that will reduce existing spending by at least 7 percent of GDP.

- **As a general rule, eliminate inefficiencies in sectors or programs before committing new funds to these areas.**

- **Using the analysis in the remainder of the report, improve the structure of government spending to reduce the share of expenditures that are more often seen as not conducive to boosting economic growth and reducing poverty.**

Taxes and Social Security Contributions

- **Enact the harmonized entity laws on corporate and personal income taxes.** Consider ways to further eliminate exemptions to create an even playing field for all companies, domestic and foreign.

- **Reduce social security contribution rates.** As a first step, use the larger than projected VAT revenues, should these turn out to be permanent, to eliminate cross flows between the extrabudgetary funds and cut contribution rates (See Chapter 6 for details). As a second step, should the new personal and corporate income tax laws also prove to be revenue positive, reduce contribution rates further. Finally, consider modest increases in the personal income tax rate to reduce yet further social security contribution rates.

Defense and Police Reforms, State Building

- **Set the wage rates and employment levels for the army and the police in a fashion that would be fiscally sustainable while providing for incentives to retain and recruit capable personnel in line with the governments' longer-term priorities.**

- **Prioritized and carefully planned strengthening of state institutions should help limit costs.** As a principle, shifting institutions from the sub-national to the national level of government without adding functions should be at least cost-neutral. The authorities should work toward offsetting costs related to creating new or strengthening existing state-level institutions and functions through reductions in spending elsewhere.

Domestic Claims and Restitution

- **Settling the outstanding domestic claims and handling restitution should be done in a way that balances the public and the private interest.** The need to reduce government spending to boost economic activity and reduce poverty, together with the need to strengthen state-level institutions, put a limit on what the governments can pay to settle the outstanding claims. Violating these constraints will have adverse fiscal consequences.

Data and Capacity for Fiscal Policy

- **Data quality needs to be improved dramatically and capacity for consolidating fiscal data strengthened substantially to enable reliable analysis.** Preparing consolidated fiscal accounts at least at annual frequency should be a priority. Explicitly including foreign-financed investment projects in the entity and state budgets should also be carried out to help improve transparency and the ability to analyze fiscal developments.

- **The governments' capacity to analyze fiscal data, as well as set, execute and monitor fiscal policy needs to be strengthened.** Such capacity would be important in analyzing trade-offs among conflicting spending proposals and reaching agreement on how to accommodate forthcoming fiscal pressures.

3. STATE BUILDING – A KEY CHALLENGE AND AN OPPORTUNITY

A. INTRODUCTION

3.1. Strengthening the institutions of the central level of government, which were left deliberately diminutive under the DPA, is both a key challenge and an opportunity for the BH authorities. Consolidating key functions that have heretofore been fragmented across different levels of government would also improve BH's capacity to engage effectively with the EC and other partners.

3.2. Future institution-building will follow the progress made in strengthening the state level of government since the end of the armed conflict and recent agreements to reform and centralize defence and police. Conceptually, it is helpful to think of future institution building as consisting of two phases. The first phase includes the establishment of institutions, functions and capacities needed to strengthen the single economic and political space in BH and enable the government to take on the key obligations under the SAA. This first phase will include the creation of new institutions, the shifting of institutions from the sub-national levels of government, or expanding capacities/functions of existing institutions. In the second phase, which could run in parallel to the first in the later years, the BH government will move to implement the EU *acquis communautaire*. This process should be similar to developments among the CEE countries during the ten or so years before accession. This chapter concentrates on the first phase of institution building.

3.3. Building on recent developments and the EC Partnership document, the baseline scenario developed in this chapter assumes that further state building proceeds within the existing constitutional structure via only modest centralization and expansion of existing institutions. It is anticipated that the entity, canton and municipal governments in BH will realign their expenditure priorities to better meet the EU requirements, and that the role of the state will continue to be mainly policy coordination and international relations. If BH were to be restructured from its present federal structure to a structure more like other transition countries, the gross cost of institution building would indeed be substantially higher, and would require large offsetting reductions in functions at the sub-national level. Such a scenario would involve substantial constitutional change, a development that appears unlikely at present.

3.4. To help ensure fiscal sustainability, the authorities would be well advised to advance institution building only within the context of the overall budget envelope. The recently adopted reforms of police and defence are welcome achievements but present potential fiscal risks. As the authorities finalize these reforms, the prospect of a substantial and permanent increase in wage outlays would need to be carefully weighed against alternative priority spending and the broader macroeconomic effects of such decisions. Principles to guide institution building could include, first, the restriction that when institutions of the sub-national level of government are shifted to the national level without adding functions, the shift must be cost-neutral. Further, if adding functions or capacities within existing institutions results in costs, there should be an offsetting saving elsewhere.

3.5. Furthermore, EU integration is not a reason *per se* for increased spending. To the contrary, the experience of the NMS demonstrates that general government spending relative to GDP was reduced in the ten or so years preceding accession. For example, general government spending in Estonia fell from 40.8 percent of GDP in 1994 to 37.1 percent by 2004. In Slovakia, spending was cut from 47.8 percent of GDP in 1994 to 38.4 percent by 2004. BH should learn from this experience.

3.6. The link between institution building and fiscal sustainability is often not acknowledged and sometimes state building is portrayed as a *sine qua non* that needs to be pursued regardless of fiscal costs. Such an approach will ultimately have detrimental consequences for BH's hard-won fiscal and financial stability and the authorities are strongly urged not to pursue it. Were the authorities to decide to advance institution building at a more rapid pace than envisaged in this study, for example, additional spending reductions need to be found to ensure that fiscal sustainability is guaranteed. As with the other fiscal pressures discussed in Chapter 2, state building is largely about establishing a process of agreeing and setting government priorities, along with the ability to muster the consensus needed to bring forth change.

3.7. Advancing state-building and the implementation of the ambitious reform agenda needed to make this a success would require the strong and coordinated support from all members of the international community. The authorities are encouraged to work hard to set up their own priorities given the challenges they face and work to take the lead in coordinating international assistance, especially now that such assistance is on the decline. The international community should fully support the governments' efforts to build more effective state institutions in a coordinated fashion.

3.8. This chapter assumes that the current decentralized structure of governance will remain unchanged over the medium term. Ongoing discussions among political parties on constitutional reform may ultimately lead to a change in the structure, but it is currently unclear what these changes may be. The baseline scenario of the chapter assumes that institution building will result in lighter centralization of government than found in most other EU countries.

B. THE CURRENT STATE OF INSTITUTION BUILDING

3.9. State building has been advanced over the last decade, but a lot more remains to be done for BH's state government to become truly effective and efficient. At the onset, the DPA provided for a three-member rotating presidency, a small bicameral state parliament with tightly defined requirements for eligibility, and a small state government. The presidents, one from each of the constituent peoples, rotate every eight months. Members of both houses of parliament, the 15 delegates of the upper House of Peoples and the 42 of the House of Representatives, must be elected in equal shares from the three constituent peoples. The state government established as a result of the DPA consisted of three ministries: Ministry of Foreign Affairs, Ministry of Foreign Trade and Ministry of Economic Relations and of Civil Affairs and communications, coordinated under the auspices of the Council of Ministers chaired by one of the three ministers on a rotating basis. Administrative spending by the state institutions amounted to ¾ percent of GDP in 1998, or 1 percent of consolidated general government spending.

3.10. State building picked up in 2000 with the creation of three new ministries: Ministry of Treasury, Ministry for Human Rights and Ministry for European Integration, with the latter transformed into a department soon thereafter. A State Border Service was also created. The process continued in 2002 when a Ministry of Security and a Ministry of Justice were created and the Ministry of Civil Affairs and Communications was split into a Ministry of Traffic and Communications, and a Ministry of Civil Affairs (Table 3.1). Expenditures by the 28 state institutions in existence in 2002 amounted to 1¼ percent of GDP. Further progress strengthening the state-level institutions has

continued since then, increasing the number of institutions to 49 by 2005 and their administrative expenditures to the equivalent of 1.8 percent of GDP.

3.11. State building has also reflected the creation of institutions carrying out central government functions but performing outside the state level of government, such as the ITA and the NFC. The ITA was set up as an intergovernmental agency through the merger of the state and entity customs administrations to help comply with provisions in the state constitution (Annex IV of the DPA). Under these provisions, all functions and powers not expressly assigned to the state government are assigned to the entities. The entities can agree to delegate additional functions to the State, and additional institutions to carry out these functions can be established. Similarly, in response to the lack of a capacity to set and monitor the aggregate stance of fiscal policy, the authorities set up the NFC. The challenges in establishing the NFC have been multiple, however, and the NFC is yet to become fully operational. Substantial progress in state building was achieved in late 2005, thanks to agreements to transfer competencies for defense and police to the state level. As discussed in Chapter 2, the authorities merged the entity armies and the MoDs in a single state-level armed forces and a ministry from the start of 2006. Agreement in principle on police reform proved politically difficult to reach and will probably remain challenging to implement.

3.12. Thus far, however, state building has been carried out without sufficient regard for fiscal constraints. The creation of the ITA, for example, saw 1,500 employees shifted to the state level, together with a substantial increase in salaries because of the persistently large differentials between the state- and entity-level public wages. Similarly, the establishment of the State Intelligence and Security Agency resulted in the shift of roughly 1,000 employees at similarly inflated pay levels.

3.13. Unresolved issues at the state level of government need to be addressed to improve effectiveness. Many institutions of the central government exist, but their administrative capacities are weak and subject to the veto-like hold of the need for consensus among the three constituent peoples. Policy coordination mechanisms, even if established at the state level, are neither efficiently operating within the Council of Ministers, nor do they allow for resolving conflicts between the entity- and state-level officials during the policy making process. Persistent understaffing in key institutions, notably

Table 3.1. BH: State Building, 2002-2005

	Number of Institutions	Budget (In millions of KM)	Employees	
			Number	% change year-on-year
2002	28	146	3,449	...
2003	37	157	3,895	12.9
2004	41	215	6,982	79.3
2005	49	308	8,224	17.8

Sources: State Ministry of Finance and Treasury and World bank staff calculations.

the state Ministry of Finance and Treasury, is a key problem. Building an effective state government would require not only strengthening of staffing and technical capacities, but also creating the mechanisms for reaching decisions and breaking deadlocks between the three constituent peoples. Further, strengthening of fiscal control and accountability at the state

level is a key ingredient for more successful institution building. Adopting the state-level supreme audit law and drafting and adopting internal audit laws will go a long way towards meeting this goal.

C. THE BASELINE SCENARIO: METHODOLOGY

3.14. The chapter's baseline scenario assumes that the authorities will advance reforms at a moderate pace within the existing constitutional arrangements. Entity competencies, therefore, are assumed to remain as provided under the DPA, with state institutions and functions established to

provide a coordinating function. This assumption is clearly conservative. The recently agreed defense and police reform involve the full transfer of entity competencies from the entities to the state. There is no indication that political support for state building to proceed in such a fashion will continue going forward, however. Were consensus to emerge for such a change, it will enable the authorities to strengthen state institutions in a more efficient way.

3.15. The methodology of the baseline scenario has several components: (i) identification of the requirements for new or strengthened state institutions or functions; (ii) estimation of the costs of carrying out institution building; and (iii) projecting the timing of the process. The text below discusses the general thrust of the assumptions and the factors that may affect the assumptions. Annex B presents the specific assumptions for individual institutions and detailed calculations.

New or Strengthened Institutions or Functions

3.16. Institution building may entail creation of new institutions at the state level, the shift of existing sub-national institutions or strengthening of existing state institutions. Important reforms are being carried out within existing institutions, but many of these do not appear to have measurable fiscal implications. Reform or capacity building within existing institutions is included where the additional fiscal implications may be significant. The following are some of the key assumptions: (i) the analysis does not include the costs of expanding institutions at the sub-national level; (ii) the study looks beyond already agreed reforms of police and defense; (iii) the chapter's list of new or strengthened institutions/functions is based largely on the Proposed European Council Decision of November 9, 2005,¹ supplemented with other sources,² including the governments' 2006-08 Budget Framework Papers (BFP). Some institutions or functions considered below are not directly envisioned in the EU Partnership, but are considered as needed to facilitate a more efficient functioning of the state government; (iv) the State BFP for 2006-08 is used as a reference to the potential needs of existing ministries, but is not a reliable estimate of future costs. The above-quoted COM (2005) proposes that "*all state-level ministries and institutions [be] adequately financed, operational and properly equipped, namely in terms of premises and staff.*" The BFP compares current staffing levels with rule book staffing levels, and calculates that full staffing would cost approximately KM80 million a year, or 0.6 percent of 2004 nominal GDP. The BFP notes that rule book staffing levels are unrealistically high, however, as they are based on claims on public resources without thinking of budget constraints. The BFP also compiles a list of additional priorities sought for current and new institutions, in terms of both capital and current expenditures.

Timing

3.17. Judgments about the timing of future reforms take into account the EU functional reviews, discussions with the authorities and observations in other countries. The timing and the structure of institution building will ultimately be directly affected by the speed and nature of legal and constitutional reform. The current scenario assumes that the status quo will not be changed. Estimates are presented under the assumption of EU membership by 2020. This projection reflects the time it took the countries that joined the EU in 2004.

¹ Council of the European Union, "On the Principles, Priorities and Conditions Contained in the European Partnership with Bosnia and Herzegovina," COM (2005) 555.

² These included meetings with government officials and with representatives of international organizations. Documents consulted include the Functional Reviews recently produced by the Public Administration Review Program; the EC "Feasibility Study" of November 2003 (COM 2003, 692 final); the Council of Ministers Report of May 2005 on progress in priority areas; the MTDS.

Cost Assumptions

3.18. The basis for each cost estimate is typically a product of the number of staff and a factor for some broadly similar body to incorporate non-staff costs. This factor is taken from the draft 2006 state BFP and other 2005 state budget documentation. Individual ministry budgets have also been reviewed to check overhead rates. The quantitative assumptions for each case are presented in Annex B. One-time costs, i.e. the cost of initial purchase of furniture, equipment and supplies, have been estimated as a share of total salary and other ongoing administrative costs, using data from BH-specific studies where available (e.g., EU Public Administration Reform reports), government sources, or subjective assessment. Finally, where BH-specific data is not available, as is the case of the establishment and operation of an Environment Ministry in line with EU standards, a simple percentage of GDP is used, derived from other CEE countries. The cost estimates do not take fully into account the cost of office space for the new institutions under the assumption that space needs will be resolved with the donor-financed reconstruction of the government tower in Sarajevo. A state-level law on public wages is currently under preparation and could alter the cost assumptions made under this chapter. Some institutional changes should not result in substantial costs, including the intended mergers of entity bank supervision and insurance supervision agencies, the competition councils, the utility regulators and the stock exchange regulators.

D. THE BASELINE SCENARIO: RESULTS

3.19. Based on the sources discussed above, the chapter identifies the institutions the authorities will need to establish over the medium to longer term, as well as additional funding needed to strengthen existing state-level institutions. It is estimated that setting up all state-level institutions described in this section will result in a setup cost of 0.4 percent of GDP and a running cost of 0.5-0.8 percent of GDP a year. These estimates form the basis of the assumptions used in the fiscal sustainability analysis in Chapter 2. The estimates assume that sub-national governments continue to perform their current functions, with the state essentially providing a coordination role where there is an overlap.

3.20. The analysis distinguishes between institutions to be set up over the next two-three years and over the longer term. Table 3.2 lists the institutions to be set up over the near- to medium-term (next two-three years). The one-off setup cost is estimated at KM8 million and the ongoing costs of their operation at KM21 million a year. Table 3.3 presents projections for longer-term developments, largely incorporating institutions that should be set up under the Stabilization and Association process. This is a minimal set of institutions and functions believed to be necessary. The associated additional ongoing costs, when fully operational, are estimated at KM40 million a year, with one-time set-up cost of about KM14 million.

3.21. As the government has advanced EU integration, many agencies have already been created. The effect of the changes listed in Tables 3.2 and 3.3, therefore, is often only to consolidate these coordinating functions and provide adequate funding for their implementation. As a consequence, one-time costs tend to be low, principally reflecting recruitment of additional staff.

Table 3.2. BH: New Institutions and Functions Needed in the Near to Medium Term

Expanded Agricultural Coordinating Agency
 Food Safety Agency
 Banking Supervision Consolidation
 Unified Stock Exchange Regulatory Body
 Standardized Statistical Agency
 Strengthened Central Public Expenditure Management
 Education Coordinating Agency
 Higher Education Coordinating Agency
 Environment Coordinating Agency
 Expanded Consumer Protection Agencies including
 Competition Council and Market Surveillance Agency
 Expanded Regulatory Bodies including an Institute for
 Intellectual Property
 Coordinating Health Agency
 Labour Coordinating Function
 Advisory Commission on Intergovernmental Relations
 Council of National Minorities
 Information Society and Data Protection Agencies
 Insurance Supervision Inspectorate
 Office for Narcotics

Sources: As quoted in the text.

3.22. In addition to the new institutions discussed above, Table 3.4 lists institutions for which additional funding is needed to help strengthen capacity, as per the state BFP for 2006-2008. One-time costs are estimated to amount to about KM28 million and the associated extra ongoing costs, when these institutions become fully operational, are estimated to be approximately KM57 million a year. Table 3.5 summarizes the costs presented in Tables 3.2-3.4.

3.23. Most of the new or enhanced institutions assumed to be established are relatively modest in size and not accompanied by substantial administrative costs (Annex B, Tables B3 and B4). Only the agencies/ministries of agriculture, environment and transport are relatively large. Together, these three agencies account for about two-thirds of all new costs. Should there be any major

restructuring of service provision in other areas, such as state funding of pensions, transfer payments, or higher education, total state spending may need to grow far beyond that of spending on administrative costs alone, albeit with potential for largely or wholly offsetting savings at other levels of government.

Table 3.3. BH: New Institutions and Functions Needed in the Longer Term

Ministry of Agriculture and Rural Development
 State Ministry of Education

Ministry or Department of Higher Education
 Ministry of Environment

Stronger Ministry of Transportation
 Department or Ministry of Welfare
 Department or Ministry of Health/Public Health Agency
 Labor and Employment Department or Ministry
 Occupational Health and Safety Department or Agency
 Ministry of Economy
 Financial Supervision Authority

Sources: As quoted in the text.

Table 3.4. BH: Increased Funding for Existing Institutions, State BFP, 2006-2008

Parliamentary Assembly
 Electoral Commission
 Secretariat of Council of Ministers and Public Administration Coordinator
 Civil Service Agency
 State Court, Prosecutor's Office and High Judicial and Prosecutorial Council
 Ministry of Security
 State Investigation and Protection Agency, including Financial Intelligence Unit
 Ministry of Transport and Communications
 State Border Service
 Accreditation Institute
 Department for European Integration

Sources: As quoted in the text.

3.24. Under a more centralized, but much less likely scenario based on a comparison of state-level institutions in Slovakia and BH, the cost of state-building would be capped at 1.8 percent of GDP a year. The details of these calculations are available upon request.

Table 3.5. BH State Building: Cost Summary

	<u>One-time</u>	<u>Ongoing, p.a.</u>	<u>One-time</u>	<u>Ongoing, p.a.</u>
	KM million (2006 prices)		Percent of 2006 GDP 1/	
Total	50	118	0.4	0.8
New Institutions, Medium-Term (Table 3.2)	8	21	0.1	0.1
New Institutions, Longer Term (Table 3.3)	14	40	0.1	0.2-0.3
Strengthening Existing Institutions (Table 3.4)	28	57	0.2	0.4

Sources: As quoted in the text and World Bank staff estimates.

1/ As a share of 2006 nominal GDP. Relative to current GDP, costs fall to 0.5 percent by 2010.

E. CONCLUSION

3.25. Under the chapter's baseline scenario, the net additional costs of future institutional reform appear to stabilize at about 0.7-0.8 percent of GDP per year after 12 years or so. More than half of these costs are already included in the state BFP for 2006-2008, albeit without explicit assumptions on what institutions these costs refer to. Under a more centralized model, the costs of state building would be larger but capped at 1.8 percent of GDP a year. These estimates form the basis of the assumptions for state building under the fiscal sustainability analysis in Chapter 2.

3.26. The actual costs of state building could vary substantially from the those under the scenario presented in this chapter because of several factors. First, pressures to boost staffing levels and wage rates are likely to persist. Second, the data available for estimating the costs of additional office space may well be optimistic and the actual outturn could well be larger. Third, substantial wage differentials persist among the different jurisdictions in BH, giving rise to substantial wage increases when responsibilities are transferred across jurisdictions. Fourth, on the positive side, the analysis has not taken into account possible savings at the subnational level that may offset costs of building the state government.

3.27. The absence of a fully operational central fiscal authority makes it difficult to execute state building within a properly defined budget constraint. The authorities will be well advised to accelerate the adoption of the law on the National Fiscal Council and move steadfastly in making both the Council and a properly staffed secretariat operational. Outlays on state building, as all other public expenditures, should be subject to the processes of budgetary planning and control. No reform will ultimately be viable unless executed with strict fiscal discipline.

3.28. Ultimately, the real effectiveness of the institutions that are created at the state level goes beyond the staffing levels or the specific functions ascribed to it. As Chapter 4 demonstrates, policies related to recruitment, promotion, pay, and incentives can all have a significant impact on the state's ability to attract and motivate skilled staff. To assure that the resources expended on state building produce a tangible benefit to citizens, the authorities will want to assure that reform of public administration systems goes hand in hand with the creation of new and expanded institutions.

4. STRATEGIC ISSUES IN MANAGING THE PUBLIC ADMINISTRATION

A. INTRODUCTION

4.1. Strengthening the quality of public administration remains a key challenge as BH advances European integration. Effective administration is also an important enabling condition to many other policy reforms. While new functions and activities are added to the public administration to help meet EU standards, the authorities must find ways to lower the overall cost and improve effectiveness. Despite significant efforts over the past few years to reduce the burden of public employment on budgets, public wages and benefits relative to GDP remain high by international standards, while outcomes remain substandard. Moreover, some of the underlying systems and practices for managing the government's human resources undermine efforts to encourage a culture of performance and meritocracy within the public sector.

4.2. The share of public wages in GDP and in total expenditures is substantially larger than among comparator countries, an outcome largely due to higher relative wage rates. Wage rates are particularly out of line for lower grade employees at the level of the state and to a lesser extent in the FBH. By contrast, wage rates for higher and mid-level employees are unusually compressed. High comparative wage rates are accompanied by overall public employment that appears modest relative to the country's population but excessive relative to total employment in the economy. Given substantial excess employment in police, defense, the courts and education, as well as the duplication arising from the fragmented administrative structure, the size of the "core" public administration is very small, with negative consequences for the functioning of government and delivery of public services.

4.3. Reducing the cost of the public administration over the medium term will necessitate tight control of salary levels, even to the extent of reducing average wages in real terms. Because the bulk of public employment is at the lower levels, excessive pay levels for these positions can have a significant impact on the overall wage bill. At the state level in particular, further assessment should be carried out as to whether the planned but as yet unrealized reduction in salary levels for 2006 by 10 percent should not be augmented to reduce public sector employment costs. Moreover, without good coordination between the levels of government, there is a risk that fiscal costs will rise even further, as employees are shifted to the state level as state building advances. Even within the current entity structures, there is a need to avoid over-paying for positions that are less essential to the core functions of government.

4.4. Difficult trade-offs need to be made to reduce the levels of employment at some levels of government. The planned defense and police reforms will contribute to that, but will not go far enough by themselves to reduce public administration costs to sustainable levels. The overlapping governmental structures within BH imply that some degree of rationalization should be feasible, but the magnitude of possible savings is difficult to quantify without in-depth studies. Setting a clear, realistic budgetary target for savings is one strategy to compel a prioritization of functions and activities across the range of ministries at the entity and the sub-entity levels. Gradual declines in staffing levels over the medium term should be feasible, but their contribution to overall savings may be moderate because the core civil administration is relatively small. **Defense, public order (including the judiciary), and the education**

sectors together make up roughly 70 percent of the overall wage bill, meaning that any serious attempt at cost reduction must include these sectors.

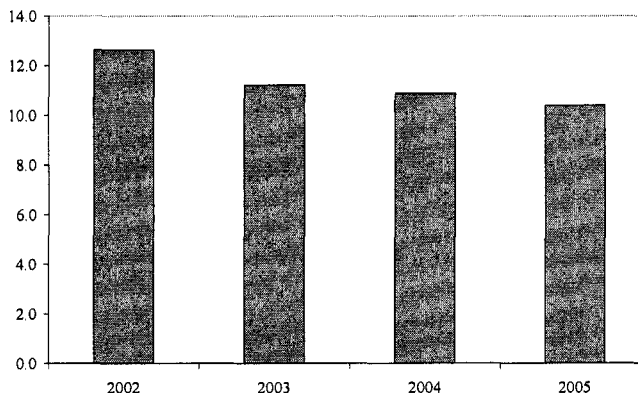
4.5. Incentives for performance must also be strengthened if there is to be any genuine improvement in the quality of public management. Though substantial progress has been made in introducing merit-based appointment into the civil service, the pay system remains largely unreformed. Pay scales remain highly compressed, and heavy reliance upon length-of-service in determining total pay contributes to a culture in which performance and responsibility are often not rewarded. Improving the incentive structure would have budgetary implications, but they need not be excessive if they are well targeted toward key skills. Policies for career management and advancement could also be refined to make the public sector more attractive to high-skilled individuals.

4.6. This chapter focuses on the high cost of the public administration and its key determinants. It outlines options for reducing the cost, based on the premise that policy actions should be well-targeted to specific sectors. It makes no attempt at specifying what ministries or functions should be cut back as these are the policy trade-offs that are the reserve of the authorities. The chapter also analyzes the current pay practices and how they contribute to or undermine performance management and equity within the public administration. Recommendations are made on enhancing incentives in the recruitment and retention of skilled staff and that would facilitate greater effectiveness. The overall thrust of the chapter is that resources could be much better allocated to improve public sector performance. Indeed, the over-reliance on achieving desired staffing levels to the neglect of basic operating funds has in some instances led to higher costs with questionable outcomes.

B. THE COST OF PUBLIC SECTOR EMPLOYMENT

4.7. The wage bill remains high despite substantial progress in reducing wage outlays over the past few years. The general government wage bill fell from 11.7 percent of adjusted GDP in 2000 to 10 percent in 2004 (Figure 4.1). Relative to official GDP, the decline was from 19.6 percent to 15.2 percent.¹ Including outlays by the extrabudgetary funds and wages for medical professionals, an adjustment that makes possible a more reliable comparison with other countries, the wage bill amounted to 12.7 percent of adjusted GDP in 2005. Relative to GDP, the government wage bill is larger than among all other CEE and SEE countries, and particularly outsized compared with faster growing emerging market economies (Figure 4.2).

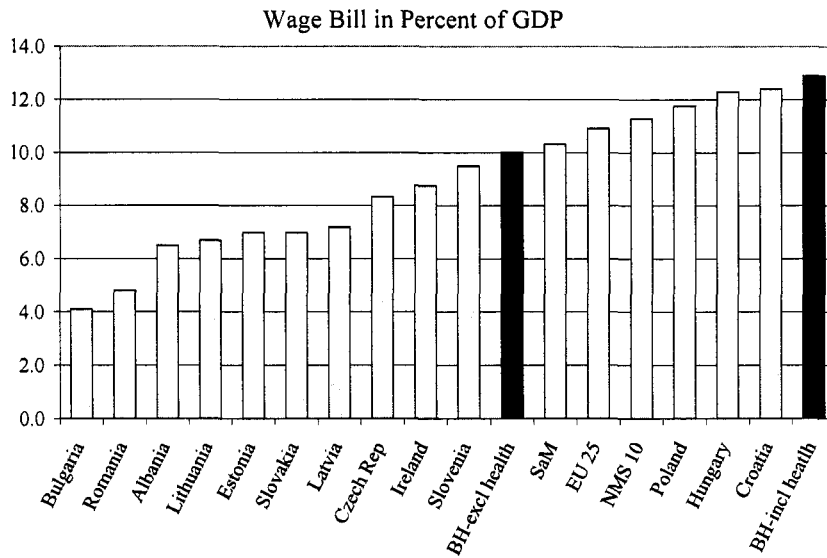
Figure 4.1. BH: General Government Wage Bill 1/
(In percent of adjusted GDP)



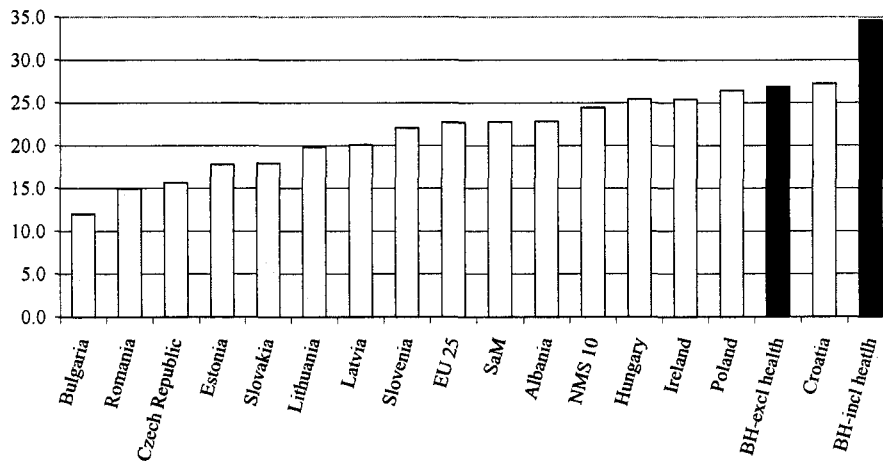
Sources: Ministries of finance and World Bank staff estimates.
1/ Excludes wages for health workers.

¹ No reliable wage data are available for the extrabudgetary funds. To enable comparisons with other countries, this estimate excludes wage outlays by the extrabudgetary funds. These outlays amounted to 0.4 percent of adjusted GDP in 2005. The BH wage bill in this example also does not include wages paid by medical facilities, as these are financed through lump sum transfers from the extrabudgetary funds. These wage outlays are likely to have amounted to KM400 million in 2004, or 2.3 percent of adjusted GDP.

Figure 4.2. Comparisons of the General Government Wage Bill, 2004 1/



Wage Bill in Percent of General Government Spending



Sources: Ministries of Finance; IMF; Eurostat and World Bank staff estimates.
 1/ BH – relative to adjusted GDP in 2005; NMS – new member states of the EU.

4.8. Helped in part by army demobilization, the nominal wage bill was little changed from 2002 to 2004 before rising moderately in 2005 as a result of building new state institutions. Efforts have been made by entity ministries of finance to keep costs under control, and freezes in salary level for most public employees have been among the most prominent policy actions.²

² The ability of governments in BH to restrain wage levels reflects a contrast with other countries. Elsewhere in the region, collective agreements with public sector union have been known to put upward pressure on the public sector wage bill. In BH in contrast, the general collective agreement is problematic primarily because of the heavy burden it

4.9. The wage bill is high even when measured relative to total government expenditures. Including health wages, wage outlays amount to 35 percent of government spending in BH compared with 24 percent on average in the EU and 19 percent in the Baltic states. High wage outlays crowd out other spending, including operations and maintenance (O&M). In the judiciary, for example, salaries rose significantly from 2001 through 2004, while resources for basic equipment and operations virtually dried up and many courts accumulated debts to pay utilities and other ongoing costs. The High Judicial and Prosecutorial Council (HJPC) estimates that even in 2004 only about 18 percent of the total budget for the judiciary goes to O&M and only 2 percent for capital investment in facilities.

4.10. Both entities contribute to the high wage bill, but the situation is worse in the more decentralized FBH structure.³ Among the FBH cantons, the scope of activities tends to be dominated by education and policing functions, which are heavily labor-intensive. Only one canton, Sarajevo, had sufficient budgetary resources that it spent less than half of its budget on personnel costs. In 2 out of the 10 cantons, wages and salaries represent 70 percent or more of the total expenditures in 2004. The actual amount available for operations is actually much lower because transfer payments make up about another one-fifth of cantonal budgets. When all is said and done, cantons spend on average only about 14 percent of their budgets on goods and services to carry out their functions.

4.11. The following section examines public employment and the size of the public payroll according to three dimensions: (i) between civil servants and other public employees; (ii) the level of government in which people are working; and (iii) the functions or sectors in which they are engaged. The section concludes with observations on the overall size of public employment.

Civil Servants vs. Public Employees

4.12. The civil service generally carries out the main policy functions of the public administration, but there is in fact no consistent definition of civil servants across governments. The state and the two entities each have civil service laws that define differently the categories that make up the civil service. For example, at the state level, civil servants are limited to those employed in certain executive functions, and exclude the diplomatic corps and the uniformed police. Within the prescribed state functions, civil service positions are limited to those that require a university education. The FBH civil service has the same educational restrictions, but it includes staff working in the cantons and the municipalities who meet the educational criteria. In contrast, the RS civil service excludes those employed by the municipalities. Moreover, the RS criteria for inclusion in the civil service are more flexible with respect to educational qualifications.

4.13. No reliable data exists, but civil servants appear to make up only a small proportion of the total public employment. The state and entity governments are in the process of developing a registry of civil servants. Both the state and the RS have provided only data on the number of civil servants in each ministry. In contrast, the FBH Civil Service Agency (CSA) has impressive statistics available in its registry but for only a small portion of the total number because the data is dispersed across the different levels of the entity, the cantonal and the municipal governments.

has placed on the private sector. As noted in a recent World Bank report on the labor market in BH, many of the terms and conditions of work currently addressed in the general collective agreement could be more productively treated in separate branch agreements for the public and private sectors.

³ In this case, we mean the entity level government and any sub-entity governments (i.e., cantons and/or municipalities).

4.14. In total roughly 105,000 people are employed in the public administration, excluding those working for municipalities, and of that amount about 12 percent are probably civil servants (Table 4.1). No data is available from the municipalities, but based on their expenditure data one may estimate that they might account for an additional 16,000 employees, bringing the total public employment at all levels of government to over 121,000.

Table 4.1. Public Employment and Wages by Level of Government, 2005

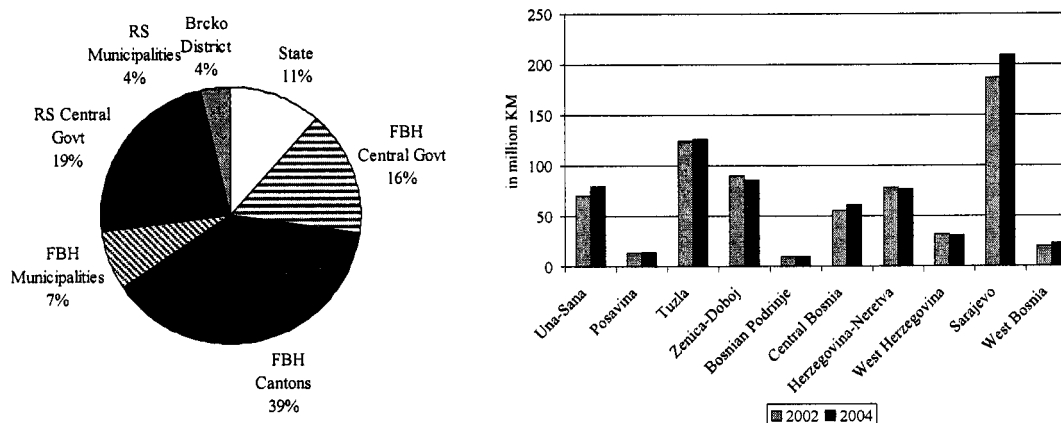
	Civil Servants	Other Public Employees	Total Public Employment	Total Payroll (In millions of KM)
State	823	6,310	7,133	214
FBH				
Entity Government	n/a	n/a	15,041	297
Cantons	n/a	n/a	46,100	715
Municipalities	n/a	n/a	n/a	138
RS				
Entity Government	4,006	30,357	34,363	362
Municipalities	...	...	n.a.	78
Brcko District	...	...	2,900	66
All	...	...	105,537	1,870

Sources: MoFs; Civil Service Agencies; the EU Systems Review; IMF; and World Bank staff estimates.

Employment by Level of Government

4.15. The responsibility for management of wages and related costs is distributed across multiple governments. The FBH, the cantons and the municipalities account for 61 percent of all BH wage outlays, and the RS for about 23 percent (Figure 4.3). The entity governments provide an overall coordination for much of the spending, but they are directly responsible for only one-third of the overall wage bill. The cantons are responsible for the single biggest part of the wage bill, almost two-fifths. The state's share has

Figure 4.3. BH: Composition of the Overall and Cantonal Wage Bills, 2005



grown significantly in recent years, but still accounts for only one-tenth of total costs. If there are to be significant cuts in the wage bill, reductions should necessarily be carried out at the cantonal and possibly at the municipal level. At the entity level, some rationalization of ministries and functions has already occurred in the RS but not in the FBH.

4.16. Among the cantons, spending capacity varies substantially and a few account for most of the outlays. The Sarajevo and Tuzla cantons account for almost one-third of the total cantonal wage expenditures. Together with the cantons of Una-Sana, Zenica-Doboj, and West Herzegovina, the five largest cantons make up about 80 percent of the overall cantonal wage bill.

Payroll by Function and Sector

4.17. The majority of public employees are concentrated in three areas—defense, public order, and education. These three functions together represent two-thirds of the overall wage bill, equivalent to about 9 percent of official GDP or 6.9 percent of adjusted GDP (Table 4.2).⁴ The remaining one-third of the wage bill reflects the “core” civil administration: it includes all the other functions and ministries of government. Moreover, about one-half of the latter amount is spent by the municipalities and the Brcko district. Thus the majority of functions within the cantons, the entities, and the state are funded with the equivalent of 2 percent of GDP. Of that amount, about one-quarter goes for tax and customs-related work. Whether the balance is an appropriate amount for BH is difficult to say in isolation, but the orders of magnitude involved seem generally in line with international practice.

Table 4.2. Estimated Functional Allocation of the 2005 Wage Bill 1/

	In millions of KM	In percent of the wage bill	In percent of GDP
Defense	198	11	1.4
Police/Security	304	16	2.1
Judiciary	118	6	0.8
Education	630	34	4.4
Other Civil Administration	620	33	4.3
Municipalities & Brcko	282	15	2.0
State, Entity, Cantons	338	18	2.4
Total	1870	100	13.0

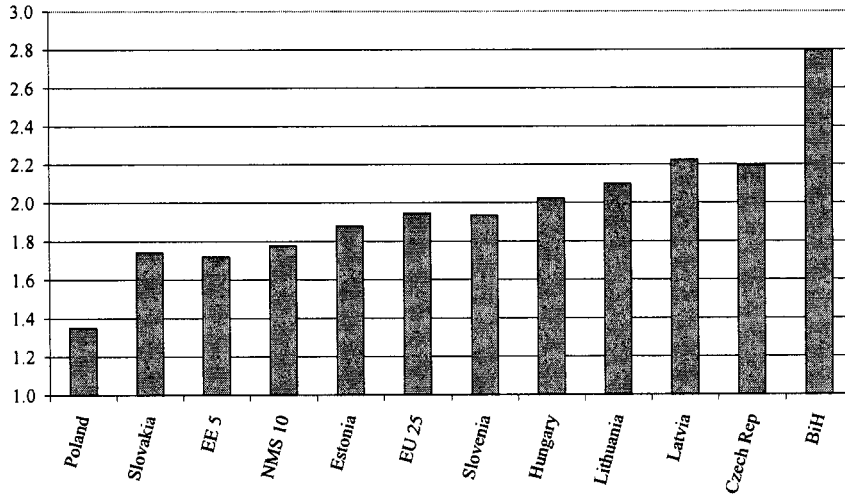
Sources: Ministries of Finance; IMF; and World Bank staff estimates.

1/ Wages of medical professionals are not included.

4.18. Demobilization efforts in recent years have helped lower outlays on defense, but overall spending on defense and public order still stands out as particularly large compared to other countries in Europe. Wage outlays related to these two categories amount to 2.8 percent of adjusted GDP compared with less than 2 percent on average in the EU. Results are similar when outlays relative to total spending are compared. About 37 percent of the wage bill in BH is on defense and public order, compared with about 19 percent in the EU and 17 percent among the NMS (Figure 4.4). Despite the relatively high rate of spending already on defense and public order, the share could increase further if defense and police reforms are not implemented carefully (Chapter 3).

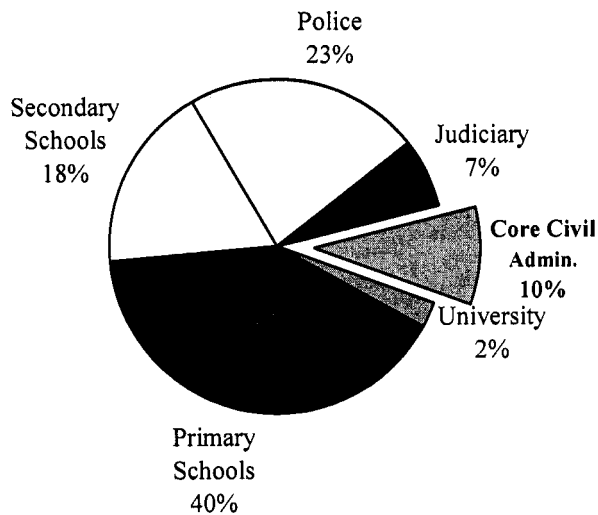
⁴ The data to derive the functional allocation is very imprecise, so that the figures presented in Table 4.2 are at best rough approximations.

Figure 4.4. Wage Outlays for Defense and Public Order, 2004 1/
(In percent of GDP)



Sources: Ministries of Finance, Eurostat and World Bank staff estimates.

Figure 4.5. Distribution of Employment by Functions in the Cantons, 2004



4.19. Most cantons have relatively little capacity outside of education and policing, limiting scope for savings under the existing constitutional structure. Only 10 percent of cantonal employees work in the core civil administration, 60 percent in the education sector and the rest in policing or justice (Figure 4.5). Moreover, the capacity of cantons to staff the core civil administration varies widely across cantons. Thus, any across-the-board cut would have a disproportionate impact on some cantons. Among the eight cantons that provided staffing data, Una-Sana, Tuzla, and Herzegovina-Neretva have much leaner civil administrations. The size of the canton's budget is not necessarily an indicator, however, as Tuzla has one of the larger overall wage bills but one of the smallest civil administrations. Further assessment is needed on whether cantons with larger civil administrations provide proportionately more functions or services that would justify the higher cost.

The Size of Public Employment

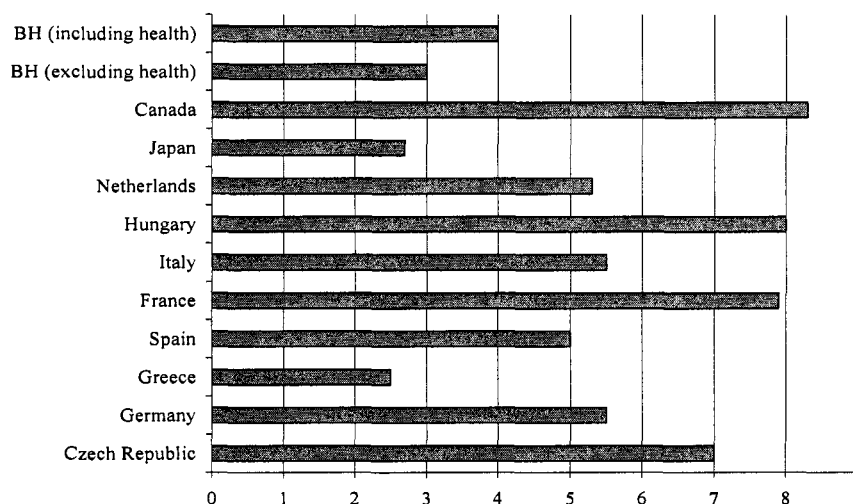
4.20. Overall, public administration employment to the population does not

appear to be excessive compared to other countries. For the ten OECD countries where data is available, general government employment ranges from 2.5 percent of the population for Greece to 8.3 percent for Canada (Figure 4.6). In BH, public employment including the local governments amounts to about 3 percent of the population, putting it on the lower end. If health workers were included in the BH estimate, the level of public employment would rise to about 4.0 percent—still on the lower end. As a share of

formal sector employment, however, public employment is an outsized 23 percent. These comparisons need to be made with care since definitions may not be similar across all countries.

4.21. The key issue for BH may not be the overall number of people employed in the public sector, but whether they are employed in productive functions and activities. Apart from the few major categories discussed above (defense, public order, and education), the data does not permit an assessment of how many people are engaged in the various activities of government, or whether the value of the services provided justifies the additional administrative costs. For example, it is unclear how many people are engaged in what GFS classifies as “general public services” and in particular, for the executive and legislative organs that exist across all levels of government. Nor can we specify the cost of carrying out common administrative and support functions at the various levels of government. These areas could be significantly over-staffed, even while areas within the “economic affairs” or “environmental protection” domains are very understaffed, or vice versa. The EU integration process will bring to light areas where additional staffing is needed, but it will not necessarily address areas with bloated public administration.

Figure 4.6. General Government Employment, 2004
(In percent of population)



Source: World Bank staff estimates from the OECD/Puma data.

C. THE IMPACT OF CURRENT PAY PRACTICES

4.22. Pay practices in BH are costly and do not provide incentives for performance in the public administration. The characteristics of the BH pay system are not unlike those found in other former Yugoslav republics. Yet, while others are beginning to make progress in reforming their systems to meet European and OECD standards, BH has been slower to adapt. Salary ranges in BH remain highly compressed, and an excessive portion of total compensation is still based on allowances and seniority.

4.23. Reforming the pay system will require hard choices between competing interests and a greater level of national coordination. The following section compares pay rates in the BH public sector with those in the private sector and those in other countries. Next, it examines the level of consistency in pay practices across the different governments in BH and reviews the overall system structure and its likely impact on work performance.

External Competitiveness of Public Sector Salaries

4.24. Pay rates vary significantly across government levels, but at the state level—where most future growth in staffing is expected—salaries are already very competitive and often excessive relative to the private sector. A recent survey shows that net total compensation approaches or exceeds the private sector median for three out of six public service posts.⁵ Only the two highest positions surveyed—“head of function” and “senior professional”—trailed significantly behind the private sector median and approximated the 25th percentile.⁶ Of the four positions that are competitive with the median, two are classified as civil service posts (Table 4.3).⁷

Table 4.3. Net Compensation in the Private Sector Compared to the State and the FBH, 2004
(In KM per month)

Job Title	Private Sector Median	State	FBH
Head of function / middle mgt	2,050	1,402	997
Senior Professional	1,621	1,162	955
Experienced Professional	1,166	1,090	945
Basic Professional	950	1,018	924
Administrative Clerk	791	874	664
Manual worker	685	730	664

Source: PriceWaterhouseCoopers, Final Report for DfID, October 2005.

4.25. FBH wages are consistently lower than those at the state level for the same category of post. According to the survey, the FBH pay levels are closest to the state for the entry level civil service positions (such as “associate”) and much less for the senior posts such as “secretary general” and “assistant minister.” Data provided for the survey by the RS is unreliable, but showed that RS wage rates vary relative to those in the FBH. Net total compensation in the FBH is slightly lower than the private sector median for the four job categories between manual workers through “experienced professional.” For “senior professional” and “head of function” jobs, the FBH pay levels are below the 25th percentile, however.

4.26. Salaries at both the state and the FBH levels are very high compared with other countries in the immediate region, especially for lower and mid-level positions. Cross-country comparisons of pay levels must be interpreted with caution, not least because of differences in purchasing power. The above quoted study presents analysis of pay practices in Croatia and SaM for six levels of jobs, from “clerk” up to “secretary general.” BH state level compensation rates appear roughly similar to those in Croatia for the lower four positions and substantially lower for the top two. In contrast, pay rates are much higher than in SaM for the lower four categories, and equal for the top positions (Table 4.4). When the salary data is adjusted for purchasing power parity (PPP), the high rate of compensation in BH stands out more dramatically.⁸ BH state compensation is almost double that of Croatia for all but the top two positions.⁹ In the FBH, where salary levels are lower than for the state, on a PPP basis they would still be moderately higher than in Croatia for the bottom four positions. FBH pay would be comparable to SaM for the top two positions, but substantially higher for the remaining middle and entry level posts.

⁵ “BH: Support for the Determination of the Pay and Grading System at State Level,” October 2005, prepared by PriceWaterhouseCoopers LLP on behalf of the DfID. The survey is primarily for civil service posts. For police and the military, RS salaries tend to be significantly lower than those in the FBH.

⁶ Salary rates for these positions were higher than only 25 percent of the private sector equivalents.

⁷ Moreover, the PWC data is affected by the presence of international firms in the sample. Wages among such firms are typically 50 percent higher than in national firms, but they are also likely to require higher skill levels.

⁸ Analysis of pay practice adjusted for PPP were not included in the final version of the PWC study.

⁹ The difference in wage rates between Croatia and BH is also reflected in the fact that the aggregate wage bill relative to GDP is comparable in the two countries, but Croatia’s public service is substantially larger than BH’s.

Table 4.4. Comparison of Total Net Compensation with Neighboring Countries
(In KM per month and in US dollars PPP)

Job Title	In KM per month				In US dollars PPP			
	BH/State	FBH	Croatia	SaM	BH/State	FBH	Croatia	SaM
Secretary General	1,690	1,049	3,098	1,664	3,588	2,227	2,963	2,192
Assistant Minister	1,402	997	3,098	1,664	2,977	2,117	2,963	2,192
Senior advisor	1,162	955	1,438	503	2,467	2,027	1,376	663
Senior associate	1,090	945	1,230	359	2,314	2,006	1,176	473
Associate	1,018	924	1,133	350	2,161	1,962	1,083	461
Clerk	874	664	889	312	1,856	1,410	851	411

Sources: PriceWaterhouseCoopers, Final Report, October 2005, for DFID and PWC draft reports.

4.27. Notwithstanding the analysis above, pay levels for some categories of jobs exceed those found in the core civil service. For example, police officers at the state level receive on average a 30 percent bonus on top of their regular pay, and judges have had special pay scales rates that can be more than double those in the civil service. Data from the survey demonstrates that police in SaM are paid substantially less (one-third to one-half) than those in BH.

4.28. A steady supply of labor to the public sector suggests that the salary offered for most positions is probably quite attractive compared to alternative job opportunities. Data on turnover is not available, but conversely anecdotal evidence suggests that the public sector has not lost significant numbers of people to the private sector. Officials in the entities are more apt to cite examples of losing staff to other governments, including new state institutions and some municipalities. The lack of alternative employment options in the private sector is likely to be a major reason why people remain in the public sector despite stagnant wages over the past several years. The more significant question may be whether the civil service is drawing the caliber of civil servants that it needs. Officials acknowledged that the best university graduates tend to pursue other opportunities and are not attracted to public sector employment.¹⁰

Internal Equity and Consistency in Pay Practices

4.29. The linkage between job responsibility and pay is not as strong as it should be to support internal equity. Jobs with very different levels of responsibility have virtually the same pay; conversely, jobs with similar responsibility sometimes have wide variance in pay. Good human resource management practice is to set pay levels based on the relative job content. However, in BH, job titles define the pay grades and those are based on educational qualifications and years of experience – a system fairly common in the former Yugoslav republics. While there is some correlation between job titles and the level of responsibility, the correlation is weak. A “head of function” for example, is not necessarily the same across all ministries or departments. Some pay systems in other countries might be able to address the differences in responsibility through broad salary bands, but these are not used in BH.

4.30. Large unexplained variations exist among positions with the same title working within the same level of government. This stands out both for the state and the RS. A review of the state’s payroll data for April 2005 shows several posts where the differences in salaries across individuals are wider than would normally be explained by the salary and allowance structure.¹¹ The biggest differences, however, are

¹⁰ The public sector pay may not adequately take into account the market premium that the skills of the most qualified graduates command among international private sector firms. Other factors, including concerns about career advancement, training, and the level of responsibility may also contribute to a reluctance to work in the public sector.

¹¹ For example, there is a 100 percent spread in net salaries for people holding the title of “expert advisor,” and all with the same level of educational qualification. There is about a 70 percent difference in salaries for “head of department”

within the newly created ITA, where the highest salary is four times higher than the lowest salary for the same position title. A variety of explanations are possible. For example, wage arrears may have been included in the data, or managers could have used their perceived flexibility to attract, retain or reward better performers. It is also conceivable that the wide differences reflect some degree of favoritism or poor controls. Al told, the magnitude of differences is quite large and suggests that a more transparent structure is needed, with a clear set of rules and procedures for salary decisions. Further, the authorities would benefit from stronger payroll accounting procedures that clearly delineate the components of total pay.

4.31. The attempt by a government working group to draft a state-level wage law confirms that there are bad practices that risk becoming entrenched. Special allowances were proposed for the security services, the army, those holding jobs of “special importance,” and those who have taken on temporary duties because of a vacancy in their institution. The criteria for most of these allowances are vague, with allowances set to represent 25-50 percent of the net salary. The allowance for temporary duties is subject to abuse and distorts the budget process. Currently, ministries propose their own organizational structure, including the number of posts they will have (subject to approval by the Council of Ministers). Since vacant posts create opportunities for individuals to receive an allowance for accepting “additional” duties, ministries have an incentive to keep some posts vacant.

4.32. Salary practices in the RS are very inconsistent as well, as each ministry appears to have the flexibility to compensate as it sees fit. Data obtained by PWC from the MoF and the Ministry of Labor and Veterans Affairs (MoLVA) indicates that the same position could have very different pay levels. The smallest difference is 34 percent for the Associate position, and the largest is 81 percent for the “secretary general.” While differences in pay might be justified based on some differences in job content or responsibility, there does not seem to be a formal system in which that is evaluated. Even more unusual is the fact that within the same ministry, a lower level position could be paid more than higher ones. If these data are reasonably reliable, they suggest the need for new guidelines or procedures to assure that the compensation practices are transparent and are genuinely linked to differences in performance.

4.33. Wide differences in pay practice exist also among individual cantons. Some of the differences across the cantons may be a result of differences in the composition of jobs, others may reflect differences in pay policy (Table 4.5). The range between the highest and lowest paying cantons is striking; for police

Table 4.5. Comparison of Average Net Pay in Selected Cantons, 2004
(In KM per month unless indicated otherwise)

Canton	Canton No.	University	Primary Schools	Secondary Schools	Police	Judiciary	Core Civil Administration
Una-Sana	1	706	485	539	561	1,065	970
Posavina	2	-	613	740	604	1,138	728
Tuzla	3	767	454	515	546	972	623
Zenica-Doboj	4	793	412	540	481	990	682
Bosnian Podrinje	5	-	412	523	478	1,011	462
Central BH	6						
Herzegovina-Neretva	7	-	564	591	672	1,076	945
West Herzegovina	8						
Sarajevo	9	-	615	663	788	1,080	688
West BH	10	-	493	556	559	1,125	616
Spread (Min to Max, percent)			49	44	65	17	110

Sources: Ministries of Finance and World Bank staff estimates.

or “head of function,” and double that if the donor-assisted High Judicial and Prosecutorial Council is included.

positions, for example, the spread is 65 percent. For positions within the civil administration, one canton pays twice as much on average as another canton.

4.34. Differences in pay can also be quite significant across functions or sectors. For example, because of influence from the international community, salaries for judges and prosecutors rose steadily over the last four years and now tend to be about double those of senior public officials. While the justification for this policy may appear sound, it has generated significant imbalances. Even some common civil service positions that work with the judiciary through the HJPC now benefit from much higher salaries than similar positions in other sectors. Those working in the judiciary are not the only ones to benefit from higher pay; at the state level, the police and security workers enjoy higher average salaries in part because of a 30 percent bonus.

The Pay System's Potential Impact on Performance

4.35. Several features of the current pay system design, both at the state and at the entity levels, have a negative impact on the performance of the public administration. Some of the practices have a long tradition and are thus entrenched, requiring substantial reform effort to bring the system in conformity with European public administration standards. Ideally, reforms should be enacted before there are additional transfers of responsibility to state level institutions. Without stronger incentives in the pay system for career advancement and performance, the government risks maintaining high levels of expenditure without reaping the desired economic benefits.

4.36. The first step should be to decompress the current salary structure, which by international standards is highly compressed. Comparing total net compensation in the civil administration,¹² the ratio between the highest and the lowest paid position is about 2.3 in the FBH¹³ and about 2.8 at the state.¹⁴ (The RS has not provided sufficient data to calculate this ratio, but it is likely to be within the same range.) In contrast, the compression ratio in SaM has already been increased to about 4.9, and many OECD countries have a compression ratio around 7 to 9. The U.S. federal government has a compression ratio of about 10.

4.37. Allowances play a large part in the BH pay system and contribute to the low compression ratio. The most common allowances are for meals, transport, and holiday pay. For a "non-qualified worker" employed by the FBH, the allowances can amount to as much as or more than the base pay. As the allowances are expressed as an absolute amount rather than as a percent of the base pay, more skilled public servants receive a proportionately lower benefit. There are other allowances, such as those for temporary duties and for work on commissions that are awarded selectively to a few individuals and are open to possible abuse. In general, the allowances have too large a role in determining total net pay and most should be eliminated with the proceeds used to enhance base salaries. The differential tax treatment that now exists within the FBH between base salaries and allowances would need to be addressed in order to implement this policy.

4.38. The little difference in total net pay between grades is a significant impediment to performance (Table 4.6). A person who enters the civil service as an associate can expect her net base pay to rise by no more than 20 percent after three promotions. Consequently, strong performers would have little incentive to take on additional responsibilities. Nor is the "threat" of career stagnation much of an instrument to induce efforts from those who prefer to be idle. The lack of career growth is assuredly one of

Monthly salaries for "secretaries," one of the most senior posts, range from KM1,500 to KM2,600.

¹² Police and judiciary have their own separate scales.

¹³ Assuming total net pay of about KM1,150 for a Secretary General vs. about KM500 for a non-qualified worker.

¹⁴ For the state, assuming total net pay of KM1,690 for Secretary General vs. KM610 for an unqualified worker.

Table 4.6. Compensation within the Core Civil Administration, 2004 1/

Level of Government	Title	Pay Coefficient	Pay Ratio
State	Assistant Minister, Advisor	4.8	1.50
	Head of Department	4.2	1.31
	Expert Advisor	3.8	1.19
	Senior Expert associate	3.5	1.09
	Expert Associate	3.2	1.00
FBH	General Secretary	7.2	1.20
	Assistant Minister	6.7	1.12
	Head of Department	6.4	1.07
	Expert Associate	6.0	1.00

Sources: BH governments and World Bank staff estimates.

1/ Based on civil servant posts at the state and the FBH level.

the obstacles to attracting and retaining younger highly-skilled staff into the public sector. Data from the state CSA indicates that only about 4 percent of the state civil servants are under the age of 30.¹⁵

4.39. Decompression of the salary structure would have budgetary implications, but the costs would be limited if salary adjustments are targeted and implemented gradually. To illustrate, salaries could be increased

by an average of 50 percent over five years for the three highest levels of civil servants within the FBH civil administration at an annual cost of KM7 million, or 0.04 percent of GDP. In the cantons, in the RS entity government and at the state level, decompression could also be focused on the core civil service administration and positions equivalent to “head of department” or above, which represent only a small share of total public sector payroll. Continued control by the authorities over nominal salaries for “public employees” and lower level civil servants would help to limit the overall fiscal impact of decompression. If the authorities choose to adopt a substantial decompression strategy, it would also be appropriate to tighten performance requirements so that only those with satisfactory performance benefit.

4.40. A second major reason the pay system discourages performance is that it gives disproportionate weight to a person’s length of service in determining total pay. Length of service is a legitimate factor in pay awards, and many governments give automatic annual increases, at least in part because of the challenge of evaluating performance through means other than length of experience. However, the way it is implemented in BH leads to highly inequitable outcomes and discourages performance. Annual increments should occur within a specific job category or grade, but in BH it functions as an additional allowance tied permanently to the individual and not to the job. Even if a person is new to the job, they carry their higher pay level with them to the new job and may surpass those who have higher performance in that particular job. Because the salary grades are so compressed, the years of service make a big difference in the total pay. A better approach would be to have salary ranges for each grade, with a defined minimum and maximum and allow increments within that range. How one moves through the range could be based on seniority and/or performance, but the relevance of seniority would be primarily linked to a specific job.

Other Human Resource Practices and their Impact on Performance

4.41. The state and entity CSAs appear to be performing their roles very well in ensuring that entry into the civil service is based on merit. Interviews with government officials and findings from the EU’s System Review suggest that civil service recruitment is well-structured and progressing without significant backlogs. Balancing of ethnic representation within the civil service is still a consideration in the recruitment process. However, its impact may decline in the future, as the composition of the selection committees has been changed to give greater weight to CSA personnel who would, hopefully, work to

¹⁵ Insufficient data were available from the FBH and the RS to determine the age distribution of their civil servants. However, data for a sample of about 1000 civil servants throughout the FBH indicates that the proportion of younger workers in the civil service roughly mirrors that found at the state level.

appoint the most qualified candidate. Civil service protections may need to be strengthened, however, to assure that senior civil servants are not arbitrarily removed with changes in government.

4.42. How the public administration manages promotion and career advancement has a substantial impact on the quality of the staff attracted and retained. To the extent that the process is perceived as too slow, too inflexible, or based on factors other than merit, the most-talented and ambitious civil servants or candidates will find alternative employment. The challenge for BH's public administration is to create an environment in which performance and talent are recognized. Higher pay cannot be the only tool in facilitating that. The current career system itself needs to be flexible enough so that as new, highly skilled staff enter the civil service, they can assume additional responsibilities quickly and gain the recognition that goes with it. In the UK, a formal program termed "fast track" was created with a separate, more demanding application process to identify talent and then to give them exposure to career-enriching assignments. A less structured program could be applied in BH, such as the one proposed by the EU System Review, which would reduce the amount of work experience required for university graduates to enter the civil service. One of the most significant features is that graduate studies would count toward experience required and that those who complete graduate-level studies could enter at a higher level than currently possible. Special bonuses and career tracks could also be created to attract individuals educated abroad and who possess high-demand skills. Not all of these people could be expected to devote their full career to the public sector, but it is incumbent upon the public sector to make full use of their skills for the period of time (perhaps 3-5 years) that they are there. To complement the managerial career path that already exists, high level technical/advisory positions could be introduced or expanded that would require less extensive knowledge of the public sector.

4.43. Regardless of how the specifications are set for each civil service level, it is vital that processes for promotion be as objective and merit-based as the process for initial entry into the civil service. Compliance with merit-based recruitment is assured by the civil service agency, but no such oversight exists for the internal recruitment of staff or the promotion of staff. Instead, each line ministry determines its own policies and practices to promote staff. Although not explicitly addressed in this study, steps should be taken to review procedures for the internal competition for posts, and more broadly how career advancement is managed across the civil service.

D. MANAGING THE COST OF THE PUBLIC ADMINISTRATION

4.44. The need to establish new institutions and functions at the state level has put upward pressure on the BH wage bill without offsetting savings or improvements in efficiency. To meet the challenges of state building over the medium-term, the authorities will need to curb costs at the state level and reduce costs at the sub-national level. Where given functions are transferred from the entity to the state, for example, the transfer should be cost-neutral. However, were costs to rise in the process, then offsetting savings would need to be found elsewhere (See Chapter 3 for details).

4.45. This section focuses on approaches to capturing savings in the public administration. It assumes that specific activities within a given function will be gradually expanded at the state level, and that this will in turn reduce the need to have people carrying out the activity at the entity and sub-entity level. The functions still need to be performed, but they can be done equally well and possibly more efficiently at a more centralized level. Further, not all savings need to come as a result of efficiency gains. It is also appropriate to encourage a reduction in functions and activities. Faced with budgetary constraints, policy makers may choose some activities that would be desirable but not essential.

4.46. The options presented below are for the core civil administration, excluding sectors such as police, judiciary, defense, and education. The first three sectors have reform programs already underway. The education sector is addressed in Chapter 5. The civil administration that is left accounts for KM545 million, or one-third of the total wage bill. **The rest of the chapter explores a range of scenarios**

(numbered 1 through 4) on how this amount could be reduced. Since municipal governments are granted autonomy under the Law on Local Self-Government, they are addressed as a separate scenario. All estimates of savings are rough approximations given the fragmented nature of data reporting in BH. For the purposes of this analysis, we assume a five-year implementation period, 2006-2010 (Table 4.7).

Table 4.7. Estimated Savings in Wage Bill from Different Policy Options 1/

Description	Spending in 2005		Spending in 2010		
	In KM	In percent of GDP	In KM, no policy change	In KM, with policy change	In percent of GDP
1a Hard-freeze on recruitment with 2.5 percent annual decline	207	1.5	229	199	1.0
1b Soft-freeze on recruitment with 1.5 percent annual decline	207	1.5	229	211	1.1
2a Targeted reduction of 15 percent over five years	207	1.5	229	194	1.0
2b Targeted reduction of 5 percent over five years	207	1.5	229	217	1.1
2c Targeted reduction of 5 percent for municipalities and Brcko district	242	1.7	267	254	1.3
3a Limit aggregate salary growth to 1 percent annually, including decompression	207	1.5	229	217	1.1
3b Aggregate salary growth in Education sector limited to 1 percent annually	630	4.4	696	660	3.4
3c Aggregate salary growth in municipalities and Brcko limited to 1 percent annually	242	1.7	267	254	1.3
4 Average wage rate declines by 5 percent in nominal terms	207	1.5	229	197	1.0

Sources: BiH governments and World Bank staff calculations.

1/ Applies to civil administration functions within Entity central governments and cantons unless noted otherwise. Civil Administration is defined as excluding Defense, Judiciary, Police/Security, and Education. Scenarios 1 and 2 assume salaries remain constant in real terms. Scenarios 3 and 4 assume employment remains constant.

Option 1: Reducing Costs through Attrition

4.47. One path requiring a low level of administrative effort or central policy guidance would be to implement a hiring freeze and to rely on attrition to reduce staffing. The number of people who might leave is uncertain, but it has the benefit of being voluntary with minimal conflict. Since some positions must be re-filled, the recruitment process would be only internal to the public service. No data is available on public sector turnover, but it is assumed to be 2.5 percent per year. An alternative approach is to allow some external recruitment to take place, so that there is a modest inflow of new employees into the public administration. Scenario 1A would entail a hard freeze – i.e., no external hiring whatsoever. Within the entity governments and the cantonal civil administration, such a measure would save KM8 million, less than 0.1 percent of GDP a year (assuming wage rates remain constant in real terms). Total staffing levels would fall by about 13 percent. Scenario 1B assumes a partial hiring freeze, with ministries allowed to recruit two out of five positions externally. Though employment would decline by only 1.5 percent per year, the savings would be about the same as under scenario 1A.

Option 2: Targeted Reduction of Functions and Activities

4.48. A disadvantage of attrition-driven reductions is that all budgetary users bear the same burden. This can be problematic because neither all units have the same workload, nor do they have the same strategic importance. An alternative approach would be to establish a process by which policymakers rebalance the relative staffing levels of all ministries to fit with strategic priorities. Faced with an upper resource limit within which to work, prioritization becomes a necessity. Some ministries or departments might remain unchanged or increase while others would shrink.

4.49. For each ministry, an employment ceiling could be set for five years, and the ministries would have the choice of how to reach that goal. Some may do so by eliminating functions or departments, together with staff, others by using attrition, offering a voluntary departure package, or some combination of programs. To reduce hardship, those workers who have been retrenched would be given preferential treatment in applying for other posts that become vacant. Ministries would be expected to recruit most of their positions internally before looking externally for candidates. To keep the best people from leaving the civil service, the measures could be limited to certain functions or public employees who are not civil servants (or to some other defined subset).

4.50. The FBH Department of Joint Services could be among the ministries that bear a larger share of the costs. The department employed about 450 people in 2004, but only about 5 percent could be qualified as civil servants and most of the remainder have secondary education or less. Though further analysis would be required, it appears that this could be cut back substantially without significant impact on public services. If many of the services provided by Joint Services could be provided commercially, the MoF could create incentives for competition.¹⁶ This option would be more challenging to implement than option 1. Under the current constitutional set-up, implementation of any downsizing would necessitate either a strengthened central authority to provide specific policy guidance or a broad consensus among the entity governments to make budgetary concessions on their own. Scenario 2A assumes a total reduction in employment of 15 percent at the end of five years (and constant value wage rates), the wage bill for the entity and canton civil administration would be about KM 194 million or 1 percent of GDP, a drop of about 0.5 percent of GDP. Scenario 2B assumes a more moderate rate of downsizing or 5 percent. This would generate a savings of 0.3 percent of GDP. Scenario 2C would extend the downsizing to municipal governments, requiring them to cut staffing by 5 percent. This adds an additional 0.4 percent of GDP savings on top of what might be achieved at other levels.

Option 3: Restraining Salary Growth

4.51. A third option is to freeze most salaries in nominal terms. Given low inflation, thus far it has been possible for governments to keep salaries virtually unchanged. As noted above, however, the salary structure is highly compressed, and some decompression is needed to improve incentives for performance. This option assumes that 1 percent per year of the overall civil administration payroll is set aside for improving the salaries of the middle and upper-level civil service positions. The impact can be much greater than 1 percent if the resources are highly targeted. Assuming average inflation of 2 percent, the net effect would still be a 1 percent reduction of the average payroll.

4.52. Scenario 3A assumes that pay for the civil administration grows by 1 percent per year, while employment levels remain unchanged. Savings would amount to KM10 million a year, or 0.3 percent of GDP. Scenario 3B extends the same control on wage rates to the education sector, resulting in savings of KM30 million or 1 percent of GDP. Scenario 3C applies it to the municipalities, with savings of about 0.4 percent of GDP. Together these scenarios would offer up to 1.7 percent of GDP in savings.

¹⁶ It is not always the case that the private sector can provide the services cheaper, and governments are well-advised not to blindly contract out for "common services."

Option 4: Reducing Nominal Wage Rates

4.53. Reducing nominal wages is an ambitious undertaking that would require substantial political will to implement. The state government proposed a 10 percent reduction in state-levels wages to be enacted in 2006, but as of mid-2006 this has yet to be accomplished. The authorities would be well advised to consider nominal cuts at the level of the state and the FBH for lower-grade employees. As discussed above, those employees appear substantially better remunerated than their peers in the region and their outsized salaries boost the overall wage bill. Pressure on private sector wages is also substantial, especially given the large size of government employment in overall formal sector employment.

E. RECOMMENDATIONS

4.54. The authorities will be well advised to keep perspective on two complementary objectives as they advance state building. The first is to create a pay system for the public administration that embodies transparency and accountability. Reform of the salary system is essential for all levels of government because the current practices do not reward performance or support the building of meritocracy within the public administration. To this end, new wage laws need to be drafted, in line with the authorities' commitments under the Economic Management Structural Adjustment Credit (EMSAC). Further, a more coordinated effort is needed across all levels of government.

4.55. The second goal should be to prioritize the functions that are to be undertaken by the public administration so that they are put on a path of fiscal sustainability. The key issue is to assure that resources are productively used and that the allocations across sectors and functions reflect the country's genuine needs. Reducing possible duplication within the civil administration is a starting point, especially with respect to overlaps between the state, the entities and the sub-entity level of government. Yet, it should also be acknowledged that some of the biggest parts of the wage bill are devoted to defense and public order – far greater shares than is generally the case elsewhere in Europe. Without a significant effort to lower costs in these sectors, deeper cuts will be needed in other vital areas, such as economic affairs or in front-line service delivery functions such as education.

4.56. In summary, the authorities should consider the following actions to create a foundation for effective state-building over the next several years:

Salary Policy and Pay Systems

- **Progressively decompress the salary structure by targeting future salary increases toward middle and upper level civil service posts in the core civil administration. Freeze (cut) the total nominal gross compensation for lower level civil service posts and all non-civil service posts.**

- **Eliminate and/or consolidate most allowances into the base salary and assure that cumulative allowances a person may receive rarely exceed more than 20 percent of net base pay.** Reduce the amount of discretion that individual ministries have in awarding allowances and bonuses, including allowances for taking on temporary duties or serving on commissions.

- **Revise salary laws to create salary ranges for each grade level and permit incremental increases for tenure only within the salary range.** Reduce the impact of length of service on total pay and create clear institutional arrangements and procedures for the use of discretion by managers, such as guidelines to allow faster movement for high performers.

- **Establish greater consistency between the laws on salaries for the state, the entities and the cantons.** In drafting new laws, assure that the salary regimes that are applied to each sector are compatible

(i.e. they facilitate comparison of jobs with like qualifications across sectors or job families) and they reflect a consistent strategy in terms of relative pay competitiveness.

Civil Service Management and Planning

- **Work toward greater consistency in the definition of a civil servant across governments** (with a preference toward narrow definitions) and establish common procedures that can facilitate the transfer of civil servants across governments.

- **Develop consolidated personnel databases** to enable the governments to know the size and cost of public employment. Reporting systems should include civil servants as well as other public employees, regardless of the level of government.

- **Increase oversight of the processes for promotion and career advancement** within ministries to assure that they are carried out transparently and according to merit.

- **Refine the criteria for entry into the civil service**, especially as concerns the experience required and how advance degrees are counted. Create more flexible career tracks for those with special skills, giving greater emphasis to performance over seniority in determining pay grades.

Rationalizing the Size and Scope of the Public Administration

- **Establish a realistic target for reducing the size of public employment across governments.** Follow this with a strategic review that (i) reduces areas of likely duplication across levels of government, and (ii) prioritizes remaining functions/activities at the entity and the cantonal level in order to strengthen those that are understaffed and significantly scale back those that are less critical.

- **Implement a partial hiring freeze into the public administration**, with preference for recruitment given to civil service posts engaged in functions and activities that are categorized as priority.

- **Follow through with significant reforms in defense, judiciary and security** to bring the aggregate costs of these sectors in line with levels in other European countries.

5. EDUCATION

A. INTRODUCTION

5.1. Inefficient education spending within an institutionally complex structure has resulted in unacceptably low education outcomes in BH. Forty percent of students do not acquire basic skills and knowledge, while many students enrolled in costly vocational schools receive insufficient general education and are ill-equipped to meet the challenges of today's labor markets. Secondary and university enrollment remain low. Institutions of higher education, meanwhile, allow publicly-funded students to take a long time to graduate, resulting in a waste of resources and poorly-motivated graduates. Fragmentation in the institutional organization of the sector has enshrined significant regional differences in education spending and educational achievement, making it hard for the single economic space to take firmer hold.

5.2. Meeting the challenges faced by the education sector will require that systemic inefficiencies be tackled before new resources are dedicated. Critically, BH spends more on education than SEE countries on average, including SaM and Croatia. This chapter reviews the institutional arrangements and spending in education and proposes measures to help improve efficiency in the medium term while raising education outcomes.

5.3. Savings from improving efficiency within the sector could more than finance a package of reforms urgently needed to begin meeting the identified challenges. The measures proposed in this chapter are estimated to save up to KM740 million over the next five years, or 0.7 percent of GDP a year on average. The sector would need KM370 million to make an immediate start on tackling the challenges referred to in the opening paragraph, or 0.4 percent of GDP a year on average. Both sets of recommendations combined would reduce BH's spending on education modestly from current levels while improving educational outcomes. This would set the stage for future reforms with more profound impact on the quality of education. These longer-term reforms will need to be considered within the overall fiscal envelope available and balanced against other priorities, as discussed in the other chapters of the report.

B. INSTITUTIONAL ARRANGEMENTS AND EDUCATION SPENDING

5.4. The institutional structure of the education sector is complex, inefficient and inequitable. There is no institution at the state level which provides funding for education. The inter-entity Agency for Standards and Assessment sets standards and conducts yearly standardized tests. In the FBH, the entity Ministry of Education and Science has no management responsibilities for schools or universities, with cantonal ministries of education in charge of primary, secondary and tertiary education. In the RS, the entity Ministry of Education and Culture provides funding for all levels of education (except for capital improvements for secondary schools that are provided exclusively by the municipalities). Eight pedagogical

institutes, sometimes constituent parts of the ministries of education and sometimes self-standing bodies, are responsible for teacher training.

5.5. As measured relative to GDP adjusted for the size of the gray economy, BH spending on education is larger than any other country in SEE, Ireland and Chile. Education outlays in BH amounted to 4.3 percent of adjusted GDP in 2005 compared with 3.8 percent in SEE (Table 5.1). Spending in the OECD countries amounts to 5.4 percent of GDP on average, but that number reflects almost entirely substantially larger spending on research and development at leading universities. From a historical perspective, Japan spent 3-4 percent of GDP on education in the 1970s, as did South Korea, the Philippines and Thailand in the 1990s, suggesting that BH's education outlays are not low.

5.6. Wages consume a slightly higher than average share of overall education outlays in BH than in comparator countries, including those in OECD on average. The education wage bill amounts to 80 percent of overall outlays on education (Table 5.2). As in other areas of government finance, the

large wage bill crowds out investment in school infrastructure and teacher training, with adverse consequences for education performance. The issue is particularly acute among some of the poorer cantons in the FBH, where wages account for an even larger share of education spending. Class size norms play a central role in driving education costs. The level of teacher salaries is set by collective agreement, while the number of teachers is set according to norms linked to the number of classes. Norms are stipulated in terms of minimum and maximum allowable class sizes by level and type of class, together with an optimal (recommended) class size.

5.7. There is substantial scope for improving the efficiency of teacher use, thereby increasing student-teacher ratios, as a way to reduce spending on wages. While countries exhibit a wide range of student-teacher ratios, BH's ratio in tertiary education is low (Table 5.3). Moreover, the trend in BH is in the wrong direction. In the FBH, the number of both primary and secondary teachers fell by less than the number of primary students between 2002/03 and 2003/04 (Annex C, Table C1). In the RS, the number of secondary teachers actually increased, even as the number of students decreased.

Table 5.1. Education Spending: Overall and on Wages
In Selected Countries 1/

	Education Spending		Educ. Wages (In percent of education spending)
	In percent of govt spending	In percent of GDP	
Albania	10.4	3.0	...
SaM	7.9	3.5	...
Japan	10.6	3.6	...
FYR Macedonia	10.5	3.7	...
Greece	8.4	4.0	...
Croatia	9.5	4.3	...
BH 2/	10.9	4.3	77.7
Ireland	13.0	4.4	...
Germany	9.8	4.8	78.8
Slovenia	n.a.	5.1	...
OECD average	12.9	5.4	74.4
Hungary	10.3	5.5	71.5
Poland	n.a.	5.6	65.8
United States	15.2	5.6	71.4
BH 3/	10.9	5.6	77.7
France	11.0	5.8	72.4
Finland	12.7	6.4	59.5
New Zealand	20.8	6.7	...
Malaysia	28.1	7.6	49.4

Sources: OECD *Education at a Glance* 2005; LSMS; BH 2005 Labor Market Update.

1/ Data for BH - 2004, OECD - 2002, the latter excluding universities. Germany and Hungary - public institutions only.

2/ In percent of adjusted GDP.

3/ In percent of official GDP.

C. EDUCATION OUTCOMES

5.8. Given funding levels, education performance is unacceptably poor, characterized by low coverage and inadequate educational achievement.

Moreover, education does not equip students to meet the demands of BH's changing economy. This section examines education performance according to several key dimensions.

Education Coverage

5.9. Secondary and higher education coverage is low. The share of children attending primary schools is similar to other countries, although coverage is still not complete (Table 5.4). Secondary and higher education coverage tends to be lower despite some improvement of late. Since 2001, the absolute number of primary and secondary students fell more slowly than the estimated decline in the corresponding cohort sizes. Enrollment rates are much lower for children from poor households and with relatively uneducated parents, limiting scope for escaping from poverty (Table 5.5).¹

5.10. School dropouts experience higher poverty rates. Among parents of children who do not continue to secondary education, most consider their children's education to be complete at the end of the 9-year basic education. This often reflects parents' experience and expectations, as well as the perception that having secondary education does not significantly raise subsequent earnings, and with good reason. As discussed below, there is a serious mismatch between the skills and knowledge provided in secondary education and those required in the labor market. This problem is particularly acute in secondary vocational and technical education programs, which disproportionately attract students from low-income households. Graduates of these programs also earn far less on average than graduates of general secondary schools, and little more than primary-school graduates.

Table 5.2. BH: General Government Education Spending
(In millions of KM unless indicated otherwise)

	2003	2004	2005
FBH			
Expenditures	484	520	568
Wages	404	411	463
Goods and services	33	53	53
Capital	3	5	6
Others	44	51	46
RS			
Expenditures	172	198	208
Wages	134	147	164
Goods and services	8	20	19
Capital	2	10	10
Others	28	21	16
Brcko education expenditures	18	25	24
Wages	...	19.2	17.8
BH			
Expenditures	673	742	800
Wages	...	577	645
Goods and services	...	76	77
Capital	...	15	17
Others	...	75	61
Memorandum:			
Wages (In % of educ. outlays)	...	77.7	80.6

Sources: Ministries of Finance and World Bank estimates.

¹ The World Bank, 2003, *Bosnia and Herzegovina Poverty Assessment*, Report No. 25343-BH.

Table 5.3. Student/Teacher Ratios, BH and Selected Comparators, 2003

	Primary	Secondary	Higher
BH			
FBH	18.3	15.8	8.6
RS	16.6	18.0	n.a
OECD Average	16.5	13.6	14.9
Hungary	10.6	11.8	14.8
Poland	11.9	13.0	18.3
Spain	14.3	10.9	11.8
United States	15.5	15.5	15.2
Finland	16.6	12.9	12.3
Russia	17.0	8.5	11.8
Czech Republic	18.3	13.4	17.3
Germany	18.7	15.1	12.5
France	19.4	12.2	17.6
Slovak Republic	19.4	14.0	10.8
New Zealand	19.9	14.4	8.5
United Kingdom	20.0	14.8	18.2
Indonesia	23.4	18.0	18.7
Peru	25.1	18.9	14.8
South Korea	30.2	17.8	n.a.

Source: OECD, 2005, *Education at a Glance*.

cohort sizes are expected to occur in 2008 for the primary-school-age cohort; in 2014 for the secondary-school-age cohort; and in 2015 for the university-age cohort (Annex C, Table C2). Over the next decade, the primary school-age cohort is projected to increase by 8 percent, while the secondary and higher education cohorts shrink by one-third.

5.13. This pattern is fortunate for education spending because the cohort declines are projected to occur at levels of education having low coverage rates at present.

5.11. The private costs of schooling constrain school attendance for poor children. The cost of education is the second most prevalent reason for non-continuation of schooling beyond the compulsory level. The private costs of schooling increase sharply after the primary level (Table 5.6). Indeed, the costs for many poor households are typically higher than the average because poor families are more likely to be rural, and to face larger costs than urban families for school-related transport and lodging. In addition to these direct costs, families also face indirect costs of lost potential income because children are at school rather than work. Any successful strategy for addressing low secondary enrollment should tackle the constraints of low educational aspirations, the low perceived and actual utility of secondary education, and the costs of attendance.

5.12. There will be a sharp decline in the school-age cohorts over the next decade due to past fertility declines, followed by a partial recovery during the following ten years. With the fertility rate estimated to have fallen from 1.6 per thousand in 1991 to 1.3 by 2001, minimum

Table 5.4. Education Coverage in Selected Countries

	2003 PPP Per-Capita GDP (US\$)	Net Enrollment Ratio (In percent) 1/		
		primary	secondary	higher
Georgia	2,519	89	61	38
Armenia	3,468	94	84	28
Albania	4,322	97	74	15
Belarus	5,729	94	85	62
FYR				
Macedonia	5,928	92	81	27
BH	6,279	93	73	24
Bulgaria	7,086	90	87	38
Romania	7,176	88	80	30
Croatia	11,025	89	87	39
Slovenia	18,474	93	93	66

Sources: World Development Indicators, 2005; BH 2003 Poverty Assessment.

1/The percentage of the population in the normal age group for each level of education actually enrolled at that level of schooling. Higher education enrollment for all countries but BH is gross.

Table 5.5. BH: Net Enrollment Rates 1/

	Pre-school 0-6	Primary 14-Jul	Secondary 15-18	Higher 19-23
Non-poor	5.6	93	76.4	27.3
Poor	1.1	92.2	57.2	9.3
Total	4.3	92.8	72.6	24.2
5 % conf. interval	3.0-5.7	91.1-94.5	68.3-76.9	20.2-28.3

Source: LSMS 2001.

Table 5.6. BH: Private Outlays on Education
(Per student, in KM per year)

	Education Level		
	Primary	Secondary	Tertiary
Transportation	72	296	546
Tuition	4	55	189
Uniforms/Clothing	42	49	34
Textbooks/materials	72	86	166
Food/Lodging	70	103	197
Other Expenditure	60	124	374
Total	319	715	1506

Source: LSMS 2001.

These demographic changes would allow for an increase in coverage rates for secondary and higher education without expanding staff and facilities. If the current ratios in secondary and higher education enrollments are maintained for the next decade, the reduction in cohort size alone would result in an increase of net enrollment ratios from 73 percent at present to 95 percent by 2015 for secondary education, and from 24 percent to 32 percent for higher education. Alternatively, a more gradual improvement in enrollment ratios would allow for a significant reduction in secondary and higher education staff and facilities, with consequent savings. Harvesting these savings would require fundamental changes in the financing and management of education.

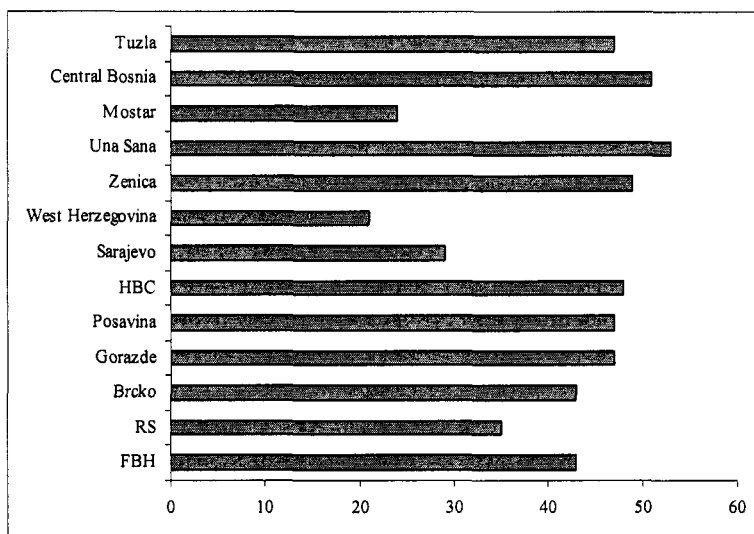
Education Quality

5.14. Exacerbating coverage issues, student performance in a number of areas is substandard, while geographical differences are substantial. The end-of-primary national student assessment provides a valuable indicator of regional variation and change over time in student learning in core skill areas. In 2003/2004, eleven cantons and regions, at least 40 percent of eighth-grade students failed to obtain a satisfactory score on the mathematics assessment (Figure 5.1). The number rises to more than one-half of eighth-grade students in the Central Bosnia and Una Sana cantons. There is an even greater difference among the performance of individual schools.

5.15. Levels of funding are positively associated with levels of student achievement. Both public financing per student and student performance vary widely by region. Within the FBH, at least, cantons that spend more on education tend to have higher student achievement. These cantons also tend to have higher levels of income and of parental education, which are also positively associated with higher student learning achievement. Raising learning achievement in the poorer cantons would require spending more on interventions such as tutoring and subsidized provision of textbooks in order to offset the handicaps of lower parental education and lower household income.

5.16. This being said, more resources would not necessarily lead to improved educational outcomes. Under current input-based budget practices, the overwhelming bulk of spending for education – 80 percent of total education budgets – is for staff costs. With a substantial part of

Figure 5.1. Percent of Students Achieving Below Minimum Standard in Mathematics Assessment by Region, 2003-2004



Source: Standard and Assessment Agency in Education for the FBH and the RS, 2004, *External Assessment of Student Achievement: Final Grade in Primary School General Evaluation*, Sarajevo.

the rest consumed by costs for utilities and heating, little is left for provision of educational materials, teacher training and other measures that directly support improvements in the teaching and learning process.

5.17. International research provides useful guidance on the educational inputs that affect student learning. One of the most consistent findings in the research literature reveals that learning outcomes are positively correlated with students having

textbooks, teachers and students spending more classroom time on substantive learning tasks (when this is supplemented with more time spent by students on homework), and teachers and schools being held accountable for what students learn.

5.18. The mechanisms of education financing also affect education outcomes. Current financing practices provide limited opportunities and almost no incentives to use education resources where they would yield the greatest benefit in terms of improved student learning. Funding allocations for primary and secondary education finance inputs for all current schools and teachers, as long as the class size and minimum teaching hour standards established by the respective ministries of education are met. This model provides no incentive for rationalizing school networks and for using resources differently to improve learning achievement or increase enrollment.

5.19. Student assessment is a crucial instrument for helping improve education quality. It is encouraging that BH will participate in the next round of the Trends in International Mathematics and Science Survey (TIMSS) as a way to dispel myths about the quality of education in BH relative to other countries. For example, there is remarkably little difference in overall performance between smaller and larger schools. This is highly commendable, and contrary to the situation in most countries. However, this means that interventions to improve student and school performance must be targeted to those students and schools with low performance, rather to a type of school, such as small or rural schools, which is often the approach taken elsewhere. An important priority for improving education quality is to extend the program of national assessments to other levels of education, and to use it as a tool for interventions to raise student achievement.

D. RECOMMENDATIONS FOR IMPROVING EFFICIENCY AND OUTCOMES

5.20. The education system needs substantial improvement. However, tackling inefficiency, while increasing the share of funds allocated to teacher training, capital improvements and maintenance, will require substantial political will. The smaller school-age cohorts going forward provide opportunities for savings by shedding teachers in schools where they are not needed, but these savings will not occur unless difficult political choices are made and financing procedures for education are changed to create stronger incentives for improving efficiency. The large regional differences in educational performance reflect in part differences in income and government outlays on education. Raising the performance of lagging regions will require resource transfers, with particular emphasis on the poorer cantons of the FBH.

5.21. The paragraphs below propose a set of measures designed to create substantial room to redirect spending towards priority areas. Overall, the measures to improve efficiency proposed in this section are estimated to save KM740 million over the next five years (Table 5.7). These potential savings are more than twice as large as the estimated cost of a minimum package of steps to improve education performance.

Table 5.7. Projected Budget Savings and Estimated Outlays for Education, 2005–2010
(In millions of KM)

	2007	2008	2009	2010	2011	Total
Total savings	42	74	170	206	246	739
Capitation financing			37	43	47	126
Class size			35	35	35	105
Salary restraint	6	19	38	63	95	220
Unified higher education management		15	15	15	15	60
Streamlined secondary	8	11	13	16	17	66
Higher education fees, repeat students	25	27	29	31	34	145
Higher education fees, foreign students	3	3	3	4	4	17
Total incremental expenditures	135	75	68	51	43	371
Improved classroom learning materials						
Primary	10					10
secondary general	22					22
secondary vocational/technical	50					50
In-service teacher training						
Primary	11	22	16	5		54
Secondary	8	17	13	4		42
Conditional cash transfers for poorest students						
Primary	8	8	8	8	8	40
Secondary	18	18	18	18	18	88
Improved relevance of secondary education	8	11	13	16	17	66
Net budget impact (annual)	93	0	-103	-156	-203	
Net budget impact (cumulative)	93	94	-9	-165	-368	

Source: World Bank staff projections.

5.22. There are several important caveats to bear in mind in considering these options. First, the options presented are the first steps to tackling some of the major weaknesses of the BH education system. Further reform will be needed beyond the initial set considered here.

However, given the breadth of the change needed, and the structural weaknesses that exist, priorities for immediate action are identified. Once these initial changes have been made, the authorities could consider further investments warranted. Second, each of these would involve political risks and educational benefits that would ultimately determine the feasibility and the educational desirability of each option. The chapter does not make a judgment about the latter, but tries to inform the choice among the options by describing the possible educational benefits and risks, as well as the prospective budget savings associated with each option. Third, while the policy recommendations apply to all jurisdictions, the potential for savings will vary; no attempt has been made in this chapter to produce sub-national estimates. However, the responsibility for action lies with these sub-national governments.

Improving the Efficiency of Resource Use

Measures Regarding Teacher Employment

5.23. As a matter of first priority, governments should adopt policies to ensure that teacher numbers decline in relation to any future decline in enrollments so that resources can be released for reform priorities. International evidence suggests that average class sizes in BH could increase without putting the quality of education at risk. Cross-sectional comparisons do not display a significant correlation between class size and learning achievement. For example, in the 2003 OECD PISA international student assessment, South Korea (with an average primary-school class size of 37) achieved a far higher mathematics and science score than Germany (class size of 22) and Greece (class size of 17). BH did not participate.

5.24. Moving to the recommended average class size for primary education in both entities could lead to budget savings on teacher costs of about KM35 million per year without degrading education quality. Moreover, the current limits on maximum class sizes appear to be too restrictive; relaxing these limits could lead to further budget savings in some schools. Slight increases in the student/teacher ratio would also yield substantial savings.

5.25. Achieving these potential savings would require major changes in the school management and financing framework. The current input-based line-item financing formula does not make schools accountable for their performance and provides neither the means nor the incentive for more efficient school management and teacher deployment. The rigidity and lack of efficiency incentives resulting from the current financing formula for primary and secondary education help explain the perverse changes in student/teacher ratios described above. The need for financing procedures which provide a stronger incentive for more efficient use of teachers will become greater as continued shrinkage of the school-age cohorts reduces the need for teachers. However, such fundamental change in the arrangements for school financing and management would take time, and would require strong government commitment and leadership.

Capitation Financing

5.26. Per student or capitation financing is the preferred approach. This would help provide an incentive for more efficient deployment of teachers and use of schools, and could also help improve quality, as schools compete with each other to attract more students. At the school level, the feasibility of combining classes and using teachers better depends upon the number of students and the existing configuration of classes. At the regional level, the feasibility of improving teacher efficiency by combining schools depends on population dispersion, access and proximity to other schools. Particular care is needed to ensure that capitation financing

recognizes the different opportunities for such economies in order not to compromise enrollments or education quality. Establishing whether or not consolidation is possible will require a careful examination of the situation of each school. For example, in the RS, only 185 of the 762 primary schools are mother schools; the rest are small, satellite schools. Clearly, some of the smaller schools could not be combined without making access for some students too onerous. At the same time, others could be consolidated without compromising quality or access.

5.27. Capitation financing would yield substantial savings. Even if secondary enrollment coverage were to increase by 1 percent a year, cumulative savings from capitation financing would yield savings estimated at over KM125 million in the first three years of implementation.² Capitation could be combined with setting aside centrally financed initiatives to raise teaching effectiveness in the lowest-performing schools. These funds could either come from budget savings or from setting per-student allocations in the formula at a level below current average unit costs and using the remainder to finance targeted interventions for the lowest-performing schools.

5.28. Capitation financing also entails risks that need to be managed. The ground has been prepared for capitation financing, as an education management information system is now in place across the country. Some jurisdictions have gone further and analyzed these data to see how efficiency might be improved. Under the World Bank-supported Education Restructuring Project, support will be provided to the governments to help the transition to a capitation system. Under capitation financing, school principals become accountable for school performance, and have the means and the incentive to improve quality. However, school quality in poorly managed schools could decline. External assessment of school performance and professional support will be key to improving quality.

Teacher Salaries

5.29. Reducing or moderating the growth of teacher salaries could provide the most important budget savings over the medium term. Average teacher salaries in BIH are two times as high as per capita income, a higher level than among all OECD countries except South Korea. High staffing ratios amplify the fiscal cost of these high salaries (See Chapter 4). With school cohorts projected to decline in size, teacher salaries could be gradually lowered in real terms and the number of teachers could be reduced without compromising the needed supply of teachers.

Secondary Education

5.30. Restructuring secondary education would help reduce costs and improve the relevance of education. The key ingredient would be to convert some secondary vocational and technical education programs to general education. Hungary and other transition countries are revamping a large number of occupation-specific programs by strengthening training in mathematics, science and languages. Cumulative savings from this measure could amount to KM65 million over the next five years.³

² Capitation financing is more effective when schools have discretion over how to spend the allocated resources. For example, schools could opt to reduce spending on non-teaching staff and increase outlays on materials or teacher training.

³ Based on the unit cost differentials observed in other countries between general secondary and vocational/technical secondary education, potential savings are estimated initially at 5 percent of secondary education expenditures, rising to 15 percent in five years. Projected cumulative savings amount to about KM65 million over the next five years.

Higher Education

5.31. Unified higher education management has provided major savings in Tuzla University, and could do so for other parts of the country as well. Apart from Tuzla University and more recently Zenica University, all universities in BH are agglomerations of separately managed faculties and institutes, limiting course choices and resulting in inflated salaries for university professors. Moreover, administrative costs are higher because each faculty has separate accounting, budget and support staff. Since it unified management five years ago, Tuzla University has managed to reduce public expenditures substantially, while doubling staff, tripling enrollment, improving laboratory and library facilities, and diversifying financing. In the process, it also offered more student choice and flexibility across programs and better access to professors by eliminating over-programming of teaching staff. Based on the experience of Tuzla University, budget savings from moving to unified management for other universities throughout the country are estimated at KM60 million over the first four years of implementation. It is encouraging to see that consensus is being built for changing the legal structure of universities across BH.

5.32. Increasing fees for repeating students in higher education would lead to improved efficiency and additional revenues. Students currently take 7.2 years on average to complete a four-year degree program in the FBH.⁴ Students with budget support who repeat an individual year more than twice have to pay fees and fee-paying students have to pay slightly increased tuition; this creates an incentive for institutions to fail students and opens up avenues for corruption. But these students still pay far less than the full cost of their programs. Raising fees for repeating students to the full budget cost of their programs would generate some KM145 million over the next five years.

5.33. Raising fees for foreign students to the full budget cost would result in budget savings of about KM17 million over the next five years. A significant potential reduction in the number of foreign students would reduce the educational experience and global outlook of BH students and teachers, so measures to attract foreign students, especially raising educational quality, would be needed.

Improving Education Performance

5.34. Provided that they materialize, part of the savings from the above efficiency measures should be used to improve education outcomes. The following paragraphs propose a number of such measures estimated to cost KM370 million over the next five years. Allocating these resources should be done only after a credible plan to tackle the system's inefficiencies is put in place. Committing additional resources to the education system without addressing the inefficiencies described in the previous sections is likely to be counterproductive and unlikely to result in improved education performance.

5.35. At a minimum, any credible effort to improve attendance and quality of education would require three elements.⁵ Firstly, improve the classroom environment for effective teaching and learning, including by improving the availability of textbooks and other teaching and learning materials. Secondly, improve teachers' effectiveness through in-service training,

⁴ Comparable figures for the RS are not available but are unlikely to be significantly different.

⁵ No consideration here is given to improving the facilities infrastructure or buying major equipment; these investments are needed, but there are more immediate needs to improve system performance.

and thirdly, provide additional incentives and penalties to encourage school attendance by children from the poorest households.

5.36. A limited program to address these immediate needs in primary education alone would cost some KM104 million over five years. These costs would include: (i) KM10 million for improved availability of classroom teaching and learning materials, including textbooks in all 2,039 primary schools in BH at a cost of KM5,000 per school; (ii) KM54 million for teacher training, including the costs of developing training programs and materials; and (iii) KM40 million conditional cash transfers to offset the cost of school attendance for children in very poor households. Conditional cash transfer programs for school attendance in poor communities have a well-documented record of success in many countries around the world.

5.37. Similar considerations apply to secondary schools, where a five-year program of reform might cost KM150 million. The cost of providing a similar program of training over a three-year period for all 11,000 secondary teachers would be about KM42 million over five years. Improving teaching and learning materials for general education in all 278 secondary schools in BH would cost about KM22 million KM for basic teaching and learning materials.⁶ In addition, materials and updated equipment for secondary vocational and technical courses would cost about KM50 million.⁷ Grants of KM700 to defray the larger private costs of secondary education for students from poor families (estimated at 10 percent of the cohort or 25,000 students) would amount to KM88 million over 5 years.

5.38. Higher education reforms are also urgently needed, but should not require additional budget resources. Further, there are significant and currently unutilized opportunities for universities to raise their own revenues. Therefore, this chapter does not recommend that significant public resources be used in the short to medium term to fund improvements in higher education. This would have the consequence of shifting public resources from higher education to lower levels, which is justified by the efficiency and equity arguments presented here.

5.39. The agenda proposed in this chapter is undoubtedly ambitious. It is, however, central to the future welfare to the country. Further, the priorities identified are deliberately few in number and almost all of them are included in existing policy documents adopted by governments. Whether the agenda could be implemented in such a fragmented institutional framework, as the one the country currently operates, is a question that political leaders would be well advised to ponder.

⁶ KM30,000 per school on average. On average, enrollments in secondary schools are three times larger than in primary schools.

⁷ Vocational and technical enrollments account for 75 percent of total secondary enrollments in the Federation and 81 percent in the RS. These courses are offered either in free-standing vocational and technical schools, or, more typically, in comprehensive secondary schools which offer both general and vocational/technical programs.

6. SOCIAL INSURANCE AND PROTECTION

A. INTRODUCTION

6.1. The social protection system in BH includes social insurance schemes funded from payroll social security contributions and programs funded from general revenues. The social insurance systems are set up at the level of the entities, while general revenue funded programs exist at both the entity and the sub-entity levels of government. For both entities, the social insurance system provides pensions (old-age, disability and survivor), unemployment benefits and health insurance. In the RS, the system also provides child allowances and maternity benefits. While the child benefit system in the RS has been assessed as one of best-administered benefit programs in BH, the rationale for funding it from payroll contributions is questionable. The programs funded from general revenues provide benefits for veterans and surviving families, social protection and, in the FBH, child and maternity benefits.

6.2. Substantial challenges face the entities' systems of social insurance, including health, and the programs financed from general government revenues. Social insurance schemes suffer from large noncompliance, reflecting pervasive evasion and poor collection, as well as low and falling formal sector employment. With revenues falling short of legal entitlements, social insurance schemes regularly benefit from general revenue transfers. Moreover, social security contribution rates tend to be higher than in most NMS and OECD countries, underpinning the substantial informalization of the economy. Moreover, the contribution rates and bases differ substantially across the entities, a feature that hinders labor mobility.¹ As proposed and demonstrated in this chapter, reducing social security contribution rates and harmonizing the tax base across the entities should be a priority for the governments.

6.3. Non-insurance social transfers in BH are high by international standards and remain dominated by spending on veterans' benefits. Only a small fraction of general revenue financed transfers are means-tested with the explicit goal of alleviating poverty. Further, in the FBH, social welfare and child protection remain *ad hoc*, with payments in most of the cantons below legally-mandated benefits and even the latter are too low to help the poorest members of society. Given overall fiscal pressures and fairness concerns, BH should aim to reduce the share of resources allocated toward social transfers, while restructuring the system to ensure that it provides an effective social safety net.

6.4. The rest of the chapter is organized as follows. Section B presents the background data of the overall level of social spending. Section C discusses the level of social security contribution rates and makes recommendations for reducing the rates and harmonizing contribution bases. Section D examines the social insurance schemes and section E focuses on general revenue funded programs.

¹ In the RS, the taxable base includes non-wage benefits and all social insurance contributions are paid by the employer. Overall, contributions amount to 42 percent of net wages, with 24 percent for pensions, 15 percent for health, 1 percent for unemployment and 2 percent for maternity and child benefits. In the FBH, the taxable base excludes non-wage benefits, and contributions are split between employers (11.5 percent of gross wages) and employees (32 percent of gross wages). The total FBH contribution rate is 43.5 percent of gross wages, of which 24 percent is for pensions, 17 percent for health and 2.5 percent for unemployment.

B. OVERALL SPENDING ON SOCIAL INSURANCE AND PROTECTION

6.5. BH's overall spending on social protection is somewhat larger relative to GDP than in the faster growing transition countries but is broadly similar to the average in the NMS. The composition of spending is substantially different from most other European countries, however, the NMS included (Table 6.1). Social insurance outlays are smaller than among the NMS largely on account of lower pension outlays and despite much larger health expenditures. Spending on social welfare and child protection is larger than among the NMS, meanwhile, thanks to larger categorical benefits, mostly for those affected by the war. With due understanding of the exceptional circumstances BH faced as a result of the 1992-95 war, outlays on war veterans' and families of surviving soldiers crowd out outlays on targeted spending to the poor. As a result, means-tested transfers account for a smaller share of social spending than in any other CEE country. While both pensions and veterans' benefits do have a poverty alleviating effect, they are not well targeted to the most vulnerable groups. This is understandable for pension benefits, which aim as much at smoothing income over time as at averting old age poverty. However, the utilization of categorical grants is a poor mechanism to effectively reach the most vulnerable. One in five individuals in BH benefits from some type of social transfer, but social transfers reach only one-quarter of the poor and have a smaller poverty alleviating effect than in Croatia or Bulgaria.

Table 6.1. BH and NMS: Expenditures on Social Protection, 2004 1/
(In percent of GDP unless indicated otherwise)

	RS	FBH	BH	NMS
Total	14.9	17.7	16.8	17.6
Social Insurance	11.6	13.7	13.0	15.2
Pensions	7.4	6.5	6.8	9.9
Unemployment Protection	0.2	0.7	0.6	0.6
Health	3.9	6.6	5.7	4.7
General revenue programs	3.3	4.0	3.7	2.4
Family, Child and Social Assistance	0.6	1.0	0.9	1.6
Benefits for Refugees and IDPs	0.5	0.3	0.4	0.0
Veterans Benefits	2.1	2.7	2.5	0.0
Other	0.0	0.0	0.0	0.8
Social Protection Spending (In percent of total spending)	44.1	52.3	46.5	45.3

Sources: Ministries of Finance and World Bank staff estimates.

6.6. Benefit types and the funding arrangements under the social protection system are similar across the two entities, but shortfalls among some insurance programs have

required general government transfers to keep payments broadly in line with legal entitlements and prevent the accumulation of arrears (Table 6.2). Moreover, the actual availability of funds to finance benefits differs considerably within each entity. The FBH has recently witnessed a proliferation of benefits with considerable fiscal implications and concerns about how this multitude of benefits can be administered most effectively.

C. SOCIAL SECURITY CONTRIBUTION RATES

6.7. Social security contribution rates are higher than in most OECD countries and substantially higher than in the faster growing transition economies, contributing to the large informalization of the economy. Chapter 2 discusses the level of contributions in more detail. Moreover, the contribution rates and bases differ substantially across the two entities, a feature that hinders labor mobility.

6.8. To reduce the government burden on the economy and facilitate the formalization of economic activity, reducing social security contribution rates and harmonizing and broadening of the contribution bases needs to become priority for the governments. First steps could be taken quickly and recommendations are proposed at the end of this section.

Table 6.2. BH: Summary of Social Protection Benefits and Financing Sources

Benefit	Primary Financing Source	
	RS	FBH
Old age, disability and survivor pensions	Social Insurance	Social Insurance
Unemployment benefits 1/	Social Insurance	Social Insurance
Health	Social Insurance	Social Insurance
Social welfare 2/	Municipal budgets 3/	Cantonal budgets 3/
Maternity benefits	Social insurance	Cantonal budgets 3/
Child benefits and child birth grants	Social Insurance	Cantonal budgets 3/
Benefits for refugees and displaced	Entity budgets	Entity budgets Cantonal budgets
Benefits for civilian victims of war 4/	Entity budget	3/
Veterans disability and survivors benefits	Entity budgets	Entity budgets
Benefits for war medal holders	None	Entity budget
Disability benefits for non-war disabled	None	Entity budget

Sources: BH authorities and World Bank staff estimates.

1/ Includes active labor market policies.

2/ Includes social assistance, carer's allowance and social services.

3/ Where cantonal or municipal budgets carry primary financing responsibility, benefits are often not realized due to budgetary shortfalls.

6.9. In the near term, there is scope for reducing contribution rates, with revenues from the VAT likely to be substantially larger than projected. Further, the new corporate (CIT) and personal income tax (PIT) laws likely to be implemented from the start of 2007 will probably be revenue positive (See Chapter 2). Since the objective of the tax reforms is to establish a modern tax system and not raise the tax burden, offsetting reductions in contribution rates would be warranted.

6.10. Determined efforts to improve collection of social security contributions and reduce exemptions would provide more room for cutting contribution rates in the medium term, as would fundamental reforms of the pension and health financing systems. As the analysis below demonstrates, evasion is pervasive, with informal employment accounting for 41 percent of overall employment, or as much as formal non-government employment. Legal exemptions, moreover, are large, with the effect that one-half of those who receive health insurance do not pay contributions.

6.11. As part of fundamental reforms of pensions and health, the authorities should seriously consider the relative merits of funding social insurance from social security contributions vs. general revenues. Some countries, including New Zealand and Denmark, have high personal income tax rates and very low contribution rates. Others, notably Germany, France and the CEE countries, have much higher social security contribution rates. Given that BH's personal income tax rates would be at the

lower end of practices around the continent, an intermediate option would be to move toward a modest increase in income tax rates to enable yet further reduction in contribution rates.

6.12. The following paragraphs list specific near-term recommendations for reducing and harmonizing social security rates and bases.

- Broaden and harmonize the **contribution base and rate** across the entities for all insurance programs. For **pensions**, based on broadening the base by including non-wage benefits, reduce the pension contribution rates in the FBH.

- Reduce further the **pension contribution rate** by shifting the responsibility for financing the health insurance contributions of pensioners from the pension insurance funds to the entity budgets.

- In the FBH, reduce the **unemployment contribution rate** by curtailing and better focusing spending on active labor market policies, together with financing of the social program for enterprise restructuring from general revenues rather than from unemployment insurance contributions. The analysis below demonstrates that the FBH unemployment contribution rate could be reduced from 2.5 percent of gross wages at present to 1.5 percent.

- Reduce further the **unemployment contribution rate** by discontinuing the practice of offering free health insurance for all those who register as unemployed. Limit the duration of free health insurance to the duration of unemployment benefits and subsequently link eligibility for free health insurance to strict means-tested criteria in coordination with the social protection system.

- Reduce and harmonize **health insurance contribution rates** by moving progressively toward a system in which entity budgets pay the contributions for legally exempt individuals. To limit the costs to the entity budgets, reduce legal exemptions from payment of contributions.

- In the RS, consider shifting the financing of child benefits from the social insurance system to general revenue financing and combining it with other poverty benefits in the medium term. This should enable the authorities to eliminate the 2 percent **contribution rate for child benefits**.

- Move to unify the **base for personal income taxation and social security contributions** and unify the administration of the two.

D. SOCIAL INSURANCE

D.1 PENSIONS

6.13. The pension system in BH inherited all the characteristics of the typical transition country pension system, including relatively high acquired rights and contribution rates and sharply

Table 6.3. Core Parameters of BH Pension Systems

	FBH	RS
Standard Retirement age (men/women)	65/65	65/60
Earliest permissible retirement age	Any time with at least 40 years of work history	Any time with at least 40 years of work history
Minimum	20 years	20 years
Accrual schedule	2.25% for first 20 yrs, 1.5%	2.25/2.75% for first 20 yrs,
Maximum	75 percent	75 percent
Valorization	Wage indexation	Wage indexation, one-year lag.
Indexation	Discretionary (cash-rationing) with a target of wage indexation	Discretionary (cash-rationing) with a target of wage indexation
Assessment Base	Gross covered wage for best 15 years, increasing to 40 by 2010	Net covered wage for full career
Contribution Base	Gross wage without allowances	Net wage plus allowances
Contribution rate (employer/employee)	24 percent (7/17)	24 percent (24/0)

Sources: FPIO and RSPIO.

declining contributory coverage. Three pension funds were set up after the war, one for each of the three ethnic groups. In January 2002, the Mostar and the Sarajevo funds were merged into the FBH Pension Insurance Fund (FPIO), and the Fund was brought under the supervision of the FBH Ministry of Labor and Social Protection. The Mostar and the Sarajevo funds continue to maintain separate IT systems and databases, however. The RS Pension Insurance Fund (RSPIO) remains separate, under the overall supervision of the RS Ministry of Labor and Veterans' Affairs. Both entity pension systems are pay-as-you-go, publicly managed defined benefit schemes funded via payroll social security contributions, but core systemic parameters differ between the two (Table 6.3).

6.14. To help prevent the accumulation of pension arrears, the OHR amended both entity pension laws in November 2002 and introduced the so-called coefficient rule. The rule requires that if monthly revenues of the PIOs fall short of the funds necessary to pay benefits and administrative expenses, then administrative expenses and a portion of pension benefits equal to a legally set minimum take precedence over all other expenditures. The portion of individual pension benefits in excess of the protected minimum is then reduced by applying a coefficient so that benefits equal the revenues not yet allocated to administrative expenses and the protected minimum pension. Under the coefficient rule,

pension entitlements are revalued every month in light of the available resources, thus ensuring that there can be no gap between legal entitlements and actual payments.

6.15. The coefficient rule has prevented further accumulation of arrears since 2002, but has two peculiarities. First, the rule mandates pension funds to pay out all their revenues, net of operating expenses, on pensions in the same period revenues are received. As a result, entity governments are only bound by the availability of current resources and can thus increase benefits arbitrarily without regard for the longer-term sustainability of the pension system. Second, the coefficient ruling results in more equitable pensions in the RS than in the FBH. When calculating the total nominal value of pension entitlements, the FPIO adds up pensions at their nominal value at the time of retirement while the RS valorizes pension entitlements before summing them up to arrive at the nominal pension entitlement value. After applying the cash rationing coefficient to the nominal pension entitlements, the FBH increases or decreases nominal pensions by the same percentage, regardless of the year of retirement.

6.16. As the pension coefficient moves closer to one, appropriately legislated pension indexation becomes an important ingredient of a fiscally prudent pension system. In the RS, the coefficient has gradually increased, rising to 0.94 by November 2005 from 0.85 in 2003, largely reflecting political pressure despite the need to boost transfers from the entity budget to the pension fund. In the FBH, the coefficient has also been raised and is currently equal to 1.18. In Europe, pensions are increasingly indexed to consumer price inflation or to an average of price and wage changes. Introducing indexation would not reduce pension expenditures, but would create a transparent and predictable mechanism that could be used to contain pension expenditures as a share of GDP over the medium term. This, in turn, may allow for a reduction of contribution burdens or for the build-up of reserves in the FPIO² and for limiting the transfers from the RS entity budget to the RSPIO. Given BH's fiscal constraints and lack of reliable data on wage developments in any case, price indexation appears to be an effective and socially responsible measure to contain pension expenditures.

Pension Revenues and Expenditures

6.17. The revenues of the FBH pension fund have consisted almost exclusively of contribution payments, while the RS pension fund has relied substantially on transfers from the entity government in meeting pension obligations. Budget transfers to the RSPIO have amounted to an outsized one-fourth of pension expenditures, even as paid pensions have been lower than entitlements.

6.18. The current fiscal position of the FPIO is more favorable than that of the RSPIO (Table 6.4). In the RS, contribution revenues lower than pension expenditures has meant growing reliance on transfers from the entity budget to the RSPIO. The FPIO, by contrast, has managed to maintain its balance. All told, pension outlays rose to 6.8 percent of GDP in 2004 from 6.2 percent in 2003. The strong growth in pension expenditures has reflected several factors, including: (i) political and social pressures to increase the pension coefficient to unity or above; (ii) the coefficient rule, which obliges funds to spend all revenues regardless of the source, thus encouraging transfers from the entity budgets to directly finance politically expedient pension increases; (iii) and the substantial rise in formal sector wages and contribution revenues in both entities.

² Accumulating reserves not exceeding 10 percent of pension expenditures is also stipulated in the FBH pension law.

KEY PENSION ISSUES

6.19. High dependency ratios and low coverage rates in both entity pension systems are a threat to their financial sustainability, so far ensured by application of the coefficient rule.

The FBH pension system has 292,200 beneficiaries and 466,000 contributors, with a high system dependency ratio of 0.63. In the RS, the ratio is somewhat lower at 0.6, with 174,000 beneficiaries and 294,000 contributors. High system dependency ratios are due to low overall labor force participation and low insurance coverage rates.

Some 62 percent of BH's population aged 15-64 do not accrue pension rights and more than one-fourth of the active labor force is not covered by pension insurance. Low coverage will further increase the share of the population not qualifying for pension rights in the future.

Disability Pensioners

6.20. The share of disability pensioners is high, mostly due to the impact of the war. The share of disability pensioners in BH is twice the level in most other countries. Old-age pensioners, as a result, account for a smaller share of the total number of pensioners in the BH, or 43 percent of the total vs. 70 percent on average in most European countries.

In BH, the share of disability pensioners is broadly similar across the entities (Table 6.5). Although no data are available, there is a concern that many disability and survivor pension beneficiaries may be receiving multiple benefits for the same reason. This applies particularly to beneficiaries under the veterans' benefits system that also allocates generous benefits to disabled war veterans' and extended families of deceased veterans.

Table 6.5. Composition of Pension Beneficiaries
(In percent of the total number of beneficiaries)

	FBH	RS
Old Age	41	46
Disabled	22	19
Survivor	37	35

Sources: FPIO and RSPIO.

Retirement Provisions

6.21. Statutory retirement provisions are broadly in line with regional best practice in both entities but the low effective retirement age is cause of concern. Legal provisions for early retirement and the high uptake of disability pensions affect the effective retirement age. Both entities allow for early retirement for certain categories of workers or for persons with at least 40 years of contributions. In addition, the FPIO had until the end of 2005 a transitory arrangement allowing men (women) to retire at the age of 60 (55) with at least 35 (30) years of contributions. Given high employment rates before 1990, these provisions effectively lower the retirement age to 60-55 years for many people. The FBH government is also considering introducing legislation that would allow workers to "purchase" insurance periods of up to three years. Furthermore, the FBH government is considering legislation to temporarily lower the statutory retirement age to 63 years of age until 2010. **These measures should not be**

Table 6.4. BH PIOs: Revenues and Expenditures, 2003-2005
(In millions of KM)

	2003	2004	2005
RSPIO			
Contribution Revenues	244	296	332
Government Transfers	66	86	103
Pension Expenditures	310	382	434
FPIO			
Contribution Revenues	731	801	865
Government Transfers	0	0	0
Pension Expenditures	688	744	831

Sources: RSPIO and FPIO.

adopted, as they would further reduce the effective retirement age in the FBH, which in turn would increase the dependency ratio and put additional strain on the FPIO.

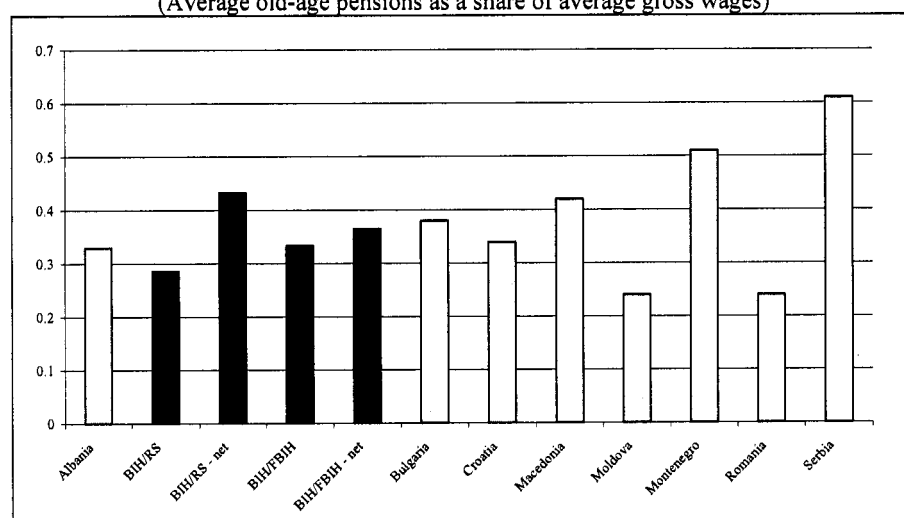
6.22. In the RS, the retirement age regulations are less diluted than in the FBH. There are only two concessions. Firstly, workers with long contribution histories (40 years for men and 35 years for women) can retire at anytime, regardless of their age. Secondly, workers who spent at least 15 years in harmful or hazardous conditions can retire at 55 years of age for both men and women. Since neither the additional rights nor the longer beneficiary periods for early retirees are reflected in the contribution rates, these entitlements ultimately lead to increased pension liabilities requiring more budgetary resources, as in the RS, or to an internal redistribution within the system to the benefit of early retirees, as in the FBH.

6.23. To help reduce the dependency ratio and improve the system’s fiscal sustainability, all regulations allowing for early retirement should be withdrawn. It is recognized that certain professions will continue to require early retirement provisions, but the list of these professions will have to be revisited. It is also desirable that early retirement provisions be treated separately either by charging actuarially fair additional contributions to the employers, while keeping these benefits within the general social security scheme, or by setting up occupational early retirement schemes to bridge the gap between the standard and the concessional retirement age.

6.24. Replacement rates are in line with regional averages, but rates are likely to fall going forward unless longer-term challenges are tackled. Replacement rates of the average old-age pension in the FBH are currently equal to 48 percent of the average wage, compared to a pension contribution rate of 34 percent of gross wages. In the RS, replacement rates for old age pensions are somewhat higher – 53 percent of the average net wage, while contribution rates are 24 percent of the net wage (Figure 6.1).

6.25. Accrual rates, the minimum eligibility criteria and early retirement provisions provide incentives to withdraw from formal employment after short contribution histories. The current accrual schedules result in a marginal replacement rate that becomes smaller after the first 20 years of contribution in both entities. Thus, every additional year of formal employment lowers the average return on contribution. **In order to promote longer contribution-covered careers, it is essential that the**

Figure 6.1. Replacement Rates for Selected Countries
(Average old-age pensions as a share of average gross wages)



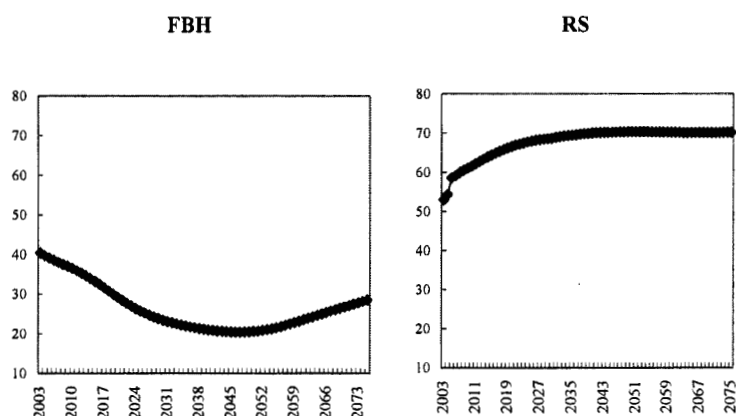
Sources: FPIO, RSPIO and World Bank staff estimates.

current accrual schedule (which is “concave”) be replaced with a schedule that rewards the first periods of contributions less relative to later years (“linear” or “convex”). In practice, such amendments would mean a lower pension to people with 20 years of contribution but a steeper replacement schedule with the respect to consecutive years.

Pensions: Outlook

6.26. In the years to come, both entity pension systems will face reduced numbers of contributors, a relatively large beneficiary population and a declining size of cohorts joining the labor force. If the entity pension systems stay the current course, the average replacement rate in the FBH will be substantially reduced over the next 35 years. Preliminary projections show that the level of pensions in the FBH may fall from the current average of 40 percent of the average wage for all types of pensions to 20 percent in the next 35 years (Figure 6.2)³. **Such a low level of pensions will provide insufficient old-age protection against poverty and will undermine**

Figure 6.2. BH: Pension Replacement Rates 1/
(Average pension in percent of average salary)



Source: World Bank, BH Pension Policy Note, Draft, 2006.

contribution incentives. As early as 2015, pensions in the FBH as a percent of the average wage are likely to be lower than the contribution rate. Individuals will have no incentive to contribute the equivalent of 34 percent of net wage for 40 years in order to receive pensions worth only 33 percent or less of the average wage for 15 years. In the RS, reaching and maintaining a coefficient of 1 will result in a rapidly growing deficit of the RSPIO that will require substantial transfers from the entity budget.

6.27. Averting a substantial drop in the FBH replacement rate, and reversing the widening RSPIO deficit would require fundamental pension reform. Detailed discussion of potential structural changes and the implied measures go beyond the reach of this report and will be presented in a separate BH Pension Policy Note. This chapter provides only a short summary of possible long-term reform measures and the recommended short- to medium-term parametric reforms to make them possible. Pension reforms take hold with a long lag and cascade through the stock of contributors and beneficiaries. Therefore, parametric adjustments will be necessary regardless of which structural pension reforms are pursued. Parametric reforms alone are unlikely to set the pension system on a sustainable path, however, making it key for the authorities to also consider deeper structural reform options.

6.28. Available structural reform options will depend largely on whether the coverage and compliance of active cohorts can be increased to a level allowing the public pension schemes to

³ Projections were made using the World Bank’s PROST pension model and were prepared by a World Bank team as a part of ongoing work on a World Bank Pension Policy Note for BH.

continue to fulfill a consumption smoothing function.⁴ Otherwise, those functions of the public pension scheme that go beyond averting old-age poverty should be rolled back over time. Addressing old-age poverty can be done through a variety of instruments, including means-tested social assistance, non-contributory flat rate citizen's pensions (a so-called "demogrant") or guaranteed minimum pensions. None of these options contain earnings-related benefits. If benefits were independent of earnings, contributions would also not need to be related to earnings, as the implied redistribution under such a scheme would discourage compliance at all income levels above the statutory minimum. Thus, a basic pension pillar could in principle be established if decision makers were ready to gradually phase out the remaining mandatory, earnings-related contributory scheme. The shift toward a flat rate pension system would also require substantial transitional financing, as workers who would only be eligible for the basic pension could no longer be expected to contribute to the old system, while pension entitlements earned under the old system would need to continue to be financed. The financing gap would require substantial general revenue transfers and the speed with which such a reform could be implemented would largely depend on the available financing.

6.29. Another reform option would be to add mandatory and voluntary funded pillars to the public scheme. This is a path followed by many ECA countries. Without exception, such reforms have left the overall level of social security contribution rates and mandated savings largely unchanged. Emerging evidence suggests that the so-called "three pillar reforms" have not improved compliance and it is not expected that BH would be different. Furthermore, BH does not appear to meet at present any of the pre-conditions necessary for the successful introduction of a multi-pillar system.⁵ Another option which will be discussed in the BH Pension Note is the introduction of a so-called "notional defined contribution" system. Such a system tracks individual contributions during the contribution period and pensions are linked to individual contributions, thereby mimicking a fully-funded system.

6.30. Regardless of the long-term reform path chosen, there will be a need for further parametric reforms in the current system and for increased harmonization between the two entity pension systems. The recommendations on the pensions system are summarized in the following paragraphs.

Pensions: Recommendations

- **Make administrative improvements to increase collection efficiency and to contribute to a transparent system where the consequences of tax-compliance are clear to all.**
- **Abolish transitory arrangements related to old-age pensions that allow for retirement before the age of 65.**
- **Introduce CPI-based, legally anchored pension indexation.**
- **Limit recognition of pension rights to those whose contribution history has been fully covered.**
- **Modify the accrual schedule so that it either becomes a linear or convex function of the years of contribution history to give more weight to the later years of contributions.**

⁴ Pension systems have two objectives: protecting the elderly against poverty and making sure that individual's consumption levels do not fall abruptly after retirement (consumption smoothing). Pension systems strive to first achieve the first objectives and, if there are sufficient resources, the second.

⁵ Pre-conditions include the readiness of financial markets, the existence of proper regulatory framework and the capacity and state of the public pension pillar.

D.2 UNEMPLOYMENT INSURANCE

6.31. Employment services are the responsibility of the entity and sub-entity governments. In the RS, there is a single Employment Institute (RSEI) with 6 regional branch offices and 55 municipal offices. In the FBH, the employment service network comprises the entity-level Federal Employment Institute (FEI) and ten cantonal Employment Services (ES) with 79 municipal offices. The RS and FBH employment services have substantially different revenues because of differences in the contribution rates and the contribution bases. In the RS, the employment contribution rate is equal to 1 percent levied on net wages including allowances. The contribution rate in the FBH is 2.5 percent levied on gross wages, which is equivalent to 4.2 percent of net wages. Of the contributions collected in the FBH, 30 percent accrue to the FEI and 70 percent to the cantonal Employment Services. The former is distributed to the cantons on a solidarity basis.

6.32. The employment services provide passive and active labor market programs. Benefits under these programs include: (i) cash unemployment benefits for registered unemployed with paid contributions, (ii) health insurance coverage for all registered as unemployed and pension insurance coverage for recipients of unemployment benefits; (iii) active labor market and job placement programs. In addition, the employment services in the FBH plan to launch a social program for workers who become unemployed because of bankruptcy or liquidation. In both entities, legislation requires the EIs to use available resources to finance unemployment benefits first. Active labor programs get financed only if there are resources to spare.

Unemployment Benefits

6.33. The generous treatment of the unemployed in the FBH tends to discourage the unemployed from searching for work. It is not as much unemployment benefits as free health insurance coverage for all registered unemployed that has been a major incentive to register with the employment services. As a result, the registered unemployment rate has been more than double the true unemployment rate, as measured according to the ILO definition.⁶

6.34. Unemployment benefits in the FBH are also one of the most generous in the broader region. In a reversal of a previous good practice, the FBH amended the employment law in May 2005 to provide for cash unemployment benefits equivalent to three months of wages for an insurance period of 8 months to 5 years, rising gradually to 24 months of wages for service longer than 35 years. The unemployment benefit replacement rate is a uniform 40 percent of the average net wage paid in the FBH in the previous three months, irrespective of the number of years of service. While a replacement rate of 40 percent is not excessive by ECA standards, the maximum duration of 24 months places the FBH at the top end of the ECA countries.⁷ Given high and growing informalization of economic activity and employment, such a long duration of unemployment benefits is likely to lower further the incentive for finding formal employment.

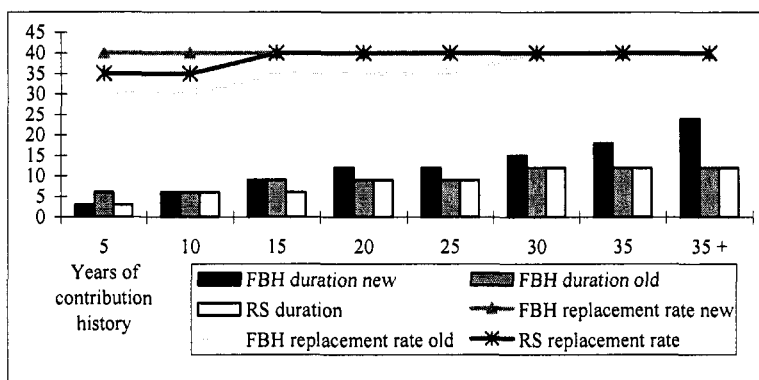
⁶ According to the ILO definition, the "unemployed" comprise all persons who during the reference period are without work (i.e., neither in paid employment nor self-employment), are currently available for work and are actively seeking work (i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment).

⁷ Under the old FBH provisions, unemployment benefits were paid for six months in the amount of 30 percent of the average cantonal salary for an insurance period of 8 months. That increased to payments for 12 months of a sum equivalent to 40 percent of the average cantonal salary for an insurance period longer than 25 years.

6.35. The unemployment benefit coverage in BH is lower than in almost all other countries in Europe. In 2004, only 2 percent of the registered unemployed received cash benefits, compared with 12 percent on average among the SEE countries. The recent expansion of benefit duration in the FBH should boost coverage but without an underlying improvement in contribution compliance.

6.36. In the RS, unemployment entitlements remain more in line with international good practice and fiscal affordability. Entitlements, comprising cash payments, health insurance and pension/disability insurance, can be received for three months for an insurance period of up to five years,

Figure 6.3. BH: Employment Replacement Rates
(Months of duration to replacement rate, in percent)



Sources: BH governments and World Bank staff estimates.

of informality and a major drain on public resources. Roughly two-thirds of all registered unemployed receive health insurance while only two percent qualify for cash benefits (Table 6.6). Entitlement to free health insurance for the duration of unemployment registration provides an incentive to stay in the informal sector and avoid paying social insurance contributions. Moreover, these arrangements have contributed to creating an unsustainable health insurance situation where only one-fourth of those who get health insurance coverage actually pay contributions. The EIs pay health insurance for all registered unemployed in both entities, and pension insurance in the RS for those who receive cash unemployment benefits.⁸

Active Labor Market Programs

6.38. The current mix of active labor programs is limited and appears to have little impact in improving the job prospects of the unemployed. This unfortunate outcome has resulted in part from the emphasis until recently on programs providing subsidized credits to enterprises, as well as wage subsidies, developments that

rising to 12 months for an insurance period of more than 25 years (Figure 6.3). Unemployment benefits amount to 35 percent (40 percent) of the individual's average salary over the preceding 3 months for those with ten years (more than ten years) of insurance.

6.37. As in the FBH, eligibility for free health coverage for all registered unemployed in the RS has been a key incentive to register and has represented both a driver

Table 6.6. BH: Registered Unemployed by Beneficiary Category, 2005
(In actual numbers)

	FBH	RS
Registered unemployed	341,650	153,474
of which:		
recipients of cash benefits	5,725	3,429
recipients of health insurance	201,599	103,028

Sources: Employment Institutes, FBH data for May 2005, RS for April 2005

⁸ In case they do not receive health protection through another means, such as being a family member of an insured person.

contributed to supporting unprofitable enterprises and practices that typically destroyed value and increased inefficiency.⁹ The issue is particularly acute for the FEI, which finances a large number of activities with little impact evaluation, including extending credits to enterprises for employment promotion via the Federation Investment Bank (FIB). Similarly, cantonal ES, most notably the Sarajevo ES, continue to extend direct credits as active labor market policies.¹⁰ Simpler and more cost effective programs such as job counseling and basic job brokerage have been neglected and remain largely ineffective. The RSEI, by contrast, has justifiably terminated all credit programs and in recent years limited active labor market policies to job referral activities.

6.39. Larger resources enable the FEI to meet entitlements of unemployment benefits with only one-third of its resources, while the RSEI spends one-half. The FEI further spends as much as 45 percent of its budget on active labor market programs, compared with 18 percent for the RSEI and 20 percent in the EU on average (Table 6.7 and Figure 6.4). The FBH employment services, moreover, run periodic surpluses and have substantial cash reserves.

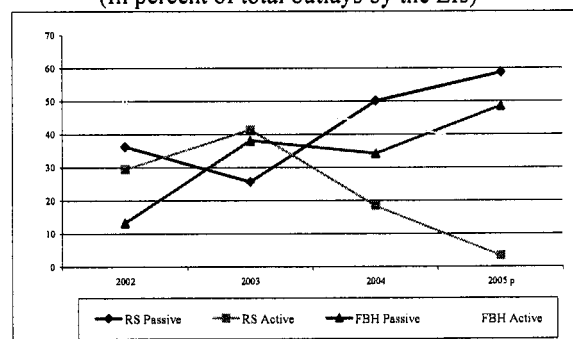
6.40. The RSEI suffered a financial shock after the introduction in mid-2004 of a social program in support of corporate restructuring. While contribution revenue increased by 20 percent in 2004, expenditures on unemployment benefits jumped by 136 percent and the RSEI required substantial transfers from the entity government to help meet its obligations. The RS government subsequently abolished the right of social program beneficiaries to unemployment benefits, limiting their rights instead to health and pension insurance contribution payments. The 2006 RS budget provides KM20 million in transfers to the RSEI to fund these entitlements.

Table 6.7. Entity Employment Institutes, 2004
(In millions of KM)

	RS	FBH
Revenues	12.5	120.4
Contributions	11.2	78.0
Other revenue	0.2	4.6
Grant income	1.0	1.9
Repayments of credits		7.3
Expenditures	12.5	84.3
Administration and capital outlays	3.9	18.0
Assistance to the unemployed	6.2	28.9
Unemployment benefits	5.7	12.5
Health insurance contributions	0.2	12.4
Pension insurance contributions	0.3	0.7
Other social protection		3.4
Labor market programs	2.3	37.5
Subventions		19.1
Credit Programs		18.4
Balance	0.0	36.1

Sources: Entity Employment Institutes.

Figure 6.4. BH: Outlays by Active and Passive Employment Programs 1/
(In percent of total outlays by the EIs)



Sources: Entity Employment Institutes
1/ 2005p refers to planned expenditure as published in the Institutes' annual program for 2005.

⁹ See Betcherman, Olivas, and Dar (2004) "Impacts of Active Labor Market Programs: New Evidence from Evaluations, with Particular reference to Developing and Transition Countries," The World Bank.

¹⁰ The FIB has taken over the outstanding portfolio of subsidized loans approved by the FEI.

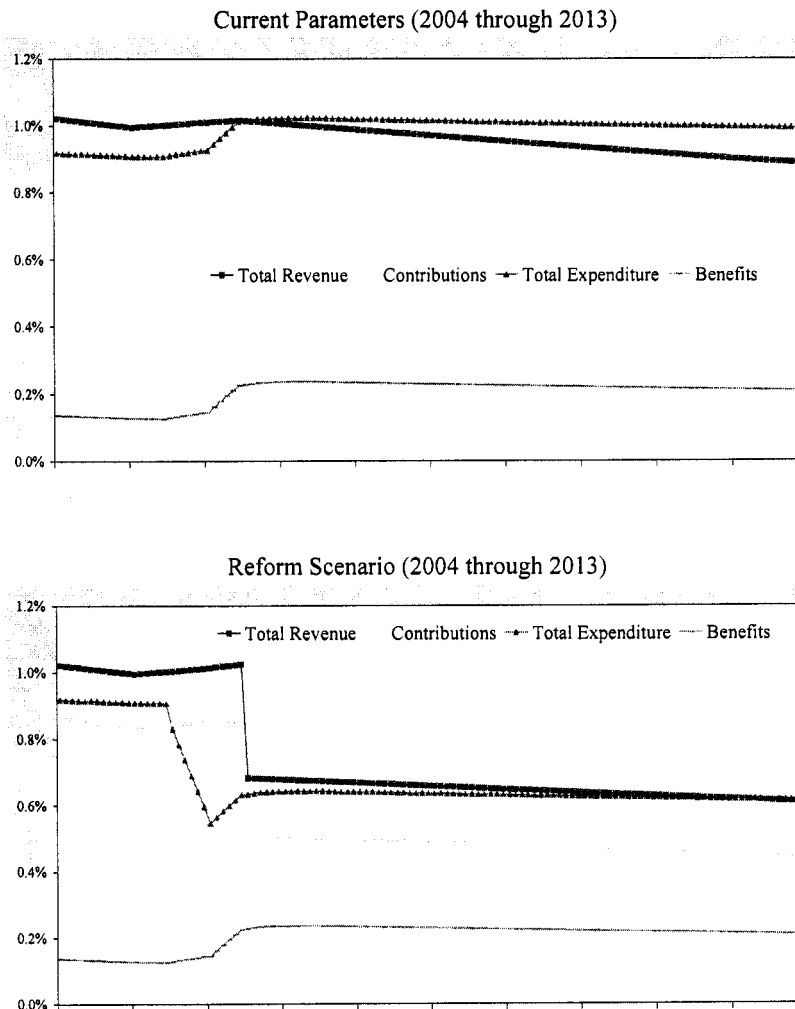
Employment Services: Outlook

6.41. The FBH and RS employment insurance systems face different outlooks. The evidence provided above suggests that the employment contribution rate in the FBH is overly high and the FBH system is substantially overfunded. The fiscal situation of the RSEI is much tighter, by contrast, and is likely to remain that way over the medium term.

6.42. A scale-back of currently inflated expenditures on active labor programs in the FBH would allow for a reduction in the unemployment insurance contribution rate even with an increased inflow of unemployment benefit claimants. The system could accommodate a jump in the share of unemployment benefit recipients relative to the overall total unemployed from 1.7 percent to 3.5 percent and a cut in the contribution rate from 2.5 percent of gross salary to 1.5 percent. This would be possible provided expenditures on active labor market programs are cut from the current 0.6 percent of GDP to 0.2 percent (Figure 6.5). Savings could also be realized from a reduction of the recently extended maximum benefit duration from 24 months back to 12 months.¹¹

6.43. The RS employment services face a different challenge. The system is tightly financed and any shocks would need to be

Figure 6.5. FBH EI: Revenue and Expenditure Projections 1/



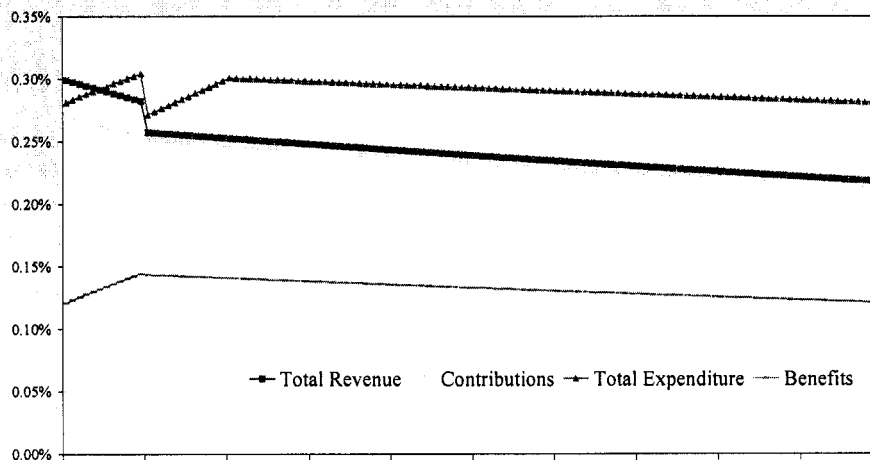
Source: World Bank staff estimates.

1/ Top figure: projections under current parameters. Bottom figure: projections assuming a doubling of unemployment benefit claimants in 2006, a cut in the contribution rate from 2.5 percent to 1.5 percent from July 2006, and spending on active labor market programs cut to 0.2 percent of GDP from January 2006.

¹¹ Simulations were carried out using UISIM, an unemployment insurance simulation model developed by the World Bank.

cushioned either through increased transfers from the entity government or through a reduction of benefits. Assuming an increase of unemployment benefit claimants from 2.2 percent of the registered unemployed to 3.5 percent from 2006 onwards and no change in benefits, the RSEI would need an additional transfer from the entity government of less than 0.1 percent of entity GDP a year (Figure 6.6). Medium-term policy options in the RS unemployment insurance system will depend on whether the number of the recipients of unemployment benefits will increase and whether this increase will be temporary or permanent. Accelerated corporate restructuring makes it more likely that any increase will be temporary. Therefore, it appears prudent to rely on budgetary transfers to cover financing gaps and not consider increasing contribution rates.

Figure 6.6. RSEI: Revenue and Expenditure Projections 1/



Source: World Bank staff estimates.

1/ The figure shows the projected revenue shortfall, assuming an increase of the unemployment benefit claimants to 3.5 percent of registered unemployed in 2006, an unchanged contribution rate of 1 percent of net salary, and non-unemployment benefit spending of 0.07 percent of GDP.

Employment Services: Recommendations

- **Rescind the recent changes to the FBH Employment Law and limit the maximum duration of unemployment benefits to 12 months.**
- **In the FBH, reduce expenditure on active labor market programs that are not targeted and unevaluated and focus these programs on cost-effective job referral and counseling.** Fully discontinue enterprise credit programs by closing the credit lines currently administered by the FIB and the Sarajevo ES.
- **Introduce impact assessment as an integral part of the activities of the EIs to inform management and staff and to influence development of effective active labor market programs.**

D.3 HEALTHCARE

6.44 The health system is fragmented and burdened with substantial duplication, excess employment and inefficient use of available resources. Access to healthcare, moreover, is inequitable, with informal payments larger than legally-mandated co-payments, implicit rationing and limited portability of insurance being the main causes. Substantial differences in resources and small risk pools in the FBH are also a factor. Preventable and high-cost diseases such as heart disease and cancer rank highly in the burden of disease. Challenges will further increase as the population ages rapidly. The incidence of tuberculosis is comparatively high and, combined with relatively low utilization of reproductive care and immunization, suggests that lower-income groups tend to be excluded from quality care. Inefficiencies in the organization and delivery of care further contribute to concerns about equity in access.

6.45 To address these challenges, the authorities need to rationalize the structure of the healthcare sector and improve the efficiency of use of available resources. To this end, legally-mandated benefits and available resources need to be realigned, the financing system strengthened and procurement rules for pharmaceuticals revamped. Measures should also be implemented to prevent the further accumulation of arrears. Moreover, the network of health facilities should be reorganized and rationalized and human resources in the health sector profiled and rationalized to increase productivity. The key further challenge for the governments would be to implement this ambitious agenda while reducing prohibitively high contribution rates.

Health: Institutional and Policy Background

6.46 The administration of the healthcare system is fragmented and inefficient. The DPA stipulated that the entities should be responsible for healthcare legislation and organization, financing and service delivery. In the FBH, the responsibility for health services has been further delegated to the cantons. The FBH health sector, as a result, includes the FBH Ministry of Health (MoH), the 10 cantonal MoHs, the Federal Solidarity Health Insurance Fund (HIF), the 10 cantonal HIFs and the 11 Institutes of Public Health (IPH). Fragmentation and inefficiency are further exacerbated given that the responsibilities of the institutions within the entity or even within the cantons are not clearly defined. By contrast, the RS health system is centralized at the entity level, with a single HIF (HIFRS) responsible for pooling, paying and contracting healthcare providers. The small District of Brcko with a population of less than 200,000, also has a Department of Health and a separate HIF.

6.47 Excess employment is substantial and, together with the institutional fragmentation, is one of the key reasons for the inefficient use of resources. In 2004, the 13 MoHs, HIFs, IPHs and other health authorities employed about 2,200 employees, or 5.7 employees per 10,000 population, considerably more than in most European countries, including the Netherlands (4.8) and Poland (0.7)¹². Two-thirds of all staff is employed at the cantonal or municipal level. As shown below, wages account for a full one-half of overall health expenditures, crowding out other needed outlays. To improve administrative efficiency and facilitate a better use of available resources, the authorities should consider consolidating and streamlining policy and administrative functions across the cantons and the entities. Such a consolidation could aim to reach the moderate Dutch staffing levels, for example, and would result in a reduction of about 350 public administration staff. Assuming a gross monthly wage of KM1000, this measure would help save about KM4.2 million a year.

¹² See EU, 2005, *Functional Review of the Health Sector in BH, Final Report*.

6.48 As in other countries in the region, BH operates publicly administered health insurance funded primarily via payroll social security contributions. There is a purchaser-provider split, with the legal arrangements providing for the HIFs to contract with public and private health providers. In the FBH, the Federal Solidarity HIF created in 2002 provides for high-cost tertiary care, expensive drugs and immunization, while the cantonal HIFs are responsible for financing all other levels of healthcare. The HIFs are not active purchasers of services according to contractual obligations but pay healthcare facilities based on expenditures submitted by the healthcare facilities, with little control over the level of spending or quality of care.

6.49 Fragmentation has limited the risk pools, especially among the cantonal HIFs and has resulted in inefficiencies and varying availability of healthcare. Four cantonal HIFs have fewer than 100,000 members and operate at a considerably higher risk level thereby limiting members' access to

Table 6.8. HIF Revenues, 2002-2004 1/
(In millions of KM unless indicated otherwise)

	2002	2003	2004
HIF RS	182	203	205
Contributions	158	152	172
Transfers 2/	25	51	33
Per capita RS (In KM)	121	135	136
HIFs FBH	517	546	594
Contributions	508	540	582
Transfers 2/	9	6	12
Per capita FBH (In KM)	222	235	255

Source: Annual Reports HIFs FBH and RS.

1/ Excludes capital revenues and copayments.

2/ Entity budgets, pension and employment funds.

however, legislated entitlements in excess of ability or willingness to pay, together with inefficient spending, have put a pressure on the extrabudgetary HIFs. The HIFRS receives transfers from the entity government and other extrabudgetary funds, most of which cover health insurance contributions for exempt individuals (Table 6.8). Without the ability to borrow, the HIFs have resorted to accumulation of arrears, notably in the RS, and to the implicit rationing of service.

6.51 Lack of adjustments to legislated entitlements and poor collection of social security contributions have kept contribution rates high. Collection has been poor because of the large share of the informal economy, rampant evasion and substantial legal exemptions from paying contributions. The healthcare contribution rate in the FHB is 17 percent of the gross wage (4 percent of the wage paid by the employer and the rest by the employee). In the RS, the rate is 15 percent of the net wage, all payable by the employees. These rates are substantially higher than in other European countries, including France (13.6 percent of gross wages), Bulgaria (6 percent), SaM (12.3 percent) and Albania (3.5 percent). Contribution bases vary across the entities, and for some categories of contributors, even among the cantons¹³. The Solidarity HIF in the FBH receives 8 percent of collections and the cantonal HIFs receive the rest.

¹³ Farmers pay either 10 percent of the minimum wage or a flat amount in some cantons. Health insurance contributions for pensioners are paid by the pension insurance fund.

care. To improve efficiency and access to healthcare across the cantons, while decreasing the financial risk related to adverse selection and moral hazard, it is recommended that the functions of cantonal funds be redefined. The authorities should work towards the longer term goal of transforming the cantonal funds into branches for membership issues and case control, with all other insurance functions merged in an entity level HIF.

Healthcare Revenues and Spending

6.50 Social insurance contributions collected by the HIFs are the main source of financing of healthcare. As in other areas of social welfare and protection,

6.52 Higher contribution rates and higher average wages result in larger per capita revenues for the FBH HIFs.

Even within the cantons, however, there is a substantial variation in revenues per capita, ultimately limiting the ability of the HIFs in the poorer cantons to provide adequate care. The FBH HIFs are almost fully self-sufficient, with a negligible transfer from the entity budget. The HIFRS receives transfers from entity governments and extrabudgetary funds, most of which cover health insurance contributions for exempt individuals.

6.53 Arrears in the health sector amounted to 0.9 percent of adjusted GDP in 2004.

The issue is particularly acute in the RS, where sizable past-due hospital liabilities have boosted the stock of arrears to 1.9 percent of adjusted entity GDP, equivalent to one-third of RS health spending (Table 6.9). Arrears in the form of unpaid salaries to staff are relatively small, but these create incentives to take bribes. Validating and settling outstanding arrears over the medium term, and ensuring that new arrears do not arise, should be priorities for the governments.

6.54 Government health expenditures are larger than the average among the CEE countries and second only to Croatia in SEE.¹⁴

At 5.7 percent of adjusted GDP, government spending is also above the level in Poland, Slovakia, and the average for SEE (Table 6.10). In addition, survey data suggests that out-of-pocket payments amounted to some 2 percent of adjusted GDP in 2004, but anecdotal evidence suggests that these payments could be higher. Overall health expenditures amounted to at least 7.7 percent of adjusted GDP in 2004, higher than in Poland, Hungary and SaM, provided the latter's GDP is properly adjusted for the nonobserved economy.

Table 6.9. BH: Health Sector Arrears, 2004
(In millions of KM unless indicated otherwise)

	RS	FBH	BH
Total	104	54	158
(In percent of total health spending)	31.4	6.1	13.0
(In percent of GDP)	1.9	0.5	0.9
HIF	12	9	21
Clinical centers	0	19	19
Hospitals	75	9	84
Others (Health centers, pharmacies)	17	18	35

Sources: BH governments and World Bank staff estimates.

Table 6.10. Health Outlays, Selected Countries, 2004
(In percent of GDP) 1/

	Public	Private	Total
BH			
official GDP	7.4	2.6	10.0
adjusted GDP	5.7	2.0	7.7
NMS	4.7	...	...
SEE, official GDP 1/	5.9	...	...
SEE all adjusted 2/	5.0		
of which:			
FYR Macedonia 3/	5.9	...	...
Albania 3/	3.7	...	...
SaM 3/	5.7	2.9	8.6
Croatia 3/	6.6	2.4	9.0
Lithuania	3.8	...	...
Slovenia	6.8	...	...
Slovakia	4.4	...	...
Poland	4.1	2.0	6.1
Ireland	6.4	...	...
Malaysia	2.0	3.0	4.0

Sources: IMF staff reports and selected World Bank PEIRs.

1/ All relative to official GDP unless indicated otherwise.

2/ See Chapter 1 and Table 2.5. All countries adjusted differentially, so that the cumulative adjustment for NOE in each country's GDP is 30 percent of the observed economy.

3/These numbers are not adjusted.

¹⁴ The ratio for SaM is relative to official GDP.

6.55 Inequity in health financing and the high share of out-of-pocket spending, most of it informal payments, raise concerns about access to care.

Independent of their insurance status, more than 80 percent of patients incur out-of-pocket expenditures. Poor households' healthcare expenditures account for one-tenth of their overall expenditures, with the share falling to 5 percent for the richest households.¹⁵ Informal payments in violation of the law are common. Comparing survey data with official co-payment suggests that informal payments are twice or three times as high as officially required co-payments. Informal payments are a substantial barrier to accessing care and threaten the integrity of the system.

6.56 Wages account for one-half of healthcare expenditures in the FBH and probably for a similar proportion in the RS.¹⁶

As in other areas, the large share of wages crowds out investment in capital improvements and maintenance (Table 6.11). Most importantly, health facilities appear overstaffed with non-medical staff. Non-medical staff amounts to one-third of all health employees, higher than in SaM (28 percent) or the UK (13 percent) (Table 6.12).¹⁷ The ratio of non-medical staff per 100 occupied beds amounts to 67 in BH, substantially higher than a target of 39 under a medical rationalization plan currently implemented in SaM. Applying the same ratio to BH would imply a reduction in

Table 6.11. FBH Health Expenditures, 2002-04 1/
(In millions of KM)

	2002	2003	2004
Total Health Expenditures	647	750	825
Wages, salaries	316	360	392
Goods, services	279	335	375
Transfers 2/	23	21	25
Capital	29	35	33

Source: National Health Account Reports FBH.

1/ Includes out-of-pocket expenditures.

2/ Sick leave and treatment abroad.

Table 6.12. BH: Number of Health Workers, 2002 and 2004
(In actual numbers unless indicated otherwise)

	2002			2004		
	RS	FBH	BH	RS	FBH	BH
Medical	7,177	15,795	22,972	7,889	15,727	23,616
Non-medical	4,034	7,816	11,850	3,578	7,973	11,551
Health workers	11,211	23,611	34,822	11,467	23,700	35,167
Average gross wage 1/				710	719	715

Sources: HIFs and IPH.

1/ In KM per month.

Table 6.13. BH: HIF Membership by Enrollment Category, 2004
(In thousands, unless indicated otherwise)

Category	RS	FBH	BH	In % of all members
Total members insured	1,093	1,990	3,083	100
Required to pay contributions 1/	606	943	1,549	50
Exempt from paying contributions				
Pensioners	237	426	663	21
Unemployed	204	418	622	20
Disabled, veterans	15	88	103	3
Other (refugees, foreign insured)	31	115	146	5

Sources: FBH and RS HIFs and World Bank staff estimates.

1/ Includes employed, self-employed and farmers.

¹⁵ See: The World Bank, 2003, *Poverty Assessment, Bosnia and Herzegovina*.

¹⁶ Such a breakdown is not available for the RS, as the NHA are not institutionalized and the RSHIF does not collect information on spending in health facilities by economic categories.

¹⁷ The government of SaM recently launched a program to further reduce the share of non-medical workers. See Cochrane, David, 2004, *Human Resource Strategy for Support Services*, Final Technical Report, Ministry of Health, Serbia and Montenegro.

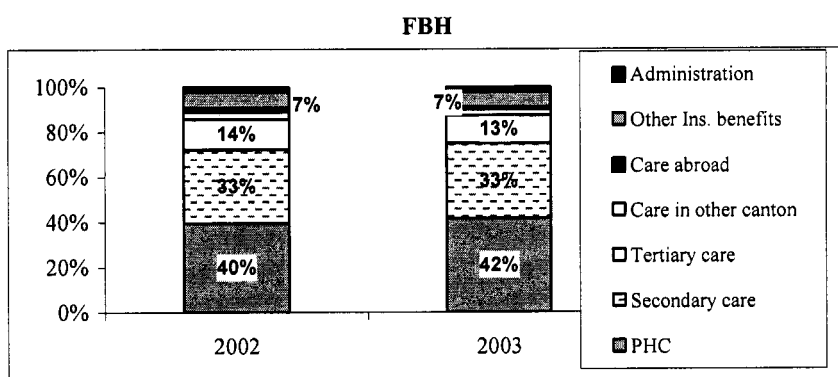
nonmedical staff by 20 percent. Were this to be implemented, wage outlays would be reduced by KM17 million a year. Part of the savings will be offset by the need to pay contractual staff, as in the UK and other European healthcare systems where large numbers of non-medical staff have been contracted out and no longer appear as public employees.

6.57 Healthcare revenues and spending are sizable relative to GDP, but the fiscal sustainability of the healthcare system is far from assured. Small risk pools, pervasive evasion and large exemptions from making health insurance contributions are among the key threats. About one-half of those who receive health insurance coverage are exempt from paying contributions (Table 6.13). These include pensioners, the unemployed, the disabled and the war veterans. The health insurance for these categories is financed via transfers from other extrabudgetary funds (the PIO for pensioners, the EI for the unemployed) and from general revenues (for the disabled and for war veterans). Other threats include generous benefits packages and inefficient hospital system (see below).

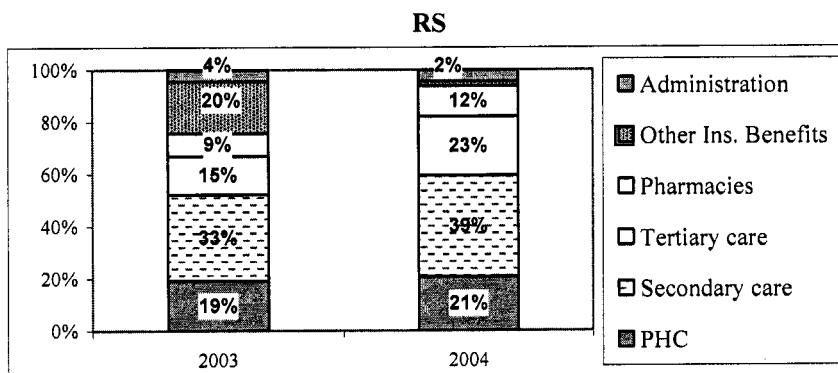
The Delivery and Utilization of Healthcare

6.58 Improvements have been made over the last several years, but service delivery remains inefficient, reinforced by still large outlays on costlier secondary and tertiary healthcare. The

Figure 6.7. BH: HIF Expenditures by Functional Categories
(In percent of the total)



Source: Annual Reports HIFs FBH.



Source: Annual Reports HIF RS.

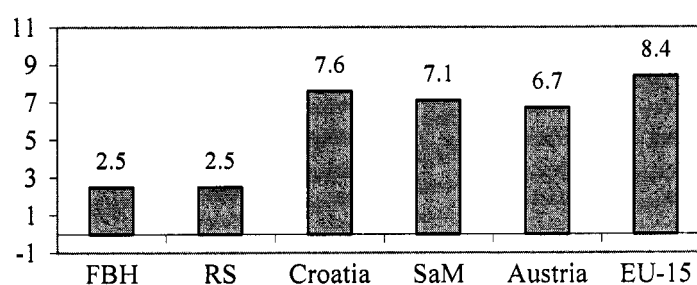
pattern is particularly pronounced in the RS, where only a fifth of total spending is for preventive and primary healthcare (PHC) (Figure 6.7). By contrast, more effective PHC have not been sufficiently emphasized. In the RS, 61 percent of HIF outlays are on in-patient care, substantially higher than in the FBH (49 percent), the Czech Republic (36 percent), Slovakia (35 percent) or Hungary (29 percent).¹⁸ The RS also spends an additional 12 percent for tertiary care abroad (mainly to Serbia) compared to 1 percent in the FBH. The high share of RS spending on treatment abroad deserves the authorities' attention. Rules for sending patients abroad need to be more strictly defined, and case audits carried out. Treatment abroad should be contracted based on transparently executed tenders, not based on individual invoices without pre-agreed prices.

Preventive and Primary Healthcare

6.59 The utilization of PHC is substantially lower than among other countries, notably three times as low as in neighboring Croatia and SaM (Figure 6.8).¹⁹

Combined with over-staffed health facilities, low utilization translates into low productivity. The 2,099 physicians in PHC facilities report a load of 18.6 patients per physician per day in the RS and 20 in the FBH.²⁰ These numbers compare with 33 visits in the USA, a level that is reasonable to apply as a standard for capacity.²¹ Moreover, PHC physicians in BH resolve only about one-half of the PHC cases in BH and refer the rest to the more expensive secondary and tertiary care level.²² Such referrals are often unnecessary. Efforts to improve preventive care and to resolve a large number of cases at the primary level by adhering to standard referral protocols should help improve productivity.

Figure 6.8. Annual Outpatient Contact Rates, Selected Countries



Source: WHO and World Bank staff calculations.

Table 6.14. Number of Beds and Physicians, Selected Countries, 2003

	RS	FBH	BH	Finland	Mexico	LMIC 1/
Beds 2/	258	358	319	228	110	225
Physicians 3/	1.18	1.62	1.45	2.6	1.5	1.75

Sources: Entity HIFs and IPHs and WHO.

1/ Lower-medium income countries, as per the World Bank classification.

2/ Per 100,000 population.

3/ Per 10,000 population.

¹⁸ WHO: Health For All, In-patient spending in percent of total health spending.

¹⁹ WHO: European Health for All Database, <http://data.euro.who.int/hfad/>

²⁰ Of the 2,099 PHC physicians, 857 are in the RS and 1,242 in the FBH.

²¹ The US full capacity norm for PHC physicians is 33 visits per day. See: US Department for Health and Human Services, <http://bphc.hrsa.gov/>

²² Cain, J. et al, 2002, *Healthcare Systems in Transition: Bosnia and Herzegovina*, European Observatory on Healthcare Systems, 4(7), <http://www.euro.who.int/document/E78673.pdf>

In-Patient Care

6.60 The hospital sector displays signs of considerable inefficiencies.

The number of hospitals per population in BH is twice as high as in other countries in the region, notably SaM, and the more efficient EU healthcare systems such as Sweden and Finland (Tables 6.14 and 6.15).²³ A considerable number of hospitals are too small to benefit from economies of scale and ensure efficiency, and many of them serve a catchment area too small to ensure efficient utilization of the facility.

BH, and especially the FBH, has more hospital beds per population than many other lower middle-income countries and some more efficient EU countries. To reach Swedish and Finnish bed levels, BH would need to close 3,666 beds (526 in the RS and 3,140 in the FBH); and adjust infrastructure accordingly. Such restructuring of beds and facilities requires a health sector rationalization strategy, substantial strengthening of the primary care system and a shift to day care surgeries.

6.61 The human resource situation in hospitals needs to be rationalized. While the average number of physicians per population is similar to other countries, BH physicians report extremely low productivity with an average of 1.7 patients discharged per physician per week. This could indicate that physicians spend a substantial portion of their time working in private practices while being on the public payroll. Increasing the patient load to a moderately higher 2.2 patients discharged per physician per week would reduce the number of physicians working in hospitals by 766 (118 physicians in the RS and 648 in the FBH). Assuming a gross average salary of KM1,050 a month, this would result in annual savings of KM9.7 million. Further analysis is needed to develop a human resource strategy and rationalize the manpower mix in hospitals.

6.60 To improve hospital productivity, the average length of stay should be shortened, bed occupancy increased and the number of beds reduced. Hospitals in BH report relatively low admission and occupancy rates but substantially longer average stays (ALOS) suggesting that patients are kept hospitalized for longer than necessary (Table 6.16). The ALOS in hospitals can be reduced by improving admission management, facilitating earlier discharge and strengthening coordination among levels of providers, including from inpatient to outpatient.

Table 6.16. Hospital Productivity, Selected Countries

	BH	Croatia	FYR M	SaM	Finland	EU-15
ALOS 1/	10.4	11.2	11.8	11.0	4.3	7.5
Percent of beds occupied	71	90	54	69	75	73

1/ Average Length of Stay.

6.62 The lack of centralized planning for high-cost tertiary care and medical technology (MT) results in inefficiencies and inequalities in the supply of and access to MT. Investment in high-cost medical equipment occurs in different hospitals within BH, often resulting in duplication and insufficient patient loads, with negative implications for effective utilization of such investments, quality of care and patient

²³ Comparing with other countries in former Yugoslavia is a useful benchmark, but most of these countries need to carry out their own health reforms, including hospital rationalization.

safety. The relatively low production volume per treatment per hospital results in high costs per treatment paid both by the HIF and the patient, inefficient use and idle resources. With MT being a major drive of healthcare costs throughout the world, controlling costs and ensuring patient safety would require the authorities to consolidate high-cost MT into one or two tertiary hospitals and ensure an efficient referral system.

Table 6.17. Registered Private Providers, 2004

	RS	FBH	Total
Total	537	776	1,313
Pharmacies	162	193	355
Wholesalers,	45	46	91
Clinics (registered)	330	537	867

Sources: MOH, IPH and HIFs.

Private Healthcare

6.63 There is no oversight, regulation or information on healthcare delivered by private establishments (Table 6.17). Private providers are registered, but not regulated or subject to quality inspection. While private sector care is not covered by the public health insurance, the large and growing number of private providers, combined with low utilization rates in public facilities suggests that a significant proportion of the population uses private providers. The private sector appears to be either offering a combination of better service and shorter wait-times, or is benefiting from referrals from public sector physicians to their own facilities.

Pharmaceutical Procurement

6.64 Inefficiencies in healthcare spending are further illustrated by the fragmented process of drug procurement. Most pharmaceuticals are imported, with 91 private wholesalers in BH involved in the process. In the FBH, the FBH Solidarity HIF procures all high-cost drugs, while the cantonal HIFs procure other medication. Each of the 13 HIFs in BH has its own drug procurement rules, procedures and positive lists. Given small volumes, decentralized procurement results in substantially higher prices, with prices often substantially different across the cantons or the entities. Some cantonal HIFs are too poor to have even moderately innovative drugs on their lists.²⁴ Providers in the poorer cantons, moreover, often ration drugs, favoring patients who are able to pay informally. The government is advised to follow the good practice established in the Tuzla canton and ensure transparent and effective procurement on a central level with a single positive list to offer quality drugs to all patients in BH.

6.65 The unequal access to pharmaceuticals is amplified by the established inefficient system for pricing and procurement, which combined result in lack of transparency and increased risk for corruption. The RS uses a system of reference prices based on a generic drug level to define sales prices for HIF reimbursable drugs. Pharmacies sell drugs at a price about three times above the MoH

Table 6.18. Estimated Pharmaceutical Expenditures, 2004 1/
(In millions of KM unless indicated otherwise)

	RS	FBH	BH
Total pharmaceutical spending	44	136	180
(In percent of health spending) 2/	13	15	15
HIF to pharmacies	24	94	118
In- and out-patients	20	42	62

Sources: BH authorities and World Bank staff calculations.

1/ Includes payments by HIF and the population. HIF payments for pharmaceuticals in health facilities are not included.

2/ Of the entity or BH overall.

²⁴ See: Andreas Seiter, 2005, *The Pharmaceutical Sector in Bosnia and Herzegovina*, The World Bank.

suggested prices.²⁵ In the FBH, drug prices are not regulated, but are set in a non-transparent way with preferred manufacturers and wholesalers in the cantons. The costs related to inefficient pricing and procurement are shifted to the patients, with co-payments for the same drugs varying between 25 and 100 percent of drug prices across the cantons and the entities. In 2004, out of pocket co-payments for drugs financed at least one-third of total pharmaceutical expenditures (Table 6.18).

Health Outcomes

6.66 Substantial improvements have been achieved since the war but some health indicators still raise concerns. Infant mortality is higher than in Croatia, SaM and most CEE countries (Table 6.19). The incidence of tuberculosis is above the levels reported in neighboring countries and four times higher than the EU average. Disability, posttraumatic stress, depression and chronic diseases including high blood pressure, arthritis and diabetes rank highly on the burden of diseases. Diseases of the heart and circulatory system, stroke and cancer have increased above European averages. Cancer is one of the leading causes of death and lung cancer the leading cause of cancer deaths, with BH reporting the highest mortality rates from lung cancer among the countries in ECA.²⁶ Accidents and injuries are at a high level and appear to be rising.

6.67 Population ageing is exerting new demands on the healthcare system. About 11 percent of the population is estimated to be older than 65 years of age, up from 6.4 percent in 1991. Together with ageing, the incidence of chronic diseases has risen, including high blood pressure, arthritis and diabetes.²⁷ Diseases of the heart and the circulatory system, stroke and cancer have increased sharply to levels above the European average.²⁸ These diseases are the leading causes of death.

Table 6.19. Health Indicators for Selected Countries, 2002

	BH	Croatia	Bulgaria	Estonia	Low middle income
Population growth (In percent)	1.3	0.1	-0.5	-0.4	1.3
Fertility rate (Births per woman)	1.3	1.5	1.2	1.4	2.1
Life expectancy at birth, male (In years)	71.0	69.0	68.0	65.0	69.2
Maternal deaths (Per 100,000 live births)	31.0	10.0	5.8	7.7	
Infant mortality (Per 1,000 live births)	14.0	6.0	14.0	9.0	31.4
Immunization, measles (In percent)	89.0	95.0	92.0	95.0	75.0
Tuberculosis incidence (Per 100,000)	56.1	44.4	44.2	56.0	161.3

Sources: World Bank: HNP statistics; and the WHO.

6.68 A lot remains to be done to improve the population's health. Policy measures must focus on facilitating access to quality care for low-income groups, implementing effective preventive care

²⁵ This is due to accumulated wholesale margins as wholesalers sell drugs among themselves charging the margin at each transaction.

²⁶ BH is also the leading cigarette consumer in Europe, with survey data suggesting that 48 percent of the population smokes. Estimates from higher-income countries suggest that smoking accounts for 6-15 percent of the overall cost of healthcare and estimates for BH are probably at the higher end.

²⁷ LSMS Wave 4, 2004.

²⁸ See WHO: Atlas of Health in Europe 2003; IPHs (FBH and RS): Annual Health Statistics 2003.

measures to curb the incidence of high-cost diseases (cancer and heart diseases), and the rational use of secondary and tertiary care.

Health: Recommendations

6.69 The current organization, financing and functioning of the health sector does not contribute to achieving the governments' overall health policy goals. Relative to countries with similar income levels, BH spends more on healthcare, reports lower utilization and productivity levels and poorer health outcomes. The following recommendations are based on this chapter's analysis.

Reform Health Insurance

- **Review the rationale for making available free health insurance to internally displaced persons (IDP) and refugees and limit free health insurance only to veterans with high levels of disability.**
- **Consider shifting the collection and control of health contributions to at least an entity level authority to help improve collection.**
- **Pool the insurance risk related to hospital and pharmaceutical care at least on an entity level.** Subsequently, in the FBH, centralize major insurance functions including collection, contracting and purchasing to the entity level and harmonize operation of cantonal funds.
- **Ensure insurance portability and a common benefit package at least at the entity level.**

Improve Governance

- **Work towards reducing fragmentation and doubling of functions. Consider consolidating at the entity level health functions** including policy and strategy, planning, financing, and regulation of the public and private sector. Reduce staff levels in the administration of health care, including in the MoHs and IPHs.
- **Institutionalize the National Health Accounts (NHA) to ensure provision of standardized and timely information needed for policy development and monitoring.**
- **Enact and enforce clear rules governing the private sector including the use of public resources for private practice and referrals from public to private practices.**
- **Validate and resolve the arrears situation and tighten policies to prevent new accumulation of arrears.**

Advance Hospital Rationalization

- **Restructure and rationalize hospital care and build networks of care with referral patterns to ensure an equal access to cost-effective and high-quality services.** Reduce the number of beds and implement standards to help reduce the average length of stay in hospitals. Plan the number of hospitals

based on an entity level, and for tertiary care on a state-level for efficient population catchment area of 2.5–3 million.²⁹

- **Limit high-cost procedures to few hospitals and reorganize care towards ambulatory and/or day care.**
- **Strengthen the PHC providers as gatekeepers to hospital care and ensure efficient referrals.**
- **Advance hospital rationalization and reduce staff more in line with the degree of utilization of health facilities.**

Rationalize Pharmaceutical Procurement

- **Support creating a central drug agency in charge of quality control, positive list and pricing.**
- **Limit reimbursement for non-innovative drugs to the lowest generic equivalent.**
- **For new drugs, consider limiting reimbursement to the lowest cost therapeutic equivalent to keep expenditures for new drugs at market-entry under control.**
- **Centralize procurement of drugs to at least the entity level and purchase all generic and hospital drugs through competitive tenders.**
- **Enact transparent regulations of pharmacies.**

Improve the Efficiency and Equity of Access to Healthcare

- **Increase emphasis on preventive medicine** (e.g. cancer screening, hypertension screening, diabetes prevention, tobacco cessation, mental health care) **to reduce high-cost diseases.** Smoking prevention is among the most cost-effective health interventions.³⁰
- **Charge progressive co-payments for treatment abroad based on patients' socio-economic background.**
- **Target low-income groups with services such as immunization, prevention of tuberculosis and respiratory infection, and reproductive health care.**
- **Take an aggressive stance against staff who take informal payments (bribes) from patients.**

²⁹ Howard Lyons and Robert Tinston, 2003, London International Healthcare Ltd.: Preparation for a Masterplan.

³⁰ Gallus et al, 2003, *Price and consumption of tobacco in Italy over the last three decades*, European Journal of Cancer Prevention, 12(4):333-337.

E. SOCIAL PROGRAMS FINANCED FROM GENERAL REVENUES

6.70. Non-insurance social transfers in BH are high by international standards and have had only a modest impact on poverty alleviation. Social transfers financed via general revenues amount to 4 percent of GDP in BH, with veterans' benefits accounting for about two-thirds of the total (Table 6.20 and Figure 6.9). In contrast to other countries, only a small fraction of general revenue financed transfers are means-tested with the aim of providing a safety net for the most vulnerable groups. Cash transfers to individuals are budgeted to increase further in 2006, notably in the FBH, due to a continued proliferation and expansion of benefits.

Table 6.20. BH: General Revenue Funded Cash Transfer Spending, 2002-2005
(In millions of KM and in percent of GDP)

	2002		2003		2004		2005	
	In millions of KM	In % of GDP	In millions of KM	In % of GDP	In millions of KM	In % of GDP	In millions of KM	In % of GDP
FBH	472	4.5	480	4.3	474	4.0	481	4.3
Child protection	31	0.3	47	0.4	48	0.4	38	0.3
Social welfare 1/	61	0.6	66	0.6	68	0.6	71	0.6
Veterans' benefits	331	3.2	316	2.8	318	2.7	334	3.0
Refugees benefits	48	0.5	51	0.5	40	0.3	38	0.3
RS	137	2.9	164	3.4	180	3.7	170	3.5
Child protection	21	0.4	16	0.3	21	0.4	25	0.5
Social welfare 1/	9	0.2	12	0.3	14	0.3	10	0.2
Veterans' benefits	85	1.8	112	2.3	117	2.4	114	2.4
Refugees benefits	22	0.5	24	0.5	28	0.6	20	0.4
Total BH	608	4.0	644	4.0	655	3.7	651	3.5

Sources: BH governments and World Bank staff estimates.

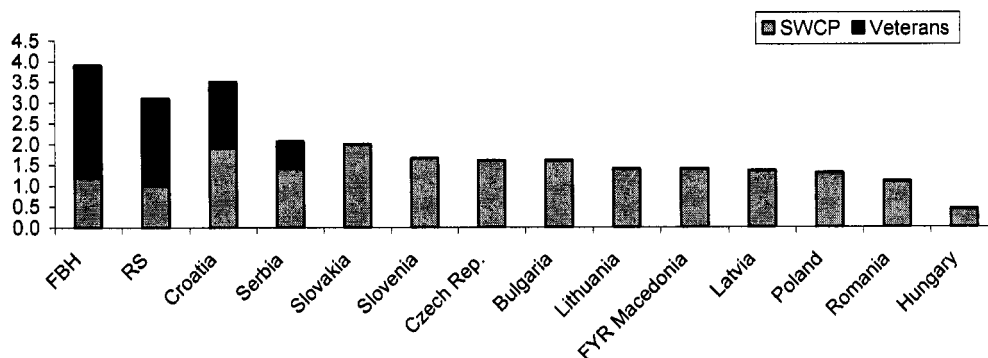
E.1 VETERANS' BENEFITS

6.71. Veterans' entitlements are similar in both entities, covering disability benefits for military war invalids and survivor benefits for members of families of killed soldiers. Disabled veterans' can also qualify for a carer's allowance and orthopedic aid. The bulk of these benefits are financed from the Ministry of Veterans' Protection in the FBH and the Ministry of Labor and Veteran-Invalid Protection in the RS. The cantons and municipalities in the FBH and the municipalities in the RS finance additional entitlements. The entity ministries are organizationally separate from the social welfare ministries and their administrative structures at the entity and sub-entity level, such as the Centers for Social Work (CSW) that administer most other social benefits.

6.72. With more than one-half of the beneficiaries under the veterans' programs members of families of killed soldiers, these programs are more appropriately defined as survivor family schemes and disability programs. In the RS, 41,000 family members and 39,000 military war invalids received benefits in 2005. In the FBH, the ratio is even starker, with more than 51,000 family

beneficiaries and 44,000 military war invalids. Family beneficiaries include the immediate family (spouse and children) and the wider family (parents, siblings and grandparents).

Figure 6.9. Spending on Social Welfare in Selected Countries 1/
(In percent of GDP)



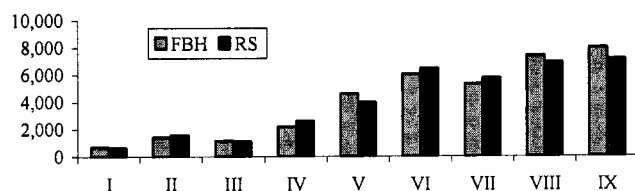
Source: BH governments and World Bank staff estimates.

1/ Data for BH and Croatia is for 2004 and for Romania from 2002. The calculations for BH are relative to adjusted GDP. The RS figures include outlays for child protection, also financed via social security contributions.

6.73. Despite some recent tightening of benefit eligibility, veterans’ benefits are not based on need. Recent reforms have resulted in some reallocation of spending to the more disabled veterans, but unlike other disability benefit systems in BH or elsewhere, veterans’ disability benefits are not limited to those who are 50 percent or more disabled. Benefits are awarded on functional disability rather than on inability to work, and the system remains dominated by beneficiaries with relatively low levels of disability, disability categories VII-X (Figure 6.10). Furthermore, the FBH recently introduced an additional system that awards benefits to war medal holders, irrespective of disability status. In the FBH, the new veterans’ protection law stipulates that the benefit levels for parents of killed soldiers who are married depends on income, but the eligibility for this benefit does not. Under the new RS legislation, benefit levels can be reduced by 50 percent for those beneficiaries whose annual net income is more than twice the average net annual wage in the RS. However, there is considerable scope for better alignment of veterans’ benefit eligibility with receipt of other social protection benefits and wage income.

6.74. There is considerable scope for “double dipping.” Veterans’ disability beneficiaries can also qualify for a disability pension under the social insurance system or for an old age pension, provided they meet the social insurance eligibility requirements. Similarly, survivor families can qualify for veterans’ survivor benefits and social insurance financed pensions. The authorities will be well advised to limit scope for double dipping by making it difficult

Figure 6.10. BH: Veterans Beneficiaries by Category, 2004



Sources: Entity Ministries of Veterans’ Protection.

to receive more than one social benefit. For example, disabled war veterans' and survivor family beneficiaries who currently qualify for veterans' benefits, old-age or survivor pensions could be given the choice of either a social insurance funded pension or a veterans' benefit. Likewise, recipients of disability benefits (veterans', CVW and non-war disabled) who also qualify for a disability pension could be required to choose between the two benefits. Initial estimates show that limiting veterans' benefits to those parents and grandparents of deceased soldiers who do not qualify for old age pensions could save roughly KM30 million a year in the FBH and KM10 million a year in the RS.

6.75. Veterans' benefits are high relative to other disability benefits, pensions and average wages.

The average size of veterans' benefits is five times the average payment to civilian victims of war (CVW) or the average disability benefit in the FBH, and 60 percent in the RS. Benefits for the first five categories of disability are higher than the average wages in both entities. For example, payments to category I disabled are about three times the average wage in both entities. By contrast, benefits at the other end of the disability spectrum are low, suggesting that such benefits play more of a role of recognition of veteran status rather than of substantial income support. Due to the high number of low level disability beneficiaries, even these low benefits result in substantial outlays.

Veterans' Benefits: Recommendations

- **Further focus veterans' programs on the most vulnerable, while achieving savings to bring down the overall high general revenue financed social transfer expenditures and to reallocate resources to the basic social safety net. Measures to that end could include:**
 - **Limit veterans' disability benefits to disability categories I-VI. Remove benefit eligibility for veterans' in disability categories VII-X to bring eligibility for categorical disability in line with that of CVW, other disability benefits and international practice.** The savings from such a measure could amount to KM20 million a year in the FBH and KM10 million a year in the RS.
 - **Refrain from implementing the FBH system for holders of military decorations. Introduction of this benefit is estimated to cost KM 18-20 million, an expense that is hard to defend in the face of underfunded benefits for those most in need.**
 - **Adjust veterans' and family benefit levels downward to align them more with benefit levels for CVW and disability benefits.** There are two options: either legislate lower benefit levels or utilize the benefit rationing mechanism available in veterans' legislation in both entities.
 - **Prevent "double dipping" for all beneficiaries by making benefits exclusive of one another.**
 - **Review disability assessment rulebooks to allow for more consideration to work ability and create a single assessment and administration system for all disability benefits.** Tighten eligibility for benefits, especially at the lower end of the categorical disability distribution. Introducing joint disability assessment rulebooks for veterans' and non-veterans' alike may be an opportunity to introduce a limit of disability benefit eligibility to those persons with a disability status above 50 percent (currently disabled veterans' are entitled to benefits if they have a disability status above 20 percent).
 - **Discontinue additional cantonal and municipal veterans' benefits programs that are usually not targeted to need, such as such as free transport, employment stimulation and housing programs.** At present, cantons and municipalities continue to provide heavily subsidized housing to war veterans without verifying employment status or need.

E.2. SOCIAL WELFARE AND CHILD PROTECTION BENEFITS

6.76. The social welfare and child protection (SWCP) system in BH remains underdeveloped, with spending relative to GDP lower than in almost all countries in the broader region. BH has substantially higher poverty incidence than the NMS on average, but outlays on SWCP amounted to 0.9 percent of adjusted GDP in 2005, almost half the average level among the NMS. Moreover, most of the expenditures reflected outlays for child protection in the RS and in the Sarajevo canton, and for social welfare in the Sarajevo canton.

6.77. Decentralized financing mechanisms result in substantial inter-regional disparities in coverage, with the poorer localities providing the least amount of services (Table 6.21). In the face of resource constraints, eligibility criteria for most benefits are *ad hoc*, as local welfare offices use discretion when rationing available resources. The only notable exception to this pattern is the child benefits system in the RS. This system is financed centrally via a payroll tax and administered by a semi-autonomous institution, the Child Protection Fund, although at local level benefit eligibility is assessed by the CSW.

6.78. The SWCP system is underfunded, but there are multiple poorly coordinated programs with substantial scope for “double dipping.” In the RS, the social protection system foresees a child allowances contingent on an income test and the number of children. Additional benefits in the RS include: a child birth grant; maternity benefits and assistance to unemployed mothers of young children; material assistance for newborns and nutritional supplements for newborns and their mothers; cash social assistance payments conditional on income and inability to work; a carer’s allowance for disabled in need of home care, one-time social assistance; accommodation in social care institutions or foster families; health insurance for social assistance beneficiaries; and disability benefits for civilian victims of war with disability of more than 50 percent. In the FBH, entity level legislation foresees the same benefits, though the financing and definition of implementation is left to the cantons, with the outcome that many of these benefits are only sporadically or not at all available in the poorer cantons and municipalities. The Sarajevo canton, on the other hand, has a broad benefit system, which comprises price compensations and utility allowances in addition to the above named benefits. The FBH recently also adopted legislation to provide entity level financed disability benefits to non-war disabled, though the system to administer these benefits has not yet been established.

6.79. The separation between policy development and implementation engenders mismatches between legislative mandates set at the entity level and what can be afforded and implemented at the sub-entity level. In the FBH, the

Table 6.21. BH: Beneficiaries of Social Welfare and Child Protection Programs, 2004

Benefit Type	FBH	RS
A. Social Welfare		
Permanent Social Assistance	12,967	6,177
Recipients		4,170
Eligible but not receiving		2,007
Carer's Allowance	13,649	5,540
Recipients		2,904
Eligible but not receiving		2,636
One-Time Assistance	10,318	12,023
Transfer for Family Care	n/a	762
Transfer for Residential Care	n/a	984
RS		794
FBH		190
Health insurance	n/a	6,568
Other benefits	n/a	5,601
Total	36,934	37,655
B. Child Protection		
Maternity Benefit	11,226	4,414
For employed mothers	2,980	1,266
For unemployed mothers	8,246	3,148
Breast-feeding allowance	n/a	11,290
Child allowance	39,933	24,504
Child development programs	n/a	1,634
Preschool	n/a	3,141
C. Civilian Victims of War		
	6,789	3,483

Sources: RS and FBH governments; RS Child Protection Fund; cantonal ministries; and the EPPU.

Ministry of Labor and Social Policy has been in charge of overall policy but has not been responsible for benefit financing. Each canton has the jurisdiction to define specific benefits and allocate funding either completely to the municipal or cantonal level, or as a shared responsibility between the canton and the municipalities. This has resulted in a system where each canton essentially defines its own parameters for eligibility, benefit amount and benefit types. In practice, only the wealthier cantons, such as Sarajevo, actually provide a full range of benefits, including child and maternity benefits, social assistance and disability for civilian victims of war. The FBH government has expressed its intention to shift the responsibility for financing and administering child protection and CVW benefits to the entity level to ensure greater uniformity and equity in the system. When this will become reality is unclear at present, however.

6.80. The centralization of social welfare and child protection financing in the RS is well advanced. In a marked contrast to the FBH, the entity-level Child Protection Fund in the RS finances benefits uniformly across the entity.³¹ Disability benefits for civilian victims of war are financed at the entity level and administered by the Ministry of Labor and Veteran Invalid Protection. Social assistance and allowance for care of another person, by contrast, are financed at the municipal level.

6.81. Coverage of the social protection system in both entities is limited and varies considerably across the cantons and the municipalities. The number of social welfare beneficiaries registered at the CSW is large, but only a fraction receive cash benefits. In the FBH, more than 188,000 beneficiaries are registered at the CSWs and in RS almost 90,000, or altogether more than 7 percent of BH's population. Despite low income thresholds, there is a substantial number of people who are registered to receive social assistance benefits in principle, but receive nothing or little due to shortage of funds. As a result, only 1 percent of those below the poverty line in the RS and 4 percent in the FBH receive social assistance. Coverage is much more substantial for child and maternity benefits in the RS, but is available in only four of the ten cantons in the FBH. Similarly, disability benefits for civilian victims of war are provided in eight of the ten cantons, with substantial variation in coverage and benefit levels.

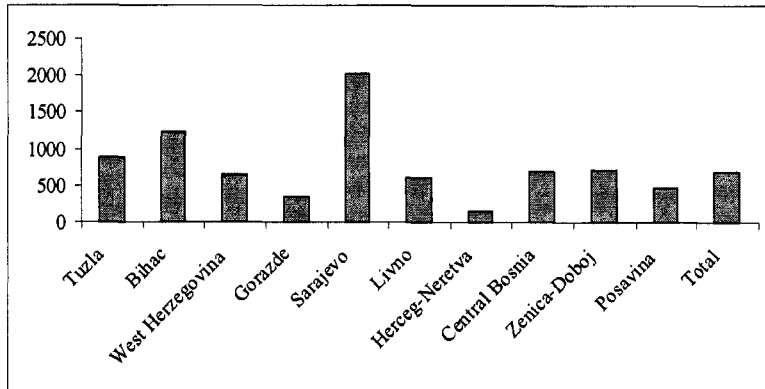
6.82. Variations in coverage are accompanied by variations of the actual level of benefits received. For example, in 2004 the average monthly social welfare spending per registered recipient ranges from KM2 in East Stari Grad to KM69 in Milici, both in the RS. These figures compare with an average monthly wage in the formal sector of KM422 and a monthly poverty line of KM185. Similar variation is found across the municipalities and cantons in the FBH (Figure 6.11).

6.83. The targeting mechanisms currently legislated and employed for social assistance and child benefits are underdeveloped. Targets are based on income, a variable that is hard to measure with confidence given the large and growing informalization of the economy. As an example, the monthly income threshold to qualify for child benefits in the RS is KM53 per capita and for social assistance is KM47 per capita. This is well below both the poverty and the extreme poverty lines, defined as consumption levels of KM185 per month per capita and KM64 per month per capita, respectively.³² However, EPPU's recent poverty analysis found that there is no absolute poverty in BH. This suggests that there should be no recipients of child benefits and social assistance, yet almost 22,000 families qualify for child benefits and over 6,000 people qualify for social assistance. The same considerations apply to the child benefits and social assistance systems in the FBH. With income clearly a poor choice for targeting social protection, the authorities would be well advised to explore alternative options, such as using proxy-means indicators to target these benefits to the most vulnerable groups.

³¹ Law on Child Protection, June 1996, amended in 1998 and 2001.

³² See: EPPU, 2005, *Poverty Update*.

Figure 6.11. FBH Cantons: Social Assistance Spending Per Recipient, 2004



Source: Ministry of Labor and Social Policy and staff estimates.

6.84. Expenditure pressures, inefficiencies and inequities in the current system of multiple social benefits call for action to further streamline and better target these expenditures to the most vulnerable groups. The governments indicated recently their intentions to embark on a medium-term reform of social protection aimed at reorienting expenditure from veterans' programs to SWCP, while reducing overall social protection expenditure as share of total spending. First steps in this process included some tightening of veterans' benefit eligibility and

limiting expenditures, which have led to a nominal freeze in veterans' benefit expenditure in RS. In the FBH, by contrast, expenditures on veterans' programs are on the rise, and the proliferation of new benefits is ongoing. This report endorses the fundamental logic of the initially formulated reform agenda. However, it suggests the need for more far-reaching adjustments if the goal of creating a well-targeted and fiscally sustainable basic social safety net is to be achieved. Recommendations in line with the analysis above are summarized in the following section.

Social Welfare and Child Protection: Policy Recommendations

- **Centralize further financing for the core SWCP benefits to help narrow the gaps in coverage of basic social assistance in the RS and social welfare and child protection in the FBH.** While some additional financing is required in both entities, the primary focus needs to be on a more even and targeted provision of benefits rather than on securing additional budgetary resources.
- **In both entities, make financing of basic social welfare and child protection (already done in the RS) an entity level responsibility.** Consider merging child allowance, social assistance and benefits for the refugees and the IDPs into a single benefit.
- **Introduce and utilize a coefficient rationing provision for social welfare and child protection benefits.** Such a rationing mechanism is in place in veterans' benefit legislation in both entities and disability benefit legislation in the FBH, as well as in draft FBH legislation on child allowances and CVW benefits.
- **Develop a more rigid method for targeting benefits, including greater reliance on means- and proxy means-testing.** The latter have performed well elsewhere in conditions of low administrative and staffing capacity.
- **Review financing arrangements for social protection between general revenue and payroll taxation financing.** In the RS, move financing for child allowance to general revenue, but retain payroll contribution financing for maternity benefits. This would entail a transfer from general revenue to the RS Children's Fund, possibly through the Ministry of Health and Social Welfare.

7. TRANSPORT

A. INTRODUCTION

7.1 Following substantial outlays in the aftermath of the war, expenditures on transport have fallen over the last several years in large part due to declining foreign assistance. Government decisions between financing capital improvements or operations and maintenance have also been a factor. Moreover, the overly complex institutional structure of the sector has raised transaction costs and has blunted the efficiency of spending. Expenditures on rehabilitation and maintenance have been inadequate, creating a substantial maintenance backlog, while the distribution of funds between the numerous spending bodies in the sector has not been made on strict economic merit. Investment plans, moreover, have typically been prepared without sufficient regard for the overall fiscal envelope, which will ultimately require rationing the most necessary outlays to fit fiscal reality. Little use of formal appraisal techniques at project level in some of the public sector bodies has also been an important constraint to efficient spending in some of the sub-sectors. All these factors combined keep the overall condition of transport infrastructure poor and inadequate for a country of the size of BH despite considerable expenditures in the sector over the last decade.

7.2 Recent developments are cause for concern. The government of the FBH is moving toward procuring passenger rolling stock at a cost that does not appear to take the entity's fiscal constraints fully into consideration. The rolling stock to be procured, moreover, will far exceed the technical capacity of the railroad network. Lack of a strategy for the development of the overall transport sector and the railroad sector in particular makes it hard to confirm these projects as a priority for the railroad sector. Other potential fiscal concerns, are raised by the authorities' plans to develop the road infrastructure within corridor Vc even if taken forward on a concession basis.. In light of these developments, the chapter argues that the governments will be well advised to proceed with any debt-financed public investment only within prioritized national and sector investment strategies, consistent with the available fiscal envelope. Involving the private sector is important, but a substantially improved institutional framework is a key pre-condition for the successful operation of public private partnerships (PPP). Moreover, open and transparent competitive bidding is a pre-requisite to ensuring that best value is obtained for the public resources available. In parallel, consolidation of the responsibilities of the spending bodies in the sector should be a priority.

7.3 This chapter reviews expenditures in the transport sector according to trends in recurrent and capital outlays, by mode of transport, and by sub-sector. The chapter then examines the road sector in more detail and estimates the annual financing needs for the road network to remove the maintenance backlog and keep the existing infrastructure in proper condition. The analysis demonstrates that outlays on the order of those in 2005 are needed to clear the maintenance backlog and upgrade the quality of the existing network, both of which should be a priority for the government, and should not be spent on further expansion. A similar analysis is carried out for the railroad sector. The chapter concludes with a summary of the recommendations.

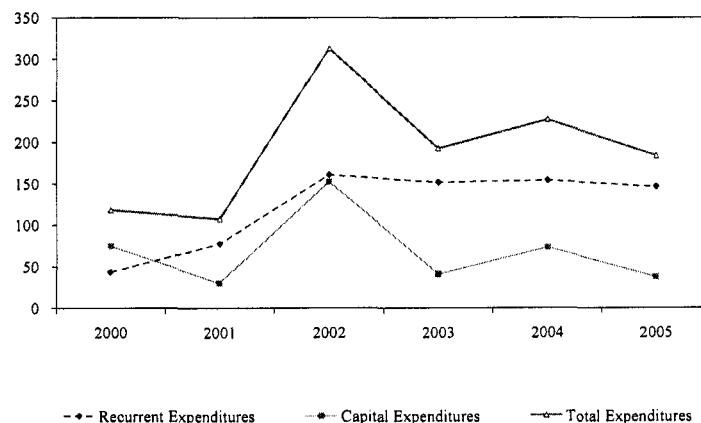
B. INSTITUTIONAL CONTEXT AND PUBLIC EXPENDITURES ON TRANSPORT

7.4 After substantial donor-financed outlays in the aftermath of the war, expenditures on transport have fallen over the last several years as assistance has declined. As recorded in entity budgets and public investment programs, outlays peaked at 2.1 percent of adjusted GDP in 2002 before falling to 1 percent by 2005 (Figure 7.1 and Table 7.1). To the extent known, external financing accounted for a considerable share of capital investment in the transport sector over the past decade. Much of this investment has been used to rehabilitate or develop the national road network, where external financing from all sources amounted to €220 million during 1996-2004, or 92 percent of all capital expenditures on road infrastructure (Table 7.2). Including private sector outlays on transport, expenditures in BH are lower than in other countries in the region (Table 7.3). These differences reflect mainly larger government spending on road construction in the NMS. These countries, however, have a substantially larger fiscal envelope for making these outlays.

7.5 The current institutional structure of the transport sector is complex and costly, and in need of further improvement. At the state level, the Ministry of Communications and Transport established in 2003 supplements the entity Ministries of Transport and Communications. In addition, at the operational level, there are three railway companies, six institutions in the aviation sector, and twelve public institutions in the road sector, excluding those organizations/bodies responsible for local and urban roads. Moreover, there are plans to establish a state-level Road Directorate to implement and manage the road infrastructure developments on Corridor Vc. Such a directorate should be established only as the first step in merging operational responsibilities in the sector, unless it is an independent commercially self-standing vehicle to manage the concession alone. Otherwise, the establishment of a new public road directorate at the national level could weaken existing entity road directorates, atomize scarce human and financial resources in the sector and blur lines of responsibilities.

7.6 The institutional structure and delineation of responsibilities in the road sector is particularly complicated. The road network is delineated into three categories: trunk roads, regional roads and local roads. The trunk road network extends some 3,739km, of which 1,958km is managed by the FBH Road Directorate (FBHRD) and the rest by the RS Road Directorate (RSRD). About 96 percent of the trunk road network is asphalt-paved. The regional road network totals some 4,907 km, of which 2,724 km falls within the FBH and 2,183 km within the RS. The ten cantonal institutions are responsible for the regional road network within the FBH, while the RSRD is responsible for the regional road network in the RS. The local road network (13,730km) is the responsibility of the municipalities in both the FBH and the RS.

Figure 7.1. BH: Recurrent and Capital Expenditures, 2000-2005
(In millions of KM)



Sources: BH authorities and World Bank staff estimates.

Table 7.1. BH: Transport Sector Expenditures, 2000-2005
(In millions of KM)

Agency	2000	2001	2002	2003	2004	2005
State Ministry of Transport and Telecommunications						
Capital Expenditures	75	2	126	12	18	0
Road sector	73	2	112	8	15	0
Railway sector	0	0	0	0	0	0
Inland water transport	0	0	0	0	0	0
Civil aviation	2	0	14	4	3	0
Total expenditures	75	2	126	12	18	0
FBH Ministry of Transportation						
Capital expenditures	0	6	1	5	6	1
Road Sector (FBHRD)	0	6	1	5	6	1
Railway sector (ZFBH)	0	0	0	0	0	0
Inland water transport	0	0	0	0	0	0
Civil aviation	0	0	0	0	0	0
Recurrent Expenditures	13	21	35	38	39	27
Road sector (FBHRD)	0	7	20	24	25	27
Railway sector (ZFBH)	13	14	15	14	14	0
Inland water transport		0	0	0	0	0
Civil aviation	0	0	0	0	0	0
Total expenditures	13	27	36	43	45	28
Cantons (roads)	0	0	35	47	50	49
Municipalities (roads)	0	0	25	33	36	35
RS Ministry of Transportation						
Capital expenditures	0	21	25	24	50	36
Road sector (RSRD)	0	21	25	24	50	36
Railway sector						
Inland water transport						
Civil aviation	0	0	0	0	0	3
Recurrent expenditures	30	57	67	34	29	36
Road sector (RSRD)	0	31	37	33	29	36
Railway sector	30	26	29			
Inland water transport						
Civil aviation	0	0	0	0	0	0
Total expenditures	30	78	92	58	78	75
Municipalities (roads)	0	0	0	0	0	0
Overall outlays on transportation	118	107	313	193	227	187
(In percent of adjusted GDP)	0.9	0.8	2.1	1.2	1.3	1.0

Source: BH authorities and World Bank staff estimates.

7.7 The railway sector also has an ungainly structure. Following independence from Yugoslavia, a BH company was formed to manage the country's railroad network. This company split into three government-owned companies after the DPA. A national railway public corporation, BHZJK, was

established in 1998 to coordinate and regulate between the three companies.¹ In 2001, the FBH adopted a new railway law that merged two railways into Zeljeznice FBH (ZFBH), but the railway in the RS part, the Zeljeznice RS (ZRS), remained separate. Thus, today, the country has two railway companies and a national coordinating body.

7.8 Civil aviation is also governed by three organizations. The BH Directorate of Civil Aviation (BHDCA) was established in 1997 within the BH Ministry of Communication and Transport to help BH carry out its obligations as a member of the International Civil Aviation Organization (ICAO) and a signatory of the Convention on International Civil Aviation (Chicago Convention). BHDCA's relations with the entities' own Directorates of Civil Aviation (DCA) are regulated by BH Civil Aviation Law.²

7.9 The institutional structure for the inland water transport sector is currently under revision. The inland water transport sector in BH has been regulated through the relevant entity laws and formally supervised by the port director's offices within the entity ministries of transportation.³ The Law governing the sector at the state level is currently under preparation.

7.10 All told, there are substantial opportunities for consolidating policy making and operational responsibilities in the sector. This should help improve the allocation of resources, strengthen accountability and reduce administrative expenditures. As a first step, the authorities should consider the possibility for consolidating the responsibility for the management of the regional roads from the cantons to the FBHRD.

7.11 The private sector has an important role to play in infrastructure investment. BH's ability to improve the coverage and quality of infrastructure and to sustain those improvements, given the limitations imposed by fiscal constraints, will require a greater involvement of PPPs in service delivery. This will entail greater levels of competition in service provision, better regulation, oversight and contractual adherence. Enhancing the effectiveness of infrastructure provision can be achieved in several ways, including via the competition for the right to build (e.g., infrastructure for all modes) and the competition for the right to provide service (e.g., franchises to operate public transport or sections of

Table 7.2. Transport Expenditures by Sector, 2000-2005
(In millions of KM)

	2000	2001	2002	2003	2004	2005
Roads	73	68	254	174	210	184
Railways	43	39	44	14	14	0
Inland Transport	0	0	0	0	0	0
Civil Aviation	2	0	14	4	4	0

Sources: BH authorities and World Bank staff estimates.

Table 7.3. Expenditure Outlays in Transport, Government and Private (In percent of GDP)

Country	Transport Expenditure
Albania	1.9
Bosnia and Herzegovina	1.6
Bulgaria	2.0
Czech Republic	4.1
Hungary	4.3
Slovak Republic	2.0
Slovenia	2.3

Source: National authorities and staff estimates.

¹ See: Agreement Between the FBH and the RS on the Establishment of a Joint Railway Public Corporation in Accordance with the Dayton Peace Agreement, Annex 9.

² Entered into force on Feb 7, 2004 and published in BH Official Gazette No 2/04.

³ The Law on Inland Navigation (RS Official Gazette RS 58/01); the Law on Inland and Maritime Navigation of FBH (FBH Official Gazette No. 73/2005, from November 28, 2005).

tolled highway). The introduction of the private sector to infrastructure provision and use is vital to the attainment of improvements in quality and scope of the transport infrastructure and services. To make private involvement a success, the authorities need to strengthen further the institutional framework for PPP, strengthen the concession law and improve transparency.⁴

C. THE QUALITY OF TRANSPORT INFRASTRUCTURE

7.12 Given the fiscal and institutional environment described above, it is hardly surprising that the quality of infrastructure appears to be poor despite large past outlays in the sector. This judgment reflects both perceptions by users and comparisons of outcomes, including traffic accidents and time of delivery of products.

The Road Infrastructure

7.13 Reflecting the country's mountainous terrain, the current road network in terms of density would appear to be broadly adequate for a country of the size of BH. As measured by length of roads per population, BH compares well against countries in the region but falls short of OECD levels (Table 7.4). On a different measure of road density, length of roads per 1000 sq. km, BH compares less favorably against the same comparators. Such comparisons need to be made with caution, however, given the substantially different physical characteristics of the countries involved.

7.14 The condition of the road network remains poor. This applies to a full 19 percent of the main and regional paved road network (Table 7.5).⁵ In addition, 68 of 410 bridges inspected and 17 of 160 tunnels present serious safety issues; moreover, urgent work is needed at another 13 tunnels. Only one-half of the main road network and a smaller share of the regional network is in a good condition.

7.15 The poor quality of infrastructure, together with poor driver behavior and limited driver education, has resulted in a very high rate of serious injuries and death, a serious social and public health issue in BH. Other factors contributing to the high accident rate include poor or non-existent enforcement, a rapid growth in car ownership and demand, and an overall poor quality of the automobile park. In 2004, there were 436 fatalities resulting from road traffic accidents and 8,470 injuries. Whilst recent figures suggest an

Table 7.4. Coverage of Road Infrastructure 1/

	Road Density	
	(Km/1000 sq km)	(Km/1000 People)
BH	427	5.6
Albania	657	3.5
Czech Republic	1646	12.5
Croatia	506	6.4
Estonia	1320	41.2
Hungary	1733	15.7
FYR Macedonia	341	4.3
SaM	494	4.8
Slovenia	1006	10.2
ECA	580	8.6
Upper middle income	1076	9.2
OECD	1340	17.3

Source: WDI and IEF databases.

1/ Latest observation available, 1997-2003.

⁴ IPSA (2005) "Motorway in Corridor Vc Preparation of Planning and Study Documentation. Lot no 5", Sarajevo.

⁵ BCEOM, (2006) *Roads, Bridges and Tunnels Database*, A study undertaken within the World Bank Project "Road Management and Safety." This figure is certainly an underestimate as only 65 per cent of the regional road network was included, with the worst sections in terms of condition excluded.

improvement, poor data collection, moreover, similarly to other countries, suggests that underreporting is substantial and the actual number of casualties may be higher. Compared with other ECA countries, BH appears to have one of the worst road safety records, with a fatality rate almost double that of the neighboring countries (Figure 7.2). This position, despite relatively low (but rising) levels of both vehicle ownership and motorization suggests that road safety is unlikely to improve unless there is a comprehensive and robust response by all stakeholders, most notably the governments.

The Railway Sector

7.16 Similarly to the rest of the transport sector, the railway infrastructure suffered extensive damage during the war, followed by lack of maintenance and investment during the late 1990s. Some of the infrastructure and rolling stock needs have been addressed, but many assets are in poor condition and await overhauling or scrapping.⁶ The length of the railway network is 1,031km, with 587km within the FBH, 416km within the RS and 27km within the Brčko District (Table 7.6). The majority of this network is in poor condition, resulting, *inter alia*, in widespread restrictions on the operational speed.

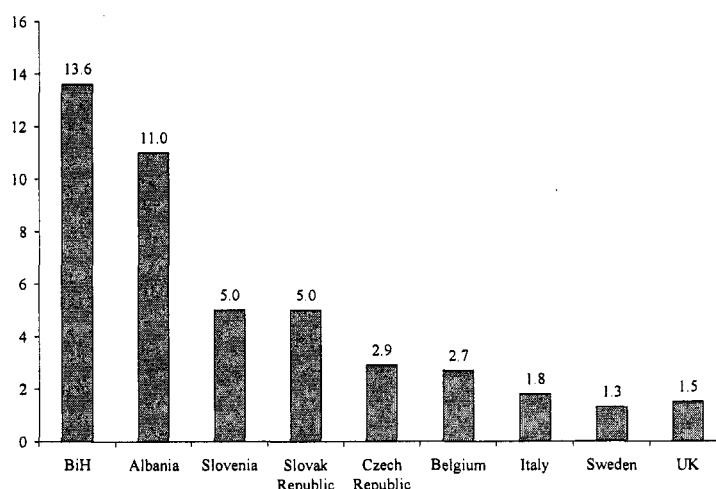
Table 7.5. Condition of the Main and Regional Road Network, 2004 1/

Category	Good (<3 IRI)	Fair (3<IRI<4.5)	Poor (>4.5 IRI)	Total
Main Roads (km)	1865	1180	641	3686
(In % of each category)	50.6	32.0	17.4	100
Regional Roads (km)	1035	848	513	2396
(In % of each category)	43.2	35.4	21.4	100

Source: BCEOM, 2005.

1/ IRI = International Roughness Index.

Figure 7.2. Traffic Deaths per 10,000 Vehicles 1/



Source: Various; 1/ All 2002 except 2003 BiH, and 2005 Albania..

⁶Railways Recovery Project financed by the EIB and the EBRD and the Emergency Transport Reconstruction Project financed by the World Bank.

7.17 Financial performance is also poor, with operating expenses exceeding revenues even after taking into account operating subsidies. Both the ZFBH and the ZRS are loss making, with cost structures not supported by current traffic volumes and revenues. The bulk of operating revenues are generated by freight

traffic, which, in the case of the ZFBH, is used to cross subsidize the loss-making passenger services. Both companies are subsidized by the respective entity government, but to a different degree. In the ZRS, subsidies account for 70 percent of total revenues and cover about the same percentage of operating expenses, while for the ZFBH the subsidy accounts for 20 percent of revenues and covers 13 percent of operating costs. Financial losses are aggravated by serious depreciation of assets due to lack of resources to cover rehabilitation.

7.18 Poor operating performance reflects in part the fact that traffic volumes have fallen to well-below pre-war levels. Since the end of the war, the loss of a considerable amount of freight transport, the main source of the railways' revenues, has severely affected the railways' financial performance. Nonetheless, there has been no corresponding adjustment in the network size or services. Freight traffic on the network is characterized by significant volumes of heavy industrial products (e.g., coal, metals) moving for short distances within the entity with an average haul distance of 46km. The restart of production at BH Steel and the pickup in production at Aluminiij Mostar makes it likely that some modest recovery is under way for commercial traffic. Passenger traffic has slumped badly, by contrast, with volumes in 2004 at less than 5 percent of pre-war levels, little changed since 2001 (Table 7.7). Rapid motorization has also contributed to passenger traffic loss, a trend that is likely to continue.

7.19 Absent any commensurate restructuring, productivity has dropped, with overstaffing an endemic problem in both railway companies. The two railway companies currently employ 7,400 people (3,900 in the ZFBH and 3,500 in the ZRS), down from 14,000 before the war. With traffic volumes for both passengers and freight a tenth of prewar levels, however, productivity per employee has fallen sharply (Table 7.8). Productivity also substantially lags benchmark European railways. Traffic units per employee are 57,000 for the ZRS

Table 7.6. BH: Characteristics of the Railway Network, 2005

	BH	Brcko	FBH	RS
Total Length	1030	27	587	416
(In percent of the BH total)	100.0	2.6	57.0	40.4
Electrified Lines	775.0	0.0	438.8	336.2
(In percent of the total in the jurisdiction)	75.2	0.0	74.7	80.8
Non-electrified Lines	255.4	26.9	148.4	80.1
(In percent of the total in the jurisdiction)	24.8	100.0	25.3	19.2
Double-Track Lines	87.8	0.0	68.5	19.3
(In percent of the total in the jurisdiction)	8.5	0.0	11.7	4.6

Source: State Ministry of Transport and Communications.

Table 7.7. BH: Passenger and Freight Volumes, 1990-2004

	1990	1997	1998	1999	2000	2001	2002	2003	2004
Passengers (In millions of passengers per km)									
ZBH	...	6	4	10	9	12	15	19	19
ZRS	...	34	52	41	38	41	38	36	34
Total	1382	40	56	51	47	53	53	55	53
Freight (In millions of tones per km)									
ZBH	...	47	73	115	140	159	177	212	445
ZRS	...	3	14	31	74	105	116	100	167
Total	4009	50	87	146	214	264	293	312	612

Source: UIC database.

(59,000 for the ZFBH), compared with 600,000 in Austria and Denmark. Traffic units per track equal 0.5 for the ZRS (0.8 for ZFBH) compared with 1 and 1.1 for the Croatian and Serbian railways respectively, and 2.3 for benchmark railways in Denmark and Germany.

7.20 Users also perceive the quality to be poor. A recent survey of user perceptions of railway infrastructure resulted in a score of 1.5 for BH (on a scale of 1 being the lowest and 7 the highest). BH ranks 98th of 104 countries, below all countries in the region (Table 7.9).

The Civil Aviation Sector

7.21 Investment in the civil aviation sector has been substantial, amounting to KM100 million during 1996-2004, or 0.2 percent of GDP a year on average, to help repair extensive damage and meet international obligations. Most of the outlays were for the reconstruction and maintenance of the infrastructure of the four airports (Sarajevo, Tuzla, Banja Luka and Mostar) and the installation of essential aviation equipment.

7.22 Investment in civil aviation has been substantial, but the outlays were spread thinly by trying to return all airports to operational standard. This judgment is yet to be validated, given the substantially lower level of traffic, especially at the three airports outside the capital Sarajevo. Bringing all airports to operational standard crowded out more focused investment on improving further the infrastructure at a key facility, such as the Sarajevo airport, leading users to perceive the quality of infrastructure in the civil aviation sector as poor. Users rate the quality of infrastructure at 1.9 according to the World Competitiveness Survey on a scale of 1 being the lowest and 7 the highest. As a result, BH ranks 93rd of 104 countries.

D. HOW EFFICIENT IS THE EXPENDITURE PROCESS FOR THE TRANSPORT SECTOR?

7.23 Poor transport outcomes are the downstream reflection of critical deficiencies in the planning and budgetary process. These deficiencies include: (i) the absence of a process for formulation and revision of a sound sector strategy; (ii) weaknesses in project identification and assessment; (iii) poor budgetary control; and (iv) limited systems for the professional management of assets in some of the sub-sectors.

Table 7.8. Selected Productivity Indices for Selected Railways, 2003

Railways	Traffic Units per track-km	Traffic Units per '000 Employees
Kosovo	0.2	...
Albania	0.3	60.6
ZRS	0.5	57.1
FYR Macedonia	0.5	116.1
Montenegro	0.6	...
ZFBH	0.8	59.4
Croatia	1.0	262.4
Serbia	1.1	123.8
Sweden	1.2	...
Finland	1.5	973.7
Denmark	2.3	893.7
Germany	2.3	615.4

Sources: National authorities, ZFBH and ZRS.

Table 7.9. Ratings of Infrastructure Quality, Selected Countries 1/

	Railway	Air
Austria	5.3	6.1
BH	1.5	1.9
Croatia	2.2	3.7
Czech Republic	4.6	5.1
Hungary	3.4	3.9
FYR Macedonia	2.3	3.4
Romania	3.5	4.1
SaM	1.9	3.3
Slovenia	3.7	4.4

Source: World Competitiveness Survey, 2003/2004.

1/ On a scale from 1=the lowest to 7=the highest.

The EBRD and the World Bank, together with bilateral donors, are working with the State Ministry of Transport and Communications to define a Strategy and Policy for the transport sector. This study will also include a detailed action plan with prioritization of key investments over the medium and longer term within the available financing envelope. It will also be consistent with the BH Medium-Term Development Strategy. The realization of this study will be a welcome and substantive contribution to the development of the transport sector in BH, but the authorities need to build the capacity to update this plan as necessary without similar levels of external support.

7.24 The limited use of formal techniques of economic appraisal in project identification and prioritization is one of the main weaknesses in the budgetary process. Recent World Bank technical assistance for the establishment of a database on roads and structures has partially addressed this need in the road sector. Setting up such a system is a prerequisite for a professional approach to asset management. The general approach involves the introduction of robust data collection systems on the condition and use of the assets. The identification of priorities for maintenance expenditures in the sector can then be made on the basis of a sound assessment of economic viability, given the available budgetary envelope, using the Highway Development and Management Model. Such systems have been established in both entity RDs, and early indications suggest that they are likely to become an integral part of the management of their respective networks. Although a similar data collection exercise has been undertaken for the secondary roads, the cantons have not adopted such systems. Project identification and prioritization at cantonal level remains based on subjective criteria.

7.25 The project identification and prioritization system employed in the railway sector is less sophisticated. The two railway companies prepare an initial list of priority projects, which may, or may not, be broadly consistent with the Strategic Plan and the Mid-Term Development Plan prepared by experts within the respective railways companies. Within these documents, projects are defined based on the forecast of the level of transport demand and this forecast gives an indication of the relative level of use of the infrastructure by each section of the network. Comparison of the traffic capacity and traffic needs indicates which segment of the network needs additional works to accommodate the expected traffic. The costs of these works are estimated based on standards calculated for each segment. The documents are reviewed by the management, accepted by the management board, forwarded to the respective entity ministries of transportation, and subsequently to the entity governments and parliaments. Once accepted, these documents are used as the basis for the annual operational plan of operations and investments.

E. THE EXPENDITURE REQUIREMENTS AND REVENUES OF THE TRANSPORT SECTOR

7.26 The demand for transport is projected to continue to grow rapidly. One recent study⁷ projected traffic volumes through 2025 and estimated that **road traffic** in BH would increase threefold, by the end of the period, with traffic in and around the major urban areas growing 5 percent a year. On the **railway network**, freight traffic volume is projected to increase markedly in the short to medium term. Four major companies in BH rely heavily on the Pan-European Rail Corridor Vc to import raw materials and export goods, and three of these companies have been sold to strategic foreign investors who intend to resume and boost production. By contrast, passenger volumes have been static since 2001 and are unlikely to increase substantially. **Air traffic** is forecast to grow rapidly, tripling through the end of the period.

⁷ COWI, 2003, *The Regional Balkans Infrastructure Study (REBIS)*, a study undertaken for the European Union.

7.27 This section estimates the expenditure needs of the road and railroad sectors. The estimates reflect the importance of these sectors as a share of overall transport expenditures and the current lack of a comprehensive sector policy and strategy. There are no high priority projects for the **civil aviation** sector. The Public Investment Program of the FBH government details projects with regular priority valued at €70 million during 2006-10, mostly funded by foreign donors. These projects include upgrades of the airports in Sarajevo, Tuzla and Mostar, the latter two to international standards. For the **inland transport sector**, projected expenditures amount to €0.3 million during 2006-10.

Road Sector

7.28 The expenditure needs of the road sector are large, reflecting the historic neglect of maintenance. In addition, the governments plan new investment, often without prioritization and regard for the overall fiscal envelope. The assessment of projected expenditures is based on three sets of calculations. The first set estimates the annual expenditures necessary to clear the current maintenance backlog and return the network, of size commensurate with current and projected demand, to good condition. The second set calculates the recurrent expenditure needs in terms of routine and periodic maintenance to ensure that the assets remain in operational condition. **These two sets of expenditures are regarded as necessary and would be the priority expenditures in the sector.** Finally, this section also presents estimates of the capital expenditures planned by the government to develop the road network. These estimates exclude the additional expenditures associated with the development of roads along Corridor Vc, as this project remains at feasibility stage at this time and significant outlays are not expected before 2009 or 2010.⁸

7.29 The expenditure requirements to clear the backlog maintenance and maintain the road network are calculated in a World Bank sponsored study (Table 7.10).⁹ These outlays are needed to return the existing network and structures to good condition, together with necessary routine and winter maintenance, and scheduled periodic maintenance for the next five years. The estimated annual expenditure needs on the main and regional road network only amount to some KM137 million a year for the next five years. An additional KM24 million a year is required to maintain the local road network, excluding outlays required to clear the maintenance backlog for local roads.

7.30 A fuller picture of the expenditure requirements would necessitate calculations of outlays to develop further the road

Table 7.10. BH Road Network: Estimated Maintenance Expenditure Needs, 2006-2010 (In millions of KM)

Category	2006	2007	2008	2009	2010
Main Roads					
Periodic maintenance	60	60	60	60	60
Routine maintenance	22	22	22	22	22
Winter maintenance	14	14	14	14	14
Regional Roads					
Periodic maintenance	15	15	15	15	15
Routine maintenance	16	16	16	16	16
Winter maintenance	10	10	10	10	10
Local Roads					
All maintenance	24	24	24	24	24
Total Annual Outlays	161	161	161	161	161

Source: BCEOM, 2005.

⁸ MoCT, IPSA Institute Ltd., and Civil Engineering Institute of Croatia (2006), *Corridor Vc Motorway, Feasibility Study, Draft Final Report*.

⁹ BCEOM, 2005, *Road, Bridges and Tunnels Database for Bosnia and Herzegovina, Final Report*.

network. Estimates of need can be produced in several ways. The simplest approach is to use benchmarks to assess the extent of total expenditures in the sector *vis-à-vis* a defined set of comparator countries. These comparisons need to be made with care, however, given the substantial geographical differences among the countries. For example, a more mountainous terrain in BH than in, for example, Poland, would mean that the densities of the optimal transport networks would be different. The density would be lower still, given BH's fiscal constraints and the much higher costs of expanding the network in a difficult terrain. The authorities in BH will be well advised to reconsider the role of the private sector in developing the road infrastructure. The available government resource envelope does not seem to leave much room for increasing meaningfully outlays on transport unless sizable reductions in spending in other areas are carried out, combined with increased private sector involvement.

7.31 The authorities' plans to develop the road infrastructure assume that a total of KM400 million will be spent during 2005-2008 on high priority projects, an amount equivalent to 0.6 percent of GDP a year. These outlays are in addition to the maintenance expenditures discussed in the previous sections and would bring average expenditures on the road network to 2.6 percent of GDP a year. The lack of a sector policy and strategy makes it difficult to assess the merits of any one of these investments, however. The governments will be strongly advised to carefully consider any future expenditure only after a sector policy and strategy are developed and only within the limits of the overall fiscal envelope. It is to be noted that at this time the returns on investments in rehabilitation are considerably higher, on average, than the returns on upgrading or new road construction.

Railroad Sector

7.32 Committed and planned capital expenditures in the railway sector are significant, but as in the road sector, there is no prioritization consistent with the available resources. Table 7.11 summarizes the necessary and committed maintenance and capital expenditures in the railway sector, based on the actual spending plans of the two entity railways. The capital investment on infrastructure reflects the rehabilitation of the Konjic-Mostar and Šamac-Doboj sections of corridor Vc, together with signaling and telecommunication systems along these lines and the east west lines, within the recently agreed credit for €153 million from the EBRD and the EIB.

Revenues and Financing Gap

7.33 The existing structure and level of revenues in the road sector appears inadequate to meet the needs of maintaining and expanding the network in the FBH.

Table 7.11. BH Railways: Projected Expenditures, 2006-2010
(In millions of KM)

Category	2006	2007	2008	2009	2010
Maintenance Expenditure					
FBH Railway	64	62	60	64	66
RS Railway	22	24	25	27	29
Capital Expenditures – Track 1/					
FBH Railway	3	11	18	70	75
RS Railway	2	7	11	44	44
Capital Expenditures – Rolling Stock					
FBH Railway 2/	31				
RS Railway					
Total Planned Expenditures	122	104	114	205	214

Source: ZFBH, ZRS and World Bank staff estimates.

1/ Reflects only committed expenditures under the EBRD/EIB Loan.

2/ Reflects proposed purchase of ex-Intercity Mark III passenger coaches from the UK.

Articles 85-93 of the Law on Roads in the FBH define the sources of financing for road maintenance and construction and provides for the terms of distribution of those funds to the specific users. In practice, almost all of the revenues are raised from two sources, vehicle registration fees and formerly fuel duty, now a share of the excise raised by the ITA. Under the former law, 40 percent of total revenues are allocated to the FBHRD, 35 percent to the cantonal RDs, and the remaining share to the municipalities. Further, of the total amount of money allocated to the FBH road sector in 2005 (KM122 million), 40 percent was allocated to main roads to cover both maintenance and development expenditures and the remainder to regional and municipal roads. The former figure is equal to only half the amount needed to keep main roads in good condition, resulting in deterioration of road quality and accumulation of maintenance backlog. The World Bank study suggests that a distribution of 60 percent to the FBHRD (rather than the 40 percent under the law on roads), 25 percent to the cantonal RDs (35 under the law) and 15 percent to the municipalities (20 percent) is more reflective of the maintenance needs of the different kinds of roads. The change in revenue distribution brought about by the establishment of the ITA allows an opportunity to correct this imbalance.

7.34 The scale and distribution of revenues to the RS road sector is somewhat more reflective of both need and demand. The revenue sources for the road network in the RS are also defined in the relevant law on public roads. The primary sources of revenue are again fuel excise and vehicle registration fees. The RSRD receives vehicle registration fees and a share of the excise from the single account of the ITA. The RD then shares the funds with the RS municipalities.

7.35 Revenues in the railway sector are similarly limited and do not cover the costs of operating the services. Unless the relations between railways companies and the governments are reformed, capital and maintenance expenditure would need to be funded entirely via transfers from the general government if they are to be carried out. Both entity railway companies are running a significant operating loss (excluding infrastructure costs), and the loss is covered by government subsidies. Neither of the two railways generates sufficient revenues to contribute anything to the investment plans in the sector.

7.36 Given current spending plans, there is a significant financing gap in the sector. The gap is projected to remain broadly unchanged in nominal terms near KM250 million during 2006-2010, but narrow as a share of GDP from 1.7 percent to 1.3 percent (Table 7.12). These projections are based on very conservative expenditure estimates, encompassing only the costs of returning the main and regional road networks to good condition; adequate expenditures for routine, winter and periodic maintenance on the main and regional road networks; and high priority capital expenditures, as identified by the governments. Projected expenditures do not include the cost of restoring the local road network to a good condition, or exceptional expenditures that might occur, such as addressing landslides. Most importantly, further development expenditures of the main network, such as outlays to build sections of corridor Vc, are not included. Fiscal constraints would require that any outlays in that area are carefully prioritized relative to needs in the other sectors. The importance of the private sector to network development remains paramount, after strengthening the institutional framework and capacities in key areas.

Table 7.12. BH: Road and Railroad Revenues and Financing Gap, 2006-2010
(In millions of KM)

	2006	2007	2008	2009	2010
Roads					
Projected Revenues	158	164	171	177	184
FBH Cantons (Regional Roads)	34	35	37	38	40
FBH Municipalities (Local Roads)	24	25	26	27	28
FBH Cantons (Trunk Roads)	38	40	41	43	44
RS Road Directorate (All roads)	50	52	54	56	58
RS Local Authorities (Local Roads)	12	12	13	13	14
Projected Expenditures	255	261	261	261	261
Estimated Financing Gap	97	97	90	84	77
Railroads					
Projected Expenditures	159	166	165	171	175
Estimated Financing Gap	159	166	165	171	175
Estimated Total Sector Financing Gap	256	263	255	255	252
(In percent of GDP)	1.7	1.6	1.5	1.4	1.3

Source: World Bank staff estimates.

7.37 The financing gap implies that the authorities will need additional resources to carry out their plans. The financing gap in the road sector is broadly similar to the KM100 million a year the authorities plan to spend through 2008 on expanding the network. For the railroad sector, all projected expenditures have to be covered from general resources. Pressures to move forward with further developments of the sector are a key input for the fiscal sustainability analysis carried out in Chapter 2.

F. RECOMMENDATIONS

7.38 This chapter finds that the overall condition of the transport infrastructure remains poor despite considerable expenditures in the sector over the last decade. The key recommendations of the study are summarized in the following paragraphs.

- **Given substantial fiscal pressures, carefully consider increases in public investment and weigh them against other priorities.** All public investments, in particular those that are debt-financed, need to be made within well-planned and prioritized national and sectoral investment strategies, consistent with the fiscal envelope available to the government.

- **Place greater emphasis on improving the condition of the current transport network, on reducing backlog maintenance, on reducing vehicle operating costs and journey time, and on improving access to markets and basic services.**

- **As a priority, strengthen the institutional framework for PPP.** The over-riding objective should be to protect the fiscal stability by limiting the government's fiscal exposure wherever possible.

Other objectives include the need to shift the risk allocation away from taxpayers and toward providers and users, and the need to improve the efficacy of agencies involved in financing of infrastructure.

- **Work toward consolidation in policy making and operational responsibilities in the sector at all levels.** A first step in the FBH would be for the responsibility for the management of the regional roads to be passed to the BHRD.

- **Develop a comprehensive policy and strategy framework for the whole transport sector to identify priorities and provide an indication of appropriate implementation schedules.** This process should also include the strengthening of capacity in the public sector institutions to facilitate: (i) the revision of a sound sector strategy; (ii) the use of formal project appraisal to assist in the identification and prioritization of projects; and (iii) the operational establishment of robust asset management systems in the operational agencies.

- **Consider revising the existing provision in the FBH law on roads to shift resources to the main road networks carrying the most traffic.** The existing provision provides for a fixed allocation of road revenues, with 40 percent going to the FBHRD, 35 percent to the cantonal RDs and the remainder to the municipalities.

- **Mortality and morbidity resulting from road traffic accidents are serious social and public health issues in BH.** Addressing this problem will require increased resources, greater co-ordination between stakeholders to improve road conditions, driver behavior and enforcement, and increased awareness of safety at each stage of the project cycle.

- **Finalize the reorganization of the aviation structure (one directorate and one provider) in accordance with the set plan;**

- **Implement the Law on Railways, with a rational and functional organization structure, in order to reduce the existing institutional inefficiencies, and enhance operational efficiency; and**

- **Accelerate the adoption of the Law on Roads and the Law on Inland Waterways, which will facilitate improved institutional structure and operation.**

ANNEXES

ANNEX A. THE DEBT-STABILIZING PRIMARY BALANCE

1. **Calculating the debt-stabilizing primary balance is one of the simplest tools for debt sustainability analysis.** The analysis starts from the government's intertemporal budget constraint, such as in equation (1):

$$G_t + i \left(\frac{D_{t-1} + D_t}{2} \right) - T_t - i \left(\frac{M_{t-1} + M_t}{2} \right) = (D_t - D_{t-1}) + (M_t - M_{t-1}) \quad (1)$$

To fix notation, G_t and T_t denote noninterest government spending and revenues in year t ; P_t denotes the primary balance ($T_t - G_t$); D_t denotes the stock of government debt at the end of year t ; M_t is the stock of high-powered money and i is the one-period interest rate, assumed constant. This specification assumes the government pays interest on the average stock of debt (thus, the average of the stock of debt at the end of the previous year and the end of the current year) and, similarly, the interest revenues of the government are from the average stock of high powered money.

2. **BH introduced a currency board arrangement in 1997, thus the consolidated government has no control over high-powered money.** Further, the central bank has made no transfers to the government since 1997. For simplicity, it is assumed that this arrangement will continue indefinitely and noninterest revenues are zero. The analysis below, therefore, is an analysis of the sustainability of government debt, excluding any transfers from the central bank. In this case, equation (1) is replaced with the simpler equation (2), which is an accounting statement of the stock of government debt:

$$D_t = D_{t-1} - P_t + i \left(\frac{D_{t-1} + D_t}{2} \right) \quad (2)$$

Nominal GDP in year t is denoted with Y_t , the real GDP growth rate by g and the change in the implicit GDP deflator (inflation) by π . Divide equation (2) by nominal GDP:

$$\frac{D_t}{Y_t} = \frac{D_{t-1}}{Y_{t-1}} \frac{Y_{t-1}}{Y_t} - \frac{P_t}{Y_t} + \frac{i}{2} \left(\frac{D_{t-1}}{Y_{t-1}} \frac{Y_{t-1}}{Y_t} + \frac{D_t}{Y_t} \right) \quad (3)$$

Using small letters to denote ratios to GDP, solve for the debt stabilizing primary balance in equation (4). This is the equation used in the calculations in Chapter 2:

$$p = d \left[\left(1 + \frac{i}{2} \right) - (1 + g)(1 + \pi) \left(1 - \frac{i}{2} \right) \right] \approx d \left[i - g - \pi + \frac{i(g + \pi)}{2} \right] \quad (4)$$

This expression is somewhat more precise than the traditional formula, which assumes that the interest payments reflect only the previous year's debt stock:

$$p = d \left[(1 + i) - (1 + g)(1 + \pi) \right] \approx d(i - \pi - g) \quad (5)$$

ANNEX B. STATE BUILDING

Assumptions: The Baseline Scenario

1. Calculations begin with an estimate of staffing level to derive staff costs. These costs are divided into two components, the cost of ongoing operations and one-time costs of the formation or expansion of the agency under consideration.
2. The ongoing cost for most agencies is calculated by multiplying the number of staff, the average salary and an overhead ratio:
 - Staffing level is estimated, where possible, from comparable agencies in the current state government, recommendations from donors or estimates from government officials.
 - The average salary is calculated from 2005 budgets where an analogous agency exists. Where no such data are available, the official marginal salary rate as determined by the state MoFT during the BFP process of KM 31,500 a year is used - an amount which includes overhead or support costs.
 - An overhead ratio is derived from budget data, where available. Otherwise, where the official marginal salary rate is used, no separate overhead is calculated (by definition).
3. One-time costs include initial capital expenditures, costs of recruitment and staffing, remodelling or repair, organizing, establishment of a materials inventory and others. These costs are calculated as a percent of initial budget amounts (salary inflated by overhead). Where independently estimated by the state or by another donor, that estimated ratio is used directly. For all other agencies, a ratio of 30 of annual ongoing costs is assumed.
4. The calculations use independent official estimates where these are available. For those agencies whose budgets include direct operations (transport, environment, and agriculture), an additional budget amount was calculated, based on other transition nations' experience if available, or indexed to affordability as is the case with transport.
5. Table B1 provides details of the calculations by agency. An Excel spreadsheet is available on request.

Cost of Increased Funding of Existing Institutions and Functions Under the Draft State BFP, 2006-2008

6. Table B2 provides details on the calculation of the cost of increased funding of existing institutions presented in Chapter 3. A spreadsheet is available showing detailed calculations. The authorities are well advised to work to scale these numbers back, however, given that these represent "wish lists" by various institutions without consideration for the overall fiscal constraints.

Table B1. Assumptions, Baseline Scenario

Department or Agency	Current Status	Proposed Changes	Cost Calculation and Notes
Ministry of Agriculture Establish an expanded coordinating agency at the state level, located initially in the MoFTEP ¹	Department in MoFTEP with 3 positions, 37 in Veterinary Office and 10 in the Animal Identification Agency. Total annual budget of KM3.3million.	Add 15 positions to department in MoFTEP to assist with coordination and plan development by 2008, in preparation for creation of a full Ministry of Agriculture.	Use salary and overhead rates from current agriculture budget agencies (KM22,500, 42 overhead rate); one-time costs of 45 from PAR. ²
Establish a food safety agency or department	Interim director appointed (per DEI); ³ department to be located in Mostar. Small budget amount purportedly included for 2006.	Staff at 25 full-time equivalents (FTE), in line with Croatia and Hungary. PAR recommends 30.	Use salary and overhead rates for current agriculture budget agencies (22,500 KM, 42 overhead rate); one-time costs of 55 from PAR.
Establish full Ministry of Agriculture and Rural Development	See above. In 2004 state Council for Agriculture & Food Production, Forestry & Rural Development was set up to coordinate agricultural policy.	Establish paying agency in 2009; fully operational by 2012 with 30 FTE. Plant health (phytosanitary) operational in 2008 with 30, full staffing of 50 FTE by 2012. Ministry established in 2009, full staffing by 2012. Attain PAR staffing level by 2020 through gradual build-up.	Use salary and overhead rates for the current agriculture budget agencies (KM22,500, 42 overhead rate). Use one-time costs of 45 from PAR. Own-source costs at 0.1 percent of GDP in Slovakia. Add 20 FTE per year, later 10, until a total of 250 employees are added.
Central Bank of BH (CBBH) Consolidate entity banking supervision agencies under the central bank	Now one for each entity; no additional staffing likely, no budget effects.	Merger of entity units; costs funded through fees on regulated banks.	Presumption of saving one or two FTE from improved scheduling. Dedicated fund, no budget impact
Insurance Supervision Inspectorate; consolidate into Financial Supervision Authority with Stock Exchange Regulation and perhaps other regulated entities.	No independent agency.	Implement agency funded through fees on insurers and regulated entities.	No direct cost to budget. The budget for Estonia's Financial Services Agency amounts to 0.007 percent of GDP.

¹ Ministry of Foreign Trade and Economic Relations.

² EC Public Administration Review (PAR).

³ State-level Department for European Integration.

Statistical Agencies

Standardize and consolidate methodologies and reporting timetables

Agencies exist at each level, but limited coordination. Needs political support.

Small adjustment for communications, additional staffing to coordinate. Small staff transfer from entity offices. Presumes a build-up to move towards census capacity.

Begin small build-up in 2006, add 45 FTE and transfer five from Entities by 2010 to coordinate and direct census. Add small amount for hardware in 2007. Salaries KM22,100, overhead 20.

State Ministry of Finance functions (MoFT, NFC, ITA/MAU, EPPU)⁴

Consolidate and strengthen central public expenditure management capacity, improve the macro analysis unit and tax administration. Add an Advisory Commission on Intergovernmental Relations to help the NFC coordinate fiscal policy and grants systems.

Additional funding and sorting out of authority; state funding of EPPU and location within agency. Intergovernmental agency formed beginning in 2008.

Cost of bringing EPPU on budget + gradual full funding of rule book staff, or 56 FTE. 20 FTE would be from EPPU function, 30 added plus another five in procurement division. 19 one-time costs from MoFT calculations for procurement division. Salary 25,400 KM includes overhead. EPPU figures are from state MoFT sources. Additional 20 FTE added for intergovernmental agency beginning in 2008.

Make the procurement agency and the procurement review body fully operational (costs above 2006 budget amount).

Priority for 2006; funding in draft state budget per DEL.

Use MoFT salaries, 25 overhead rate, 19 one-time per MoFT calculations.

Education

Establish an embryo ministry or expand the Department in MoCA⁵ to encourage impartial school education and make recommendations for funding and consolidation.

Gradual build-up adding coordination and integration unit plus legislative capacity per PAR; 25 FTE total. Also add 10 FTE to perform coordinating function for youth and culture (see below). Begin in 2007.

Use official marginal FTE cost of 31,500 from BiH BFP.⁶ Use 30 one-time ratio.

State level Ministry of Education (see below) to standardize or coordinate curricula.

Add 17 staff to Standards and Assessment Agency and create Curriculum Agency, expand Department of Education staff to a full 20 FTE. Begin in 2009.

Use official marginal FTE cost of 31,500 from BiH BFP. Use 30 one-time ratio.

⁴ State-level Ministry of Finance and Treasury, National Fiscal Council, Indirect Tax Authority, Macroeconomic Analysis Unit and Economic Policy Planning Unit.

⁵ State-level Ministry of Civil Affairs.

⁶ Budget Framework Paper.

<p>Higher Education Enhance establishing coordinating functions within the Ministry of Civil Affairs in the area of higher education</p>	<p>Current eight public universities with about 100,000 students governed by RS or cantons. MoCA coordinates, with Working Group for Higher Education. Limited staff capacity.</p>	<p>Add Higher Education coordinating unit of six then 12 FTE per PAR recommendation, add 13.5 FTE to Department of Education for Higher Education unit, add certification unit (Centre for Information, Recognition and Quality Assessment) of 10 FTE. Begin in 2008.</p>	<p>Use official marginal FTE cost of 31,500 from BiH BFP. Use 30 one-time ratio.</p>
<p>Oversight of higher education at state level; governance at the Ministry of Education. Retain current funding for operations.</p>	<p>Current eight public universities with about 100,000 students governed by RS or cantons. MCA coordinates, with Working Group for Higher Education. Limited staff capacity.</p>	<p>Add 29 employees, with another 24 transferred from Entities to state for a total of 53. Begin in 2012.</p>	<p>Use official marginal FTE cost of 31,500 from BiH BFP. Use 30 one-time ratio. For transferred employees, presume an increase in the state budget of 40. See Appendix B.</p>
<p>Environment Establish an embryo ministry to improve environmental protection and coordinate with EU.</p>	<p>Three FTE at state level in MoFTER.</p>	<p>Expand staffing in MoFTER to 15 by 2008, 26 (total) by 2010. Increased to ½ size of DEI.</p>	<p>Use official marginal FTE cost of 31,500 from BiH BFP. Use 45 one-time ratio, as in agriculture.</p>
<p>Establish regular Environment Ministry to coordinate environmental policy</p>	<p>Three FTE at state level in MoFTER.</p>	<p>Not calculated through staffing directly but by using same percent of GDP in as Slovakia for current expenditures. Begin in 2013.</p>	<p>40 one-time ratio; see notes on GDP growth rate (below).</p>
<p>Ministry of Transport and Communication Establish an Information Society Agency and a Data Protection Agency.</p>	<p>Current Ministry of Transport and Communications; expansion and funding under discussion within BH government.</p>	<p>Establish information agencies beginning in 2008. Presume modest capital program at 0.05 percent of GDP; scaled to affordability only. Add funding for 30 FTE to administer. Begin in 2009.</p>	<p>Assume 20 FTE for Information Society Agency (same as Slovakia) and 20 FTE for Data Protection Agency. Ratio of capital expenditure to wage bill for Ministry of Transport is 25 to 1 in Slovakia, suggesting a wage bill of about 800,000 KM, or about 30 FTE, for 20m KM program.</p>
<p>Consumer protection Fully fund Consumer Council, Competition Council, Consumer Ombudsman.</p>	<p>Protection Council, Consumer Ombudsman.</p>	<p>Add two to Competition Council from general revenues (balance from fees and charges). Add five to consumer ombudsman.</p>	<p>BFP estimates 440,000 KM cost for setting up regional competition councils. Salary 51,700 KM based on the average for the competition council. Overhead 58 based on same budget.</p>

<p>Regulatory framework for energy Extend electricity regulatory regime (now being brought to state level) to include gas.</p>	<p>Electricity regulation moved to the state in 2006; costs of KM2 million financed by fees and charges.</p>	<p>Create identical issue for gas; presume regulation fees fund entire agency.</p>	<p>No direct cost.</p>
<p>General regulation Fully fund quality control, intellectual property, metrology, instrumentation, certification and establish Market Surveillance Agency.</p>	<p>Programs in place, typically under funded: Intellectual Property Institute has KM 3.3million budget and 77 FTE, 57 FTE below Rule Book. Some new funding in 2006 budget. No Market Surveillance Agency.</p>	<p>Phase in total of 37 new positions to increase size to that of Ombudsman. Create Market Surveillance Agency.</p>	<p>40,600 average compensation based on budget for communications regulation. 30 overhead; 30 one-time costs. Market Surveillance agency staffed at 75 FTE, one-fourth of total Slovak agency.</p>
<p>Welfare Establish a department or ministry at national level to coordinate pensions and other benefits.</p>	<p>Small department in MoCA.</p>	<p>Create small independent ministry or division of larger (Health, Welfare, Labour). Assume 45 FTE and 45 one-time costs as newly established. Same size as MoCA. Start in 2009.</p>	<p>Standard KM31,500 annual salary. Additional 10 overhead added due to new agency. 30 one-time costs.</p>
<p>Health Expand national coordination; now Ministry of Civil Affairs.</p>	<p>Small department in MoCA.</p>	<p>Add 30 FTE; scale on agricultural offices. Start in 2008.</p>	<p>Standard KM31,500 annual salary. Additional 30 overhead added due to costs of services and equipment. 45 one-time costs.</p>
<p>Establish state-level Health Department or Ministry to coordinate public health and drug approval.</p>	<p>Now at entity/canton level.</p>	<p>Create a large ministry, 125 FTE. Same size as other major ministries (Justice, Defence). Begin in 2009.</p>	<p>Standard KM31,500 annual salary. Additional 30 overhead added due to costs of services and equipment. 45 one-time costs.</p>
<p>Labour Expand Labour and Employment Agency to create a single economic space for Labour and regulate market.</p>	<p>Current 16 FTE, 600,000 KM budget in MoCA</p>	<p>Add 25 FTE, move functions from MoCA and 16 current MoCA staff. Begin in 2009.</p>	<p>Salary KM25,000 based on current for MoCA. Overhead 33 based on current. 30 one-time.</p>
<p>Standardize Health and safety regulation of workplaces.</p>	<p>MoCA implements as well, but no funding.</p>	<p>Add 35 FTE; with 25 above and MoCA staff, agency totals 70 FTE, or about the same as in other regulatory agencies.</p>	<p>Standard KM31,500 annual salary. Additional 33 overhead added due to costs of services and equipment. 45 one-time costs.</p>

Begin in 2009.

Social affairs Deal with returnees; much already covered by Ministry of Human Rights and Refugees. Establish Council on National Minorities.	Much already covered by Ministry of Human Rights and Refugees.	Establish Council on National Minorities; No other evident need for expansion of current activities; small reorganization may be worthwhile.	Add 50 FTE beginning in 2008.
Export promotion agency Locate in MoFTER, coordinate with Chamber of Commerce.	MoFTER does some similar work; parallel to foreign investment promotion agency.	Smaller version of Foreign Investment Promotion Committee; 4 FTE. Begin in 2008.	Standard salary; 25 additional overhead assigned for promotional activities, 40 one-time ratio assumed. Will require coordination with (privately funded) Chamber of Commerce.
Ministry of Economy Split MoFTER to implement and coordinate industrial policy required by the acquis. Add SME promotion Agency.	MoFTER has 108 FTE, 77 below rule book. No SME agency.	Small ministry; add 65 FTE initially, 45 more starting in 2017. Makes this agency the same size as the MoFTER is now. Begin in 2009. Add SME agency beginning in 2008.	Standard salary, 10 additional overhead assigned. 30 one-time costs. SME agency consists of 25 FTE.
Culture and Youth Coordinating office for entity and canton ministries. Costs included in education budget.	Now in MoCA.	Add 10 FTE to Education (above).	Cost determined with Education (above).
State Narcotics Office Create an agency for narcotics enforcement.	Current police and security function; no specific agency.	Create new agency beginning in 2007.	Add total of 60 FTE beginning in 2007.

Source: PKF for the World Bank.

Table B2. Costs of Increased Funding for Existing Institutions
(In thousands of KM)

Institution	Difference 1/	Additional admin costs from BFP	Additional one-time costs from BiH state BFP
Parliamentary Assembly	315	20	...
Electoral Commission	32	460	...
Secretariat of Council of Ministers and PAR Coordinator	441	500	1,500
Civil Service Agency	32	...	...
State Court, Prosecutor's Office and High Judicial and Prosecutorial Council	7,103	8,000	11,400
Ministry of Security	2,803	...	...
State Investigation and Protection Agency, including Financial Intelligence Unit	20,018	...	11,000
Ministry of Transport and Communications	190	...	...
State Border Service	16,664	...	4,400
Accreditation Institute	69	200	45
Department for European Integration	172	358	...
Total	47,837	8,980	28,345

Sources: BH authorities and PKF for the World Bank.

1/Salary difference between current and 95 percent of rule book staffing levels

Table B3. Institution Building, Main Scenario - Changes and Timing

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agricultural Coordinating Agency	E	IS	IS	TrMin										
Food Safety Agency	E	IS	FO	TrMin										
Ministry of Agriculture			E	IS	IS	FO								
Banking Supervision Consolidation		E	FO											
Stock Exchange Regulation with Insurance Supervision		E	FO											
Standardized Statistical Agency	Impr	IS	Impr											
Procurement Agency and Review Body	E	IS	FO											
Education Coordinating Agency	E	IS	FO	TrMin			FO							
State Ministry of Education			E	IS	IS	FO								
Higher Education Coordinating Agency			E	IS	IS	FO	E	IS	FO					
Ministry or Department of Higher Education			E	IS	O	O	O	O	TrMin	IS	IS	IS	IS	FO
Environment Coordinating Agency			E	IS				E	IS					
Ministry of Environment														
Expanded Consumer Protection Agencies	IS	FO												
Expanded Regulatory Bodies, Market Surveillance Agency	IS	FO												
Coordinating Health Agency		E	IS											
Health / Public Health Agency				E	IS	IS	FO							
Labor Coordinating Function				E	EE	FO								
Occupational Health and Safety				E	EE	FO								
Ministry of Economy				E	IS	IS	O	O	O	O	IS	IS	IS	FO
Department or Ministry of Welfare				E	IS	FO								
Ministry of Transport with Information Society Agency and Data Protection Agency				E	IS	CF	CF	FO						
Regulatory Framework for Energy			E	O										
Social Affairs, Council on National Minorities			E	ES	FO									
State Narcotics Office			E	ES	ES	FO								

Source: PKF for the World Bank.

Coding: CF=Capital Funding; E=Establish; EE=Establish and Equip; ES=Equip and Staff; IS=Increase Staffing; O=Operational; FO=Fully Operational; TrMin=Transfer to Ministry; Impr=Improvements in Place

Table B4. Institution Building, Baseline Scenario (In thousands of KM)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Agricultural Coordinating Agency	-	477	589	524	539	56	572	589	607	625	644	663	683	704	725
Food Safety Agency	-	1,020	952	873	899	926	954	982	1,012	1,042	1,074	1,106	1,139	1,173	1,208
Ministry of Agriculture with phytosanitary agency	-	-	1,475	2,074	8,579	13,815	13,259	14,539	15,886	16,261	17,274	18,334	19,443	20,604	21,817
Banking Supervision Consolidation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stock Exchange and Insurance Supervision	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Standardized Statistical Agency	52	159	587	864.8	1,562	1,423	1,466	1,511	1,557	1,605	1,654	1,704	1,756	1,810	1,865
Procurement Agency and Review Body	-	-	505	630	646	662	569	586	603	621	640	659	679	699	720
Public Expenditure Management and Intergovernmental Education Coordinating Agency	302.3	1,630	2,595	2,530	2,617	2,708	2,801	2,898	2,998	3,102	3,210	3,321	3,436	3,556	3,679
State Ministry of Education	-	-	-	1,119	2,046	2,231	2,219	2,286	2,354	2,425	2,498	2,573	2,650	2,729	2,811
Higher Education Coordinating Agency	-	-	261	745	1,496	1,333	1,373	1,414	1,457	1,500	1,545	1,592	1,639	1,688	1,739
Ministry or Department of Higher Education Environment	-	-	697.8	1,142	1,722	1,008	1,038	1,069	1,101	1,134	1,168	1,204	1,240	1,277	1,315
Coordinating Agency	-	-	-	-	-	-	-	7,233	12,978	19,472	17,434	18,132	18,857	19,611	20,396
Ministry of Environment	1,479	1,075	1,112	1,150	1,189	1,230	1,230	1,273	1,317	1,362	1,409	1,458	1,508	1,560	1,614
Expanded Consumer Protection Agencies	-	-	-	1,119	2,046	2,231	2,219	2,286	2,354	2,425	2,498	2,573	2,650	2,729	2,811

Source: PKF for the World Bank

ANNEX C. EDUCATION

Table C1. BH: Enrollment, Teachers, and Student/Teacher Ratios by Entity

	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
FBH										
Primary										
Enrollments	252,000	260,000	268,000	277,000	276,000	259,000	246,613	243,204	247,590	242,170
Student/teacher ratio						18.4	18.0	18.0	18.0	17.6
Secondary										
Enrollments	81,000	89,000	89,600	103,000	112,000	118,050	114,523	115,918	114,438	111,863
Student/teacher ratio						15.4	15.1	14.9	14.2	
Higher										
Enrollments (full time)			25,381	28,593	30,947	34,078	34,861	37,554	39,239	42,894
Student/teacher ratio					9.3	8.6	8.6	8.6	8.7	9.5
RS										
Primary										
Enrollments	126,000	131,000	128,000	126,000	121,197	114,570	114,523	114,098	124,802	122,434
Student/teacher ratio					17.2	16.9	16.4	16.4	16.4	16.0
Secondary										
Enrollments	45,000	50,000	51,000	52,000	n.a	53,085	52,293	51,948	51,577	51,556
Student/teacher ratio						18.3	18.0	17.6	17.1	
Higher										
Enrollments (full time)								14,784	16,830	18,641

Source: Ministries of Education and World Bank staff calculations.

Table C2. Projection of School-Age Population, 2000 – 2035

Age	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
7-14 years	460,000	444,000	425,000	405,000	390,000	376,000	365,000	357,000	355,000	357,000	363,000
6-14 years	505,000	487,000	468,000	447,000	432,000	419,000	408,000	404,000	403,000	407,000	414,000
15-17 years	190,000	192,000	193,000	194,000	191,000	185,000	176,000	166,000	156,000	148,000	141,000
18-21 years	238,000	243,000	250,000	255,000	259,000	263,000	262,000	260,000	252,000	243,000	231,000
Age	2011	2012	2013	2014	2015	2020	2025	2030	2035		
7-14 years	370,000	379,000	388,000	398,000	405,000	393,000	377,000	370,000	366,000		
6-14 years	422,000	431,000	439,000	448,000	453,000	440,000	423,000	415,000	413,000		
15-17 years	136,000	132,000	130,000	129,000	130,000	154,000	146,000	141,000	138,000		
18-21 years	219,000	206,000	195,000	186,000	180,000	185,000	208,000	192,000	188,000		

Source: BH authorities and World Bank staff estimates and projections.

REFERENCES

- Afonso, Antonio, Ludger Shuknecht and Vito Tanzi, 2006, Public Sector Efficiency: Evidence for New EU Member States and Emerging Markets, European Central Bank, Working Paper No. 581.
- BCEOM, 2006, Roads, Bridges and Tunnels Database, The World Bank.
- BEEPS, 2002, EBRD-World Bank Business Environment and Enterprise Performance Survey.
- BEEPS, 2005, EBRD-World Bank Business Environment and Enterprise Performance Survey.
- Betcherman, Olivas, and Dar, 2004, Impact of Active Labor Market Programs: New Evidence from Evaluations, with Particular Reference to Developing and Transition Countries, The World Bank.
- BH Ministry of Finance and Treasury, 2004, Bosnia and Herzegovina: Public Investment Plan 2004-2006.
- BH Ministry of Finance and Treasury, 2005, Draft 2006 - 2008 Budget Framework Document.
- BH Ministry of Justice, 2004, Functional Review of the BH Police Forces, Final Report.
- BH Police Restructuring Commission, 2004, Final Report on the Work of the Police Restructuring Commission of Bosnia and Herzegovina.
- Cain, J. et al, 2002, Health Systems in Transition: Bosnia and Herzegovina - European Observatory on Healthcare System, <http://www.euro.who.int/document/E78673.pdf>
- Chawla, M., 2005, Controlling Health Expenditures, The World Bank.
- Council of Ministers of Bosnia and Herzegovina, 2005, Report.
- Council of Ministers of Bosnia and Herzegovina, EPPU, Medium-Term Development Strategy.
- Cochrane, David, 2004, Human Resource Strategy for Support Services, Final Technical Report, Ministry of Health, Serbia and Montenegro.
- Dell'Anno, Roberto and Piirisild, Marje, 2004, OECD, Estimates of the Non-Observed Economy in Bosnia and Herzegovina.
- EPPU, 2005, Poverty Update.
- European Commission, 2003, Public Administration Review Program: Feasibility Study, COM 2003, 692 final.
- European Commission, 2003, The Regional Balkans Infrastructure Study (REBIS).
- European Commission, 2005, Bosnia and Herzegovina - 2005 Progress Report.

- European Commission, 2005, Functional Review of the Health Sector in BH, Final Report.
- European Commission, 2005, Council Decision on the Principles, Priorities and Conditions Contained in the European Partnership with Bosnia and Herzegovina.
- European Union CARDS Program for BH, 2005, Functional Review of the Education Sector in Bosnia and Herzegovina, Final report.
- FBH Health Insurance Fund, 2005, Calculation of Funds in the Health Sector for 2004.
- FBH Ministry of Finance, 2005, Draft 2006 - 2008 Budget Framework Paper, Medium-Term Expenditure Framework 2006-08.
- Gallus et al., 2003, "Price and Consumption of Tobacco in Italy Over the Last Three Decades," European Journal of Cancer Prevention.
- Gershon P., CBE, 2004, Releasing Resources to the Front Line - Independent Review of Public Sector Efficiency.
- Howard Lyons and Robert Tinston, 2003, Preparation of a Masterplan, London International Healthcare Ltd.
- IMF, 2004, Selected Economic Issues, Report No. 05/54.
- IMF, 2005, Selected Economic Issues, Report No. 055/158.
- Informal Working Document, 2005, Main Administrative Structures Required for Implementing the Acquis – Overview.
- IPSA Institute Ltd., and Civil Engineering Institute of Croatia, 2006, Corridor Vc Motorway, Pre-Feasibility Study, Final Report.
- IPSA, 2005, Motorway in Corridor Vc Preparation of Planning and Study Documentation, Lot no.5.
- Kaufmann at al., 2005, Governance Matters IV: Governance Indicators for 1996 – 2004, The World Bank.
- La Porta at al., 1999, "The Quality of Government," The Journal of Law, Economics and Organization.
- OECD, 2004, Handbook for Measurement of the Non-Observed Economy, www.eocd.org.
- OECD, 2005, Education at a Glance.
- PriceWaterhouseCoopers LLP, 2005, Bosnia and Herzegovina: Support for the Determination of the Pay and Grading System at State Level.
- RS Government, 1999, RS Law on the Basis of Social Protection of Civil Victims of War and Protection of Families with Children.

- RS Ministry of Finance, 2005, 2006-2008 Budget Framework Paper.
- Seiter, Andreas, 2005, The Pharmaceutical Sector in Bosnia and Herzegovina, The World Bank.
- Standard and Assessment Agency in Education for FBH and RS, 2004, Technical Report, External Assessment of Student Achievement: Final Grade in Primary School General Evaluation 2004, Sarajevo.
- International Monetary Fund, 2004, Debt Sustainability in Low-Income Countries – Proposal for an Operational Framework and Policy Implications.
- UNECE, 2006, The Non-Observed Economy in National Accounts.
- World Bank, 2006, Anticorruption in Transition 3.
- World Bank, 2003, Bosnia and Herzegovina Poverty Assessment, Report No.25343-BH.
- World Bank, 2005, World Development Indicators.
- World Bank, 2006, Pension Policy Note for Bosnia and Herzegovina.
- World Bank, Emergency Transport Reconstruction Project.
- World Bank, 2006, Public Expenditures Policies in South Eastern Europe, Report No. 33400-ECA.
- World Bank, 2001, Croatia - Regaining Fiscal Sustainability and Enhancing Effectiveness, A Public Expenditure and Institutional Review, Report No. 22155-HR.
- World Bank, 2005, BH Labor Market Update: The Role of Industrial Relations, Report No. 2650-BA.
- World Bank, 2005, Bulgaria - Public Finance Policy Review: Leveraging EU Funds for Productivity and Growth, Report No. 33992-BG.
- World Health Organization, 2003, Atlas of Health in Europe.
- World Health Organization, European Health for All, <http://data.euro.who.int/hfadb>.

**Bosnia and Herzegovina:
Addressing Fiscal Challenges and Enhancing Growth
Prospects
A Public Expenditure and Institutional Review**

Statistical Annex

ACRONYMS AND ABBREVIATIONS

BH	Bosnia and Herzegovina
FBH	Federation of Bosnia and Herzegovina
GDP	Gross Domestic Product
RS	Republika Srpska

Vice President:	Shigeo Katsu (ECAVP)
Country Director:	Orsalia Kalantzopoulos (ECCU4)
Sector Director:	Cheryl W. Gray (ECSPE)
Sector Manager:	Bernard Funck (ECSPE)
Task Team Leader:	Ivailo Izvorski (ECSPE)

CONTENTS

Table 1. Bosnia and Herzegovina: Consolidated General Government (In millions of KM)	1
Table 2. Bosnia and Herzegovina: Consolidated General Government (In percent of GDP)	2
Table 3. Bosnia and Herzegovina: State Government (In millions of KM)	3
Table 4. Federation of BH: Consolidated General Government (In millions of KM).....	4
Table 5. Federation of BH: Consolidated General Government (In percent of GDP).....	5
Table 6. Federation of BH: Entity Government (In millions of KM).....	6
Table 7. Federation of BH: Entity Government (In percent of GDP)	7
Table 8. Federation of BH: Cantons (In millions of KM)	8
Table 9. Federation of BH: Extrabudgetary Funds and the FBH Road Directorate	9
Table 10. Federation of BH: Municipalities (In millions of KM)	10
Table 11. Republika Srpska: Consolidated General Government (In millions of KM)	11
Table 12. Republika Srpska: Consolidated General Government (In percent of GDP)	12
Table 13. Republika Srpska: Entity Government (In millions of KM)	13
Table 14. Republika Srpska: Entity Government (In percent of GDP)	14
Table 15. Republika Srpska: Municipalities (In millions of KM).....	15
Table 16. Republika Srpska: Extra-budgetary Funds and the RS Road Directorate	16
Table 17. Brčko District (In millions of KM).....	17

Table 1. Bosnia and Herzegovina: Consolidated General Government
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	6571	6788	7091
Wages and contributions	1911	1822	1907
Gross wages	1378	1386	1468
Allowances	329	302	303
Contributions	110	134	118
Severance	94	0	19
Goods and services	1243	1581	1545
Outsourced services	709	979	1004
Utilities including energy	127	172	170
Procurement of materials	118	138	131
Current maintenance	150	184	134
Per diems	23	28	29
Transportation and fuel	29	35	34
Rentals	20	29	29
Insurance and banking services	17	16	15
Capital spending	777	654	672
Foreign-funded projects	356	365	293
Others	421	289	379
Subsidies and transfers	2459	2507	2773
Subsidies	128	158	195
Transfers to individuals	1592	1712	1939
Pensions	946	999	1138
Veterans	423	433	445
Unemployment	22	17	19
Child protection	52	67	75
Social assistance	66	76	81
Refugees	79	86	73
Other individual transfers	27	37	94
Other transfers	739	637	639
Interest	118	113	91
Net lending	26	74	28
Arrears (+=cash outlays to settle)	37	38	55
Arrears (+=increase)	-37	-38	-55
Expenditures on a commitment basis	6534	6750	7036

Sources: BH authorities, World Bank staff calculations and estimates.

Table 2. Bosnia and Herzegovina: Consolidated General Government
(In percent of officially-estimated BH GDP)

	2002	2003	2004
Expenditures on a cash basis	56.4	55.2	52.5
Wages and contributions	16.4	14.8	14.1
Gross wages	11.8	11.3	10.9
Allowances	2.8	2.5	2.2
Contributions	0.9	1.1	0.9
Severance	0.8	0.0	0.1
Goods and services	10.7	12.8	11.4
Outsourced services	6.1	8.0	7.4
Utilities including energy	1.1	1.4	1.3
Procurement of materials	1.0	1.1	1.0
Current maintenance	1.3	1.5	1.0
Per diems	0.2	0.2	0.2
Transportation and fuel	0.2	0.3	0.2
Rentals	0.2	0.2	0.2
Insurance and banking services	0.1	0.1	0.1
Capital spending	6.7	5.3	5.0
Foreign-funded projects	3.1	3.0	2.2
Others	3.6	2.3	2.8
Subsidies and transfers	21.1	20.4	20.5
Subsidies	1.1	1.3	1.4
Transfers to individuals	13.7	13.9	14.4
Pensions	8.1	8.1	8.4
Veterans	3.6	3.5	3.3
Unemployment	0.2	0.1	0.1
Child protection	0.4	0.5	0.6
Social assistance	0.6	0.6	0.6
Refugees	0.7	0.7	0.5
Other individual transfers	0.2	0.3	0.7
Other transfers	6.3	5.2	4.7
Interest	1.0	0.9	0.7
Net lending	0.2	0.6	0.2
Arrears (+=cash outlays to settle)	0.3	0.3	0.4
Arrears (+=increase)	-0.3	-0.3	-0.4
Expenditures on a commitment basis	56.1	54.9	52.1

Sources: BH authorities, World Bank staff calculations and estimates.

Table 3. Bosnia and Herzegovina: State Government
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	400	389	425
Wages and contributions	89	103	141
Gross wages	66	78	107
Allowances	23	26	34
Contributions	0	0	0
Severance	0	0	0
Goods and services	30	38	52
Outsourced services	5	6	7
Utilities including energy	7	8	11
Procurement of materials	2	4	5
Current maintenance	2	3	4
Per diems	4	4	6
Transportation and fuel	2	2	3
Rentals	8	10	15
Insurance and banking services	1	1	1
Capital spending	5	4	4
Foreign-funded projects	0	0	1
Others	4	4	3
Subsidies and transfers	172	156	147
Other transfers	172	156	147
Interest	104	88	79
Net lending	0	0	0
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	400	389	425

Source: BH Ministry of Finance and Treasury.

Table 4. Federation BH: Consolidated General Government
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	3936	3972	4261
Wages and contributions	1222	1200	1214
Gross wages	913	886	879
Allowances	212	209	229
Contributions	96	104	105
Severance	94	0	0
Goods and services	757	931	959
Outsourced services	463	622	670
Utilities including energy	76	105	103
Procurement of materials	78	96	91
Current maintenance	43	54	47
Per diems	12	15	14
Transportation and fuel	16	21	18
Rentals	8	11	8
Insurance and banking services	9	7	8
Capital spending	159	157	248
Foreign-funded projects	165	195	168
Others	147	136	248
Subsidies and transfers	1583	1652	1868
Subsidies	70	85	39
Transfers to individuals	1173	1194	1318
Pensions	661	679	744
Veterans	334	316	323
Unemployment	20	15	13
Child protection	31	47	44
Social assistance	61	66	68
Refugees	13	23	9
Other individual transfers	368	258	239
Other transfers	367	380	338
Interest 1/	13	23	9
Net lending	15	40	20
Arrears (+=cash outlays to settle)	15	0	41
Arrears (+=increase)	-15	0	-41
Expenditures on a commitment basis	3921	3972	4221

Sources: FBH Ministry of Finance, cantonal ministries of finance, FBH municipalities, FBH extrabudgetary funds, FBH and cantonal road directorates; and World Bank staff calculations and estimates.

1/ Includes all interest except on loans received through the State.

Table 5. Federation BH: Consolidated General Government
(In percent of officially-estimated FBH GDP)

	2002	2003	2004
Expenditures on a cash basis	49.6	47.5	47.9
Wages and contributions	15.4	14.5	13.6
Gross wages	11.5	10.7	9.9
Allowances	2.7	2.5	2.6
Contributions	1.2	1.3	1.2
Severance	1.2	0.0	0.0
Goods and services	9.5	11.3	10.8
Outsourced services	5.8	7.5	7.5
Utilities including energy	1.0	1.3	1.2
Procurement of materials	1.0	1.2	1.0
Current maintenance	0.5	0.7	0.5
Per diems	0.2	0.2	0.2
Transportation and fuel	0.2	0.3	0.2
Rentals	0.1	0.1	0.1
Insurance and banking services	0.1	0.1	0.1
Capital spending	2.0	1.9	2.8
Foreign-funded projects	2.1	2.4	1.9
Others	1.9	1.6	2.8
Subsidies and transfers	19.9	20.0	21.0
Subsidies	0.9	1.0	0.4
Transfers to individuals	14.8	14.4	14.8
Pensions	8.3	8.2	8.4
Veterans	4.2	3.8	3.6
Unemployment	0.3	0.2	0.1
Child protection	0.4	0.6	0.5
Social assistance	0.8	0.8	0.8
Refugees	0.2	0.3	0.1
Other individual transfers	4.6	3.1	2.7
Other transfers	4.6	4.6	3.8
Interest 1/	0.2	0.3	0.1
Net lending	0.2	0.5	0.2
Arrears (+=cash outlays to settle)	0.2	0.0	0.5
Arrears (+=increase)	-0.2	0.0	-0.5
Expenditures on a commitment basis	49.4	47.5	47.4

Sources: FBH Ministry of Finance, cantonal ministries of finance, selected FBH municipalities, FBH extrabudgetary funds, FBH and selected cantonal road directorates and World Bank staff calculations and estimates.

1/ Includes all interest except on loans received through the State.

Table 6. Federation BH: Entity Government
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	1256	1126	1133
Wages and contributions	396	361	331
Gross wages	303	267	236
Allowances	60	63	67
Contributions	34	31	28
Severance	94	0	0
Goods and services	78	100	78
Outsourced services	12	16	14
Utilities including energy	17	23	18
Procurement of materials	28	32	23
Current maintenance	5	8	5
Per diems	4	6	5
Transportation and fuel	6	10	7
Rentals	4	5	3
Insurance and banking services	2	1	1
Capital spending	36	31	51
Foreign-funded projects	12	21	0
Others	24	10	51
Subsidies and transfers	651	615	627
Subsidies	38	34	38
Transfers to individuals	356	318	358
Pensions	0	0	0
Veterans	308	286	289
Unemployment	0	0	0
Child protection	0	0	0
Social assistance	0	0	0
Refugees	32	31	14
Other individual transfers	17	0	54
Other transfers	258	263	231
Interest 1/	0	11	1
Net lending	0	9	5
Arrears (+=cash outlays to settle)	15	0	41
Arrears (+=increase)	-15	0	-41
Expenditures on a commitment basis	1241	1126	1092

Sources: FBH Ministry of Finance, World Bank staff calculations and estimates.

1/ Includes all interest except on loans received through the State.

Table 7. Federation BH: Entity Government
(In percent of officially-estimated FBH GDP)

	2002	2003	2004
Expenditures on a cash basis	15.8	13.6	12.7
Wages and contributions	5.0	4.4	3.7
Gross wages	3.8	3.2	2.6
Allowances	0.8	0.8	0.8
Contributions	0.4	0.4	0.3
Severance	1.2	0.0	0.0
Goods and services	1.0	1.2	0.9
Outsourced services	0.2	0.2	0.2
Utilities including energy	0.2	0.3	0.2
Procurement of materials	0.4	0.4	0.3
Current maintenance	0.1	0.1	0.1
Per diems	0.1	0.1	0.1
Transportation and fuel	0.1	0.1	0.1
Rentals	0.0	0.1	0.0
Insurance and banking services	0.0	0.0	0.0
Capital spending	0.5	0.4	0.6
Foreign-funded projects	0.2	0.3	0.0
Others	0.3	0.1	0.6
Subsidies and transfers	8.2	7.4	7.0
Subsidies	0.5	0.4	0.4
Transfers to individuals	4.5	3.8	4.0
Pensions	0.0	0.0	0.0
Veterans	3.9	3.5	3.2
Unemployment	0.0	0.0	0.0
Child protection	0.0	0.0	0.0
Social assistance	0.0	0.0	0.0
Refugees	0.4	0.4	0.2
Other individual transfers	0.2	0.0	0.6
Other transfers	3.2	3.2	2.6
Interest 1/	0.0	0.1	0.0
Net lending	0.0	0.1	0.1
Arrears (+=cash outlays to settle)	0.2	0.0	0.5
	0.0	0.0	0.0
Arrears (+=increase)	-0.2	0.0	-0.5
	0.0	0.0	0.0
Expenditures on a commitment basis	15.6	13.6	12.3

Source: FBH Ministry of Finance.

1/ Includes all interest except on loans received through the State.

Table 8. Federation BH: Cantons
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	1169	1207	1300
Wages and contributions	678	679	713
Gross wages	509	510	527
Allowances	117	108	122
Contributions	52	61	64
Severance	0	0	0
Goods and services	163	184	174
Outsourced services	48	67	70
Utilities including energy	37	41	42
Procurement of materials	23	22	20
Current maintenance	30	29	20
Per diems	7	7	7
Transportation and fuel	9	8	8
Rentals	4	5	4
Insurance and banking services	5	4	4
Capital spending	75	66	103
Foreign-funded projects	0	0	0
Others	75	66	103
Subsidies and transfers	247	275	309
Subsidies	28	33	54
Transfers to individuals	130	139	152
Pensions	0	0	0
Veterans	23	27	29
Unemployment	2	1	0
Child protection	28	37	35
Social assistance	60	60	66
Refugees	6	2	1
Other individual transfers	90	4	3
Other transfers	89	104	104
Interest	6	2	1
Net lending	0	4	3
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	1169	1207	1300

Sources: FBH Ministry of Finance, Cantonal ministries of finance and World Bank staff calculations and estimates.

Table 9. Federation BH: Extrabudgetary Funds and the FBH Road Directorate
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	1308	1363	1509
Wages and contributions	35	39	43
Gross wages	24	29	32
Allowances	8	7	8
Contributions	3	3	4
Severance	0	0	0
Goods and services	454	576	629
Outsourced services	397	519	566
Utilities including energy	16	17	17
Procurement of materials	25	36	42
Current maintenance	1	1	1
Per diems	0	0	1
Transportation and fuel	0	0	0
Rentals	0	0	0
Insurance and banking services	2	2	2
Capital spending	11	18	28
Foreign-funded projects	0	0	0
Others	11	18	28
Subsidies and transfers	699	728	808
Subsidies	3	5	19
Transfers to individuals	681	712	782
Pensions	661	679	744
Veterans	0	0	0
Unemployment	18	14	12
Child protection	0	0	0
Social assistance	0	0	0
Refugees	3	2	1
Other individual transfers	16	27	11
Other transfers	16	5	3
Interest	3	2	1
Net lending	13	27	11
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	1308	1363	1509

Sources: FBH Ministry of Finance, FBH extrabudgetary funds, the FBH road directorate, cantonal road directorates and World Bank staff calculations and estimates.

Table 10. Federation of Bosnia and Herzegovina: Municipalities
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	301	344	402
Wages and contributions	113	121	127
Gross wages	77	80	85
Allowances	28	32	32
Contributions	8	9	9
Severance	0	0	0
Goods and services	62	71	78
Outsourced services	6	20	20
Utilities including energy	6	24	26
Procurement of materials	2	6	5
Current maintenance	7	16	21
Per diems	0	1	2
Transportation and fuel	1	3	2
Rentals	0	1	1
Insurance and banking services	0	1	1
Capital spending	37	42	66
Foreign-funded projects	0	0	0
Others	37	42	66
Subsidies and transfers	84	102	123
Subsidies	1	14	10
Transfers to individuals	6	25	27
Pensions	0	0	0
Veterans	3	4	5
Unemployment	0	0	0
Child protection	3	10	10
Social assistance	1	6	2
Refugees	4	7	6
Other individual transfers	5	1	1
Other transfers	5	8	0
Interest	4	7	6
Net lending	2	1	1
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	301	344	402

Sources: Federation Ministry of Finance, cantonal ministries of finance, FBH municipalities and World Bank staff calculations and estimates

Table 11. Republika Srpska: Consolidated General Government
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	1914	2010	2061
Wages and contributions	455	462	471
Gross wages	353	373	422
Allowances	94	65	38
Contributions	8	24	11
Severance	0	0	19
Goods and services	376	536	467
Outsourced services	203	311	289
Utilities including energy	42	54	53
Procurement of materials	28	29	26
Current maintenance	76	111	71
Per diems	6	8	8
Transportation and fuel	10	10	10
Rentals	4	6	5
Insurance and banking services	7	7	5
Capital spending	402	275	252
Foreign-funded projects	190	170	124
Others	211	105	128
Subsidies and transfers	859	870	965
Subsidies	58	71	72
Transfers to individuals	428	498	601
Pensions	285	320	394
Veterans	89	116	122
Unemployment	2	3	6
Child protection	21	16	21
Social assistance	5	8	10
Refugees	22	24	28
Other individual transfers	4	5	6
Other transfers	378	292	281
Interest 1/	1	2	2
Net lending	12	34	8
Arrears (+=cash outlays to settle)	22	38	14
Arrears (+=increase)	-22	-38	-14
Expenditures on a commitment basis	1914	1973	2047

Sources: RS Ministry of Finance, selected RS municipalities, RS extrabudgetary funds, RS road directorate and World Bank staff calculations and estimates.

1/ Includes all interest except on loans received through the State.

Table 12. Republika Srpska: Consolidated General Government
(In percent of officially-estimated RS GDP)

	2002	2003	2004
Expenditures on a cash basis	56.0	54.1	48.8
Wages and contributions	13.3	12.4	11.1
Gross wages	10.3	10.0	10.0
Allowances	2.7	1.7	0.9
Contributions	0.2	0.6	0.3
Severance	0.0	0.0	0.4
Goods and services	11.0	14.4	11.0
Outsourced services	6.0	8.4	6.8
Utilities including energy	1.2	1.5	1.2
Procurement of materials	0.8	0.8	0.6
Current maintenance	2.2	3.0	1.7
Per diems	0.2	0.2	0.2
Transportation and fuel	0.3	0.3	0.2
Rentals	0.1	0.2	0.1
Insurance and banking services	0.2	0.2	0.1
Capital spending	11.8	7.4	6.0
Foreign-funded projects	5.6	4.6	2.9
Others	6.2	2.8	3.0
Subsidies and transfers	25.1	23.4	22.8
Subsidies	1.7	1.9	1.7
Transfers to individuals	12.5	13.4	14.2
Pensions	8.3	8.6	9.3
Veterans	2.6	3.1	2.9
Unemployment	0.1	0.1	0.1
Child protection	0.6	0.4	0.5
Social assistance	0.1	0.2	0.2
Refugees	0.6	0.7	0.7
Other individual transfers	0.1	0.1	0.1
Other transfers	11.1	7.9	6.6
Interest 1/	0.0	0.1	0.1
Net lending	0.3	0.9	0.2
Arrears (+=cash outlays to settle)	0.6	1.0	0.3
Arrears (+=increase)	-0.6	-1.0	-0.3
Expenditures on a commitment basis	56.0	53.1	48.4

Sources: RS Ministry of Finance, selected RS municipalities, RS extrabudgetary funds, RS road directorate and World Bank staff calculations and estimates.

1/ Includes all interest except on loans received through the State.

Table 13. Republika Srpska: Entity Government
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	1139	1123	1112
Wages and contributions	371	369	375
Gross wages	294	308	352
Allowances	75	45	19
Contributions	1	17	5
Severance	0	0	19
Goods and services	81	164	111
Outsourced services	11	39	33
Utilities including energy	17	26	24
Procurement of materials	22	22	18
Current maintenance	13	55	16
Per diems	4	6	6
Transportation and fuel	7	8	7
Rentals	3	5	5
Insurance and banking services	3	4	3
Capital spending	153	42	40
Foreign-funded projects	0	0	0
Others	153	42	40
Subsidies and transfers	524	540	561
Subsidies	44	62	65
Transfers to individuals	102	136	151
Pensions	0	0	0
Veterans	83	111	117
Unemployment	0	0	0
Child protection	0	0	0
Social assistance	0	0	0
Refugees	20	22	24
Other individual transfers	0	0	0
Other transfers	378	341	345
Interest 1/	0	1	0
Net lending	9	6	6
Arrears (+cash outlays to settle)	22	38	14
Arrears (+increase)	-22	-38	-14
Expenditures on a commitment basis	1117	1085	1098

Source: RS Ministry of Finance.

1/ Includes all interest except on loans received through the State.

Table 14. Republika Srpska: Entity Government
(In percent of officially-estimated RS GDP)

	2002	2003	2004
Expenditures on a cash basis	33.3	30.2	26.3
Wages and contributions	10.9	9.9	8.9
Gross wages	8.6	8.3	8.3
Allowances	2.2	1.2	0.4
Contributions	0.0	0.4	0.1
Severance	0.0	0.0	0.4
Goods and services	2.4	4.4	2.6
Outsourced services	0.3	1.0	0.8
Utilities including energy	0.5	0.7	0.6
Procurement of materials	0.6	0.6	0.4
Current maintenance	0.4	1.5	0.4
Per diems	0.1	0.2	0.1
Transportation and fuel	0.2	0.2	0.2
Rentals	0.1	0.1	0.1
Insurance and banking services	0.1	0.1	0.1
Capital spending	4.5	1.1	0.9
Foreign-funded projects	0.0	0.0	0.0
Others	4.5	1.1	0.9
Subsidies and transfers	15.3	14.5	13.3
Subsidies	1.3	1.7	1.5
Transfers to individuals	3.0	3.7	3.6
Pensions	0.0	0.0	0.0
Veterans	2.4	3.0	2.8
Unemployment	0.0	0.0	0.0
Child protection	0.0	0.0	0.0
Social assistance	0.0	0.0	0.0
Refugees	0.6	0.6	0.6
Other individual transfers	0.0	0.0	0.0
Other transfers	11.1	9.2	8.2
Interest 1/	0.0	0.0	0.0
Net lending	0.3	0.2	0.1
Arrears (+=cash outlays to settle)	0.6	1.0	0.3
Arrears (+=increase)	-0.6	-1.0	-0.3
Expenditures on a commitment basis	32.7	29.2	26.0

Sources: RS Ministry of Finance and World bank staff estimates.

1/ Includes all interest except on loans received through the State.

Table 15. Republika Srpska: Municipalities
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	250	302	344
Wages and contributions	66	75	77
Gross wages	45	52	55
Allowances	15	17	17
Contributions	33	47	56
Severance	0	0	0
Goods and services	85	101	110
Outsourced services	26	41	47
Utilities including energy	23	26	27
Procurement of materials	5	5	6
Current maintenance	26	22	23
Per diems	2	2	2
Transportation and fuel	2	2	3
Rentals	0	0	0
Insurance and banking services	2	2	2
Capital spending	33	47	56
Foreign-funded projects	0	0	0
Others	33	47	56
Subsidies and transfers	66	79	99
Subsidies	13	6	5
Transfers to individuals	18	24	28
Pensions	0	0	0
Veterans	6	5	5
Unemployment	0	0	0
Child protection	0	0	0
Social assistance	5	8	10
Refugees	1	2	4
Other individual transfers	4	5	6
Other transfers	40	41	54
Interest	0	1	1
Net lending	2	1	2
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	250	302	344

Sources: RS Ministry of Finance, selected RS municipalities and World Bank staff calculations and estimates.

Table 16. Republika Srpska: Extrabudgetary Funds and the RS Road Directorate
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	566	675	725
Wages and contributions	18	18	19
Gross wages	14	14	15
Allowances	3	3	3
Contributions	1	1	1
Severance	0	0	0
Goods and services	210	271	245
Outsourced services	166	231	208
Utilities including energy	2	2	2
Procurement of materials	1	2	2
Current maintenance	38	34	31
Per diems	0	0	0
Transportation and fuel	0	0	0
Rentals	0	0	0
Insurance and banking services	1	1	1
Capital spending	28	17	36
Foreign-funded projects	2	2	4
Others	25	16	32
Subsidies and transfers	309	341	424
Subsidies	1	3	2
Transfers to individuals	308	338	422
Pensions	285	320	394
Veterans	0	0	0
Unemployment	2	3	6
Child protection	21	16	21
Social assistance	0	0	0
Refugees	0	0	0
Other individual transfers	0	0	0
Other transfers	0	0	0
Interest	1	1	1
Net lending	0	27	0
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	566	675	725

Sources: RS Ministry of Finance, RS extrabudgetary funds, RS road directorate and World Bank staff calculations and estimates.


Table 17. Brčko District
(In millions of KM)

	2002	2003	2004
Expenditures on a cash basis	212	213	172
Wages and contributions	51	57	63
Gross wages	45	49	60
Allowances	0	2	1
Contributions	6	6	2
Severance	0	0	0
Goods and services	80	76	67
Outsourced services	37	40	38
Utilities including energy	2	5	4
Procurement of materials	9	9	9
Current maintenance	29	16	11
Per diems	1	1	1
Transportation and fuel	1	2	3
Rentals	1	2	1
Insurance and banking services	0	1	0
Capital spending	65	51	15
Foreign-funded projects	0	0	0
Others	65	50	7
Subsidies and transfers	15	29	27
Subsidies	0	2	2
Transfers to individuals	12	21	20
Pensions	0	0	0
Veterans	0	0	0
Unemployment	0	0	0
Child protection	0	5	10
Social assistance	0	3	3
Refugees	0	0	0
Other individual transfers	3	5	4
Other transfers	3	2	2
Interest 1/	0	0	0
Net lending	0	0	0
Arrears (+=cash outlays to settle)	0	0	0
Arrears (+=increase)	0	0	0
Expenditures on a commitment basis	212	213	172

Source: Brčko District Government, Department for Budget and Finance.

1/ Includes all interest except on loans received through the State.

BOSNIA AND HERZEGOVINA

- SELECTED TOWNS
- ⊕ NATIONAL CAPITAL
-  MAIN RIVERS
-  MAIN ROADS
-  RAILROADS
-  DAYTON AGREEMENT LINES
-  MUNICIPAL BOUNDARIES
-  INTERNATIONAL BOUNDARIES

This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

