Bosnia and Herzegovina

Towards Financial Sustainability and Creditworthiness

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Poverty Reduction and Economic Management Unit
Europe and Central Asia Region

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EXECUTIVE SUMMARY

1. After five years of active recovery and reconstruction efforts, Bosnia and Herzegovina has reached a turning point. While the reconstruction phase has mostly been completed, the economy is only at the early stages of transition to a market economy and still heavily dependent on foreign aid flows. The post-war economic revival has been impressive, an achievement made possible by substantial financial support from the international community, sound macroeconomic management, and initial structural reforms. However, as the year 2001 advances, Bosnia and Herzegovina is facing a more difficult situation, due to slow progress on structural reforms and a worsening external environment. Moreover, the availability of official concessional financing is diminishing and the comfortable debt service schedule enjoyed until now will deteriorate soon. In addition, recent global economic and political developments make it even more difficult for Bosnia and Herzegovina to attract private capital inflows. As a consequence, the nature of Bosnia and Herzegovina's financial interaction with the international community will inevitably change in the near future.

2. The prospect of the diminishing availability of official concessional finance and the upcoming debt service profile is not a surprise. But at the time of the rescheduling of the debt inherited from Socialist Federal Republic of Yugoslavia (SRFY), assumptions regarding the country's debt service capacity were more favorable than what has emerged. These assumptions were mainly based upon expectations of stronger and sustained output recovery and faster and broader reforms than what have been achieved to date. The importance of evaluating Bosnia and Herzegovina's external financing challenges in the years ahead, in light of the limited reform progress to date and the changing role of the international community, is well recognized by the International Financial Institutions as well as by the authorities.

3. This Report presents the findings of an assessment of the economic and financial conditions that Bosnia and Herzegovina needs to have in place to strengthen its creditworthiness in the near future. It also provides a macroeconomic framework for the Bank's future lending approach for Bosnia and Herzegovina, while highlighting the need for strengthening public finances and strategic debt management in a context of diminishing concessional flows.

4. The study focuses on two important questions. First, what would be the optimal combination of policy measures and borrowing strategy that would allow Bosnia and Herzegovina to re-establish market access so that the country's financial needs can be met on an increasing scale by private capital flows? Second, what should be the size if any, of the fiscal adjustment to establish a fiscal position conducive to moderate long-term inflation and to government solvency? A debt sustainability analysis is conducted in order to assess the likelihood of achieving creditworthiness in the medium term. The

impact of different macroeconomic outlooks, changes in the availability of concessional lending and other risk factors are evaluated vis-à-vis the country's prospects of medium-term debt sustainability.

5. The key message of this study is that ***Bosnia and Herzegovina can achieve external and fiscal sustainability, as well as limited external creditworthiness in the medium term but this will require a substantially reinvigorated structural reform effort in parallel with continued donor support.*** It confirms that unless the remaining reform agenda is implemented aggressively, the economy's growth potential could be compromised and external and fiscal sustainability would be extremely difficult to achieve. The importance of establishing an environment conducive to self-sustained growth that is less dependent on foreign assistance cannot be underscored in a context of declining concessional flows from the international community. The report emphasizes that the timing for improving the investment climate and fostering growth of the private sector is crucial determining the success of placing the economy on a sustainable growth path.

6. The main findings of the study can be summarized as follows:

- Progress towards establishing a self-sustaining economy was below expectations over the last five years. While the revival of economic growth has been impressive, the underlying source of growth is too dependent on aid inflows. Unemployment, which has been significantly reduced, remains too high at 40 percent. The economy's export capacity is weak and narrow. The private sector still accounts for only 35 percent of economic activity. Inflows of foreign direct investment (FDI) remain low and the investment climate is still not conducive to high and sustained private capital inflows.

- Accelerating dramatically the implementation of structural reforms is, therefore, a priority. Such an effort is crucial to sustain the rapid growth of the past several years and achieve both fiscal and external sustainability. Priority areas of reforms are, *inter alia*, establishing of a single economic space, strengthening expenditure management and revenue collection, completing privatization of large state-owned enterprises and banking sector reform, and enhancing the legal and institutional framework for the private sector.

- Even with a significant acceleration in reforms that improve the investment climate and induce a substantially higher volume of private capital inflows, Bosnia and Herzegovina's external financing requirements for concessional assistance will remain considerable. We estimate that the country will require some $2.3 billion from the donor community during the next five years. Thus, the key challenge facing policymakers is to provide the international community with credible signals of a strong commitment to structural reform implementation and efficient use of external resources.

- Bosnia and Herzegovina also needs to continue to maintain a prudent external borrowing strategy, keeping a cautious approach to borrowing on non-concessional terms. The review shows that for the period 2001-10, external debt

sustainability depends, *inter alia*, upon assuring access to the appropriate mix of concessional lending and grants in line with the debt servicing capacity of the country. Our analysis suggests a 50/50 mix of grants and concessional lending would be an appropriate benchmark in the next five-year period. Finally, this analysis also suggests that official non-concessional finance should be considered only on a limited basis and possibly during the second half of the decade.

- Strengthening public finances is particularly important for medium term debt sustainability. The current levels of fiscal deficits are not sustainable and the continuation of such imbalances would lead to unsustainable debt dynamics. Our analysis indicates that a substantial fiscal adjustment of about 11 percent of GDP is required in the medium term. While the expected decline in reconstruction expenditures would ease the needed adjustment, this would not be enough to place the fiscal balances on a sustained basis. Similarly, given the already high tax rate, room for increasing revenues is relatively small. Nevertheless, improving revenue collection would support an effort for placing the fiscal finances on a sustainable ground. Public expenditures would, therefore, need to be reoriented and rationalized towards meeting critical needs and should be strategically streamlined in light of a decline of future foreign assistance.

- Finally, a simulation of a slower pace of reform demonstrates that falling short of the high growth objective and the inability to sustain strong export performance results in unstable debt indicators, increases fiscal vulnerability and delays prospects towards a self-sustained economy. While it is difficult to predict at what point a "crisis-situation" would occur, it is clear that, under this type of scenario, a large fiscal adjustment would be required, which would put pressure on wages and social spending and, in turn could undermine the country's hard won progress towards political stability.

A. THE ECONOMY

Economic Performance after Five Years of Reconstruction

7. Over the last five years, Bosnia and Herzegovina has been facing the dual challenge of recovering from the devastating war and moving towards its transformation from a centrally planned to a market economy. Since the 1995 Dayton Peace Agreement[1], which established the country into a State with two constituent Entities (Federation of Bosnia and Herzegovina and Republika of Srpska), significant progress has been accomplished in the political and economic context[2]. Reconstruction activities and the reform program that has been financed mainly by the international community (IC)[3] since 1996 gave an initial strong boost to the economy. However, while essential reconstruction has mostly been achieved, policy and institutional reforms are yet far from complete.

Table 1 Key Economic Indicators, 1990-2000

	1990	1995	1996	1997	1998	1999	2000e
GDP (US million)	10,633	1,867	2,741	3,423	4,169	4,540	4,372
Real GDP growth			85.8	36.6	9.9	9.9	5.9
Per capita GDP in current US$	2,429	456	660	816	1,042	1,135	1,093
Price Inflation (average, in %)					1	3	5
Trade Balance (US$ million)	290	-930	-1546	-1758	-1,959	-1,852	-1,617
Exports (US$ million)	1,990	152	336	575	697	649	732
Imports (US$ million)	1,700	1,082	1,882	2,333	2,656	2,502	2,348
Current Account Balance (% of GDP)		-10.3	-27.3	-31.0	-18.9	-21.0	-20.6
Public Sector Balance (% of GDP)		-7	-27	-25	-18	-17	-16
Of which: External Financing (%of GDP)		7	27	25	18	17	16

Source: Official data, World Bank and IMF estimates.

8. The extent of the post-war economic revival has been impressive compared to other post-conflict economies. More importantly, Bosnia and Herzegovina has managed to achieve this without compromising macroeconomic stability. Prudent fiscal management, and a strict currency board arrangement[4] have been the main pillars of the Government's macroeconomic policy framework, supported largely by an IMF Stand-by Arrangement (SBA). In addition, successive Bosnian governments have embarked on policy and structural reforms, ranging from trade and price liberalization to tax reforms, institutional building, social sector and financial market reforms as well as privatization. Although painfully slow, the implementation of these reforms together with the

[1] See United States State Department website (http:\\www.state.gov\) for detailed information regarding the 1995 Dayton Peace Agreement.

[2] For a summary description of recent developments in the political context see "Bosnia and Herzegovina: Country Assistance Strategy", World Bank, dated June 14, 2000.

[3] In December of 1995, the international community endorsed a US$5.1 billion three-to-four year Priority Reconstruction Program and Recovery Program (prepared jointly by the World Bank, the EU and the EBRD in collaboration with the Bosnia and Herzegovina authorities), of which an estimated US$4 billion has been disbursed by the end of 2000.

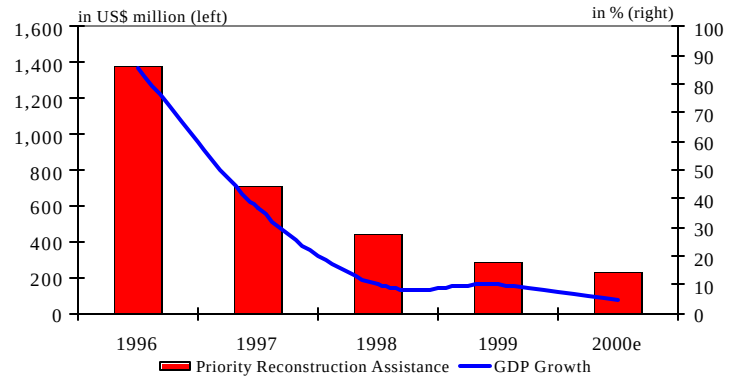
[4] An important element to the macroeconomic stabilization was the introduction of a common currency, the Convertible Marka (KM), and its peg to the Deutsche Mark in July of 1998.

substantial assistance from the IC and International Financial Institutions (such as the World Bank, IMF and EBRD) has initiated the transition from economic recovery to growth.

9. Annual economic growth averaged over 29 percent in real terms during the period 1996-2000, in spite of the disruptions caused by the Kosovo conflict during 1999. Real per capita consumption has increased significantly for most households. Unemployment has halved from its high of 70 to 80 percent at the end of the war. Inflation has fallen progressively, and is currently running at an annual rate of 5 percent. In addition, main infrastructure networks damaged during the war have been largely rehabilitated and schools and hospitals have been for the most part reconstructed. The strong economic recovery has allowed post-war output to more than double, from US$1,867 million in 1995 to US$4,372 million in 2000. Unfortunately, adverse factors such as the sizeable destruction of economic activity, transitory setbacks and a loss of momentum of the reform agenda, has kept Bosnia and Herzegovina as the second poorest country in the Central European region on a per capita basis.

10. Macroeconomic stabilization seems to be by and large intact. However, there are signs that the economic revival has been achieved at the risk of creating an aid-dependent economy. Output growth has moved in tandem with aid flows (see Chart 1). The high growth rates of recent years have largely been sustained by external aid rather than private investment and a continuation of growth requires the pace of structural reform to be accelerated significantly. Moreover, the strong economic growth and price stabilization enjoyed during the post-war years has not been broadly shared. Regional imbalances continue to exist and intra-regional economic convergence has been slow. The Federation remains as more prosperous than the Republika Srpska.[5] Because of a later start of donor assistance and economic reforms, incomes remain lower in Republika Srpska than in the Federation. Although aid flows to the Republika Srpska accelerated following the election of a moderate government in January 1998, its close economic integration with the Federal Republic of Yugoslavia made its recovery particularly vulnerable to negative spillover effects from the country's economic isolation and recent conflicts.

Chart 1 GDP Growth and Financial Aid Flows



[5] It's refusal to participate in the first donor's conferences as well as its reluctance to cooperate with the International Criminal Tribunal for the Former Yugoslavia, have contributed to the reconstruction lag in the Republika of Srpska.

11. Fiscal and current account deficits are currently running at levels that are not sustainable in the long run. Public expenditures for the period 1996-2000, inclusive of off-budget donor-financed expenses, averaged over 60 percent of GDP, a level that is excessively high by any transition economy standards.[6] With the reconstruction phase ending, it is expected that public expenditures will gradually decline to more normal levels, which can increasingly be financed with domestic resources. In addition, reduction and reallocation of recurrent expenditures will be needed to accommodate both the expected decline in foreign support and public sector investment needs. The challenging adjustment process would have to be managed within the currency board arrangement, which limits the fiscal deficit of the consolidated public sector to levels compatible with the available sources of foreign financing.

12. Bosnia and Herzegovina's external accounts also remain very fragile. An issue of concern is whether the recent levels of deficit at around 22 percent of GDP can continue to be successfully financed without either imposing a threat to the currency board arrangement and/or increasing foreign debt to critical levels. The steep growth in imports experienced in the early years was due to the active reconstruction efforts and to the slow recovery of domestic production. Some decline in the rate of growth of imports is expected in the coming years as the reconstruction phase winds down. The export base has slowly expanded to 17 percent of GDP. The room for further recovery of the export base is large: by 2000, exports have only reached one third of its pre-war level. In light of the declining external assistance, it is critical that during the next years exports increase at levels sufficient to bring the external accounts into a sustainable path. The private sector's role will be critical in achieving the expansion in the export base. In turn, the current low levels of domestic savings would have to be reversed in order to finance and support the emergence of a dynamic private sector.

Progress and Challenges of Structural Reforms

13. The prospect for entering a phase of self-sustained growth is contingent on the successful implementation of economic and institutional reforms. In this respect, some important steps have already been taken. Many of the basic political and economic institutions required for the country's effective functioning have been established, including the issuance of the national currency and establishment of the central bank. Significant progress has been achieved in removing barriers to the movements of goods and people within the country, and a common, countrywide customs tariff regime and trade policy have been introduced.

14. The reform of the public finance system has begun, with a focus on strengthening accountability and control over management of public resources. Both Entities have made significant progress in reforming and harmonizing tax policies and in establishing intra-Entity revenue and expenditure assignments. The legal and institutional frameworks for privatization and restitution have been adopted. Although with considerable delay due to difficulties of achieving consensus on privatization methodology and institutional framework among constituent groups, privatization of

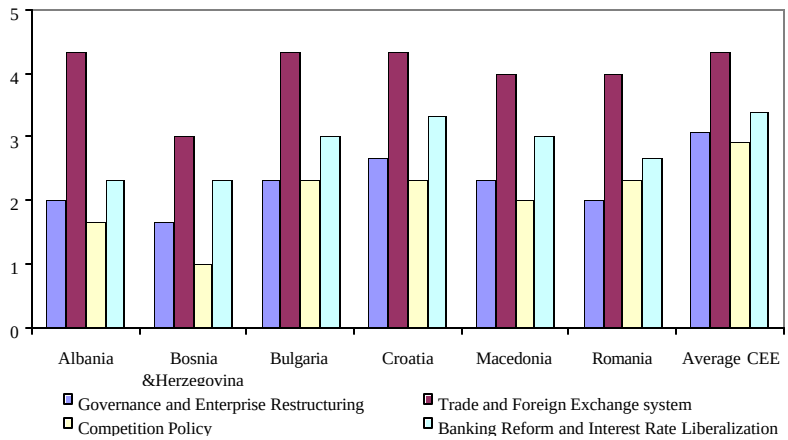
[6] These figures do not reflect the full extent of public expenditures due to significant off budget expenditures, particularly for defense, and some social transfers.

SMEs has been well advanced and preparations for sale of large enterprises is being initiated. Key elements of the legal and regulatory frameworks for the banking sector have been introduced, including provisions for supervisory capacity, and a major reform of the payments system has largely been completed.

15. Despite positive developments in the market-based economic reforms, a substantial reform agenda lies ahead. Priority areas of reforms are, *inter alia*, establishing a single economic space, strengthening expenditure management and revenue collection, completing privatization of large state-owned enterprises and banking sector reform, and enhancing the legal and institutional framework for the private sector. The progress and impetus of structural reforms has to be kept up in order to create an environment conducive to private sector activity. The private sector's share in the economy is only 35 percent, reflecting the slow progress in privatization and the still weak investment climate. FDI inflows have remained fairly low, albeit some encouraging signs of increased interest from neighboring countries such as Slovenia. Compared to other countries of similar per capita income at 2.6 percent of GDP Bosnia and Herzegovina has been a poor performer in terms of attracting FDI. Deterrent factors such as political uncertainty, slow progress in privatization and low enforcement of the legal framework has kept FDI low in the past.

16. Measured by the EBRD's transition indicators scores[7,8], Bosnia and Herzegovina is one the countries with the lowest score in transition progress. This score, however, should be interpreted accounting for Bosnia and Herzegovina's initial conditions, which have been more unfavorable than the other SEEs due to its later start in the transition towards a market economy as a consequence of the war. According to the transition indicators, Bosnia and Herzegovina's reforms in the areas of competition policy, trade and financial system lag behind those of its neighboring countries and more importantly behind Central European countries, the advanced reformers (See Chart 2).[9] Speeding up the pace of reform in all

Chart 2 Progress in Reform in the SEE Countries and CEE Region, 2000



[7] The EBRD transition indicator is based on a rating of progress in economic reforms, which evaluates the main dimensions of transition, such as liberalization of prices, foreign trade and access to foreign exchange, small-scale and large-scale privatization, enterprise reform and corporate governance, and the functioning of financial institutions.

[8] Similar to EBRD's rating, the Heritage Foundation estimates a measure of economic freedom in countries throughout the world. Bosnia and Herzegovina's economic environment is classified as moderately repressed—ranking 141st out of 155 countries (155 is the most repressed). However, contrary to EBRD transition index, the Heritage Foundation classifies Bosnia and Herzegovina's trade environment less regulated than the that prevailing in the rest of SEEs countries.

[9] Bosnia and Herzegovina has made significant progress in the areas of trade and foreign exchange system. Currently,

these areas is crucial to generate a supply response needed to maintain the growth rates so far enjoyed and further bring down unemployment. As will be discussed later, foreign direct investment also plays a key role in the success of internal adjustment and the sustainability of external sector. Furthermore, as the exceptional external financing phase is coming to an end, institutional and policy foundations needed for sustainable growth become increasingly urgent.

B. EVOLUTION OF PUBLIC DEBT AND ITS MANAGEMENT

External Debt Structure: 1997-2000

17. Following the breakup of the Former Republic of Yugoslavia and during the war period, the country accumulated substantial arrears towards all of its creditors.[10] As a condition to normalize its membership and resume lending from the IMF and the World Bank and to become eligible to borrow from international financial institutions, Bosnia and Herzegovina had to clear arrears on its past debt. Through a process of rescheduling and loan consolidations between 1996 and 1997, the authorities were able to normalize the country's relation with most of its creditors and reinstate their membership with both the IMF and the World Bank.[11] These efforts involved an agreement with the Paris Club of sovereign creditors to reduce Bosnia and Herzegovina's debt by 67 percent in net present value terms (NPV)[12]. In December of 1998, the London Club of commercial creditors agreed to forgive 73 percent of the debt on a present discounted value basis.[13]

Table 2 Bosnia and Herzegovina: Total External Debt Outstanding
By Creditor, US$ million

	1997	1998	1999	2000
Total Outstanding External Debt	3,867	3,041	3,160	2,927
As share of GDP (%)	*111.0*	*73.0*	*69.6*	*66.6*
Multilateral	926	1,127	1,252	1,298
Of which: IBRD	566	581	578	562
IDA	278	427	497	556
Bilateral	1,139	825	841	564
Of which: Paris Club	874	558	557	542
Commercial	1,803	1,089	1068	1,064
Of which: London Club	1,040	407	386	336
Memo Item:				
Stock of Arrears	946	946	946	609

Source: World Bank Global Finance Indicators and official data.

its progress in the area of trade reform differs from the other SEE countries in the areas of agricultural trade policies and progress towards WTO membership.

[10] It was estimated that at the end of 1995 arrears amounted $1.9 billion, of which $342 were due to IBRD alone.

[11] After clearing its arrears to multilateral and bilateral creditors, Bosnia and Herzegovina joined the IMF on December of 1995. Arrears clearance and membership in the World Bank was accomplished in 1996 through the consolidation of IBRD obligations into three loans.

[12] Cutting its liabilities to US$231.8 million of principal but US$528 million including past due interest. The rescheduled obligations were agreed on very concessional terms, at 23 year maturity and six-year grace period for commercial type credits and at 33 year maturity and no grace period for Official Development Assistance (ODA).

[13] It was agreed that of the total amount only US$147.8 million will be subject to servicing over 20 years, while the remaining will fall due when Bosnia and Herzegovina GDP per capita reaches US$2,800 for two consecutive years.

18. The sizeable reduction in the country's external debt burden brought by rescheduling and clearance of arrears, and substantial external assistance in the form of non-debt flows have significantly improved the country's external liabilities position. External debt outstanding, excluding new borrowing, was reduced from US$3.9 billion to US$2.6 billion, or from over 111 percent of GDP to 63 percent of GDP at end-1998. By end of 2000, Bosnia and Herzegovina's external debt, including outstanding arrears and new borrowing, was at US$2.9 billion equivalent to 67 percent of GDP. This, altogether, represents an improvement of almost 44 percentage points of GDP compared to 1997.

19. Nevertheless, the process of resolution of outstanding foreign claims on government and non-government agents has not yet been fully completed. Currently, there is a significant amount of outstanding external liabilities in arrears—US$609 million or 14 percent of GDP[14]. Most of this debt is defined as trade credits, and unassigned debt inherited from the former-Yugoslavia. All of these obligations were contracted before the breakup of former-Yugoslavia. To date, while there has been progress in the preparation towards rescheduling, as financial obligations to former COMECON countries have been rescheduled, formal negotiations with the remaining of arrears have not yet been initiated. However, it has been agreed internally that, as in the case of the other debt, the end-user Entity would be responsible for paying the service on the rescheduled stock. This implies an increase in Republika Srpska's future debt service payments since the majority of the debt in arrears was contracted by what is now the Republika Srpska. Completing the rescheduling process would be key in restoring the country's creditworthiness. This requires improved coordination between creditors and Bosnian authorities in order to reschedule the outstanding arrears at favorable terms, at least comparable to Naples terms.

Table 3 Net Present Value of Government External Debt ($ million, end 2000)[1]

	Nominal value[1]	NPV
Total	2,209	1,333
Multilateral	1,299	874
Of which: IDA	556	208
IBRD	562	509
Bilateral	564	296
Of which: France	174	68
Germany	118	87
Other	336	163

Note: Excludes arrears.

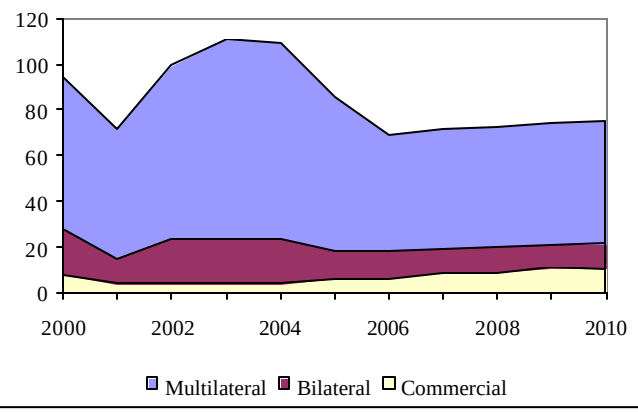
20. Most of Bosnia and Herzegovina's external debt is held by official creditors (See Table 3), with the reminder held by commercial creditors. Among official creditors, the World Bank is the largest creditor holding US$1.1 billion. Of this amount, US$556 million has been accumulated between 1996 and 2000 under highly concessional terms (IDA). The reminder of the debt held by official creditors has also been contracted at very concessional terms. Of the commercially held debt, only a small amount is old debt (London Club), the rest is commercial debt in arrears (see paragraph 19). Both the reliance on borrowing from multilateral creditors and the rescheduling of "old-debt" have brought a favorable debt servicing profile. But, this inflexibility of debt also has the downside risk of leaving little room for maneuver in the event of an unexpected shock to the economy, as these types of debt cannot be rescheduled.

[14] See Annex 2 for details on external debt in arrears by creditor.

21. In assessing a country's debt burden, the face value of the external debt stock is not a good measure if a significant part of the external debt is contracted on concessional terms with an interest rate below the prevailing market rate. This is the case in Bosnia and Herzegovina, where over 60 percent of the estimated US$4 billion reconstruction assistance provided up to end-2000 has been disbursed in the form of grants, and the rest under very concessional terms. A more useful indicator commonly used is the net present value (NPV) [15] of debt, a measure that takes into account the degree of concessionality. Measured in NPV terms, Bosnia and Herzegovina's debt-to-GDP ratio is only 30 percent or US$1.3 million.

22. The highly concessional terms of donor assistance provided to the Government of Bosnia and Herzegovina, between 1996 and 2000, have also helped ensure a relatively comfortable external public debt servicing profile. To date, essentially all of the new foreign borrowing contracted by the Government has been under favorable terms: average maturity of 30 years and grace period of 9 years. Nevertheless, as the grace period for the consolidated IBRD loans expires, debt service payments to multilateral agencies will increase in 2002 by an average of US$23 million compared to previous years. For the next three years, debt service profile based on existing liabilities will show a hump, as IMF's principal repayments on the Stand by Agreement fall due.

Chart 3. Pipeline Debt Service Projections, end 2000
Millions of $US



23. The currency composition of the Government's external debt is largely denominated in US dollars and EURO (see Table 4)[16]. The private sector has had limited access to foreign borrowing mainly due to the lack of creditworthiness. Excluding debt in arrears, private sector's debt amounted to only 0.6 percent of total outstanding external debt. EBRD has a portfolio investment in the private sector of 26.1 million EURO consisting of 11 projects. Of this total only 17 percent amounts to direct investment and the rest

Table 4 Currency Composition of Total External Debt, end 2000

	US$ millions	Share (%)
Total	2,213	100
US dollars	1,325	60
Deustche Mark	442	20
SDR	432	20
EURO	310	14
Others	42	2

Note: Excludes arrears

[15] Net present value is defined as the sum of all future debt-service obligations (interest and principal) on existing debt, discounted at the market interest rate. Whenever the interest rate on a loan is lower than the market rate, the resulting NPV of debt is smaller than its face value, with the difference reflecting the grant element.

[16] The average interest rate is 1.3 percent, which reflects the exceptional concessional terms of almost all new foreign borrowing.

has been provided in the form of publicly guaranteed loans, mainly to support the strengthening of the financial intermediation capacity.

24. Is Bosnia and Herzegovina's debt large? Compared to countries from Southeastern Europe and countries of similar per capita income (lower-middle income countries), Bosnia and Herzegovina's external debt is relatively large. Despite rescheduling and consolidation agreements, Bosnia and Herzegovina's debt to GDP ratio ranks second in the SEE region, after Bulgaria.[17] Debt-serving ratios, however, look more favorable in Bosnia and Herzegovina. As of end-2000, payments due on total external obligations were only 7 percent of total exports of goods and services and 11 percent of Entities' budget revenues. Nevertheless, the extent of concessionality relates to past obligations and as exceptional financing is starting to dry up and financial obligations of the IBRD consolidated loan falls due end of 2001, future debt servicing might impose a heavy burden on public expenditures.

Table 5 Comparative Debt Indicators, December 2000
(in percent)

	Lower-Middle Income Countries[5]	Albania[1]	Bosnia and Herzegovina[3]	Bulgaria	Croatia	Macedonia	Romania[1]
External debt to GDP	28.2	29.5	66.6	85.0	54.9	43.6	26.8
NPV of external debt to GDP[2]	23.2	18.1	44.4	76.7	54.0	36.7	25.8
External debt to exports of goods and services[4]	113.6	284.7	256.7	154.9	107.3	99.8	93.8
External public debt to central government revenue	166.9	128.1	306.6	199.1	70.6	146.1	124.8
Total debt service to exports of goods and services	14.7	4.8	7.0	16.4	19.41	11.8	14.5
Public debt service to central government revenue	22.1	2.5	11.4	24.0	7.73	17.3	24.7
Memo Item:							
2000 GDP per capita (US$)	1,288	1,089	1,093	1,410	5,574	1,647	1,638
Gross Reserves in months of imports	6.3	2.9	2.0	5.0	4.1	4.5	2.8

Notes: 1. Preliminary data. 2. Corresponds to 1999. 3. Entities budget. $. Three-year average of exports of goods and services.5. Weighted (by GDP) average of lower-middle income countries.
Source:IMF, World Bank and official statistics.

External Public Debt Management[18]

25. During 1998, a basic public debt management structure was established with the support of the World Bank's first Public Sector Structural Adjustment Credit. The legal status of the State and Entities regarding foreign borrowing has been clarified and upheld by the State Law on External Debt. This Law stipulated the creation of a debt service mechanism and the establishment of a state debt management office to carry out diverse tasks related to the settlement of the old debt and of the new borrowing. In addition, at the lower government level, each Entity adopted an Entity external debt law consistent with the State Law and each Entity Ministry of Finance created a Debt Management Unit

[17] It is important to bear in mind that Bosnia and Herzegovina's high debt-to-GDP ratio is partly due to the sharp output collapse after the war.

[18] This section is based on the Second Public Finance Structural Adjustment Credit, Report No. P-7318-BIH.

to monitor for timely payments and to record external debt flows and stock. A systematic and transparent debt servicing mechanism has been put in place, as well as a debt tracking system in the Ministry of Treasury. As a result, the State has been able to regularize its external debt service payments.

26. Both Entities have set basic rules for external borrowing at the lower levels of government. External borrowing at the Sub-Entity level is only allowed for investment purposes and its servicing cannot exceed 20 percent of the corresponding public agent's budget revenue. However, the existing Entity legislation on government borrowing does not include a provision for regulating domestic borrowing and guarantee issuance. Given the increasing fiscal needs and the incipient financial management of sub-Entity borrowers, of the existence of unregulated borrowing/guarantee issuance could add further pressure to already fragile public finances. Indeed, international experience has shown that an important factor that contributed to the accumulation of unsustainable levels of external debt was poor management and imprudent practices from debtor countries.

27. Therefore broadening the initial debt servicing and monitoring mechanisms between the State and Entities to establish clear guidelines for sub-Entity borrowing and reporting is critical for strengthening debt management capacity and ensuring fiscally prudent borrowing operations in Bosnia and Herzegovina. Presently, the authorities are working on the development of such guidelines for public sector borrowing building on the current legislative framework. These guidelines are intended to (i) establish a comprehensive debt reporting system extending reporting procedures to cover debt liabilities of all levels of government, public enterprises and social security funds; (ii) provide strong and transparent selection, budgeting and supervision procedures for loans and guarantees; and (iii) set up the procedures for borrowing policy coordination within the Entities.

28. With regard to the technical aspect of debt management, Bosnia and Herzegovina has only started its process to integrate its external debt databases countrywide. At present, the U.S. Treasury led technical assistance project for the establishment of a wide-area network between the three debt offices is moving slowly and has had some setbacks. The importance of a well functioning public sector debt database cannot be underscore. Prudent risk management of public debt can only be performed with an up to date and comprehensive external debt database. Moreover, sound fiscal policy can only be conducted with reliable information on the financial position of the public sector. Therefore, Bosnian authorities would need to pay increased attention to improving human and technical capacities of the current debt management systems at all levels of government and establish prudent policy coordination framework in the medium term.

C. EXTERNAL DEBT SUSTAINABILITY AND CREDITWORTHINESS

29. Bosnia and Herzegovina is at the crossroads of a transition towards sustainable development. To make this transition successful in a context of declining donor concessional flows, Bosnia and Herzegovina will have to manage a sizable adjustment in the external account and strengthen fiscal finances in order to sustain macroeconomic stability. Low levels of revenue collection, exports and FDI make the country almost

entirely dependent on official aid to cover fiscal and external imbalances under its currency board agreement. In this regard there is an urgent need to continue to raise domestic savings (and hence reduce reliance on external sources of savings) to support higher levels of private investment. The current levels of national savings at—1.6 percent of GDP is well below those required to sustain long-run growth.

30. To emphasize the importance and urgency of accelerating the structural reform agenda, two alternative macroeconomic scenarios, which differ in the level and/or adequacy of reform efforts, are evaluated. An invigorated full reform scenario is contrasted with the downside risk of a weak reform scenario. For each macroeconomic scenario, standard external debt sustainability indicators are assessed. In addition, the impact of harder borrowing terms on external debt sustainability is evaluated for each macroeconomic scenario. First, the risk of less concessional funding is evaluated by assuming that the financing gap is bridged at hardened terms, i.e. only interest bearing debt at concessional terms and no additional grants. Second, to illustrate the impact of commercial terms on long-term external debt sustainability, it is assumed that half of the financing gap is filled with commercial loans and the rest with concessional loans.

High Growth: Invigorated Reform Effort Scenario

31. A full reform scenario is built on the assumption that the government will take decisive actions to complete the systemic transformation of the economy, restructure and strengthen the management of public finances and ensure social sustainability in the medium term, as well as continuing the policy of price stabilization and the currency board arrangement. Sustaining Bosnia and Herzegovina's growth momentum, in the face of the prospective decline in both the level and concessionality of official financing, will require the private sector increasingly to provide the main impetus to economic activity. In turn, improving the performance of the private sector requires more decisive and faster actions.

32. Bosnia and Herzegovina has undertaken some significant economic and structural reforms that slowly have began to redefine the roles of the public and private sector, and initiated the transition towards a market-based economy. Nevertheless, the extent of the reforms implemented to date did not provide the stimulus for a private sector led growth that is less dependent on foreign assistance. The risk of doing business in Bosnia and Herzegovina is perceived to be too high by prospective investors, both local and foreign.[19] Among the factors, which continue to be an impediment for the development of the private sector, is the lack of a single economic space, large state involvement in the economy, poor legislative enforcement, lack of a sound and modern financial sector, and fragile public finances (see Box 1).

33. The country is not yet functioning as a single economic space. Regulations, institutions and economic policies differ across Entities. However, the authorities are increasingly convinced of the importance of developing a single economic space in improving the investment climate and supporting the emergence of a strong private

[19] See for example, FIAS (2000), "Bosnia and Herzegovina: Commercial Legal Framework and Administrative Barriers to Investment", and Financial Times (December 18, 2000) Survey - Bosnia and Herzegovina.

Box 1. Key Reform Challenges: Accelerating Private Sector Development

Governance/Public Administration/Fiscal:

- *Harmonization of Economic Policies, Laws and Institutions.* While some important steps have been taken to narrow the differences between the two Entities, the creation of a single economic space has not yet been accomplished. On the fiscal front, this would involve the need to address the problem of extreme fragmentation of the public sector and the limited policy coordination between governments on fiscal policy issues.
- *Governance*. Audit institutions at the State and Entity levels have been established to improve accountability and transparency in governance. Notwithstanding, there is still concern regarding corruption in Bosnia and Herzegovina. Authorities should design a strategy that would address this problem.
- *Budget Management.* Fully operational treasuries at the Entity level, which would improve the efficiency of public resource management, are yet to be established. Currently, Treasuries cover limited budget operations and lack of a single Treasury account system. In addition, there is the need for consolidating external financial management.
- *Social Protection.* In face of declining aid flows, social protection measures should be developed to ensure the fiscally affordable, equitable and efficient social services and cash transfer payments.
- *Expenditure Rationalization.* Design of a strategy for public expenditure rationalization in tandem with tax reforms aimed at improving tax compliance.

Financial Sector:

- *Bank Privatization.* Although recently the momentum has picked up, in general privatization and restructuring of the banking sector has been moving slowly. The banking sector still remains relatively concentrated with most assets in a small number of state-owned banks. The privately owned banks are undercapitalized and many of them reach only the statuary minimum level of capital.
- *Regulatory and Supervisory Agencies.* Banking agencies have been established, though at the Entity level. Additional remaining challenges are the establishment of a single deposit insurance agency and a single deposit insurance scheme. Such *single* institutions will ensure common licensing and prudential regulation throughout the country, as well as allow for uniform protection for depositors.

Business Environment[1]:

- *Trade Reform.* Liberalization of the trade regime has not yet been completed. Trade reform should be directed to eliminate the remaining barriers to exports and to reduce the dispersion of tariffs.
- *Privatization Process.* Large state-owned enterprises continue to dominate the economy. The latest take-off of the privatization process has to be kept up in order to further encourage private investment.
- *Commercial Legal Framework.* The layered constitutional and government structures create a climate of complexity in the current commercial legal framework. The old Yugoslav Law has not been repealed and superimposes in some cases the new Commercial Law. Legal resources should be used to ensure consistency between laws at all levels, and improve the company laws with broader rules of corporate governance, modern bankruptcy and liquidation standards and procedures. Enforcement mechanisms are in need of most urgent attention to support an environment conducive to private sector development.
- *Administrative Barriers.* The existing process for business registration and establishment is too lengthy, costly and complicated. Reform in this area would contribute to the reduction of barriers to entry and exit of firms. Bankruptcy legislation is still under preparation.
- *Public-private sector dialogue.* The current State Law should be amended so to allow for the formation of voluntary business associations across the whole of Bosnia and Herzegovina.

1/ A "Business Environment Adjustment Credit" has recently been proposed by the World Bank, which will provide funds to support the Government's efforts to reform the business environment and help further a single economic space. Some of the issues mention here will be addressed under this operation.

sector.[20] Accelerating the privatization and restructuring the remaining state-owned enterprises and banks are important means for encouraging private investment. The banking sector is still plagued with insolvent banks and dominated by state-owned banks. Currently, the existing banking system is not providing the financial intermediation services needed for supporting private sector growth.

34. Small and medium enterprises (SMEs) face not only a difficult business environment but also financial constraints. Financing available from local banks for working capital is very costly, with interest rates as high as 60 percent on short-term credits and 24 percent on long-term credits. The recent entry of foreign investors in the banking sector is expected to increase the competition and probably improve the borrowing terms for SMEs. In addition, reform efforts in the commercial legislative and enforcement areas are needed to boost the confidence of local and foreign investors. Investors face many constraints in the business environment. Enforcement of laws, enforcement of contracts, and enforcement of court decisions are exceptionally poor and reflect inadequacies of the whole legal system. In addition, administrative barriers such as lengthy business registration and licensing procedures do not facilitate the entry of competitive business.

35. Finally, in the fiscal area, complex issues are still being addressed. Most importantly, fiscal imbalances are too high and raise the question of sustainability in the medium term. Decisive actions are needed in the near term to reduce government expenditure and to contain and streamline the fiscal costs of the social benefits system. In addition, fiscal policy goals should be such that they are supportive of private sector-led growth. The current overall tax burden on the economy is too high and hampers the competitiveness of the private sector.

36. If the structural reforms needed to build an entrepreneurial society are implemented (See Box 1), Bosnia and Herzegovina is likely to be able to sustain a growth rate of 6 percent per year for the next decade. This growth would be driven by the private sector –private investment and export growth- as the public reconstruction program is gradually winding down. Under the assumption of an improved private sector environment and more modern financial sector, Bosnia and Herzegovina's external sector will be able to operate on a more competitive ground. Increased domestic and foreign direct investment would support the expansion of the export base, which has been recovering only slowly due to the lack of structural reforms in the areas of financial services and private sector environment. The recovery of Bosnia and Herzegovina's trade performance augurs well if these main constraints to export growth are addressed in an aggressive manner. The regulatory framework is already in place, as the country's foreign trade regime is quite liberal: in 2001, the un-weighted average tariff was 6.8 percent and four tariff bands of 0, 5, 10, and 15.[21] Moreover, by assuring that the

[20] For the first time State and Entity governments have taken the initiative to develop their own medium-term strategy and drafted a *Global Framework of Economic Development Strategy of Bosnia and Herzegovina,* which stresses the need for establishing a self-sustaining economy through the development of the private sector, recognizing that foreign assistance will decline in the near future.

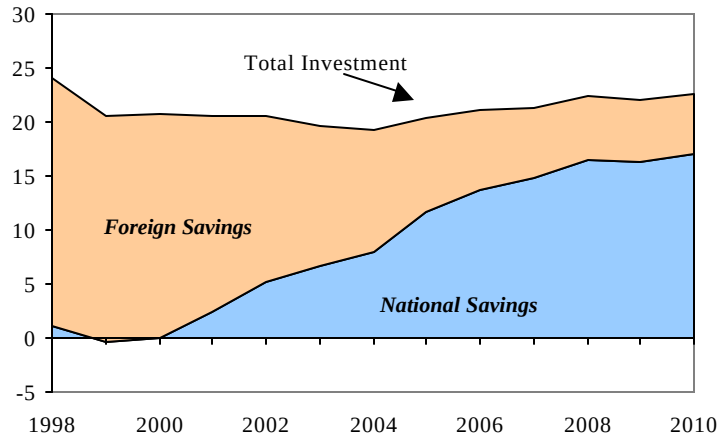
[21] This excludes specific duties on some agricultural products. Bosnia and Herzegovina's level of average tariff compares favorably with the rates of other countries of the region: Albania 12 percent, Croatia 12.4 percent, Former Republic of Yugoslavia 13.4 percent, Slovenia 12.2 percent and Macedonia 16.5 percent. See, Michalopoulos, "The Western balkans in World Trade: An Essay in Memoriam of Bela Balassa", draft, Mimeo, October 2001.

external sector operates on a more competitive basis it can benefit further from the trade opportunities that it currently enjoys with the European Union.

37. Under this scenario Bosnia and Herzegovina will restore its pre-war level of GDP by the end of the decade. To sustain a growth rate of this magnitude, the investment-to-GDP ratio is projected to remain at an average of 21 percent throughout the decade. The composition of public/private investment would gradually change over time. Public investment will drop from 16 percent of GDP in 2001 to 10 percent in 2010. Private investment will increase steadily from 7 percent of GDP in 2001 to 10 percent in 2010 in response to a more favorable investment climate. Overall, productivity of capital is assumed to improve over the decade.

38. Improvements in both public and private savings will strengthen national savings, which will turn positive starting 2001 and reach 14 percent of GDP by the end of the decade. Current transfers and factor incomes will continue to be important contributors to private national savings, although the strengthening of domestic savings will gradually reduce Bosnia and Herzegovina's reliance on external inflows. The major composition of the national saving will be changed, as large donor support will gradually phase out while domestic savings rate increases.

Chart 4. Savings –Investment Balance Projections, 1998-10 (in % of GDP)



39. As noted, key to bringing the current account deficit to sustainable levels will be export performance, as the downward adjustment in imports related to reconstruction will be compensated to some extent with higher imports related to productive activities. A potentially large financing gap from 2002 onwards, however, indicates an urgent need to strengthen the adjustment effort and mobilize donor support given that Bosnia and Herzegovina is still not ready to borrow on commercial terms.[22] A more vibrant and strong outward-oriented private sector would contribute to lowering the current account deficit, as well as promote the growth of foreign direct investment. With a growth rate of exports of goods and service of 9 percent per year, the current account balance could be brought down from 18 percent of GDP in 2001 to 5 percent of GDP in 2010.

40. Based on the past composition of external financing, whereby two thirds of donors' assistance has been disbursed in the form of grants, it was assumed that starting 2001, half of new foreign assistance would be provided in the form of grants and the rest

[22] A six-donor conference is expected to take place during the spring of 2002 to confirm the existing commitments and mobilize further bilateral support for the coming years.

on concessional terms. Although there is no exact formula to project the concessionality of new financing available to Bosnia and Herzegovina, this assumption allows for a smooth transition to a sustainable external balance.

External Financing Requirements under the Full Reform Scenario

41. Table 6 summarizes the projected financing needs and sources based on assumptions discussed previously. The non-interest current account will improve during the second half of the decade reflecting the combination of sound domestic policies, improvement in the investment climate and lower, but still substantial, flows of concessional financing. Debt service requirements become larger between 2005-2010 reflecting increased principal payments to international financial institutions and due to the rescheduling of part of the unallocated debt inherited from the former-Yugoslavia on commercial terms.[23] Reserves are assumed to remain at an average of 2.7 months of imports, which adds approximately US$530 million to the country's financing needs. The projected financing requirement includes, in addition, the scheduled net amortization payments to official and commercial creditors, suppliers and private non-guaranteed debt.

42. Our analysis indicates that Bosnia and Herzegovina's total gross financing needs over the period 2001-2010 remain large at roughly US$10 billion. The *financing gap,* which has been computed after accounting for *expected disbursements* on existing and new commitments from official sources, indicates that additional financing needs are US$3.2 billion for the projection period. External financing requirements would need to be met by increased borrowing by the public and (gradually) by the private sectors, as well as by non-debt creating flows such as foreign direct investment and continued grants.

Table 6 Bosnia and Herzegovina's Financing Requirements and Sources, 2001-2010
Full Reform Scenario, cumulative in US$ million

	Actual	Projection			Actual	Projection	
Total requirements	**1996-2000**	**2001-05**	**2006-10**	**Sources**	**1996-2000**	**2001-05**	**2006-10**
1. Non Interest CAD	5,092	3,533	2,677	1. Private	**340**	**1,345**	**2,120**
2. Interest Due	703	521	858	Foreign Direct Investment	340	1,100	1,420
				Private Sector Commercial	0	245	700
3. Amortization due, of which	480	355	983	2. Official	**6,756**	**2,610**	**1,332**
Multilateral	45	277	399	Multilateral	1,105	879	470
Bilateral	58	52	71	IBRD	0	0	225
Commercial	87	26	317	IDA	556	504	145
Gap Fill	0	0	194	IMF	872	150	100
				Bilateral	55	115	0
4. Gross reserve build up	556	192	336	Grants and Off. Transfers	4,168	962	392
				3. Other credit net[1]	1,119		
				4. Financing Gap	0	**1,300**	**1,871**
Total (1+2+3+4)	**6,831**	**4,601**	**4,853**	**Total (1+2+3+4)**	**6,831**	**4,601**	**4,853**

Note. 1/ Includes debt rollover/relief, changes in NFA in commercial banks, and errors and omission.

[23] US$400 million of arrears correspond to claims on BiH banks for guarantees provided for construction work that has not been completed, primarily from Libya. By the time this note was prepared, we were informed that the rescheduling of this debt was in the process of being resolved.

43. Based on the premise that reform efforts materialize and improve considerably the investment climate, a sharp increase in private capital inflows compared to previous years can be expected. These private capital inflows would provide roughly 35 percent of the financing requirements for the next decade. Foreign direct investment is projected to increase more than three times, from only $340 million during 1996-2000 to $1,100 million during 2001-05. Similarly, with a more favorable business environment the emerging private sector is projected to gradually gain access to commercial foreign financing --an average of $50 million per year during the next five years, and $140 million for the rest of the decade. This implies a major improvement as in the past, the private sector has had limited access to foreign financing, which have only been provided under public guarantees and by multilaterals or NGOs.

44. Even with this substantial increase in private capital inflows, substantial inflows of official finance will still be required. Out of the $6 million official financing projected, only $2.8 million are resources available from existing commitments from multilateral and bilateral creditors. The rest of the financing gap, which has been assumed to be provided on concessional terms, would have to be identified. The projected foreign borrowing on concessional terms is justified, as multilateral and bilateral institutions would be willing to continue to support the country's economic rehabilitation and the program of institutional and structural reforms. While the volume of grants and concessional lending available to Bosnia and Herzegovina can be expected to decline in the future, it should not vanish completely even in the long term.

45. The simulations had assumed a continuation of the donor community support, albeit at lower rates than in the past. During 2001-06, grants would amount to 42 percent of that realized in 1997-2000 while concessional lending would amount 82 percent in the same period. Bilateral creditors should gradually replace the reliance of new financing on almost exclusively multilateral institutions. If bilateral creditors/investors were to bridge the financing gap, their share in total disbursement could increase to 55 percent from 21 percent in 2000. This would allow the ratio of preferred creditor in total debt to decline from 44 percent in 2000 to 38 percent in 2010, although still above the recommended 35 percent exposure ratio.

Table 7 Required Debt Flows: Full Reform Scenario
(In millions of $)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Disbursements	369	418	423	372	322	345	378	406	468	525
Multilateral	202	198	181	151	103	99	91	90	95	95
of which: IDA	113	107	102	86	53	69	41	25	10	0
IBRD	0	0	0	0	0	10	30	45	65	75
Private and short-term debt	25	35	45	60	80	100	150	150	150	150
Other (incl. financing gap)[1]	142	185	197	161	139	146	137	166	223	280

1/ Includes only the debt component of the financing gap.

46. The initial exceptional IDA amounts have been justified on the basis of Bosnia and Herzegovina's extraordinary post-conflict circumstances, continued strong macroeconomic performance, progress on reconstruction and the demonstrated ability to capitalize these resources, as well as the fact that achieving creditworthiness took longer

than originally anticipated under the early donors' conference. During the projection period it is assumed that IDA availability will diminish to levels comparable to those of other eligible recipients. Nevertheless, in the near term, IDA will remain the most important source of official financing (see Table 7). As the country progresses towards achieving creditworthiness, it is assumed that it can resume IBRD lending by 2006, although starting at very moderate levels.

Deceleration of Growth: Truncated Reform Effort Scenario

47. Contrasting with the full reform scenario is a status quo scenario, which assumes that the government would not demonstrate decisive political will to accelerate the implementation of a package of far-reaching structural measures to ensure self-sustained growth. Under this scenario the slow reform pace of the 1990s is continued and public finance reforms and the privatization process are delayed. As a result, economic activity would slow, as the private sector would not sustain the economy's growth momentum, when the growth impulse arising from public investment abates. The lack of political will to accelerate reforms would adversely affect the business climate, leading to a lack of growth in domestic, and, in particular in foreign investment inflows. As a result, annual GDP growth is assumed to average two percentage points lower than the full reform scenario.

48. Under this scenario, inadequate progress on structural reforms in the near term would engender a vicious circle of stagnant domestic revenue performance along with significantly lower levels of donor assistance. As fiscal reforms are deferred, low tax revenues will exacerbate pressures on public finances. The increasing fiscal fragility and lower donor financial support would severely constrain development expenditures. Furthermore the strategic reallocation of expenditures will only be limited, which will further delay prospects for economic recovery. In the near term, the current account deficit would remain at levels that would make the external debt dynamics unsustainable and restoration of the country's creditworthiness is postponed.

External Debt Sustainability: Trends in Indicators

49. In assessing a country's creditworthiness potential, external debt sustainability analysis is generally based on three key determinants: (i) the existing stock of debt and its repayment terms, (ii) fiscal and external repayment capacity; and (iii) the growth, composition (mix of loans and grants) and terms of new external financing. Several debt ratios have been developed to help indicate potential debt-related risks. Nevertheless, there are few clear-cut benchmarks for debt ratios due to conceptual difficulties since factors affecting debt sustainability are related to domestic and external policies, which are unique to each country. Box 2 discusses some critical values used in the literature for debt sustainability indicators.

Box 2 Debt Indicators for Sustainability Analysis

Within the external vulnerability literature, several indicators have been used to measure debt sustainability. The most common are those related to stock concepts and debt service concepts relative to variables associated with a country's potential repayment capacity. Debt-to-GDP and debt service-to-GDP ratios compare the debt burden to the country's ability to generate income. Debt-to-exports and debt service-to-exports ratios are used as indicators of potential external liquidity problems. The scope for identifying critical ranges for these indicators is limited. Nevertheless, one can find some benchmarks that can be used as reference to evaluate a country's long-term debt sustainability.

- Cohen (1997)[1] has done some empirical work on the solvency of the public sector. Based on whether or not a country has been subject to rescheduling, Cohen estimates critical points for debt-GDP ratio of 50 percent, debt-exports ratio of 200 percent and debt to tax ratio of 290 percent. He found that above this benchmarks the risk of rescheduling exceeds 60 percent. His study, however, covers a wide range of countries with different composition of external debt (public vs. private, short term vs. long term).
- Assistance under the Heavily Indebted Poor Country (HIPC) initiative is determined on a set of debt indicators targets[2]. The threshold for debt sustainability under the HIPC framework are defined as an NPV of debt-to-exports ratio of 150 percent and a debt service ratio of 15-20 percent. For countries with revenues-to-GDP ratio of 15 percent and exports-to-GDP ratio of 30 percent, the fiscal window is 250 percent NPV debt-to-revenue.
- Finally, the World Bank defines an income and indebtedness classification criteria based on NPV of debt-to-GDP and debt service-to-exports of goods and services (XGS) ratios. If either ratio exceeds a critical value-80 percent for debt-to-GDP ratio or 220 percent for debt-to exports of goods and services (XGS) ratio-the country is classified as heavily indebted. If the ratio does not exceed either ratio but is 3/5 or more of the critical values (48 percent and 132 percent, respectively), the country is classified as moderately indebted.

1/ Cohen, D. "Growth and External Debt: A New Perspective on the African and Latin American Tragedies", Center for Economic Policy Research, Discussion Series No. 1753.
2/ See "The Initiative for Heavily Indebted Poor Countries, Review and Outlook", DC/98-15, September 22, 1998, http://www.worldbank.org/hipc/hipc-review/hipc-review-and-outlook.pdf.

50. As noted above, we have analyzed Bosnia and Herzegovina's long term sustainability under the assumption that half of donors' assistance is provided in grants and half under concessional terms. Table 8 shows a comparison of Bosnia and Herzegovina's long-term debt sustainability indicators under a full reform scenario vis-à-vis indicator of developing countries and HIPCs as summarized in Box 2. The most notable outcome of this analysis is that, in average, the projected NPV debt-to-GDP ratio is closer to that of non-HIPC developing countries. However, the debt service and NPV debt-to-export ratios are closer to that of HIPCs. This highlights both the difficulties of attaining external sustainability in a concerted reform scenario, even with substantial concessional official inflows, and the potential external liquidity problems that Bosnia and Herzegovina could be subject to if exposed to unexpected external shocks.

Table 8 Debt Indicators in Developing Countries and HIPCS
In percent, sustainable thresholds in parenthesis

	Developing Country Average	Non-HIPC Developing Countries	Heavily Indebted Countries	Bosnia and Herzegovina			
	1999			2005	2010	2005	2010
				full reform		*weak reform*	
NPV of debt-to-GDP ratio	38	36	84	40	36	52	57
NPV of debt-to-exports ratio	133	128	249	160	147	231	264
Debt Service-to-exports ratio	20	21	14	11	15	15	25

Sources: Global Development Finance, World Bank, Decision Point Documents for 22 HIPCs, and own calculations for Bosnia and Herzegovina

External Debt Sustainability: Trend in Indicators

51. Table 9 summarizes a detailed set of indicators of external debt sustainability. Despite the assumption of a steady recovery of the export base in the full reform scenario, indicators of trends in repayment capacity remain fairly weak and show a temporary deterioration in the near term. The later mostly explained by the fact that during the first two years of projections, the extent of the projected decline in concessionality of aid flows cannot be matched even with a strong external adjustment: by 2002, the NPV of debt-to exports of goods and services ratio peaks at 192 percent, increasing by about 30 percentage points compared to 2000. Starting in 2003, this ratio improves steadily until it falls below the 150 percent critical threshold for debt sustainability in 2010.

52. Debts service burden ratios both relative to exports of goods and services and to fiscal revenues remain moderate at 11 percent and 7 percent respectively until 2006. However, the liquidity indicators deteriorate towards the end of the projection period and in the case of debt service-to exports ratio it surpasses the critical threshold. External debt service reaches 15 percent of exports by 2009. The upward trend in debt service is an expected outcome as principal repayments on past obligations and rescheduled debt are coming due during the projection period. Nevertheless, it is worth noting the quick deterioration in debt service burden indicators in spite of the assumed sustained growth, deeper reforms and the continuation of official foreign assistance in concessional terms.

Table 9 Bosnia and Herzegovina: External Debt Indicators, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
FAST REFORM SCENARIO											
Total DOD (US$ mln)	2,927	3,270	3,625	3,567	3,850	4,094	4,325	4,548	4,757	4,993	5,248
Total Debt Service (US$ mln)	130	109	154	183	216	214	260	315	371	420	475
Total DOD to GDP (%)	66.6	68.0	69.3	62.0	61.1	59.3	57.2	54.9	52.5	50.3	48.4
NPV to GDP (%)	44.4	45.9	47.0	40.3	40.3	40.0	39.3	38.7	37.8	37.0	36.3
NPV external debt to XGS* (%)	160.1	180.2	191.5	165.4	164.5	160.4	154.9	150.7	147.7	147.2	147.4
NPV of government debt to fiscal revenues (%)	89.6	102.7	108.5	111.5	111.8	110.0	106.5	102.0	98.0	95.5	93.9
TDS external debt to XGS (%)	7.0	8.3	10.9	11.6	12.2	10.8	11.9	13.2	14.4	15.4	16.0
TDS government external debt to fiscal revenues (%)	6.0	6.2	7.3	7.2	6.9	6.4	7.6	8.1	8.3	8.5	8.5
TRUNCATED REFORM SCENARIO											
Total DOD (US$ mln)	2,927	3,360	3,833	3,915	4,375	4,809	5,249	5,743	6,164	6,583	7,016
Total Debt Service (US$ mln)	130	112	161	194	232	232	288	354	417	475	534
Total DOD to GDP (%)	66.6	69.9	74.1	70.2	72.8	74.3	75.3	76.4	76.1	75.5	74.6
NPV to GDP (%)	44.4	48.7	51.9	47.4	50.1	52.2	53.8	55.6	56.4	56.9	57.2
NPV external debt to XGS* (%)	160.1	192.0	215.7	203.4	220.4	231.0	239.1	249.0	255.0	259.7	263.6
NPV of government debt to fiscal revenues (%)	89.6	106.6	119.7	132.1	143.3	152.3	159.2	167.4	172.3	176.0	179.1
TDS external debt to XGS (%)	7.0	8.9	12.6	14.2	15.9	14.8	17.2	19.8	21.9	23.3	24.6
TDS government external debt to fiscal revenues (%)	6.0	6.4	7.9	8.2	8.4	8.4	10.6	12.3	13.6	15.0	16.1

Chart 5 External Sustainability: NPV/XGS

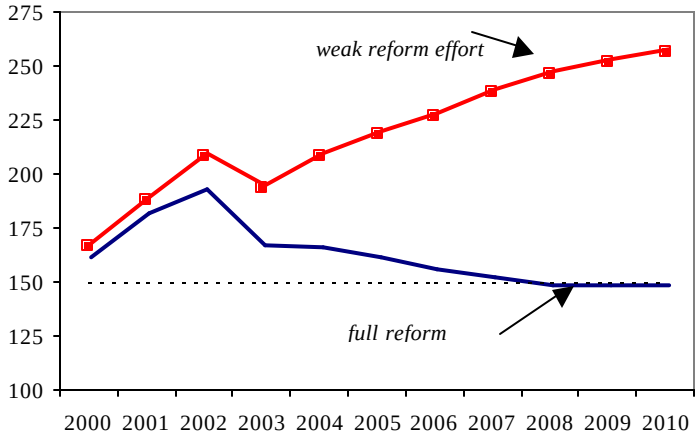
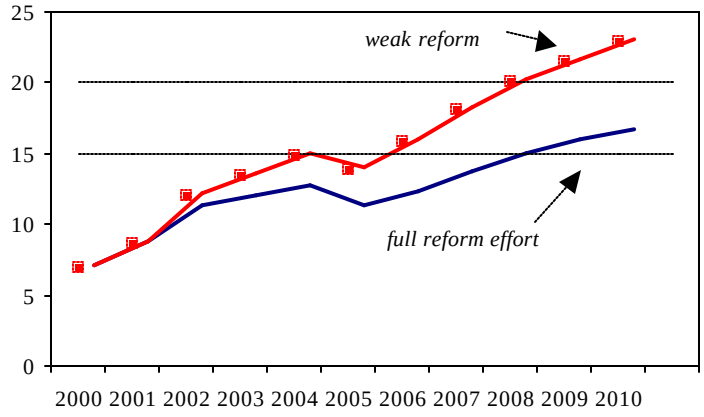


Chart 6 External Liquidity: Total Debt Service/XGS



* Dashed lines represent HIPC thresholds.

Chart 7 Fiscal Sustai nability: NPV of Debt to Budget Revenue Ratio

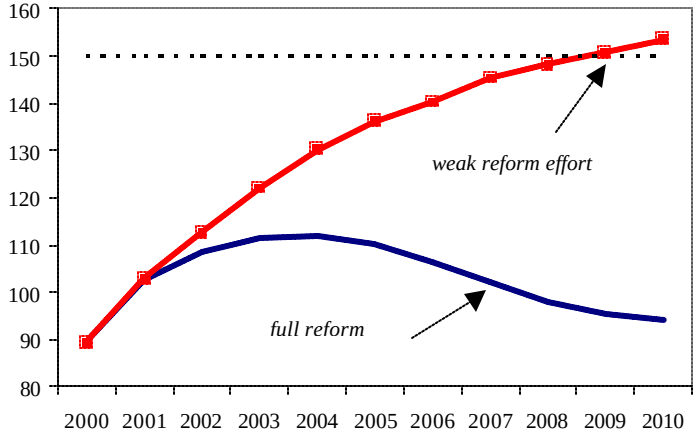
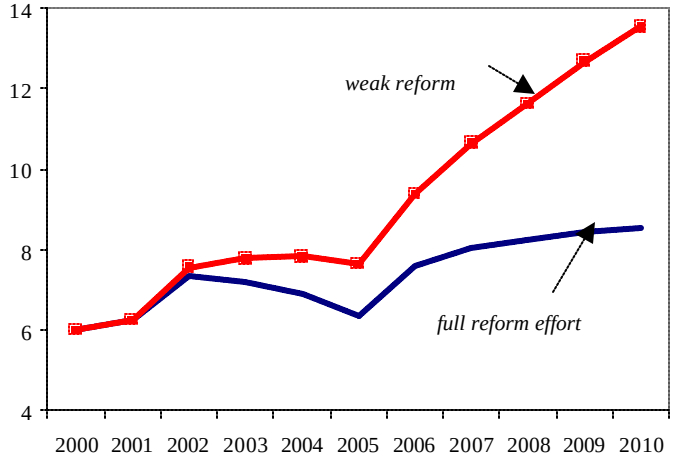


Chart 8 Fiscal Liquidity: Total Debt Service to Budget Revenue Ratio



Sensitivity of the Debt Indicators to Reform Scenarios

53. Deeper and faster reform efforts would allow Bosnia and Herzegovina to move towards improved creditworthiness and external sustainability by mid-decade and to slowly exit the aid dependency cycle, as most of the debt stock indicators under the full reform scenario exhibit a declining trend. Liquidity indicators, such as the debt service burden, would most likely show an increasing trend, although not reaching worrisome levels. By contrast, under the weak reform scenario, debt indicators, stock or liquidity ratios, show an explosive trend and surpass the levels at which other countries have been forced to reschedule or accumulate arrears.

54. Falling short of the growth projections assumed under the full reform scenario and the inability to maintain robust export expansion has a significant impact on the Government's ability to service its debt. Past experiences on low and middle income countries have shown that public debt difficulties can arise even before the ratio of debt to GDP reaches unsustainable levels. The costs of weak or inadequate reform effort in the near future are high: insufficient levels of domestic savings, low levels of FDI, lower external assistance, slower growth and the risk of forcing additional economic adjustment.

55. Trends in debt sustainability indicators for the two macroeconomic outlooks suggest the following:

- First, although for both scenarios the debt-to-GDP ratio improves over the decade, under the assumption of a weak reform effort, the debt-to-GDP ratio remains at relatively high level. The assumption of the bulk of new external borrowing on concessional terms implies that the projected growth rates in both scenarios are well above real external interest rates, which helps to stabilize the debt-to-GDP ratio. Under the full reform scenario, total external debt outstanding as a share of GDP declines steadily from 67 percent of GDP in 2000 to 48 percent of GDP in 2010. Similarly, the market value of debt (i.e., measured in net present value terms,) relative to GDP decreases from 44 percent in 2000 to 36 percent in 2010. A weaker reform effort results in an increase of 9 percentage points in the NPV debt–to-GDP ratio, reaching at 57 percent by the end of the decade—a worrying level;
- Second, the NPV of debt-to-exports ratio, an indicator of the burden of debt relative to the availability of foreign exchange, shows a sustainable trend only under the full reform scenario. A weaker reform effort translates in a NPV of debt-to-exports profile above 200 percent for most of the projection period, close to the ratio at which other countries have been forced to reschedule. Similarly, a favorable macroeconomic environment and fiscal stance, stabilizes the ratio of NPV of external debt to fiscal revenues at 100 percent. By contrast, under the truncated reform scenario, the government external debt to fiscal revenue ratio shows an increasing trend; and
- Finally, debt service burden ratios both relative to exports of goods and services and to fiscal revenues under the full reform scenario, although showing an increasing trend, remain below unsustainable thresholds. By contrast, a lower export growth and delayed fiscal adjustment results in debt servicing ratios not only quickly

increasing throughout projection period but also dangerously close to unsustainable levels.

56. Finally, the truncated reform scenario has shown that external debt indicators reach quickly unsustainable levels, having significant negative implications for the country's creditworthiness, solvency and the sustainability of current account imbalances. It is important to highlight that the debt sustainability exercise aimed to compare the outcomes of two different reform scenarios in the medium term. However, if Bosnia and Herzegovina cannot raise the amount of external financing assumed under the weak reform scenario, it would be forced to undertake an even larger domestic and external adjustment than what has been assumed. A forced adjustment, which is not accompanied by the necessary policies to address the current vulnerabilities, would have further negative impact on growth prospects and on the hard-won gains already made towards political stability.

The Impact of Harder Borrowing Terms

57. The above sustainability analysis has assumed a continuation of foreign assistance in which the financing gap is bridged with grants and concessional lending. To evaluate the impact of harder borrowing terms arising from higher risk premium due to political factors or unforeseen shocks, we have also simulated the effect of hardened financing terms. As expected, in both scenarios, hardening the terms and concessionality of new borrowing has a pronounced negative impact on debt servicing ratios, as well on debt stock ratios.

Table 10 Impact of Harder Borrowing Terms
Average 2001-10

	Ratio of NPV External Debt to		Ratio of Debt Service to	
	Exports of Goods and Services	Central Government Revenue	Exports of Goods and Services	Central Government Revenue
Full Reform Scenario				
100% Concessional Lending	188.4	117.8	15.4	9.5
50% Commercial Borrowing	212.1	142.6	18.5	13.2
Truncated Reform Scenario				
100% Concessional Lending	237.7	153.4	19.0	12.1
50% Commercial Borrowing	251.1	164.2	22.9	15.5

58. It is particularly worthwhile to note that if grants are replaced by official concessional finance, i.e. the mixed is changed from 50 percent grants and 50 percent concessional finance to 100 percent of the latter, debt ratios do not reach sustainable levels. Indeed, under this scenario, Bosnia and Herzegovina is projected to have persistently high long-term debt ratios (above 190 percent of exports for most of the next 10 years), well above the HIPC thresholds (see Box 2). The impact on the fiscal ratios is even more dramatic, ranging from a 7 percentage point increase in the debt service relative to government revenues in the next 5 years to 14 percentage points in the outer years, compared to 6 percent ratio of debt service to government revenues in 2000.

59. For illustrative purposes, it was assumed that Bosnia and Herzegovina would have access to commercial lending and be able to finance half of the gap by borrowing on commercial terms (LIBOR, with a 10 year maturity and 3 years grace period). Clearly, as seen in Table 11, this assumption places external debt indicators on an explosive trend. By 2010, the NPV-to-exports ratio surpasses 225 percent, becoming a "heavily indebted country" according to the World Bank classification. Similarly, debt service ratios reach levels unsustainable—as high as 28 percent of exports of goods and services and 19 percent of fiscal revenues later in the projection period.

60. This stress testing exercise suggests that even with a vigorous domestic reform effort, the availability of foreign assistance falls short of expectations, Bosnia and Herzegovina would need to accept a temporary deceleration of growth rather than attempting to maintain rapid growth with non-concessional borrowing. Given the current external and fiscal fragility, Bosnia and Herzegovina needs to continue to maintain a prudent external borrowing strategy, keeping a cautious approach to non-concessional borrowing.

D. GOVERNMENT SOLVENCY AND SUSTAINABLE DEBT

61. The previous analysis has focused on one aspect of Bosnia and Herzegovina's creditworthiness outlook. However, the fragile fiscal position creates additional risks to debt sustainability and the country's creditworthiness. Room to accommodate fiscal risks is limited. First, both Entities' budget revenues, although substantially improved since the end of war, have fallen well short of supporting current expenditures, with the entire deficit financed by external budgetary support. Until recently, foreign support has come largely in the form of grants. As concessional lending and grant assistance are likely to decline in the near future, domestic resources would have to accommodate for this decline. Second, while the currency board agreement has helped in achieving macroeconomic stability, it limits the options for deficit financing as by definition a country with a currency board loses seignorage collection and cannot issue domestic debt.

62. Although the long-term debt sustainability analysis was performed from the point of view of balance of payments gap filling, one cannot ignore the impact that the assumed path of new external financing will have on public finances. So far, external debt burden indicators have been evaluated for the country as a whole. In order to assess fiscal implications of external debt burden by Entity, new borrowing in Table 11 has been allocated approximately two-thirds to the Federation of Bosnia and one-third to the Republika Srpska. This allocation is reflected also on the debt service projections—it should be noted that for the old IBRD debt, actual Entity debt service profiles were used, which are almost equal between the Entities (see table 11). For the whole economy, the fiscal burden of debt servicing has been moderately high at 15.3 percent of tax revenues in 2000[24]. The fiscal burden has so far been higher in the Federation. As shown in the

[24] For example, Bolivia, a country with similar per capita income showed a debt service-to-tax revenue ratio of 15.9 before HIPC relief, 1998-99. After HIPC relief (2001-03) debt service ratio is projected to decrease to 9.0 percent. After HIPC debt relief, all 22 countries are projected to have a debt service ratio below 15 percent, with most countries in the single digits.

table below, however, as the grace period of IBRD consolidated loan has almost been finalized, the projected debt service burden for the Republika of Srpska will become more similar to that of the Federation starting in 2002 (see table 11).

63. Assessing fiscal sustainability in Bosnia and Herzegovina poses several challenges. First, official consolidated balances of the public sector are not available, which makes it very difficult to estimate the true fiscal stance. In addition, current indicators of fiscal stance in Bosnia and Herzegovina reflect a transitional state while the assessment of long-term fiscal sustainability requires assumptions of the steady state of the economy. Nevertheless, one can (i) roughly estimate the consolidated fiscal position of the public sector, although this estimate may underestimate the actual position due to difficulty in capturing some off-budget expenditures; and (ii) use a standard fiscal sustainability exercise to evaluate the fiscal gap in line with the external debt projected in the previous section and use the results as reference points.

Table 11 Debt Service Projections, By Entity
(In millions of US$)

	2001		2002	
	Federation of Bosnia and Herzegovina	Republic of Srpska	Federation of Bosnia and Herzegovina	Republic of Srpska
Total	59.0	36.9	79.2	50.3
In percent of GDP	1.2	0.8	1.5	1.0
Of which:				
IMF	10.4	5.2	16.0	6.3
World Bank-IBRD	19.8	21.4	27.2	29.5
World Bank-IDA	3.4	1.1	3.8	1.2
EBRD	4.3	1.8	6.1	2.9
Paris Club	16.0	4.4	15.8	5.3
London Club	1.6	0.8	1.6	0.8
Memo Item:[1]				
Total debt service as % of tax revenues.	18.1	15.0		
Total debt service as % of Entity GDP.	2.0	3.0		

1/ Assumes that the share of tax revenue to remains as in 2000.

Source: Bosnia and Herzegovina State Treasury, based on debt disbursed as end of 2000.

64. As shown in Table 12, estimated consolidated fiscal deficits have been running at rather high levels—18 percent of GDP in 1999 and 16 percent of GDP in 2000. In line with currency board rules, consolidated fiscal deficits so far have been almost entirely financed by foreign aid/credit flows. The trend in the stock of public debt, however, does not reflect the high levels of public deficits as part of these deficits have been financed with non-debt accumulating flows (grants). It is important to bear in mind that Bosnia and Herzegovina's consolidated fiscal imbalances have been driven mostly by reconstruction efforts. As reconstruction phase is reaching its end, a decline in public expenditures is expected in the near future. The public expenditure ratio to GDP at 16 percent in 2000, which is mostly externally financed, is particularly high by international standards. As noted in the previous section, a natural decline in public investment to levels of 10 percent by the end of the decade is most likely to occur. In parallel, as public

expenditure management is strengthened and revenue collection is improved, public investment needs would be met increasingly by domestic resources.

Table 12 Consolidated General Government
(In percent of GDP)

	1998	1999	2000	2001 (projection)	2002 (projection)
Total Revenue	43	48	47	46	45
Total Expenditure	60	66	63	60	56
Current Expenditure	43	48	47	46	44
Capital Expenditure	17	18	16	14	12
Domestically financed	2	2	2	2	2
Foreign Financed	15	16	14	12	10
Primary Balance	-15	-17	-14	-12	-9
Overall Balance before grants	-17	-18	-16	-14	-11
Grants	12	13	11	7	5
Overall Balance after Grants	-5	-5	-5	-7	-6

Source: IMF and data provided by Bosnia and Herzegovina authorities.

65. The continuation of the large fiscal imbalances in a context of declining foreign aid would not be possible without the risk of recurring to arrears accumulation or cutting expenditures in areas that would have a social impact. Therefore, it is important to assess the extent of the correction necessary to establish a fiscal position conducive to government solvency and in line with available future foreign financing. To perform such an assessment, it is necessary to evaluate the government's available financing sources in the long term. Conceptually, there are three sources for financing public sector deficits: issue of (net) foreign debt, issue of domestic debt, and seignorage collection through money printing. In the case of Bosnia and Herzegovina, the currency board framework rules out printing money and issuance of domestic debt. Consequently, the resources that can be raised are determined by imposing a simple requirement: in the long run the stocks of public debt cannot rise faster than the external resources available to service them. The growth rate of such resources can be approximated by the rate of real GDP growth and therefore this requirement amounts to imposing a constant ratio of public debt to GDP in the long term. Under such a condition, the financing that can be raised from additional debt issue in the long run equals the rate of nominal GDP growth times the debt-to-GDP ratio.

66. A methodological issue concerns Bosnia and Herzegovina's public debt. As noted before, a large fraction of the outstanding external liabilities of the public sector has been contracted at highly concessional terms, rather than at market terms. Conceptually, the acquisition of a given volume of liabilities at concessional terms amounts to the issue of certain (smaller) volume of debt at market terms coupled with the receipt of a unilateral transfer (a grant). Thus, to calculate the financeable deficit two adjustments need to be made. First, the grant component of the existing concessional public debt stock should be extracted from the outstanding debt figures to arrive at a market-terms equivalent debt volume. Second, an assessment should be made of the volume of implicit and explicit grants that the country might continue to receive over the long term.

Table 13 Sustainable Primary Fiscal Deficits under Alternative Assumptions
(In percent of GDP)

Nominal US$ Interest Rate on New Debt	Real GDP Growth Rate				
	6.0	**5.5**	**5.0**	**4.5**	**4.0**
6.3	3.11	2.98	2.85	2.72	2.60
8.0	2.53	2.40	2.27	2.14	2.01
10.0	2.02	1.89	1.76	1.62	1.49
12.0	1.51	1.38	1.24	1.11	0.97
14.0	1.00	0.86	0.73	0.59	0.45

Assumptions

Domestic Inflation Rate	4.0
Foreign Debt Stock/GDP	36.6
Foreign Reserves/GDP	9.0
Foreign Grants/GDP	2.0

Source: Staff estimations.

67. The simulations summarized in Table 13 provide a rough assessment of the sustainable public deficit ratios required to stabilize the debt to GDP ratio over the long term, at different growth and interest rates. The underlying assumptions of these scenarios are common: domestic inflation is assumed to remain stable at 4 percent; external inflation is assumed to equal 2 percent per year; foreign exchange assets are assumed to stabilize at 9 percent, and grants will continue to accrue at 2 percent per year. The real interest rate on foreign debt is assumed to be equal to the difference between the nominal rate and foreign inflation. Finally, the nominal exchange rate is assumed to depreciate (vis-à-vis the US$) at a rate equal to the domestic-foreign inflation differential, to maintain the real exchange rate unchanged in the long run[25].

68. In line with the discussion from the previous section on debt sustainability, the debt to GDP ratio has been assumed to stabilize at the levels projected at end-2010 (36 percent of GDP) under the full reform scenario with a grant share of the gap fill of 50 percent. The fiscally sustainable deficit has been simulated, varying the rate of growth of real GDP and the interest rate assumptions regarding the new debt. All these assumptions are crude, and therefore the simulation results should be considered at best approximate.

69. Under such assumptions, the results show that with a 6 percent real GDP growth rate and 4 percent of inflation, the sustainable primary deficit equals 3.1 percent of GDP, if the external debt to GDP ratio to be stabilized at 36 percent (full reform scenario). A reduction of 2 percentage points in real GDP growth (as in the truncated reform scenario) requires almost balanced primary finances in order not to face solvency problems. All these estimates reflect that foreign grants will continue to accrue at 2 percent of GDP in

[25] The sensitivity analysis starts with a long run real interest rate on foreign debt equal to 4.3 percent and therefore the nominal interest rate on external debt equals to 6.25 percent (USD 6-month LIBOR).

the long run. Any decline (increase) in those grants would automatically result in a one-on-one increase (decline) in the sustainable primary deficit.

70. The results of Table 13 provide an indication of the order of magnitude of the fiscal correction that Bosnia and Herzegovina needs to undertake to stabilize the debt to GDP ratio at 36 percent (full reform scenario). In terms of the primary deficit, the required correction equals to the difference between the current primary deficit shown in Table 12 and the sustainable primary deficit identified in Table 13. Accordingly, even with a favorable growth rate of 6 percent, the required correction involves a cut in the primary deficit of about 11 (=14-3) percentage points of GDP. Of this adjustment, a decrease of about 6 percentage points of GDP could be achieved by public investment returning to more normal levels as the reconstruction phase ends. Thus, the "structural" adjustment effort would amount 5 percentage points of GDP. With slower GDP growth the correction would have to be more dramatic, as the primary sustainable primary deficit would be correspondingly smaller.

71. The above analysis demonstrates that the current fiscal position is unsustainable in the long run; the required fiscal correction is quite substantial. As noted earlier, fiscal correction will be partly achieved by a decline in reconstruction related financing needs over the decade. Nevertheless, over and above this, Bosnia and Herzegovina will certainly need to further orient its fiscal position to available financing means, in order to avoid tackling painful solvency and financing problems in the medium term.

E. DOWNSIDE RISKS

72. As any other country, Bosnia and Herzegovina could face external or internal shocks. The goal of the government's approach to the implementation of the structural reforms should be to reduce the role of public finances and the external trade sector in generating or exacerbating these shocks. By placing public finances on a more sustainable ground and by strengthening export capacity, Bosnia and Herzegovina would be on a better ground to weather unforeseen shocks.

73. An important source of risk is the high degree of inflexibility of Bosnia and Herzegovina's external debt. In the near term, more than half of government's debt service obligations are due to multilaterals, IBRD and IMF, which cannot be restructured. In addition, rescheduling existing bilateral and commercial debt would be difficult, as the country has already received substantial debt relief from both Paris Club and London Club creditors. This underscores even more the importance of having public finances and external balances on a sustainable ground. Even under an accelerated reform scenario, if the country faces an unexpected shock or the availability of external concessional finance diminishes further, the room for maneuver is very limited, leaving policy makers with the choice of using foreign reserves and/or reducing further government spending to honor its liabilities. A situation of this type would be exacerbated under a slow reform scenario.

74. In addition to the fragility of the economy, the volatile political environment is a distinct downside risk. Despite improved State-Entity and inter-Entity cooperation, Bosnia and Herzegovina's political equilibrium is constantly threatened by tensions between the three ethnic groups. At present, the country is far from operating as an

integrated state. Until this picture visibly improves, foreign investors will probably continue to behave cautiously when it comes to invest in Bosnia and Herzegovina. A favorable investment climate is also needed to increase inflows of private capital as international assistance decreases. Therefore, a major step forward in strengthening the prospects for restoring creditworthiness would be the convergence in objectives and design of the reform agenda and speeding up its implementation at the Entity and the State level.

75. The instability of the political situation in the Balkans posses another potential downside risk for Bosnia and Herzegovina. The negative effects on the country's creditworthiness of an escalation of political conflict in neighboring countries could be neutralized by the continuation of prudent macroeconomic policies. It is obvious that the impact of the above potential risks would be more dramatic under the truncated reform scenario.

76. Finally, although it is difficult to estimate their size and significance, the Entity's fiscal position is also exposed to explicit risks arising from contingent liabilities. Anecdotal references indicate that these contingent liabilities include loan guarantees, connected borrowing between public banks and public enterprises and social security arrears. In comparison to a non-contingent liability (such as interest bearing debt), the contractual obligation of the government for a contingent liability is dependent, in its timing and amount, on the occurrence of some event that would trigger a call on that obligation. At present, there is no official recording or assessment of the contingent liabilities or non-cash payments policies in Bosnia and Herzegovina. Such liabilities need to be carefully monitored in order to avoid further pressures on public finances.

F. CONCLUSIONS

77. Assessing Bosnia and Herzegovina's creditworthiness prospects and its financing requirements is not an easy task. The ongoing process of structural changes, which are both wide-ranging and volatile in pace, makes it very difficult to predict the future evolution of key factors such as growth, interest rates, or the extent of the private sector's response to structural reforms. Nevertheless, this study aimed to evaluate the trend on financing requirements and sources during the next ten years in a context of declining concessional flows, under moderately optimistic assumptions regarding the future of the economy. The exercise illustrates five main points, which are discussed below.

78. First, given that foreign assistance is expected to both decline and become less concessional in the near term, Bosnia and Herzegovina cannot afford delaying the process of internal and external adjustment and achieving the creditworthiness needed to assure access to other sources of financing in the medium term. The key message of the previous sections is that deeper reforms will allow Bosnia and Herzegovina to achieve increases in domestic savings necessary to support sustained growth, while at the same time ensure that the economy continues to attract large inflows of external capital and channels these inflows into the most productive arrears. Without accelerating the transition to a market economy, which increasingly becomes the main trigger for continued donor assistance, Bosnia and Herzegovina could face potentially serious external debt problems. Clearly, a continuation of the current levels of fiscal and external

deficits in the face of solvency constraints and financing problems would generate unfavorable debt dynamics, and jeopardize growth prospects. A scenario in which the current imbalances are not improved would become unsustainable and require a forced domestic and external adjustment. An adjustment that is not accompanied with a set of policies and reforms that address the current areas of vulnerabilities would certainly compromise growth prospects. Redirecting the economy from aid-dependency to self-sustainability should, therefore, be the most important task in the government's agenda.

79. In this context, without strong output growth, reducing the debt burden to sustainable levels would be extremely difficult. A major barrier to fast and sustained growth over the medium and long term is the current low domestic saving rate. Mirroring this low domestic saving rate is a high external trade deficit. Therefore, to smoothly complete its internal/external adjustment with the least possible impact on growth, Bosnia and Herzegovina would need to very aggressively implement major reforms aimed at removing the barriers/distortions to competitive private sector activities, and reforming the role of the public sector in line with the requirements of a vibrant market economy. The sustained growth scenario also assumes that Bosnia and Herzegovina will attract an increasing non-debt accumulating inflows (FDI), which will help bridge the current account financing gap, and foster economic growth. FDI inflows would also make an important contribution to the development of the economy and its further integration into world markets, while compensating for the expected decline in foreign assistance.

80. Second, even with an acceleration of reform efforts, Bosnia and Herzegovina's external financing requirements will remain large in the medium term. It should be noted that initial post-war assessments predicted that Bosnia and Herzegovina would have access to international capital markets much earlier, under the assumption of stronger growth and much firmer implementation of policy and institutional reforms. Unfortunately, due to transitory setbacks and loss of momentum in the reform agenda, the opportunity to achieve creditworthiness before foreign aid flows begun to decline has been missed. According to our projections, under the assumption of a full reform scenario with strong output and donor response, the country will require some US$2.3 billion from donors during the next five years. While about half of this requirement could be financed through committed and expected assistance from official creditors, financing sources for the other half remains to be identified.

81. Third, the simulation results suggest that the terms of the external financing for the period 2001-10 are critical in determining the prospects for restoring Bosnia and Herzegovina's creditworthiness. During the first half of the decade, debt sustainability indicators show a temporary deterioration, reflecting increasing debt service payments both on existing liabilities and on the restructured commercial arrears. However, the appropriate mix of concessional lending and grants and sound macroeconomic management coupled with strong structural reform can restore creditworthiness by the second half of the decade. During this period, Bosnia and Herzegovina would still remain dependent on foreign aid and concessional assistance both to maintain a reasonable debt carrying capacity and to complete its transition reforms.

82. The debt sustainability analysis in this study indicates that creditworthiness can be assured in this decade with a financing mix that includes both grants and concessional loans. A greater reliance on debt accumulating inflows, even on concessional terms, pushes external debt ratios to unsustainable levels and increases fiscal fragility. Only an appropriate mix of available financing, which is kept in line with the debt servicing capability and the country's development needs, would ensure a smooth transition toward self-sustained development, even assuming that the authorities do their utmost in accelerating structural reforms.

83. Within this scenario, the Bank's role in supporting the country's reform efforts and the transition to creditworthiness would continue to be crucial. IDA allocations, over and above those presently committed, should help in attracting additional concessional resources to bridge the remaining financing gap. At this stage, this Review indicates that expanding total World Bank lending through IBRD loans should be considered only on a limited basis and during the second half of the decade, subject to review of the country's creditworthiness at that time.

84. Fourth, at the core of a successful growth strategy and efficient external aid/debt management is the strengthening of public finances. The current fiscal deficits are not sustainable. Unless corrective actions are taken, it can lead to accumulation of arrears and threaten macroeconomic stability. In this context, while a certain downward adjustment in capital expenditure is expected to occur as the reconstruction activities come to an end, recurrent public expenditures would also have to be streamlined to accommodate for the projected lower levels of foreign assistance. Furthermore, public expenditure management would have to be significantly strengthened to ensure the efficient use of resources, which will become increasingly tight and more expensive.

85. Fifth, the truncated reform simulations demonstrate that Bosnia and Herzegovina's debt indicators are highly sensitive to growth rates. Falling short of the growth pattern assumed under the full reform scenario and the inability to maintain high export growth rates results in explosive debt indicators, increases the vulnerability of the public finances, and deteriorates prospects towards a self sustained economy even with further external transfers. Bosnia and Herzegovina's volatile political environment poses significant challenges in avoiding the risk of falling into a truncated scenario path.

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ANNEX

ANNEX 1. EXTERNAL DEBT SUMMARY: FULL REFORM SCENARIO

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Nominal debt stock (DOD)	2,927	3,270	3,625	3,567	3,850	4,094	4,325	4,548	4,757	4,993	5,248
of which: Arrears	608	604	604								
Multilateral	1,298	1,489	1,658	1,790	1,874	1,924	1,961	1,977	1,983	1,994	2,004
of which: IDA	556	680	809	928	1,016	1,070	1,135	1,170	1,186	1,184	1,169
of which: IBRD	562	550	528	505	483	460	448	456	478	521	573
Official Bilateral	564	692	845	1,016	1,165	1,298	1,423	1,523	1,636	1,791	1,990
Paris Club	542	547	553	551	547	542	537	531	524	516	508
Non Paris Club	22	30	29	27	26	24	23	22	20	19	17
Commercial	333	334	334	335	335	333	331	326	321	314	307
Private and short-term debt	731	756	788	426	476	538	611	722	816	894	946
Present value of debt (PV)	2,027	2,272	2,528	2,383	2,615	2,843	3,058	3,289	3,514	3,766	4,033
Multilateral	874	990	1,087	1,159	1,205	1,241	1,260	1,276	1,294	1,326	1,365
of which: IDA	208	261	320	378	427	466	507	537	561	577	588
of which: IBRD	509	500	481	461	441	422	411	420	443	485	537
Official Bilateral	296	392	508	644	769	889	1,003	1,099	1,203	1,339	1,510
Paris Club	282	287	290	289	289	291	293	295	296	297	297
Non Paris Club	14	19	19	18	17	17	16	15	14	13	12
Commercial	161	167	174	181	189	195	201	205	209	212	215
Private and short-term debt	696	723	758	399	452	518	594	709	807	889	944
Grant Element (GEL) (%)	38.8	37.5	36.3	33.2	32.1	30.6	29.3	27.7	26.1	24.6	23.1
Multilateral	32.7	33.5	34.4	35.3	35.7	35.5	35.7	35.4	34.7	33.5	31.9
Official Bilateral	47.9	43.3	39.8	36.6	34.0	31.5	29.5	27.9	26.5	25.2	24.1
Commercial	51.7	49.9	47.9	45.8	43.6	41.5	39.3	37.2	34.9	32.6	30.1
Private and short-term debt	28.0	21.8	16.4	6.4	5.0	3.8	2.8	1.8	1.1	0.6	0.3

ANNEX 2. STOCK OF EXTERNAL DEBT IN ARREARS AT END-1997

	Debt stock at end-1997			
	Total	Principal	Interest	Late interest
Non-convertible currency	257.1	160.3	43.5	53.3
Czechoslovakia	197.5	122.5	33.7	41.3
East Germany	59.6	37.8	9.8	12.0
Other bilateral convertible currency	7.0	4.4	1.2	1.4
Iraq	7.0	4.4	1.2	1.4
Short term credit	4.5	3.2	0.0	1.3
Qatar	4.5	3.2	0.0	1.3
Supplier's credit (trade credits)	4.7	3.4	0.3	1.0
Finland (Paris Club)	0.7	0.5	0.0	0.2
Hungary	2.2	1.4	0.2	0.6
Poland	0.8	0.8	0.0	0.0
Saudi Arabia	1.0	0.7	0.1	0.2
Other commercial creditors	652.4	385.4	167.6	99.4
Unallocated commercial debt 1/	238.0	130.6	84.0	23.4
Other commercial credit 2/	414.4	254.8	83.6	76.0
Other multilateral creditors	20.4	14.2	2.8	3.4
IFC	20.4	14.2	2.8	3.4
Total	946.0	570.9	215.4	159.8

Note:

1. Total unallocated debt of the Former Republic of Yugoslavia calculated at US$3,144 million at en-1991 less London Club ($1,391 million), less IMF debt of Total Yugoslavia ($200 million). This debt is assumed to be repaid at LIBOR over 10-year maturity.

2. Possible claims on Bosnia and Herzegovina banks for guarantees provided for construction work that has not been completed, primarily from Libya.

Source: IMF and Bosnia and Herzegovina authorities.

ANNEX 3. FINANCING ASSUMPTIONS FOR DEBT SUSTAINABILITY ANALYSIS

Commitments:

- Pipeline information based on detailed loan-by-loan information collected from the written records from the authorities.
- Information about commitments from EBRD has been taken from their web site. EBRD Railway and Electricity Power Reconstruction projects amounting together to EURO 71 million are included in the pipeline of loans to the public sector. EBRD loans to private sector are also included in the pipeline. The full amount was assumed to be disbursed and outstanding by the end of 2000 and the terms of the loans were assumed to be 3/7/6 percent.
- IDA future loans have been specified according to the latest CAS and the expected IDA-13 allocations. Out of US$300 million assumed in the 2000 CAS, US$55 million have been approved in CY2000 and are therefore included in the pipeline, US$113 mill ion are assumed to be contracted this calendar year and US$100 million in 2002. The total 2000 CAS lending is expected to amount to US$270 million. The remaining three projects that have been identified in the CAS, but are not expected to be delivered under this envelop and that amount collectively to US$24 million (Pension/Health, Environment Infrastructure and Agriculture II) are expected to be committed during the CY 2002-03, but on the account of the next IDA 13 program. The PFSACIII has been moved to CY 2003. After FY 2005 BIH is assumed to graduate to a blend IDA/IBRD status.
- IMF is expected to commit and disburse about US$ 30 million per year during 2001-2003 and US$20 million per year for the remaining of the period.
- The European Investment Bank (EIB) committed EURO 120 million in 2000 for two projects: Road and Electricity Networks Rehabilitation. They are included in 2001 as new borrowings.
- Private sector is assumed to attract debt inflows, starting from a modest $15 million in 2001 and growing slowly to $100 million by 2007.

Gap fill financing assumptions:

- The financing gap is assumed to be filled with government loans, presumably bilateral, at the following terms 5/15/3.5 percent (approximately 25 percent grant ele ment) and direct grants. The terms are concessional and close the terms of the bilateral loans that have been attracted by Bosnia and Herzegovina after the Paris Club debt restructuring. It is not reasonable to assume Naples terms for the gap fill as Paris Club treatment represents an exceptional, presumably one time, debt relief operation and not a usual lending practice. It is also not reasonable to assume IDA terms for gap financing as assumptions for 2001-05 disbursements consistent with the current CAS and the expected IDA envelope have been already included in the new borrowings.
- For stress testing the terms are hardened by assuming that the gap was financed entirely with debt accumulating flows, only concessional in one case and half with commercia l debt in the other case.

ANNEX 4. EXTERNAL FINANCING REQUIREMENTS, FULL REFORM SCENARIO

(in millions of $US)

	Actual					Projected									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total requirements	**1775**	**1443**	**1153**	**1417**	**1042**	**988**	**966**	**941**	**894**	**812**	**838**	**870**	**942**	**1050**	**1154**
NICA (+ deficit, excl official transfers)	1084	1254	907	977	870	851	772	709	643	558	518	501	513	567	578
Interest due of which:	222	228	79	81	93	76	88	100	124	133	144	157	171	185	201
multilateral (including IMF)			41	44	42	52	56	58	58	57	56	56	57	58	60
bilateral			5	7	11	11	11	12	13	13	13	13	12	12	12
other (including gap)			33	30	41	13	21	30	53	63	75	88	102	115	129
Amortization due, of which	239	51	75	79	37	33	66	83	92	81	116	158	200	235	274
multilateral (including IMF)			0	23	23	25	54	70	73	56	66	77	85	86	86
bilateral			32	14	12	8	12	12	12	7	12	13	14	15	16
commercial			42	42	2	0	0	1	7	18	28	44	61	79	105
other (including gap)			1	0	0	0	0	0	0	0	11	25	40	54	66
Gross reserve build up (- increase)	-230	90	-92	-281	-43	-28	-40	-49	-35	-40	-60	-54	-58	-64	-101
Total Financing	**1776**	**1443**	**1153**	**1417**	**1042**	**988**	**966**	**941**	**894**	**812**	**838**	**870**	**941**	**1050**	**1153**
Current Official Transfers	558	422	197	86	53	14	15	20	20	20	20	20	20	20	20
Disbursements, of which	259	176	227	244	281	369	418	423	372	322	345	378	406	468	525
multilateral (including IMF)	259	176	214	233	223	210	218	196	151	103	99	91	90	95	95
bilateral	0	0	13	11	58	18	28	29	24	17	0	0	0	0	0
Gap						116	137	153	137	122	146	137	166	223	280
Commercial banks	0	0	129	-203	-146	25	35	45	60	80	100	150	150	150	150
Grants for Reconstruction	842	574	492	548	396	405	332	298	252	220	223	202	216	262	308
Debt relief and errors and omissions	117	271	8	652	308										
FDI	0	0	100	90	150	200	200	200	250	250	250	270	300	300	300

ANNEX 5. EXTERNAL FINANCING REQUIREMENTS, TRUNCATED REFORM SCENARIO

(in millions of US$)

	Projections									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total requirements	**1035**	**966**	**932**	**925**	**852**	**903**	**1124**	**1091**	**1136**	**1201**
NICA (+ deficit, excl official transfers)	870	795	731	672	591	571	550	522	494	459
Interest due of which:	80	99	114	166	179	197	223	242	261	282
Multilateral (including IMF)	52	56	58	58	57	56	56	57	58	60
Bilateral	15	15	16	17	17	17	16	16	15	15
Other (including gap)	13	27	39	92	106	124	150	169	188	207
Amortization due, of which	33	66	82	88	73	114	249	300	349	396
Multilateral (including IMF)	25	54	70	73	56	66	77	85	86	86
Bilateral	8	12	12	12	10	14	19	20	23	24
Commercial	0	0	0	0	0	1	1	1	1	1
Other (including gap)	2	8	8	8	2	2	4	4	4	2
Gross reserve build up (- increase)	-52	-6	-6	1	-9	-21	-102	-27	-32	-64
Total Financing	**1035**	**965**	**932**	**925**	**852**	**902**	**1123**	**1091**	**1135**	**1200**
Current Official Transfers	100	95	90	86	81	77	74	70	66	63
Disbursements, of which	475	510	532	519	468	543	780	765	822	899
Multilateral (including IMF)	210	218	196	151	103	99	91	90	95	95
Bilateral	26	28	29	24	17	0	0	0	0	0
Commercial	0	0	0	0	0	0	0	0	0	0
Other (including gap)	239	264	307	344	349	445	689	675	727	804
Grants for Reconstruction	300	200	150	120	102	82	69	55	47	38
Debt relief and errors and omissions										
FDI	160	160	160	200	200	200	200	200	200	200

ANNEX 6. BOSNIA AND HERZEGOVINA: SAVINGS INVESTMENT BALANCE

(Full reform scenario, in percent of GDP)

	Gross Savings	Gross Domestic Investment	Savings - Investment	Balance on Current Account	Net factor Income and Current Transfers
1999	-13.0	20.6	-33.7	-21.0	12.7
2000	-10.5	20.7	-31.1	-21.0	10.2
2001	-6.7	20.5	-27.2	-18.2	9.1
2002	-2.9	20.6	-23.4	-15.4	8.1
2003	-0.6	19.7	-20.2	-13.1	7.2
2004	2.1	19.5	-17.5	-11.7	5.8
2005	6.0	20.8	-14.7	-9.2	5.5
2006	8.6	21.4	-12.8	-7.9	4.9
2007	10.1	21.7	-11.5	-7.0	4.5
2008	12.1	22.7	-10.7	-6.5	4.2
2009	12.1	22.4	-10.3	-6.2	4.1
2010	13.3	22.8	-9.5	-5.9	3.6

	National savings				Investment		
	Total	Private Savings	Public Savings	Foreign Savings	Total	Private	Public
1999	-0.3	0.1	-0.5	21.0	20.6	3.0	17.6
2000	-0.3	0.1	-0.4	21.0	20.7	4.8	15.9
2001	2.3	2.3	0.0	18.2	20.5	6.5	14.0
2002	5.2	4.4	0.8	15.4	20.6	8.6	12.0
2003	6.6	5.0	1.6	13.1	19.7	7.9	11.8
2004	7.8	5.2	2.6	11.7	19.5	8.6	11.0
2005	11.6	7.9	3.6	9.2	20.8	10.5	10.3
2006	13.5	9.3	4.1	7.9	21.4	11.7	9.7
2007	14.6	10.0	4.6	7.0	21.7	11.9	9.8
2008	16.2	11.1	5.1	6.5	22.7	12.7	10.0
2009	16.2	10.5	5.6	6.2	22.4	11.9	10.5
2010	17.0	10.8	6.1	5.9	22.8	12.4	10.4