FISCAL SUSTAINABILITY OF DEBT

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EXECUTIVE SUMMARY

Fiscal Sustainability Ratios and Indicators

1. Fiscal sustainability should ideally be judged on the basis of ratios relating debt stock and service to fiscal payment capacity, i.e. the capacity of government to generate recurrent revenue. However, the only consistent published data time series related to the budget of debt to GDP. Analysis of these data produces the following results:

- There were 6 Commonwealth countries (The Gambia, Ghana, Guyana, Kenya, Sierra Leone and Zambia), 5 OIF countries (Central Africa Republic, Djibouti, Guinea-Bissau, Mauritania, and Togo), 2 Latin American countries (Bolivia and Nicaragua) and Ethiopia with domestic debt/GDP ratios in excess of the floor of the IMF’s 15% - 20% significant level in 2007. Of these countries, Central African Republic, Djibouti, The Gambia, Guinea-Bissau, Guyana, Mauritania, Nicaragua and Togo also had total public debt/GDP ratios above the EU’s 60% benchmark.

- Amongst the Commonwealth countries, Malawi’s domestic debt/GDP ratio of 14.8% was just below the IMF’s significant range, whereas the total public debt to GDP ratios of Sierra Leone and Solomon Islands were just below the EU’s 60% threshold at 57% and 52%, respectively.

- Of the OIF group, 6 countries (Comoros, Congo DR, Congo Republic, Côte d’Ivoire, Guinea and Sao Tome and Principe), 5 of which are yet to receive full HIPC and MDRI debt relief, have public sector debt burdens exceeding the EU’s 60% benchmark because of large external debt burdens.

2. The following are the main recommendations for enhancing fiscal sustainability of debt:

- Ministers could urge the international community to establish international norms on what constitutes domestic and public sector debt, to define fiscal sustainability and how it is to be assessed, and to prepare a Domestic Debt Statistics Guide through an inter-agency Task Force, similar to the External Debt Statistics: Guide for Compilers and Users. (Section 2.4)

- Ministers could request the BWI (in cooperation with other debt analysts) to define appropriate indicators and thresholds for domestic and total public debt sustainability. These benchmarks, to be determined on the basis of countries’ experiences of accumulation of domestic debt arrears, should be finalised during the current IMF review of country borrowing ceilings and limits, and incorporated in the modifications to the LIC-DSF to be presented to the BWI Annual Meetings. They should be based on the most accurate measure of the fiscal burden of debt – i.e. stock and service indicators compared to budget revenue. (Section 2.4)

- Ministers could undertake to compile and publish accurate and timely data on all types of domestic debt, especially arrears, and to include domestic debt analysis when conducting national debt strategy analysis as part of the budget process. (Section 2.4)

- Ministers could commit to strengthening national capacity to analyse domestic debt trends and policy issues as a basis for developing domestic financial markets, and to sensitize Cabinet colleagues to the need to implement a total public (including domestic)
• debt policy and strategy. Capacity building providers such as the Commonwealth Secretariat, Heavily Indebted Poor Countries Capacity Building Programme partners (BCEAO/BEAC Pole Dette, CEMLA, DRI, MEFMI and WAIFEM) and UNCTAD could assist in these areas. (Section 2.5)

• Ministers could welcome the work done by the Commonwealth Legal Clinic on developing a framework for fiscal responsibility, and urge governments to adapt the framework to their country needs should they decide to adopt a Fiscal Responsibility Law. (Box 1)

Publicly Guaranteed Debt and Contingent Liabilities

3. Some of the main risks to fiscal sustainability come from contingent liabilities, including publicly guaranteed debt. Contingent liabilities refer to obligations that may become government liabilities, whose size and timing is dependent on the occurrence of some uncertain future event outside the control of government. Such occurrences can include the central government having to assume the debt servicing costs should a state enterprise default on a publicly guaranteed loan, rescue failing banks as part of a financial sector bailout, or recapitalise a public pension or a central bank. At a time of international financial crisis, it is essential to have good information and an assessment of such fiscal risks, especially because the private sector and non-central government public sector are likely to experience greater than normal problems with rollovers and servicing.

4. The following are the main recommendations for managing contingent liabilities:

• Ministers could undertake to compile and publish accurate and timely data on all government guaranteed loans and other contingent liabilities, and to statutory disclosure and reporting of loan guarantees as part of the budget process and to parliament. (Sections 3.1 and 3.2)

• Ministers could commit to strengthening national capacity to analyse contingent liabilities, to analysing trends and indicators to assess the probability of default, to include contingent liabilities when conducting national debt strategy analysis as part of the budget process, and to sensitising Cabinet colleagues to include them in a total public debt policy and strategy. (Section 3.4).

• Ministers may want to consider longer-term policy responses for dealing with country-specific contingent liabilities, which include contingency funds, insurance schemes or charging for loan guarantees. (Section 3.4)

• Ministers may want to recommend that governments have forward-looking strategies for financing contingent liabilities which are judged as likely to become actual liabilities in the short-to-medium term, based on assessments of probabilities. For example, if a country faces regular droughts, an appropriate policy response is a contingency fund, with an annual budget allocation to this fund in non-drought years. For liabilities which it is more difficult to foresee, such as financial sector bailouts, the government could monitor prospects (e.g. through financial soundness indicators) and judge the likelihood of having to intervene. (Section 3.4).
Sustainability of Sub-National Debt

Decentralisation of service provision is accelerating in many developing countries. In LICs and LMICs, requirements to provide public goods exceed sub-national governments’ current income generating capacities, requiring borrowed resources. For this reason, sub-national debt management and strategies become vital. Without them, sub-national governments may well accumulate unsustainable debt levels, which can jeopardise their capacity to provide services and, if repeated simultaneously in many sub-national areas, can compromise national debt sustainability and development.

The following are the main recommendations for managing sub-national debt

- **Ministers could commit to establishing sustainable legal and institutional frameworks for sub-national debt management, adapted to national circumstances and decentralisation processes** (Section 4.1)

- **Ministers could undertake to work with the international community (after agreeing thresholds for assessing domestic and total NATIONAL debt sustainability) to define methods for establishing sub-limits for sub-national governments, so as to ensure that the sum of national and sub-national government debt is within national total debt limits.** (Section 4.2)

- **Ministers could commit to compile and publish data on all sub-national debt, to analysing trends and indicators as part of national debt strategy analysis included in the budget process, and to establishing fiscal rules based on debt stock or service to revenue indicators, and to sensitising Cabinet colleagues to include them in a total public debt policy and strategy.** (Section 4.2).

- **Ministers could commit to strengthening national capacity to formulate and implement debt strategies for sub-national governments. This includes improving institutional structures, strengthening human resources, forecasting fiscal positions, analysing debt sustainability, and designing and implementing borrowing and negotiating strategies. They could also urge donors to fund such capacity-building programmes.** (Section 4.3)
SECTION 1: BACKGROUND AND OBJECTIVES

5. The Government of Guyana as Chair of the Commonwealth Ministerial Debt Sustainability Forum (CMDSF) through until its meeting of April 2009, has been keen to move forward with a series of actions based on authoritative analytical studies. It therefore commissioned Debt Relief International (DRI), with funding from the United Kingdom’s Department for International Development DFID), to prepare a series of “action papers”, for discussion at the joint Commonwealth Secretariat – Organisation Internationale de la Francophone (OIF) Ministerial Debt Sustainability Forum meeting on April 23, 2009 in Washington DC.

6. The aim of this study, prepared by Debt Relief International (DRI) together with Centro De Estudios Monetarios Latinoamericanos (CEMLA) and the Commonwealth Secretariat, is to discuss the issues relating to how to assess the fiscal sustainability of both external and domestic central government debt, as well as decentralised debt (owed by parastatals, states and municipalities), guarantees and on-lending. In addition, it focuses on the potential impact of contingent liabilities on debt sustainability, which is very pertinent at a time of international financial crises. It makes practical recommendations for improving the tools and criteria used to judge whether the debt is sustainable, and for governments and the international community to include such debts far more systematically and comprehensively in their analysis and policy measures.

SECTION 2: FISCAL SUSTAINABILITY RATIOS AND INDICATORS

7. Although the focus to date has been very much on low income countries’ external debt sustainability, there is a pressing need to analyse domestic and total public debt sustainability in relation to the budget (also referred to as fiscal sustainability), particularly because domestic debt issuance for fiscal financing and monetary policy implementation has been growing in many low-income countries in recent years. The IMF estimated that domestic debt accounts for about 20% of total public debt in the typical low-income country in 2006 ¹. Analysis by DRI of recent BWI conducted Debt Sustainability Analysis (DSA) would indicate this was closer to an average of 25% for low income countries, 37% for Commonwealth low income countries ² and 17% for OIF low income countries in 2007.

8. At a time of international financial crisis, maintaining fiscal sustainability becomes very relevant as low-income countries may find themselves having to borrow more, externally and/or domestically, to cope with falling overseas earnings and inflows, or to support troubled domestic financial markets.

9. To date there is no international agreement on how to define and assess the fiscal sustainability of debt. One way of looking at it is in terms of the government’s ability to remain solvent with a given set of fiscal and monetary policies, which can be reflected in the government’s ability to finance a deficit through debt issuance. In this context the size of the government budget deficit or the ratio of the budget deficit to GDP provides a proxy measure of fiscal sustainability. Alternatively, fiscal sustainability can be assessed by looking at the

² Nigeria is excluded from these calculations as its ratios are presented on net rather than gross debt basis.
level of the government’s debt liabilities (domestic and external) that has been accumulated to finance the deficit, and its service costs, in relation to GDP, government revenues and government expenditures. This approach is adopted here.

10. However, as the budget deficit underlies the concept of fiscal sustainability, one tool available to governments to maintain control over the budget deficit, and hence ensure fiscal sustainability, is the adoption of a Fiscal Responsibility Law (FRLs), which provides an institutional framework for ensuring responsibility for inter-generational equity in fiscal management (for more detail see Box 1).
Box 1 Fiscal Discipline Through Legislation

The prevailing international fiscal environment highlights the potential of fiscal policies and rules as tools for enabling governments to maintain control of budget deficit financing* and debt sustainability. As part of its Legal Referral Services, the Commonwealth Secretariat has proposed as a way forward that governments adopt a strong legal framework for fiscal policy, through the adoption of Fiscal Responsibility Laws (FRLs).

FRLs provide an institutional framework binding on government, and as such, encourages government to pursue a prudent fiscal policy, thereby ensuring that it is responsible for inter-generational equity in fiscal management. Research has shown that, in some cases, adopting a rules-based fiscal responsibility framework leads to reduced public debt ratios. In addition, adopting FRLs avoids a build up of external and internal debt to the point where a government can no longer meet its repayment obligations. They also make revenue forecasts and spending plans more realistic and affordable, and increase government accountability, hence affording greater transparency to the public.

Fiscal transparency is a key aspect of good governance, and is conducive to successful fiscal policy implementation. The principle of fiscal transparency emphasises openness to the public about the structure and functions of the government, fiscal policy intentions, public accounts and fiscal projections. It also implies that by disclosing such expenditure programmes, members of society will be able to make a timely assessment of the fiscal situation.

Transparency in fiscal operations strengthens the accountability of budgetary policies, and highlights the risks associated with unsustainable policies. It also entails:
- the provision of reliable information on the government’s fiscal policy intentions and forecasts, presupposing a high degree of fiscal marksmanship;
- detailed data and information on government operations, including publication of comprehensive budget documents, containing accounts for the government and quasi fiscal activities conducted outside the government;
- a transparent regulatory framework; open public procurement and employment practice, a code of conduct for tax officials and published performance audits.

Whilst recognising that some governments do in fact follow a prudent fiscal policy without the need for a legislative regulatory framework, it is notable that countries** having a framework have obtained significant benefits.

* In an interview in Dec 2008, the European Central Bank President Jean-Claude Trichet warned that fiscal indiscipline could threaten already fragile economic confidence and increase nervousness about governments' funding needs. He maintained that EU fiscal rules must be kept.

** Several countries have passed FRLs: Australia, Canada, Germany, New Zealand, Nigeria, Spain, Argentina, Brazil, Columbia, Ecuador, India, Peru, the United Kingdom and the United States.
2.1 External public debt indicators and thresholds

11. Over time, different indicators and thresholds have been used internationally to assess the sustainability of low-income countries’ external public debt. Prior to the introduction of the HIPC Initiative in 1996, external public debt sustainability was usually assessed using the ratios of debt stock to GNP and/or exports and debt service to exports, although there were no internationally agreed benchmarks. With the introduction of the HIPC Initiative in 1996, and its enhancement in 1999, the key indicators used to evaluate a country’s external public debt sustainability were the ratios of the present value of public external debt to exports, the present value of public external debt to domestic budget revenue and public external debt service to exports. Furthermore, benchmarks for these indicators were established for purpose of assessing a country’s eligibility for HIPC debt relief and to determine the amount of HIPC debt relief a qualifying country receives. It is important to recall that the HIPC Initiative was the first to focus on the burden of debt in relation to the budget, thereby introducing a measure of fiscal sustainability.

12. In recent years, the focus of the Bretton Woods institutions (BWI) has shifted to consider external public debt sustainability more widely than just within the context of the HIPC Initiative, in particular to provide guidance on new borrowing by all low income countries so as to ensure long-term debt sustainability and by extending the range of indicators.

13. Under this new approach, the BWI have linked the external public debt sustainability thresholds to the quality of a country’s policies and institutions. The underlying premise is that a country with strong or good policies and institutions is more likely to be able to shoulder a higher debt burden, and therefore is less likely to fall into debt distress, than a country with weak or poor policies and institutions. Hence the BWI have formulated separate thresholds for assessing the external public debt sustainability of strong, medium and weak policy and institutional performers, as set out in Table 1.

**Table 1: External Public Debt Sustainability Indicators and Thresholds**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Assessment of institutional strength and quality of policies</th>
<th>Poor</th>
<th>Medium</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV external public* debt /GDP</td>
<td></td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>PV external public debt /exports</td>
<td></td>
<td>100%</td>
<td>150%</td>
<td>200%</td>
</tr>
<tr>
<td>PV external public debt /budget revenue</td>
<td></td>
<td>200%</td>
<td>250%</td>
<td>300%</td>
</tr>
<tr>
<td>External public debt service/exports</td>
<td></td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>External public debt service/budget revenue</td>
<td></td>
<td>25%</td>
<td>30%</td>
<td>35%</td>
</tr>
</tbody>
</table>

* Public and publicly guaranteed debt (ie central government, parastatal and government guaranteed private sector debt)

14. In principle there are five indicators listed, however, in practice the BWIs are focusing mainly on the ratios with GDP and export denominators. They argue that national revenue data are less reliable and comparable across countries than GDP and exports data, and so the budget revenue-based indicators have been excluded when assessing eligibility for grants

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3 In this paper public external debt is used as a shorthand reference for public and publicly guaranteed external debt.
4 The HIPC indicators and thresholds still apply to countries going through the HIPC process.
5 The quality, and hence classification, of a country’s policy performance and institutional strengthen is measured by the three-year average of the World Bank’s IDA Resource Allocation Index (IRAI), where by a strong performer has an overall IRAI equal to or greater than 3.75, a medium performer has an overall IRAI of between 3.25 and 3.75 and a weak performer has an overall IRAI equal to or less than 3.25.
from IDA and the regional development banks. However, in order to assess fiscal sustainability, the level of external public debt and external public debt service compared to budget revenue are the key ratios.

15. Most recently the IMF has referred to the ratio of nominal external public and private debt to GDP of greater than 60% as an indicator of a high debt burden in low-income countries (regardless of policy level), with 28 low-income countries having external debt burdens alone above this level,\(^6\) (of which three are Commonwealth HIPC countries, four are Commonwealth non-HIPC low income countries, twelve are OIF HIPC countries, one is an OIF non-HIPC low income country, two are other HIPC countries and six are other low income countries). This implies that a significant number of low income countries already have worryingly high levels of external debt which could jeopardise fiscal sustainability, as most of these external borrowings will have been contracted by governments.

16. In analysing the potential impact of the international financial crisis, the IMF concludes that 13 low income countries (as set out in the last column of Table 2 below) could potentially move from low or moderate to high risk of external debt distress, on the basis of their ratios of external debt/GDP and debt service to exports breaching the thresholds listed in Table 1, if reductions in aid and FDI flows are replaced with new external public debt\(^7\). There will also be significant fiscal impacts of such additional external borrowing, an analysis of which is not included in this recent study.

### 2.2 Domestic and total public debt indicators and thresholds

17. To date there are no internationally agreed indicators or benchmarks for assessing domestic debt and total public debt sustainability, however there are a number of ratios and thresholds currently being used as follows:

- For European Union countries, the Stability and Growth Pact requires member states to have the ratio of national debt (domestic and foreign borrowings in nominal terms) to GDP of 60% or less to maintain fiscal discipline.

- Other regional organisations such as the Andean Community, West African Monetary Zone (WAMZ) and Union Economique et Monétaire Quest Africaine (UEMOA) have established limits or guidelines for total public (nominal external and domestic) debt to GDP in the range of 60% - 70%. In addition, the UEMOA has also set an informal guideline on its member states for total debt service/ budget revenue of 15%.

- The IMF describes the domestic debt burden as significant when the ratio of nominal domestic debt stock to GDP ratio is above 15% - 20% and it recommends that IMF staff thoroughly review the risks in such cases when doing debt sustainability analyses in low-income countries\(^8\).

- In addition, the IMF has also indicated that an annual increase in the PV of public external debt or total public debt in the 5% - 7% range or above should act as a ‘caution flag’ as countries where there has been rapidly growth in debt are significantly more likely to suffer debt distress\(^9\). Such rapid growth could occur if a country has a large

\(^6\) IMF (2009), page 25.
\(^7\) IMF (2009), Appendix IV. Strictly speaking the Table 1 thresholds are for public and publicly guaranteed debt but in the IMF study they are being applied to total public and private external debt.
\(^8\) IMF (2008), page 13.
\(^9\) IMF (2006), page 16.
upfront borrowing, for example an international bond issue. But it can also arise if there is significant new domestic debt issuance.

18. While the primary purpose of the EU and other regional organisation benchmarks for total debt as % GDP reflects regional stability and convergence objectives, the benchmarks can be used by others to monitor the burden of national debt. Within this context, the IMF range of 15%-20% for domestic debt to GDP provides an indicative indicator for this portion of the national debt. Similarly, the IMF ‘caution flag’ of 5%-7% growth in public debt to GDP ratio can be seen as a dynamic indicator to signal potential debt problems in future years because of the rate of public debt accumulation. As noted above this benchmark can be applied to either external public or total debt (in PV terms) and so it reflects the accumulation of large new borrowings, such as for example an international bond issue or domestic bond issue, or a combination of the two.

19. As domestic debt is generally issued on market terms, unlike external debt which is usually contracted on concessional terms, it is common practice to assess the solvency of domestic debt and total public sector debt in nominal, rather than present value, terms. When analysing liquidity, total debt service payments or interest payments are the usual numerators. For domestic debt, debt service is calculated as sum of interest and amortisation of medium to long-term instruments. The service cost of short-term instruments, such as Treasury bills (with maturity of less than 1 year), are excluded because these instruments are usually rolled over.

20. Finally, the main macroeconomic denominator used to reflect the capacity to repay domestic and total debt should preferably be domestic budget revenue, measured excluding any temporary or one-off current or capital revenues (such as proceeds from sales of assets). Ratios related to GDP are much less precise measurements of the fiscal burden of debt than ratios related to revenue.

2.3 Assessing domestic and total public debt sustainability

21. From the most recent BWI debt sustainability analyses conducted using the Debt Sustainability Framework, it is possible to obtain data on nominal public and domestic debt indicators for most low-income countries (see Annex Table 1). The main features of low-income countries’ current domestic and public debt sustainability are as follows and as summarised in Table 2 below:

- On average Commonwealth low income countries have an average higher domestic debt burden, at 15.4% of GDP, compared with 12% of GDP for low-income countries. As all Commonwealth countries have exited from HIPC and MDRI debt relief, their external debt averages 31.5% of GDP, which is considerably below the average 51.9% of GDP for low income countries, and just marginally higher than the post-HIPC countries average of 30.1% of GDP.
- OIF low-income countries have on average a lower domestic debt burden at 10.1% of GDP, reflecting the widespread lack until recently of a domestic debt market. However

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10 In the case when the present value of total public debt is calculated, the present value of domestic debt is usually valued at par with its nominal value.

11 In some cases, the imputed interest costs of short-term Treasury bills are included in domestic debt interest payments.

12 The DSAs using DSF are conducted as part of an Article IV review and/or IMF programme review and the data in Annex Table 1 are the latest country reports available on the IMF website.
they have a higher average total public sector debt burden, reflecting larger external burdens, as ten OIF countries have yet to receive full HIPC and MDRI debt relief.

- There were six Commonwealth countries (The Gambia, Ghana, Guyana, Kenya, Sierra Leone and Zambia), five OIF countries (Central Africa Republic, Djibouti, Guinea-Bissau, Mauritania, and Togo), two Latin American countries (Bolivia and Nicaragua) and Ethiopia with domestic debt/GDP ratios in excess of the floor of the IMF’s 15% - 20% significant level in 2007. Of these countries, Central African Republic, Djibouti, The Gambia, Guinea-Bissau, Guyana, Mauritania, Nicaragua and Togo also had total public debt/GDP ratios above the EU’s 60% benchmark. However the high debt levels of Central African Republic, Guinea-Bissau and Togo arise because of high levels of domestic arrears rather than large amounts of domestic borrowings.

- Amongst the Commonwealth countries, Malawi’s domestic debt/GDP ratio of 14.8% was just below the IMF’s significant range, whereas the total public debt to GDP ratios of Sierra Leone and Solomon Islands were just below the EU’s 60% threshold at 57% and 52%, respectively.

- Of the OIF constituency, six countries (Comoros, Congo DR, Congo Republic, Cote d’Ivoire, Guinea and Sao Tome and Principe), five of which are yet to receive full HIPC and MDRI debt relief, have public sector debt burdens exceeding the EU’s 60% benchmark because of their large external debt burdens.

- Elsewhere Liberia and Sudan, both pre-HIPC completion point countries, have unsustainably high external debt burdens giving rise to public debt burdens in excess of the EU benchmark. Nicaragua, a post-HIPC country, also has a public sector debt burden in excess of 60% of GDP and the Kyrgyz Republic’s public debt burden is just below.

- Countries which have larger domestic than external debt burdens include two Commonwealth countries (Cameroon and Zambia), as well Bolivia and Ethiopia, while Malawi’s external and domestic debt burdens are almost equivalent.

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13 Kenya’s domestic debt burden will have further increased following the issuance of its infrastructure bond in 2009.
## Table 2: Countries with Significant Debt Burdens

<table>
<thead>
<tr>
<th>Domestic debt as %GDP &gt; 15%</th>
<th>Public debt as % GDP &gt; 60%</th>
<th>Domestic debt/GDP &gt; External Debt/GDP</th>
<th>Public debt service as % revenue + grants &gt; average 13.4%</th>
<th>LICs potentially becoming high risk of external debt distress due to financial crisis **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>Central Africa Republic</td>
<td>Cameroon</td>
<td>Bolivia</td>
<td>Bhutan</td>
</tr>
<tr>
<td>Central Africa Republic</td>
<td>Congo</td>
<td>Cameroon</td>
<td>Central African Republic</td>
<td>Cambodia</td>
</tr>
<tr>
<td>Djibouti</td>
<td>Congo, D R</td>
<td>Ethiopia</td>
<td>Congo, D R</td>
<td>Cape Verde</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Cote d'Ivoire</td>
<td>The Gambia</td>
<td>Congo, Rep</td>
<td>Georgia</td>
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<tr>
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<td>Djibouti</td>
<td>Guinea</td>
<td>Cote d'Ivoire</td>
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<tr>
<td>Ghana</td>
<td>The Gambia</td>
<td>Guinea</td>
<td>The Gambia</td>
<td>Kyrgyz Rep</td>
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<tr>
<td>Guinea-Bissau</td>
<td>Guyana</td>
<td>Guinea-Bissau</td>
<td>Guinea</td>
<td>Lesotho</td>
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<td>Guinea-Bissau</td>
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<td>Kenya</td>
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<td>Liberia</td>
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<td>Nicaragua</td>
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<td>Malawi</td>
<td>Mozambique</td>
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<tr>
<td>Nicaragua</td>
<td>Nicaragua</td>
<td>Sao Tome &amp; Principe</td>
<td>Nepal</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>Sao Tome &amp; Principe</td>
<td>sausage</td>
<td>Nicaragua</td>
<td>Senegal</td>
</tr>
<tr>
<td>Togo</td>
<td>Sao Tome &amp; Principe Sudan</td>
<td>Sao Tome &amp; Principe</td>
<td>Sierra Leone</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>Zambia</td>
<td>Sao Tome &amp; Principe Togo</td>
<td>Sao Tome &amp; Principe</td>
<td>Togo</td>
<td></td>
</tr>
</tbody>
</table>

Data for domestic and public debt indicators as of 2007

* Countries which have yet to receive full HIPC and MDRI debt relief, hence external debt burden is significant. Sao Tome has no domestic debt.

** IMF estimates of LICs which move from low or moderate to high risk of debt distress with projected total external public and private debt as % GDP or debt service/exports excluding Table 1 thresholds with additional borrowings. The list excludes those countries which are already at high risk of debt distress.

** Sources: See Annex Table 1 for domestic and public sector debt indicators and IMF (2009) for final column

### 22. Unfortunately it is not possible to get consistent data time series for liquidity ratios of external, domestic and public debt because there is inconsistent use of government revenue or revenue plus grants as the denominator, although recent BWI DSAs have been more consistent in using government revenue as the denominator. Based on the available data, countries, excluding those yet to receive HIPC and MDRI debt relief, which have above average public debt service burdens, are Bolivia, The Gambia, Kenya, Malawi, Nepal, Nicaragua and Sierra Leone. For Bolivia, The Gambia, Kenya, Malawi, Nicaragua and Sierra Leone this correlates with high domestic debt burdens.

### 23. In some countries the global financial crisis is leading to tighter domestic financing conditions, putting upward pressure on interest rates, and as a result domestic debt service costs are rising. This has already been happening in a number of countries such as Ghana, Tanzania and Zambia. In addition, the withdrawal of foreign investors from domestic financial markets (where they are allowed to invest as for example in Zambia) has been putting further upward pressure on domestic interest rates, which coupled with currency depreciation, has been leading to higher total public debt service costs and reducing fiscal sustainability.

### 24. The financial crisis is also having an impact on countries which had been planning to go to the international capital markets. Because it is not currently possible for low-income countries to tap the international capital markets, governments are having to consider raising money domestically instead. For example Kenya’s plans for issuing an international bond

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14 Annex Table 1 reports debt service as % of revenue and grants as consistent data on debt service as % of revenue are not yet available for all countries’ DSF analysis prepared by the BWI.

15 For an example see Budget Address by Hon Dr S Musokotwane, Minister of Finance and National Planning, Government of Zambia, January 2009.
have had to be postponed and instead it has issued a 12-year Kshs 18.5 billion bond to finance infrastructure. However raising money domestically can be expensive and the Kenya bond has a 12.5% coupon rate, which is considerably higher than the 8.50% Ghana is paying for its international bond.

Box 2 Country Experiences of Domestic Debt

Countries experiences of domestic debt problems have varied considerably as illustrated below:

- Accumulation of payment arrears has been the main reason for the large domestic debt burden in many countries, notably Central African Republic, Guinea-Bissau, Niger and Togo.
- Cameroon, which in the past had significant domestic arrears, has successfully reduced its arrears through securitisation (issuing bonds), and accelerating repayments from windfall oil revenues.
- Ethiopia has a large domestic debt burden, at 25% of GDP in 2007, although in liquidity terms the ratios are low and domestic interest costs are not high because of low domestic interest rates, which are not market-determined.
- Ghana, which had domestic debt burden of 27% of GDP and high interest service costs at 6.1% of GDP at end-2001, successfully negotiated to use 20% of its HIPC debt relief to reduce its domestic debt burden and debt service costs.
- In recent years Tanzania, Uganda and Zambia all successfully extended their domestic debt portfolios by issuing longer-term Treasury bonds, although this strategy has come under considerable pressure in the current uncertain financial climate as investors are seeking short-term instruments.

2.4 Issues for Analysing Domestic and Total Debt Sustainability

25. An assumption underlying the above analysis of domestic and total debt sustainability is that the domestic and total public sector debt data are similarly defined and recorded across countries. However this may not be the case as, for example, there is no guide for compilers and users as there is for external debt and so what constitutes domestic and public sector debt can vary between countries.

26. For most low income countries domestic debt is comprised of Government issued instruments, both short-term and medium-term to long-term, for fiscal financing and monetary policy implementation, which are comprised of Treasury bills, bonds and all types of stocks. In addition domestic debt can include central bank issued instruments for monetary policy implementation, as well as central bank holdings of other long-term Government liabilities, such as undated stocks or interest-free instruments arising from the conversion of Government overdraft facilities or recapitalisation. It can also include Government payment arrears to civil servants, suppliers and others and contingent liabilities (discussed in more detail in Section 3). However inclusion of these latter types of domestic debt varies across countries.

27. There is also the issue as to how the debt of public enterprises and other agencies and sub-national debt is treated when considering total public sector. For example in some countries public debt may refer to just central government borrowings (both domestic and external) while elsewhere it may refer to the consolidated public sector borrowings.

28. So there is a need to prepare and agree international norms on what comprises domestic debt and public sector debt and a definition of fiscal sustainability. Once these have been established, the next step is to agree on a set of indicators and benchmarks for assessing sustainability. For indicators, it would be most appropriate to focus on nominal debt and debt service as the numerators, with GDP and budget revenue (excluding grants) as the denominators. It is also possible to use government expenditures as a denominator.

29. More detailed analytical work of recent country experiences of domestic and public debt trends and crises is required in order to come up with some appropriate benchmarks, using the same analytical approach adopted by the BWI to determine the external debt sustainability thresholds, namely levels at which countries’ experienced the accumulation of domestic debt arrears and/or domestic debt restructuring. In the past the BWI have said this sort of work is not possible because of lack of comparable data, however with the advent of the DSF-based DSAs being done by the BWI, data are more widely available.

30. In addition, it is important that low-income country government’s maintain accurate and timely records of all domestic debt issuances, including central bank liabilities, arrears and public enterprise domestic debt.

2.5 Managing Domestic and Total Debt

31. There are tools available that governments can use to analyse domestic and total public sector debt sustainability. These tools include the Debt Sustainability Framework (DSF) templates of the IMF and World Bank for low income and middle income countries \(^{17}\), the Commonwealth Secretariat’s CS-DRMS software for debt recording and management, UNCTAD’s DFMAS software for debt recording and management, the HIPC-CBP domestic debt templates in Excel format and Debt-Pro©. In addition, governments should include domestic and public debt analysis when preparing a national debt strategy analysis, in collaboration with the Heavily Indebted Poor Countries Capacity Building Programme (HIPC CBP), the Commonwealth Secretariat, UNCTAD or other partners.

2.6 Recommendations

32. The following are the main recommendations for enhancing fiscal sustainability of debt:

- **Ministers could urge the international community to establish international norms on what constitutes domestic and public sector debt, to define fiscal sustainability and how it is to be assessed, and to prepare a Domestic Debt Statistics Guide through an inter-agency Task Force, similar to the External Debt Statistics: Guide for Compilers and Users. (Section 2.4)**

- **Ministers could request the BWI (in cooperation with other debt analysts) to define appropriate indicators and thresholds for domestic and total public debt sustainability. These benchmarks, to be determined on the basis of countries’ experiences of**

\(^{17}\) The DSF and FSA templates are available to be downloaded from the IMF and World Bank websites.
accumulation of domestic debt arrears, should be finalised during the current IMF review of country borrowing ceilings and limits, and incorporated in the modifications to the LIC-DSF to be presented to the BWI Annual Meetings. They should be based on the most accurate measure of the fiscal burden of debt – ie stock and service indicators compared to budget revenue. (Section 2.4)

- Ministers could undertake to compile and publish accurate and timely data on all types of domestic debt, especially arrears, and to include domestic debt analysis when conducting national debt strategy analysis as part of the budget process. (Section 2.4)

- Ministers could commit to strengthening national capacity to analyse domestic debt trends and policy issues as a basis for developing domestic financial markets, and to sensitisie Cabinet colleagues to the need to implement a total public (including domestic) debt policy and strategy. Capacity building providers such as the Commonwealth Secretariat, Heavily Indebted Poor Countries Capacity Building Programme partners (BCEAO/BEAC Pole Dette, CEMLA, DRI, MEFMI and WAIFEM) and UNCTAD could assist in these areas. (Section 2.5)

- Ministers could welcome the work done by the Commonwealth Legal Clinic on developing a framework for fiscal responsibility, and urge governments to adapt the framework to their country needs should they decide to adopt a Fiscal Responsibility Law. (Box 1)

SECTION 3: PUBLICLY GUARANTEED DEBT AND CONTINGENT LIABILITIES

33. One of the main risks to fiscal sustainability is contingent liabilities including publicly guaranteed debt. Contingent liabilities refer to obligations which may become government liabilities, whose size and timing is dependent on the occurrence of some uncertain future event outside the control of government 18. Such occurrences can include the central government having to assume the debt servicing costs should a state enterprise default on a publicly guaranteed loan, or rescue failing banks as part of a financial sector bailout, or recapitalise a public pension or a central bank. At a time of international financial crisis, it is essential to have good information and an assessment of such fiscal risks, especially because the private sector and non-central government public sector are likely to experience greater than normal problems with rollovers and servicing.

34. There are two types of contingent liabilities as discussed below and illustrated in Chart 1:

- Explicit liabilities based on contracts, laws or policy commitments. These include loan guarantees; export guarantees; other financial guarantees such as those relating to bank deposits, pension savings, and public private partnership (PPP) returns; government insurance programmes such for crop or flood risks; legal claims against government related to privatisations or personnel issues; natural disaster spending relating to government infrastructure assets (eg rebuilding a damaged hospital) and uncalled capital such as obligations to contribute to international organisations.

- Implicit liabilities are moral or political obligations, often arising from expectations of government intervention in a crisis or disaster, including bailouts of public enterprises, financial institutions, sub-national governments and private firms, which are strategically

18 For a very good discussion of many of these issues, see also Cebotari (2008)
important or too big to fail; uninsured damages of natural disaster relief; and environmental cleanup costs.

- Experiences to date indicate that it is the implicit liabilities which are usually the most costly, and can put government debt on an unsustainable path. The current international crisis is just the latest example whereby governments are having to bailout banks and other financial sector institutions and thereby assume significantly larger debt liabilities. Although the cost of the current financial crisis is as yet unknown, the fiscal bill of financial sector bailouts has averaged about 13% of GDP in some 40 crisis, while Standard & Poor’s estimates that the average fiscal exposure to risk from the financial sector during a banking crisis was about 27% of GDP across 75 countries in mid-2008.

35. Experience in the HIPC CBP indicates that both explicit and implicit liabilities have often become major debts. For example, in the Franc Zone, arrears of salaries and to suppliers have become large components of domestic debt; in Mozambique and Uganda, large bonds have been issued for banking sector reform; in Ghana and Uganda, there have been major bonds issued to compensate and recapitalise central banks against exchange losses on IMF debt; and in Bolivia, a privatisation of the pension system had to be bailed out with domestic debt with liabilities exceeded assets.

Chart 1: What are contingent liabilities?

Source: IMF

3.1 Publicly guaranteed debt

36. Central government guarantees of direct borrowings (by parastatal enterprises or private firms) are one of the most common forms of contingent liabilities. There are good reasons
why a government may want to issue such guarantees but there are also associated costs and risks. The government may want to issue loan guarantees for the following reasons:

- With a guarantee, a parastatal or private enterprise should be able to borrow on better terms than without, because the guarantee lowers the lender’s risk as the government is assumed to have better information about the borrower’s ability to repay the loan.

- For strategic or commercial reasons, the government may want to support a particular enterprise, such as the national airline, and guaranteeing its borrowings is one way of doing so.

- Loan guarantees may be a less costly way of providing government support to an enterprise or project than a direct subsidy, particularly if the borrower does not default. However, whereas subsidies have a direct fiscal impact by increasing the budget deficit, guarantees do not unless they are invoked.

- The administrative cost of providing a guarantee may less than implementing a subsidy programme. In addition, it is good practice for the government to charge the guarantee recipient as discussed in the box below.

37. However there are costs and risks attached to guarantees, which include:

- The main cost to government is if the borrower defaults and the outstanding loan is to be repaid by the government. If guarantees are issued on the basis of political patronage or for other non-economic reasons, or the government does not have good information about the borrower’s ability to repay, and hence the borrower’s default is more likely, then the guarantee can prove to be costly.

- It may be more cost effective for the government to borrow funds and on-lend directly to the public or private enterprise than to issue a guarantee, particularly if the government can borrow on significantly lower terms those obtainable by the public or private enterprise even with a guarantee. An analysis of total loan costs will assist with such decisions.

- A guarantee can create a moral hazard whereby the enterprise, whose debt is guaranteed, has little incentive to minimise risks to ensure the debt is repaid.

- As guarantees are usually not part of the budget process, there is less scrutiny of the risks involved and it also enables the government to support riskier ventures than those which fall within the budget process.

- Lack of stringent disclosure and reporting procedures for guarantees can lead to inappropriate issuance or overextended use of guarantees.
### Box 3  Charging for loan guarantees

When issuing a guarantee the government is effectively assuming the risk that the recipient may not be able to repay the loan at some future date. As a way of mitigating the costs of this potential liability the government can charge a fee for the guarantee. In charging for a guarantee the government is effectively issuing the recipient an insurance policy and imposing a cost for doing so.

In principle the guarantee fee would be the expected cost to the government over the lifetime of the guarantee plus a risk premium, where the expected cost is the anticipated annual debt service times the probability of having to make the payments. Many developed countries use this approach to setting the guarantee fee.

Alternatively some countries charge a flat fee proportional to the face value of the guarantee, sometimes with an added adjustment for risk. Turkey, for example, charges a one-off fee of up to 1% to the recipients of loan or investment guarantees.

38. In order to analyse the implications and potential fiscal risks of loan guarantees, it is essential to have detailed information on the outstanding guarantees issued and their relevant loan terms. However such information and data are often not compiled as part of government debt management procedures, in part because there are often weak or nonexistent institutional and legal structures and disclosure and reporting requirements for dealing with loan guarantees. International best practices suggest the following:

- The law/regulation relating to external and domestic debt should also cover the issuance of government loan guarantees, specifying who (usually the Minister of Finance) can authorise guarantees, under what conditions and terms (including financial checks to be carried out on recipients and the cost-benefit analysis of the terms), and any ceilings or limits on amounts that can be guaranteed.

- There should be statutory disclosure and reporting of loan guarantees as part of the budget process and to parliament.

- The debt management department should be mandated to compile detailed data and information of loan guarantees (including direct debt borrowed by government agencies and subject to implicit guarantees) to be managed as part of the external and domestic database.

39. Conventionally the analysis of public debt sustainability focuses on the debt indicators for disbursed outstanding debt stock and debt service payments, taking no account of the potential burden of invoked loan guarantees. Therefore to ensure the government has an informed idea of the risks associated with loan guarantees, it is important to analyse the key debt indicators under alternative scenarios of guaranteed loans being serviced by the government and comparing these ratios with the international and national applicable debt indicators.

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19 See Cebotari (2008), pages 15-19 for more information on developed country practices.

20 For example, it is the Government of Rwanda’s policy to guarantee only up to 50% of the total value of an external loan/transaction of public institutions and the sum of debt service payments resulting from the guarantee(s) shall not exceed 10% of the programmed total annual external debt service in subsequent fiscal years, and the Government shall not guarantee loans contracted by the private sector. The 50% ceiling also applies to domestic guarantees to public institutions; however the maximum limit for the total annual debt service payments resulting from such guarantees is lower at 5%. See Government of Rwanda (2008a).

21 For examples of country disclosure and reporting requirements, see IMF (2008).
sustainability thresholds. The IMF recommends this as part of the DSF analysis, when contingent liabilities are considered important, as for example in Vietnam.

40. In particular it is important to analyse a scenario which looks at the maximum potential costs if the government has to assume servicing of all outstanding guaranteed loans within the next 2-3 years. Thereafter further scenarios can be analysed to assess alternative assumptions about (i) the probability of borrower defaults and amounts, and (ii) the timing of these defaults. These alternative scenarios will need to reflect national circumstances and experience of defaults by recipients of guaranteed loan. In addition, the government should assess the potential exchange and interest rates associated with having to assume responsibility for servicing loan defaults.

41. Since loan guarantees represent a fiscal risk, the most important debt indicators to use when doing this analysis are: debt service/budget revenue, debt service/expenditure and debt stock/revenue. It is also useful to look at debt stock and service ratios to GDP, as international benchmarks are often set in terms of these denominators. The analysis should also have a policy impact on the budget, whereby there is a line item to reflect the costs of contingent liabilities, based on probability of default. In some countries funds are put aside in an escrow account as a preventive measure as discussed below.

<table>
<thead>
<tr>
<th>Box 4 Assessing probability of default</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are numerous indicators used to assess the soundness and stability of financial and non-financial sector enterprises, some of which are listed below. In general these indicators attempt to measure an enterprise’s vulnerability to adverse economic circumstances, which in the worst case could lead to default on the servicing of its debt.</td>
</tr>
<tr>
<td>For non-financial sector enterprises, risk indicators include:</td>
</tr>
<tr>
<td>- Level of indebtedness, history of debt restructuring and exposure to debt-related interest rate and exchange rate risks,</td>
</tr>
<tr>
<td>- Profitability and income records and vulnerability to specific sectors and/or commodities,</td>
</tr>
<tr>
<td>- Equity base and types of holders,</td>
</tr>
<tr>
<td>- Level of contingent liabilities, such as pension fund obligations, deferred taxes.</td>
</tr>
<tr>
<td>For financial sector enterprises, risk indicators include:</td>
</tr>
<tr>
<td>- Capital adequacy ratio (regulatory capital to assets),</td>
</tr>
<tr>
<td>- Assets quality ratios such as loans or liabilities/capital, % of non-performing loans and exposure to specific sectors,</td>
</tr>
<tr>
<td>- Profitability ratios, including return on assets and cost/income</td>
</tr>
<tr>
<td>- Share of foreign ownership, ability and willingness of parent company to support a subsidiary.</td>
</tr>
</tbody>
</table>

3.2 Implicit liabilities

42. While government guaranteed loans are explicit contingent liabilities, the non-guaranteed debts of parastatals and other government agencies are considered implicit liabilities, as it is likely that the government will have to assume responsibilities for such loans in cases of default. For example, although a national airline may contract loans or enter into leasing agreements without any formal government guarantees, should the airline default...
on these debts, it is anticipated that the government would take them over, thereby adding to the sovereign debt burden.

43. Similarly the net liabilities of public sector banks and financial institutions are treated as implicit contingent liabilities because should they run into financial problems, it is anticipated that the government would assume responsibility through an official bailout. Such bailouts may involve the government assuming responsibilities for specific liabilities, such as external or domestic loans. Alternatively, the government may need to finance the bailout by issuing domestic debt, thereby increasing the level of sovereign debt.

44. This can apply to the wider financial sector, as has been very much in evidence during the recent financial crisis, whereby the sovereign debt of many OECD governments has increased significantly as they act to bailout their commercial banks. For example the UK net government debt jumps from 47.5% of GDP at end-2008 to around 150% of GDP when taking account of the commercial banks the UK government has effectively had to nationalise due to the international financial crisis. Past examples of costly financial sector bailouts include Jamaica, where the financial sector bailout of the late 1990s led to a 37% increase in the domestic debt stock, with these debts accounting for 27% of GDP 22.

45. Recapitalisation of a country’s central bank is another type of implicit liability, which has historically resulted in significant increases to the government’s debt burden 23. In order to cover central bank losses, the government creates new central bank assets through the issuance of domestic securities 24.

46. In general implicit contingent liabilities are harder to measure than explicit ones, with the exception of non-guaranteed public enterprise liabilities. Data on all parastatal and other government agencies liabilities should be available from public enterprise accounts or other sources, and it should be recorded and monitored as part of government debt management. If such information and data are not available, then the government needs to set up legal and institutional arrangements to ensure this is done in future. It would also be appropriate to put in place stringent disclosure and reporting requirements, including to reporting to parliament.

47. Furthermore, the government should include public enterprise non-guaranteed liabilities when assessing its fiscal sustainability indicators. As discussed above this should be done by looking at various scenarios, including maximum default as well as alternative scenarios reflecting alternative default probabilities and their timing. By doing this analysis the government is able to monitor and assess the overall fiscal risks of the public sector, including the implicit liabilities.

48. More widely the government also needs to assess the fiscal risks of other implicit liabilities such as financial sector bailouts, the costs of environmental cleanup, such as oil spills or toxic waste, and the costs of potential natural disasters, such as uninsured hurricane or flood damages. While some events such as financial sector bailouts may result in direct increases in government debt, other events such as environmental cleanups will result in higher government spending which in turn has to be financed by additional government borrowing, domestically or externally.

23 Fitch (2007).
24 For more details see Dalton and Dziobek (2005)
49. So it is important that the government analyses the implications of these possibilities by conducting scenario analysis of the likely impact of such events on its debt sustainability ratios. However estimating the costs of the possible events should be based, where possible, on past experiences of, for example, previous financial sector bailouts nationally or regionally. In the case of oil spills and other environmental disasters some costs estimates may be available from industry sources.

50. In doing such fiscal risk analysis, it is also important to look at the probability of such events occurring, based on past experiences. In the case of natural disasters, it may be that severe flooding or hurricanes occur roughly every so many years and this should be factored in when doing the risk analysis.

51. Other events are harder to predict. For the financial sector, the government or central bank supervisory procedures should involve regular monitoring of financial sector soundness indicators such as commercial bank capital adequacy ratios etc, and publish its assessment of financial sector stability. The international credit rating agencies regularly monitor such indicators as part of sovereign credit rating.

3.3 Implications of contingent liabilities on creditworthiness

52. The international rating agencies (Standard & Poor’s, Moodys and Fitch) all take account of contingent liabilities in their sovereign credit ratings. For example one of Standard & Poor’s nine criteria categories is off-budget and contingent liabilities, focusing on the size and health of nonfinancial public enterprises. In particular it treats the indebtedness of unprofitable public enterprises as a useful measure of contingent liabilities (both explicit and implicit liabilities) as the government may have to take these over at some future date. It also considers the financial sector as a contingent liability because the sovereign credit rating will be impaired if financial sector problems result in an official bailout by government. In particular it looks at public sector banks where activities, such as subsidised lending or exchange rate guarantees, are off-budget. For example, China has a low rating in this category despite financial sector restructuring.

53. Fitch and Moodys both look at the financial liabilities of the central bank and public sector enterprises and financial institutions as well as implicit liabilities, such as unfunded pension and healthcare provisions, if these are thought to be material liabilities or impact adversely on the longer-term sustainability of public finances.

3.4 Managing Contingent Liabilities

54. In order to manage contingent liabilities, it is important that governments know the potential impact of having to absorb these liabilities and the implications for medium to long-term debt sustainability and in order to do this governments need to strengthen data and information on explicit and implicit contingent liabilities and to analyse the implications and risks contingent liabilities have for future debt sustainability. The tools available to do this include:

25 See IMF Financial Sector Assessment Program (http://www.imf.org/external/np/fsap/fsap.asp#cp) for details of these indicators.
27 Standard & Poor’s (2006)
• The Debt Sustainability Framework (DSF) templates of the IMF and World Bank for low income and middle income countries can be used to analyse the impact of contingent liabilities on both external and public sector debt sustainability.28

• The World Bank has the Fiscal Sustainability Analysis (FSA) template for middle income countries to assess fiscal constraints, including contingent liabilities.

55. In addition, governments should assess the risks to debt sustainability of contingent liabilities when preparing a national debt strategy analysis, in collaboration with the Heavily Indebted Poor Countries Capacity Building Programme (HIPC CBP), the Commonwealth Secretariat, UNCTAD or other partners. Ideally this is to be done by projecting alternative scenarios, according to the likelihood/risk of the liabilities having to be taken on budget, including all explicitly and implicitly guaranteed government debt in total public debt. Computer simulation tools such as CS-DRMS, DMFAS and Debt-Pro®, can all be used to simulate the impact of absorbing contingent liabilities onto the Government budget.

56. As well as knowing the potential scale of the risks of contingent liabilities, it is possible for governments to managing potential calls on contingent liabilities by establishing a contingency reserve, as part of the budget process. Many developed country governments have set up some form of contingency reserve system or escrow account to effectively insure against these liabilities. For example Chile, Colombia, Sweden and the US have contingency funds for loan guarantees, usually funded by a loan guarantee fee or from public entities’ budgets. In some cases, the contingency fund is set up to cover a specific risks, such as natural disasters, as for example, is the case with the Calamity Relief Funds set up by each Indian state government, funded 25% from the state budget and 75% from the central government budget. Pension guarantees to protect workers if their employers fail to honour pension obligations, have been set up in several countries.29

57. Assessing the potential future costs on the budget of contingent liabilities and the appropriate policy response requires a degree of judgement. In principle the government should design a strategy of how to finance the potential liabilities which it judges as being most likely to occur over the short and medium terms, based on the probabilities of specific events occurring. For example, if a country faces regular droughts, an appropriate policy response is to establish a contingency fund, whereby there is an annual budget allocation to this fund in non-drought years. For liabilities which it is more difficult to foresee, such as the financial sector bailouts, the government needs to monitor the situation (for example by monitoring financial soundness indicators) and make a judgement as to the likelihood of having to intervene.

3.5 Recommendations

58. The following are the main recommendations for managing contingent liabilities:

• Ministers could undertake to compile and publish accurate and timely data on all government guaranteed loans and other contingent liabilities, and to statutory disclosure and reporting of loan guarantees as part of the budget process and to parliament. (Sections 3.1 and 3.2)

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28 The DSF and FSA templates are available to be downloaded from the IMF and World Bank websites.

29 For more examples, see Cebotari (2008).
Ministers could commit to strengthening national capacity to analyse contingent liabilities, to analysing trends and indicators to assess the probability of default, to include contingent liabilities when conducting national debt strategy analysis as part of the budget process, and to sensitising Cabinet colleagues to include them in a total public debt policy and strategy. (Section 3.4).

Ministers may want to consider longer-term policy responses for dealing with country-specific contingent liabilities, which include contingency funds, insurance schemes or charging for loan guarantees. (Section 3.4)

Ministers may want to recommend that governments have forward-looking strategies for financing contingent liabilities which are judged as likely to become actual liabilities in the short-to-medium term, based on assessments of probabilities. For example, if a country faces regular droughts, an appropriate policy response is a contingency fund, with an annual budget allocation to this fund in non-drought years. For liabilities which it is more difficult to foresee, such as financial sector bailouts, the government could monitor prospects (eg through financial soundness indicators) and judge the likelihood of having to intervene. (Section 3.4).

SECTION 4: SUSTAINABILITY OF SUB-NATIONAL DEBT

59. The expansion of decentralization processes in Latin America and throughout the world has been accompanied by a clearer fiscal division of labour among different levels of government. In most countries, macroeconomic stability and redistribution functions are associated with central governments. However, sub-national governments increasingly allocate expenditure on the basis that decentralisation makes public expenditure more efficient, because sub-national governments are in a better position to assess the community’s requirements. Decentralisation processes thus primarily involve determining the authority of sub-national governments to conduct expenditure and to mobilise the resources to spend (including own revenue, revenue subject to sharing arrangements, transfers and grants, and borrowing of debt).

60. Depending on the political and administrative structure in each country, sub-national governments include states, regions, departments or provinces, municipalities, and delegations. In many cases, they also include enterprises (such as water or refuse collection companies) or institutions (such as autonomous public hospitals). Many sub-national governments or agencies (especially in LICs and LMICs) are not able to generate sufficient revenue and grants to fund the public goods they are expected to provide, leading to increased debt requirements, which can in turn produce severe fiscal disequilibria and macroeconomic instability. Accordingly, managing their debt and determining how to judge debt sustainability become vital issues.

61. Sub-national debt includes all obligations contracted or generated by regional and local governments, including agencies that report to them. Contracted obligations are underpinned by explicit legal documentation (loan contracts or securities documents), while generated obligations spring from expenditure accrued and not paid on time. There are five main types of resulting debt instruments: 1) directly borrowed loans from private (domestic or foreign) banks, state banks, or other public finance agencies; 2) loans borrowed or on-lent
by national governments, from domestic or foreign sources; 3) securities issued nationally (normally bonds); 4) financing contracts for private sector works; 5) arrears, including those to suppliers of goods, services and works; 6) salary or pension obligations deriving from delays or changes in schemes.

4.1. Approaches to Sub-national Debt Management

62. Countries have adopted four broad approaches to a legal and institutional framework to manage sub-national debt.\textsuperscript{30}

1. **Market-based:** the capital market regulates or restricts sub-national indebtedness. The national government does not set any limits, so sub-national governments are free to decide how much borrowing to undertake, from whom, and for what purposes.

2. **Rules-based:** the national government establishes fiscal rules supported by a legal framework. These can include: limits to absolute amounts of debt; deficit or expenditure ceilings; a “golden rule” under which debt can be contracted only for investment; and ceilings for the sub-national agency’s debt burden ratios.

3. **Co-operative:** sub-national debt limits are not established by law or the national government, but designed and implemented by negotiation between national and sub-national governments.

4. **Administrative:** the national government retains authority to establish direct control of sub-national debt, through annual or semi-annual debt ceilings, direct authorization of loans, or centralisation of borrowing followed by on-lending to sub-national governments.

63. As indicated by various studies (eg Plekhanov and Singh 2007), around 33% of 43 countries studied have adopted administrative systems, 30% market-based, and 20% rules-based and cooperative systems. However, none of these approaches has proven intrinsically superior for avoiding sub-national debt crises and bailouts by central government. The approach adopted depends on national institutional features and processes of decentralisation, and the degree of financial soundness of sub-national governments. In Latin America, bailouts have been needed in Bolivia, Chile and Mexico (all administrative), Argentina (cooperative), Brazil (administrative and rules) and Colombia (rules).

4.2. Debt Sustainability and Indicators

64. The most important concept for a sub-national government is **Sustainability of Service Provision**, ie its capacity to provide community services in accordance with its legal mandate, and with adequate coverage, quality, and cost\textsuperscript{31}. On the other hand, its **Fiscal Sustainability** is its ability to generate sufficient ongoing resources to finance its expenditures, and to honour its debt service without arrears, renegotiations, or significant fiscal adjustments. This implies both debt sustainability - a level of debt that does not generate payment problems; and revenue mobilisation capacity. However, as debt sustainability is most commonly incorporated into regulatory frameworks, this is used here as equivalent to fiscal sustainability.

\textsuperscript{30} Teresa Ter-Minasian (1997).

\textsuperscript{31} However, this has often not been addressed systematically – so that services provided by sub-national governments have yielded disappointing results. The capacity-building programme for sub-national governments is addressing this issue as part of its methodological developments, including, by analysing results in terms of poverty reduction and other development goals.
65. Service sustainability and debt sustainability are obviously interrelated, as unsustainable debt will generate pressures which, in the absence of a bailout, will jeopardise its capacity to provide services. For example, some subnational governments have executed intensive infrastructure programmes, financed by loans which generated large debt service burdens. These deprived the infrastructure of maintenance spending, leaving its quality ultimately similar to the situation before the programme. If similar situations occur in several sub-national governments, overall debt sustainability in the country, as well as fiscal equilibrium, may be jeopardised.

66. As with aggregate national public debt and domestic debt, there are currently no internationally accepted thresholds to judge sub-national government debt sustainability. However, it is possible to track whether debt is becoming more or less sustainable using long-term projections. The key indicators to forecast are shown in the table below:

<table>
<thead>
<tr>
<th>Stock/Revenue (D/R)</th>
<th>Present Value/Revenue (PV/R)</th>
<th>Service/Revenue (S/R)</th>
<th>Interest Payments/ Revenue (I/R)</th>
</tr>
</thead>
</table>

Table 3: Sub-National Debt Sustainability Indicators

67. The numerator can be analysed from the standpoint of solvency (its stock or present value) or liquidity (service or its components). The denominator normally reflects recurrent revenue, on which it is easy to compile and calculate standardised information. Revenue should be recurrent, ie collectible every year, thereby excluding temporary or one-off components such as grants or capital income from the sale of assets. It is also possible to calculate indicators relating debt or service to different types (capital or current) expenditures, or to use different fiscal balances as denominators of ratios or as indicators to measure debt dynamics.

68. Whichever indicators are used, the vital step is to analyse their trends and the underlying characteristics of the government. For example, if debt starts at high levels and is forecast to grow constantly over the long-term, without any concomitant increase in revenues, debt levels are unsustainable. Adding this to analysis of past and projected financial flows (income, expenditure, and fiscal balances) makes it possible to determine a government’s fiscal sustainability.

4.3. Sub-National Governments Capacity-Building Needs

69. The debt programme of the Centre for Latin American Monetary Studies (CEMLA) has developed a methodology to assess a sub-national government’s fiscal and debt management capacity based on the HIPC Capacity-Building Programme (HIPC-CBP) methodology for national governments. This has been applied on a pilot basis in Bolivia with five sub-national governments of different characteristics and sizes. Out of an optimal rating of five, they achieved an average rating of 2.5, indicating scope for substantial improvement in capacity – especially because in Bolivia, sub-national governments implement most public investment.

70. The weakest areas involve a) organisation and human resources in the debt management department; b) debt strategy and analysis; and c) analysis of financial flows and
fiscal balances. Capacity is stronger in policy frameworks and planning, and financial information systems (even though considerable support is also needed in these areas). In many cases, although computerised information systems are in place, most staff members lack the training required to prepare the information correctly, let alone to engage in any analysis. The same low levels of low capacity have been found in Nigeria.

71. Lower capacity in sub-national governments fundamentally distorts the process of decentralisation. In a market-based system, it makes sub-national governments more likely to run up debts until they are fairly brutally “disciplined” by the market refusing to lend further to them. In a cooperative system, it puts them at a disadvantage in negotiations with national governments. In rules-based and administrative systems, it leads them to breach rules and procedures without fully understanding the implications for the sustainability of their services, ultimately leading to central government bailouts, and encouraging the tendency of national governments to interfere more in sub-national debt management.

Conclusions and Recommendations

- Ministers could commit to establishing sustainable legal and institutional frameworks for sub-national debt management, adapted to national circumstances and decentralisation processes (Section 4.1)

- Ministers could undertake to work with the international community (after agreeing thresholds for assessing domestic and total NATIONAL debt sustainability) to define methods for establishing sub-limits for sub-national governments, so as to ensure that the sum of national and sub-national government debt is within national total debt limits. (Section 4.2)

- Ministers could commit to compile and publish accurate and timely data on all sub-national debt, to analysing trends and indicators as part of national debt strategy analysis included in the budget process, and to establishing fiscal rules based on debt stock or service to revenue indicators, and to sensitising Cabinet colleagues to include them in a total public debt policy and strategy. (Section 4.2).

- Ministers could commit to strengthening national capacity to formulate and implement debt strategies for sub-national governments. This includes improving institutional structures, strengthening human resources, forecasting fiscal positions, analysing debt sustainability, and designing and implementing borrowing and negotiating strategies. They could also urge donors to fund such capacity-building programmes. (Section 4.3)
## ANNEX TABLE 1 – DEBT RATIOS FOR SELECTED LOW INCOME COUNTRIES

<table>
<thead>
<tr>
<th>Countries</th>
<th>Risk of external debt distress</th>
<th>Nominal debt as % GDP, 2007</th>
<th>Public debt service as % revenue + grants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>External debt</td>
<td>Domestic debt</td>
</tr>
<tr>
<td>Afghanistan *</td>
<td>high</td>
<td>19.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Benin</td>
<td>moderate</td>
<td>12.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Bolivia</td>
<td>low</td>
<td>19.8</td>
<td>24.1</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>high</td>
<td>18.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Burundi</td>
<td>high</td>
<td>26.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Cambodia **</td>
<td>moderate</td>
<td>29.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Cameroon</td>
<td>low</td>
<td>5.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Central African Rep.*</td>
<td>high</td>
<td>54.2</td>
<td>23.6</td>
</tr>
<tr>
<td>Chad*</td>
<td>moderate</td>
<td>22.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Comoros *</td>
<td>debt distress</td>
<td>57.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Congo, Dem. Rep. of *</td>
<td>debt distress</td>
<td>134.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Congo, Rep. of *</td>
<td>high</td>
<td>79.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Côte d’Ivoire*</td>
<td>debt distress</td>
<td>71.0</td>
<td>10.2</td>
</tr>
<tr>
<td>Djibouti *</td>
<td>high</td>
<td>36.7</td>
<td>23.9</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>moderate</td>
<td>9.5</td>
<td>24.9</td>
</tr>
<tr>
<td>Gambia</td>
<td>high</td>
<td>49.5</td>
<td>27.7</td>
</tr>
<tr>
<td>Ghana</td>
<td>moderate</td>
<td>23.6</td>
<td>16.0</td>
</tr>
<tr>
<td>Guinea *</td>
<td>debt distress</td>
<td>65.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Guinea-Bissau *</td>
<td>debt distress</td>
<td>296.6</td>
<td>39.5</td>
</tr>
<tr>
<td>Guyana</td>
<td>moderate</td>
<td>105.1</td>
<td>27.7</td>
</tr>
<tr>
<td>Haiti *</td>
<td>high</td>
<td>24.4</td>
<td>4.0</td>
</tr>
<tr>
<td>Honduras</td>
<td>low</td>
<td>16.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Kenya **</td>
<td>low</td>
<td>22.8</td>
<td>17.8</td>
</tr>
<tr>
<td>Kyrgyz Republic **</td>
<td>moderate</td>
<td>55.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Lao PDR **</td>
<td>high</td>
<td>51.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Lesotho**</td>
<td>moderate</td>
<td>42.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Liberia *</td>
<td>debt distress</td>
<td>354.8</td>
<td>6.5</td>
</tr>
<tr>
<td>Madagascar</td>
<td>low</td>
<td>23.4</td>
<td>8.8</td>
</tr>
<tr>
<td>Malawi</td>
<td>moderate</td>
<td>15.0</td>
<td>14.8</td>
</tr>
<tr>
<td>Mali</td>
<td>low</td>
<td>22.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Mauritania</td>
<td>moderate</td>
<td>85.1</td>
<td>25.5</td>
</tr>
<tr>
<td>Mozambique</td>
<td>low</td>
<td>19.9</td>
<td>7.0</td>
</tr>
<tr>
<td>Nepal **</td>
<td>moderate</td>
<td>33.0</td>
<td>13.7</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>moderate</td>
<td>65.9</td>
<td>15.0</td>
</tr>
<tr>
<td>Niger</td>
<td>moderate</td>
<td>15.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Nigeria (net debt data)**</td>
<td>low</td>
<td>2.0</td>
<td>-3.8</td>
</tr>
<tr>
<td>Rwanda</td>
<td>moderate</td>
<td>16.7</td>
<td>12.6</td>
</tr>
<tr>
<td>São Tomé &amp; Príncipe</td>
<td>high</td>
<td>67.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Senegal</td>
<td>low</td>
<td>18.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>moderate</td>
<td>32.0</td>
<td>25.3</td>
</tr>
<tr>
<td>Solomon Islands**</td>
<td>moderate</td>
<td>37.9</td>
<td>14.4</td>
</tr>
<tr>
<td>Sudan*</td>
<td>debt distress</td>
<td>59.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Tanzania</td>
<td>low</td>
<td>26.3</td>
<td>13.5</td>
</tr>
<tr>
<td>Togo *</td>
<td>debt distress</td>
<td>82.1</td>
<td>24.7</td>
</tr>
<tr>
<td>Tonga**</td>
<td>high</td>
<td>33.2</td>
<td>12.1</td>
</tr>
<tr>
<td>Uganda</td>
<td>low</td>
<td>17.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Zambia</td>
<td>low</td>
<td>9.9</td>
<td>16.7</td>
</tr>
</tbody>
</table>

| Averages all (excluding Nigeria) | 51.9 | 12.0 | 63.8 | 13.4 |
| Average Commonwealth (excluding Nigeria) | 31.5 | 15.4 | 46.9 | 14.6 |
| Average OIF countries | 57.0 | 10.0 | 67.0 | 13.6 |
| Average post-HIPC | 30.1 | 12.9 | 43.0 | 10.8 |
| Average pre-CP HIPCs | 101.6 | 11.3 | 112.9 | 20.0 |

* pre-HIPC completion point and pre-MDRI relief  
** Non-HIPC low income countries  
Data for Burundi and STP are post-HIPC completion point projections  
Source: IMF DSF-DSA documents
REFERENCES


Dalton J and C Dziobek (2005), Central Bank Losses and Experiences of Selected Countries, IMF Working Paper WP/05/72, Washington DC, April

Etkin, D S (1999) Estimating Cleanup Costs of Oil Spills, 199 Oil Spill Conference, USA


Government of Rwanda (2008), Medium Term Debt Strategy, Ministry of Finance and Economic Planning, November

___________________ (2008), Public Debt Policy, Ministry of Finance and Economic Planning, November


___________________ (2006), Applying the Debt Sustainability Framework for Low Income Countries Post Debt Relief, Washington DC, November

Standard & Poor’s (2006), *Sovereign Credit Ratings: A Primer*, October, available at [http://www2.standardandpoors.com/portal/site/sp/en/us/page.home/home/0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.html](http://www2.standardandpoors.com/portal/site/sp/en/us/page.home/home/0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.html)


