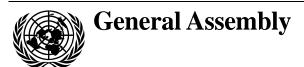
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# **Sixty-fourth session Second Committee**

Agenda items 51 (c) and 52

Macroeconomic policy questions: external debt and development: towards a durable solution to the debt problems of developing countries

Follow-up to and implementation of the outcome of the 2002 International Conference on Financing for Development and the 2008 Review Conference

# Letter dated 9 November 2009 from the Permanent Representative of Nicaragua to the United Nations addressed to the Secretary-General

I have the honour to refer to the note prepared by the secretariat of the United Nations Conference on Trade and Development (UNCTAD), entitled "Impact of the financial and economic crisis on debt sustainability in developing countries" (see annex), which was presented to the Member States at an informal meeting.

The note was prepared at the request of the outgoing President of the General Assembly, Miguel d'Escoto Brockmann, who asked UNCTAD to prepare a document on the impact of the crisis on debt sustainability. The document is also intended to contribute to the discussions of the ad hoc open-ended working group of the General Assembly, which will follow up on the work of the United Nations Conference on the World Financial and Economic Crisis and Its Impact on Development.

I should be grateful if you would have the aforementioned note circulated as a document of the sixty-fourth session of the General Assembly, under agenda items 51 (c) and 52.

(Signed) Maria Rubiales de Chamorro Permanent Representative





# Annex to the letter dated 9 November 2009 from the Permanent Representative of Nicaragua to the United Nations addressed to the Secretary-General

[Original: English]

# The impact of the financial and economic crisis on debt sustainability in developing countries

Note by the secretariat of the United Nations Conference on Trade and Development September 2009

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#### I. Introduction

- 1. The present paper is prepared in response to a request by the former President of the General Assembly, Miguel d'Escoto Brockmann, dated 6 July 2009 for the United Nations Conference on Trade and Development (UNCTAD) to prepare a paper on the impact of the financial and economic crisis on debt sustainability. Furthermore, the paper is a contribution to the follow-up to the United Nations Conference on the World Financial and Economic Crisis and its Impact on Development, held in June 2009.
- 2. Section II of the present paper describes the impact of the crisis on developing countries. It shows that this crisis has demonstrated, once again, the vulnerability of developing countries to exogenous shocks and that the global downturn raises concerns with regard to the capacity of developing countries to weather the storm without laying the foundations for a debt crisis in the years to come. In this context, it is essential for policymakers to be aware of key determinants of debt sustainability and how they have evolved over the past two years. Debt sustainability should not be viewed, however, as simply the capacity to continue servicing debt obligations without taking into account the fact that higher debt servicing costs necessarily mean fewer funds available for fighting poverty and meeting the Millennium Development Goals.
- 3. Sections III shows that developing countries suffer debt crises with debt levels which, by the standards of the advanced economies, are relatively low (a phenomenon often referred to as debt intolerance). In the paper, the conventional wisdom that this phenomenon is a result of poor policies or institutions is rejected and the argument made that the key determinants of debt intolerance are the economic and debt structure of developing countries.
- 4. Section IV discusses international and domestic long-term policies aimed at reducing the probability of debt crises. This section also highlights that, even with better policies, debt crises and sovereign defaults are bound to happen and that the cost of such crises could be attenuated by putting in place an international debt resolution mechanism, which would allow a speedy, equitable and transparent debt restructuring process.

#### II. Recent trends

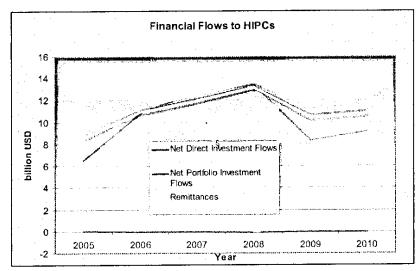
- 5. The financial crisis ignited by increased defaults on subprime mortgages in the United States of America in 2007 has turned into the most severe global economic downturn in the past 70 years. The crisis spread from the financial sector to the real economy during the course of 2008, and deepened substantially after the bankruptcy of Lehman Brothers in September 2008. During 2008 the debate on the decoupling of developing countries from the evolving economic slump in the developed economies was still inconclusive, but by the end of 2008 the data was clearly signalling that developing countries would face a substantial deterioration in their growth prospects, accompanied by the worsening of a number of key economic and social indicators.
- 6. Growth in heavily indebted poor countries (HIPC) is expected to average 2.7 per cent in 2009, compared with 5.8 and 5.6 per cent in 2007 and 2008, respectively. For non-HIPC developing countries, gross domestic product (GDP)

growth is expected to slow to 0.7 per cent in 2009, compared with 8.1 per cent in 2007 and 5.7 per cent in 2008. These numbers hide large differences among countries in performance, as the non-HIPC developing countries excluding China are expected to record a decrease of 1.8 per cent of their GDP in 2009 compared with 2008, and about 62 (out of a total of 166 countries for which data are available) developing countries are expected to record negative output growth in 2009, while an even larger number of countries are expected to record negative growth in per capita terms.

- 7. Developing countries as a group registered a current account surplus of 3.5 per cent of their gross national income (GNI) in 2007, but by 2008 the surplus had dropped to 2.5 per cent of GNI and is expected to shrink to 1.6 per cent in 2009. A few countries with large surpluses heavily influence the group average; excluding China, the figures look even more worrying. Non-HIPC developing countries registered a current account surplus of only 0.8 per cent of GNI in 2007 in 2008 had already moved to a deficit of 0.3 per cent of GNI. Moreover, over half of the developing countries had current account deficits exceeding 6 per cent of GNI in 2008, and HIPCs as a group recorded a current account deficit of 6.8 per cent of their GNI in 2008.
- 8. The deterioration in developing country current accounts was largely driven by the collapse in exports and to a lesser degree by a decrease in remittances. The drop in exports owing to decreased global demand led to a decline of 30 per cent in the value of globally traded goods between September 2008 and March 2009. This decrease is explained by a simultaneous slump in export volumes and export prices, especially in the commodity sector. Although low-income countries dependent on single-commodity exports are likely to suffer most in the course of the crisis, owing to a sharp contraction industrial activity in developed countries between late 2008 and mid-2009, middle-income developing countries have also recorded large decreases in exports, reflecting a sharp deterioration of trade in manufactured goods resulting from a reduction in spending by consumers in the developed and developing countries.
- 9. As remittances account for a relatively small fraction of the income of migrants, these flows tend to be fairly stable even during economic downturns. This explains why remittances have proven to be more resilient than other financial flows in the recent crisis, though some countries suffered sharp declines. After peaking at a record \$328 billion in 2008, remittances to developing countries are expected to decrease by 7.3 per cent in 2009, compared with a drop of over 50 per cent in net private financial flows during the same period. The drop in remittances is directly linked to the recession in advanced market economies and the decrease in the aggregate earnings of migrant workers who are often employed in the hardest-hit sectors, such as construction and automobile production. The region most affected by the decline in remittances will be sub-Saharan Africa, registering an 8.3 per cent decrease, followed by Latin America with a decline of 6.9 per cent. Remittances from workers are regarded both as an important stabilizing factor in current account dynamics for many developing countries and as a cushion against poverty for receiving households. It is this latter effect that has caused concern for many developing countries, as the weakness of the economy and decreasing Government revenues are already jeopardizing a number of social programmes.

10. Owing to a general decrease in other financial flows, the relative importance of remittances has grown, notably for smaller developing countries. In HIPCs, remittances will overtake net direct investment flows in 2009, the latter decreasing as a consequence of the financial crisis by more than 30 per cent in 2008-2009 (see figures I and II). It is expected that the countries most affected by the drop in remittances in 2008 and 2009 will be Guyana, Haiti, Honduras, Lesotho, the Republic of Moldova and Tajikistan.

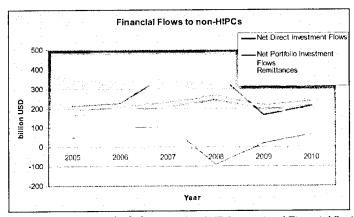
Figure I Financial flows to heavily indebted poor countries



Source: UNCTAD calculations based on International Monetary Fund (IMF) International Financial Statistics, UNCTAD World Investment Report, national sources and Economist Intelligence Unit (EIU) estimates.

Note: Based on data availability.

Figure II Financial flows to non-heavily indebted poor countries



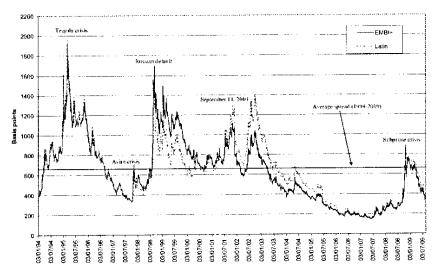
Source: UNCTAD calculations based on IMF International Financial Statistics, UNCTAD World Investment Report, national sources, and EIU estimates.

**Note:** Based on data availability.

11. While it is true that some developing countries may benefit from moving from a current account deficit to a current account surplus position and that developing countries with a current account surplus may receive limited or no benefits from financial globalization and the associated private capital inflows, 1 it is also true that adjustments should be gradual. Therefore, a sudden halt of private capital flows may be a source of considerable pain, at least in the short run. Coping with such a reversal of private inflows is one of the main policy challenges for a number of developing countries in 2009. This is especially, but not uniquely, true for those countries which are running a current account deficit. Net private capital flows, which surpassed \$900 billion at the peak of the previous cycle in 2007, dropped to \$465 billion in 2008 and are expected to be below \$200 billion in 2009. Not only has the availability of external private finance decreased over the past two years, but the cost of accessing international capital has also become higher to developing countries as the financial turmoil has deepened. The global financial crisis and the accompanying rise in risk aversion, in particular after the collapse of Lehman Brothers in September 2008, led to a drastic increase in sovereign borrowing spreads for emerging markets as a group. The spread over comparable treasuries increased from around 200 basis points in mid-2007 to over 850 basis points at the height of the crisis in late 2008 and early 2009 (see figure III). Following a series of interventions by monetary and fiscal authorities around the world and the propagation of the view that the global financial system would not collapse, spreads started decreasing from late February 2009 and have now dropped to levels that had prevailed prior to Lehman's bankruptcy. Current spreads of 350 basis points, however, still imply higher borrowing costs for emerging markets as a group compared with pre-crisis levels and, for countries that rolled over their debt during 2009, a heavier debt service burden on their economies in coming years.

Figure III

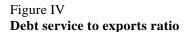
Emerging Markets Bond Index composite and Latin spreads

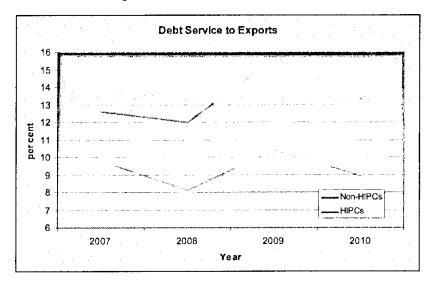


Source: Bloomberg.

<sup>&</sup>lt;sup>1</sup> UNCTAD, *Trade and Development Report*, 2008 (United Nations publication, Sales No. E.08.II.D.21).

12. With a synchronized global financial crisis and the resulting sudden halt of credit provision, the International Monetary Fund (IMF) has been functioning as the lender of last resort. Therefore, the severity of balance-of-payment difficulties encountered by developing countries is exemplified by the fact that the average number of countries seeking non-PRGF2 IMF loans amounted to six per year prior to the crisis, whereas from October 2008 to August 2009 alone the number of countries accessing such facilities increased to 24. Furthermore, whereas the average amount of disbursed IMF funds for all non-PRGF programmes averaged 2 billion special drawing rights (SDRs) a year between 2003 and 2007, the support for the 24 countries from the end of last year amounted to over SDR 100 billion. Debt stock reductions associated with the HIPC Initiative and the Multilateral Debt Relief Initiative, coupled with the robust international growth of the previous years, led to an impressive improvement in debt indicators between 2003 and 2007. While total public debt held by developing countries increased by \$176 billion during 2008, basic debt ratios still showed a moderate decline, as the full impact of lower export and slower GNI growth had not yet filtered through to developing countries. The decline in global demand and the resulting drop in the growth and export performance of developing countries will partially reverse the big gains made on the external debt front through the end of 2008, however. For example, the debt service to exports ratio is expected to worsen for both HIPCs and non-HIPCs during 2009 (see figure IV).





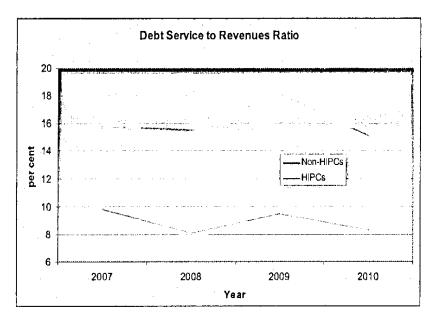
**Source:** UNCTAD calculations based on World Bank *Global Development Finance*, and EIU estimates.

13. It is likely that debt service burdens, both as a share of exports and as a percentage of Government revenues will remain more elevated both during 2009

<sup>&</sup>lt;sup>2</sup> IMF Poverty Reduction and Growth Facility. The present report looks at non-PRGF programmes as they reflect the changes in the economic landscape excluding the ongoing HIPC activities, which follow a timetable of their own.

and well into 2010 than in the pre-crisis years. In 2009, debt service in relation to Government revenue will increase by more than 17 per cent for both HIPCs and non-HIPCs (see figure V). For HIPCs, this increase is the result of both an increase in absolute debt service payments and a substantive decrease in Government revenues. Even prior to the crisis, the capacity of many developing countries to meet the Millennium Development Goals was constrained by a lack of domestic resources, and the increased share of Government revenues devoted to debt servicing is worrisome, as more countries are likely to fall behind on planned poverty reduction programmes. According to the 2009 Millennium Development Goals report,<sup>3</sup> the number of people living in extreme poverty is expected to be an estimated 55 to 90 million higher compared with the pre-crisis level. In this context, the UNCTAD secretariat has proposed a temporary debt moratorium on official debt for low-income countries, which would amount to approximately \$26 billion for 49 low-income countries for 2009 and 2010.

Figure V **Debt service to revenues ratio** 



**Source:** UNCTAD calculations based on IMF *Government Finance Statistics*, national sources, and EIU estimates.

14. A recent study commissioned by UNCTAD found that the global financial crisis has substantially weakened the banking sector in a number of low-income developing countries.<sup>4</sup> Looking at financial leverage, measured as total liabilities divided by total equity from bank balance sheet information, the study finds an increase in this indicator during the post-crisis period. Furthermore, the total bank capital ratios of most countries have shown a decrease in the post-crisis period as

<sup>&</sup>lt;sup>3</sup> The Millennium Development Goals Report 2009 (United Nations publication, Sales No. E.09.I.12).

<sup>&</sup>lt;sup>4</sup> Amar Gande and Lemma W. Senbet, "The impact of global economic crisis on debt sustainability of low-income countries", UNCTAD informal paper, 2009.

compared with the pre-crisis period. Interestingly, the ratios tend to be worse for domestic banks owned by foreign banks, reinforcing the increasingly held view that developing counties have suffered disproportionately for the excesses generated by international centres of private finance. If the global crisis extends beyond 2010, the risk of bank failures would increase in some developing countries, adding further pressure on their already strained budgetary positions, as Governments would be obliged to rescue some of the big banks, the failure of which would pose a systemic risk to the economy. Even in the more optimistic scenario under which global growth resumes in early 2010, a weakened domestic banking sector could hamper a rapid resumption of economic activity in developing countries and thus further delay the achievement of the Millennium Development Goals. The weakening of the banking sector in developing countries, caused by the financial crisis shows once again how developing countries, as innocent bystanders of the crisis, nevertheless have to cope with the repercussions of the crisis, which has derailed or slowed down their economic growth. It also demonstrates the different trajectories of the financial crisis in different countries. In the developed world, the economic crisis was triggered by the financial sector, while in many developing countries it was the global economic crisis which brought problems to their financial sector. Though there was a time lag, the negative impact on growth, poverty reduction and debtservicing capacities could nevertheless be significant.

## III. Debt sustainability in developing and advanced economies

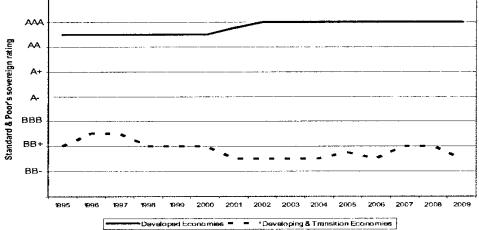
- 15. Developing countries and transition economies are subject to frequent debt crises which are characterized by low credit ratings and high sovereign spreads.
- 16. Of course, different developing countries face different types of problems. Low-income countries are indeed unable to sustain high levels of debt. This is unlikely to be a result of poor institutions and policies, as it is often claimed. Low tolerance to debt is driven by the fact that these countries have poorly diversified economies and are excessively reliant on the exports of a few commodities. This leads to a vicious circle. Low-income countries need credit to develop their productive sector and diversify their economies, but, if they borrow, they end up suffering the devastating and destabilizing consequences of debt crises. The answer to this dilemma is more concessional finance.
- 17. Middle-income countries that can access the international capital market face different types of problems. On average, it is not true that these countries go into crisis because they borrow "too much" (even though this is the case for some of them). Frequent crises are instead driven by a suboptimal debt structure which is partly the consequence of a poorly designed international financial architecture.
- 18. This latter point can be illustrated by looking at credit ratings, sovereign spreads<sup>5</sup> and debt levels. Over the period 1995-2009, the median sovereign credit rating of a large sample of developing countries oscillated between BB- and BBB while the median credit rating of the advanced economies remained above AA+ (see figure VI). Low credit ratings lead to high and volatile borrowing costs. During

<sup>&</sup>lt;sup>5</sup> Sovereign spreads measure the difference between the borrowing cost of the Government of the United States and that of dollar-denominated debt issued by emerging countries. The difference in borrowing costs derives from the pricing of perceived risks of default and expected losses.

Figure VI

1994-2009, spreads on dollar-denominated sovereign debt averaged 640 basis points and went as high as 1,920 basis points (see figure III). This poses the following questions: What are the roots of this situation? Why do developing countries have low ratings and high and volatile spreads?

Median Standard & Poor's credit rating in developed and developing economies AAA



Source: UNCTAD calculations based on Bloomberg data.

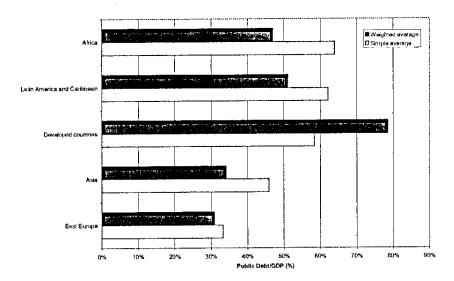
19. An economist's natural answer to the above questions is "bad fundamentals"; however, the excessive volatility of emerging market spreads casts doubt on any explanation that is purely based on "fundamentals". Volatility would be justified if it were caused by the choice of domestic policies, with low spreads rewarding good policies and high spreads punishing bad policies; however, there is overwhelming evidence that volatility is often driven by external factors.<sup>6</sup> It is hard to identify changes in fundamentals that would justify the abrupt swings in spreads documented in figure III.

20. The same argument can be made by looking at the level of public debt over GNI, which is one of the most commonly used indicators of a country's ability to face its obligations. Figure VII shows that, on average, developing countries do not have levels of public debt that are substantially higher than those of the advanced economies. When examining simple averages, only Africa and Latin America have debt levels which are higher than the developed countries, but the difference is fairly small (6 percentage points in the case of Africa and 4 percentage points in the

<sup>&</sup>lt;sup>6</sup> For instance, sovereign spreads in Latin America reached a high of 1,700 basis points after the Russian crisis in 1998, yet Latin America had no economic connections with the Russian Federation. This was a case of "financial contagion" driven by the fact that the same Wall Street investors who held Russian bonds also held Latin American bonds. When the Russian Federation defaulted in 1998, these investors indiscriminately sold the whole asset class. Even starker examples of the exogenous nature of volatility are the sudden increase in spreads in the aftermath of the 11 September 2001 attacks and the current financial crisis. Both of these events concerned the centre of the world financial system but had a large negative effect on the borrowing costs of emerging market countries.

case of Latin America). In contrast, Asia and Eastern Europe have average debt levels which are substantially lower than the average of the developed economies.<sup>7</sup>

Figure VII **Public debt as a percentage of GDP (2004-2008)** 



Source: "Public debt around the world: a new dataset of central Government debt", Ugo Panizza and Dany Jaimovich, Applied Economics Letters (March 2008).

21. These relatively low levels of debt do not mean that debt is not a problem for developing countries. On the contrary, they mean that debt is a much bigger problem for developing countries than for the developed countries. Japan has a public debt ratio to GDP that is well above 150 per cent, yet there is little concern about the solvency of Japan. At the same time, developing countries often face debt crises with debt levels which are as low as 30 per cent of GDP. There is something that makes debt riskier in developing countries. What is it? Why is debt a big problem for developing countries and a much smaller problem for the developed countries?

<sup>7</sup> In fact, weighted averages, which place greater weight on larger economies, show that developed countries have the highest debt levels. It may be argued that the above discussion, which focuses on total public debt, is misleading because developed countries have much lower levels of external debt with respect to developing countries. There are two possible answers to this criticism. The first is that debt sustainability exercises that focus only on external debt are flawed. There is ample evidence that domestic public debt is a considerable source of vulnerability and that many debt crises originate in the domestic debt market (Carmen Reinhart and Kenneth Rogoff, "The forgotten history of domestic debt", National Bureau of Economic Research working paper 13946, 2008). Moreover, in a world in which several emerging market countries have open capital accounts and borrow by issuing bonds, the distinction between external and domestic debt becomes somewhat artificial. Second, a comparison of the external debt situation of the developing world with that of the United States shows that there is no evidence that the United States has lower external debt than the average developing country. While there is some worry about a possible depreciation of the United States dollar, there is little concern about a default by the United States Government; yet United States Treasury bonds continue to carry a AAA credit rating and pay very low interest rates.

#### The standard explanation

- 22. According to conventional wisdom, this situation is a result of the presence of poor policies and institutions. With respect to policy prescriptions, this view maintains that the only way in which developing countries will be able to sustain higher levels of debt is by improving their institutional set-ups. However, the argument goes, improving institutions will require time and effort; in the meantime, developing countries should maintain low levels of debt. This is the approach at the base of the IMF/World Bank Debt Sustainability Framework for low-income countries, which relates the level of sustainable debt to the score of the World Bank's country policy and institutional assessment index.
- 23. This view, which may be labelled as "institutional fundamentalism", appears to be too strong in its conclusions and is not consistent with the high levels of volatility documented above. Such volatility in borrowing costs is often driven by the fact that foreign investors can change their minds very rapidly. The same policies and institutions that in one moment are deemed to be prudent and are "rewarded" with massive capital inflows and low spreads can suddenly become, in the view of investors, irresponsible and be "punished" with large capital outflows and high spreads.<sup>8</sup>

#### The role of debt structure

- 24. An alternative and more promising explanation focuses on debt structure. It argues that what matter are the characteristics of the debt contract. For instance, the literature on "original sin" has focused on the currency composition of external debt and argued that the presence of foreign currency debt plays a key role in reducing debt sustainability. Debt maturity is also important because short-term debt leads to rollover risk and thus increases vulnerability vis-à-vis long-term debt. The Mexican crisis of 1994/95 and the Russian crisis of 1998 are clear demonstrations of the vulnerabilities linked to maturity mismatches (see appendix).
- 25. Focusing on currency composition helps to explain why developing countries face frequent debt crises and a country like the United States faces no problems sustaining its debt. The difference is not a result of where they borrow, as they both borrow abroad and, on average, developing countries borrow abroad less than the

<sup>8</sup> United Nations Conference on Trade and Development, Trade and Development Report, 2009 (United Nations publication, Sales No. E.09.II.D.16).

<sup>&</sup>lt;sup>9</sup> See Barry Eichengreen and Ricardo Hausmann, "Exchange rates and financial fragility", National Bureau of Economic Research working paper 7418 (1999); Eichengreen, Hausmann and Ugo Panizza, "The pain of original sin", in *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economics*, Eichengreen and Hausmann (eds.), (Chicago, Illinois, University of Chicago Press, 2005).

Consider the case of two countries with similar debt levels but with different debt composition: country D has all of its debt denominated in domestic currency and country F has all of its debt denominated in foreign currency. Further assume that the two countries enter a recession and decide to adopt expansionary macroeconomic policies, which lead to a depreciation of their currencies. In country D, the expansionary policies are likely to stimulate the economy and improve both external and debt sustainability. In country F, the currency depreciation will increase the domestic currency value of the debt (this is often referred to as a negative balance-sheet effect) and may lead to a higher debt ratio and possibly to a debt crisis. As a consequence, countries with a large amount of foreign currency debt may face serious constraints in conducting countercyclical macroeconomic policies.

United States does. They even borrow abroad in the same currency as the United States (mostly the United States dollar); the difference is that the United States can print the dollar, whereas developing countries cannot.

### IV. How to make debt safer

- 26. There is a heated debate on why countries have different debt structures and whether it is possible to introduce new instruments that can improve debt sustainability.
- 27. In one camp there are those who, while not denying the role of good institutions and policies, argue that the set of debt instruments currently available to developing countries is mainly the result of a combination of historical accidents and inertia. As a consequence, it is possible, although not easy, to introduce new and better debt instruments that can improve debt sustainability. In the opposite camp, there are those who argue that the available set of instruments is just a reflection of institutional failures which lead to poor contract enforcement and a lack of policy credibility. According to this view, there is no shortcut and nothing can be done without addressing institutional failures.
- 28. The latter view appears to be too extreme. While it is unlikely that new financial instruments will, by themselves, allow developing countries to sustain the same debt levels that can be sustained by many developed countries, marginal improvement in debt structure is likely to reduce the probability of a debt crisis, at any given level of debt. Moreover, most developing countries have investment opportunities with a potential return that is higher than the cost of funds. Hence, in theory, borrowing to finance these projects can improve a country's welfare. In some cases, developing countries may be able to finance these investment projects by mobilizing domestic resources. In other cases, external debt is the only alternative.

#### Avoiding over-borrowing

29. Innovative debt instruments can limit the risk of a debt crisis at any level of debt; however, for any set of debt instruments, the risk of a debt crisis can be reduced by borrowing less. This suggests that the first step towards achieving debt sustainability is to borrow for the right reason and not borrow too much during "good times". This does not mean that countries should not borrow, but rather that they should not over-borrow. Borrowing for the right reason means that debt should only be used to finance projects that generate returns which are higher than the interest rate charged on the loan. Moreover, foreign currency borrowing should be

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A standard answer to this claim is that if such new instruments were viable there would be no need for policy interventions because the market would provide them. This line of reasoning does not recognize that the creation of innovative instruments would lead to positive externalities and therefore limit market incentives for the supply of such instruments (Eduardo Borensztein, Eduardo Levy Yeyati and Ugo Panizza Living with Debt: How to Limit the Risks of Sovereign Finance, (Boston, Harvard University Press; Washington, D.C., Inter-American Development Bank, 2006).

limited to projects that can either directly or indirectly generate the foreign currency necessary to service the debt. 1,12

- 30. A way to maintain prudent debt levels is to complement macro-level debt sustainability analysis with a careful evaluation of the sustainability of each project. Before borrowing abroad, a country should evaluate a project by asking the following three questions: (a) Will the project have a social return that is higher than the cost of funds? (b) Will the project generate the amount of foreign currency necessary to service the debt? (c) Will the resource flows match the payment schedule of the debt contract? Only projects with positive answers to the above three questions should be financed with standard external debt contracts. It is likely that in low-income countries there are several high social return projects that do not satisfy the second and third requirements, in which case such projects should be financed with grants and concessional loans.
- 31. Excessive borrowing by the public sector is often driven by political or electoral considerations and by the fact that politicians may decide to maximize their own welfare rather than that of their constituencies. There is, by now, ample empirical evidence that public sector over-borrowing can be limited by increasing the transparency of the budgetary process and the reliability of fiscal and debt statistics (see below) and by having a well-working system of automatic fiscal stabilizers. Of course, discretionary fiscal policy remains important, especially at times of crisis, but it should be accompanied by rules that reduce the potential to generate a deficit bias (chapter 7 of the 2008 *Trade and Development Report* provides a detailed discussion of these issues).<sup>13</sup>
- 32. This highlights the important role of responsible borrowing and lending. Although there is no agreed set of definitions or principles, shared responsibility by both borrowers and lenders is crucial to avoiding the unsustainable (and sometimes fraudulent) accumulation of debt. UNCTAD has launched a project that aims to address some of these issues, which includes the development of guidelines and criteria for assessing the legitimacy of sovereign debt.
- 33. Excessive borrowing, especially external borrowing, is also an issue for the private sector. <sup>14</sup> In fact, in many cases it is impossible to separate public from private liabilities. This is especially the case for bank debt. The presence of implicit or explicit deposit insurance implies that, in the case of a banking crisis, bank liabilities are absorbed by the public sector. Thus, the external debt of private banks is a contingent external liability of the public sector.
- 34. Moreover, there are conditions under which private external debt may lead to over-borrowing and end up generating more vulnerabilities than public sector

<sup>12</sup> Since money is fungible, the latter statement does not need to be applied literally. Whenever a country borrows abroad, however, it needs to make sure that the economy can generate the external resources necessary to service the debt.

<sup>13</sup> The need to increase spending and cut taxes during bad times is often not matched by the desire or ability to cut spending or increase taxes in good times.

<sup>14</sup> According to the Lawson-Robichek doctrine, any payment problem linked to private external debt would only affect the parties directly involved in the debt contract and would not have the macroeconomic effects that are typically associated with sovereign debt crises. This view was discredited by the debt crisis of 1982 and the Asian crisis of 1997/98, which hit several countries with large current account deficits but high private investment rates and balanced fiscal accounts.

external debt. For instance, in most developing countries, the cost of borrowing is linked to total (public and private) foreign debt; thus, external borrowing generates a negative externality, because each borrower increases the cost of funds for all other borrowers. If the Government is the only borrower, it will make its borrowing decision by taking into account the effect of this upward sloping supply of funds; however, private agents do not internalize the fact that their borrowing decisions have a negative effect on the borrowing costs for other agents and will thus borrow more than what is socially optimal.

- 35. Another source of vulnerability is linked to the presence of moral hazard. Private borrowers may decide to minimize borrowing costs and accumulate currency and maturity mismatches if they think that they will be bailed out in the event of a currency or liquidity crisis. In particular, currency mismatches linked to the presence of liabilities in foreign currency and assets in domestic currency have been at the root of many debt crises, including the Asian crisis of 1997/98 and the current problems facing several countries in Eastern Europe and Central Asia. This problem cannot be solved by simply requiring banks to match their foreign currency liabilities with foreign currency assets. Even if a bank perfectly matches its assets and liabilities, a currency devaluation can hurt the bank's balance sheet if the bank's clients have a currency mismatch (this is the case when firms that produce non-tradable goods borrow in foreign currency or when households hold foreigncurrency-denominated mortgages). In fact, some private agents amplify potential mismatches linked to their normal borrowing needs by engaging in carry trade and speculating with derivative products. These activities may end up causing them enormous losses; the unwinding of these speculative positions contributed to destabilizing several foreign exchange markets. 15
- 36. Prudential regulation should be aimed at avoiding such mismatches, but the implementation of such prudential regulation is made difficult by the fact that external private borrowing is more opaque than external public sector debt and that the total external exposure of the private sector is more difficult to measure and quantify than the external exposure of the public sector. This opaqueness is complicated by the fact that private sector entities often take currency risks by using sophisticated derivative instruments. Given these problems, there are instances in which controls on capital inflows can play a useful role in limiting over-borrowing and losses in external competitiveness.

#### Improving debt management

37. The current crisis has once again highlighted the importance of effective debt management for debt sustainability in developing countries. As with previous crises, effective management of a country's public debt has proved to be a valuable asset in mitigating the effects of external shocks. Effective debt management contributes to the attainment and maintenance of sustainable debt levels through three key dimensions: providing input to the decision-making process, implementing policies and ensuring adequate coverage of the country's debt.

For a discussion of carry trade, see UNCTAD *Trade and Development Report*, 2007, Chapter I. For a discussion of derivative-related exposures in the corporate sector, see Alejandro Jara, Ramon Moreno and Camilo Tovar, "The global crisis and Latin America: financial impact and policy responses", *BIS Quarterly Review*, June 2009.

- 38. The input of debt management to the Government's decision-making process consists of the provision of debt data and strategy proposals. The availability of reliable and timely debt data is essential for prudent risk analysis and the elaboration of Government strategies aimed at ensuring sustainable debt levels. Key factors are the allocation of an adequate number of trained staff, efficient information flows and the implementation of effective management information systems. Additionally, the Government must be prepared to make use of the information and recommendations that the debt management function can provide. In countries where these conditions are met, debt sustainability analysis can rely on accurate data, and the resulting policies are strengthened; where this is not the case, the analysis and resulting decision-making suffer.
- 39. For the implementation of policies, appropriate regulatory frameworks, organizational structures and operational procedures are essential. When the appropriate legal and institutional frameworks are in place and the organizational structure defines clear responsibilities, the consequential improvements in accountability and transparency levels promote the effective implementation of Government policies for achieving debt sustainability. On a macroeconomic level, debt management must be treated as an integral part of the Government's overall macroeconomic framework, strengthening the decision-making process and ensuring consistency with other macroeconomic objectives and policies. At the microadministrative level, debt management functions must be integrated with the broader processes of public finance management and administration, including integrated financial management systems. Countries that satisfy these conditions have been able to use debt management to mitigate the effects of financial crises. Where these frameworks, structures and resources are lacking or are weak, however, there is insufficient capacity to effectively implement Government policies related to debt sustainability, resulting in inconsistency between Government objectives and actual results.
- 40. Another prerequisite for debt management to support debt sustainability is full coverage of a country's public and publicly guaranteed debt obligations, as well as the monitoring of private non-guaranteed and short-term debt. The Asian crisis underlined the need for Governments to maintain comprehensive coverage of such liabilities; however, many countries still have limited coverage of their debt, maintaining debt records for only some categories of central Government debt. The consequence of this incomplete information is weaker ability to undertake comprehensive risk and debt sustainability analysis.

#### **Developing new debt instruments**

- 41. Developing countries can reduce the risks of a debt crisis by consistently running fiscal and current account surpluses; however, even if a country decided to do so (and there are several reasons why this may not be optimal or feasible), it would still be left with an existing stock of debt. As financial crises are often driven by liquidity problems and not by solvency problems (and even solvency problems are sometimes the outcome of a liquidity crisis), having a debt structure that limits the risks of such a crisis is key for guaranteeing sustainability.
- 42. Section 3 above highlighted the risks of foreign currency borrowing. Several developing and emerging market countries have been successful in reducing these risks by switching from the international to the domestic debt market. This option is

not available to all countries, however, and several developing countries still need to rely on the international capital market, where issuing in domestic currency is extremely difficult. The international financial institutions can help broaden the investor base for long-dated local currency instruments by issuing their own bonds in the currencies of their borrowing countries. In the past, multilateral development banks issued bonds denominated in the currencies of emerging economies, with the objective of minimizing their own borrowing costs. Recently, they accelerated this process because they recognized that by borrowing in local currencies they could provide support for the creation of markets for such instruments and thus contribute to development by using both the asset (their loans) and the liability (their funding) sides of their balance sheets. <sup>16</sup> Of course, these policies would become easier if the international financial architecture would move towards a less dollar-centric system (see the 2009 *Trade and Development Report* for proposals in this direction).

- 43. Debt sustainability could also be improved by issuing contingent debt instruments. For example, GDP-indexed bonds are of particular interest because they provide for lower payments when capacity to pay is low. 17 Creating a market for such securities poses a number of challenges, however, especially because someone needs to pay the fixed cost linked to the design and issuance of the new instrument. Also in this case, the international community could play an important role by providing technical assistance and strengthening the quality and reliability of the statistics necessary for pricing the new instruments. In the extreme, the international financial institutions could be the first to issue innovative and contingent debt instruments.
- 44. The creation of new instruments may require intervention at the international level because of the required market size, externalities and the need for homogenous standards, but the international community could also help address a more fundamental problem. Issuing local currency or contingent debt is analogous to paying an insurance premium. In order to accept debt instruments with a more variable return, international investors are likely to ask for some form of compensation. Paying such a premium might be politically costly, and policymakers may object to an insurance policy that may benefit future Governments. <sup>18</sup> If the international financial institutions were to create a critical mass of these instruments

<sup>16</sup> Eichengreen and Hausmann, in "Original sin: the road to redemption", in Other People's Money (see footnote 9), proposed that the multilateral development banks should issue bonds denominated in an index that pools currency risk from a diversified group of emerging economies.

<sup>&</sup>lt;sup>17</sup> For discussions of GDP-indexed bonds, see Eduardo Borensztein and Paolo Mauro, "The case for GDP-indexed bonds", *Economic Policy*, vol. 19, No. 38, pp. 165-216, April 2004; see also Stephany Griffith-Jones and Krishnan Sharma "GDP-indexed bonds: making it happen" Department of Economic and Social Affairs working paper No. 21, ST/ESA/2006/DWP/21, April 2006.

Recently, the Minister of Finance of Mexico received high praises for having adopted a prudent policy aimed at hedging against the volatility of oil prices. This hedging policy was prudent and wise, and it would have been prudent and wise even if the prices of oil had increased instead of decreased (like buying insurance is prudent even if one does not have accidents); however, one could imagine the type of criticism the Mexican Government would have been subject to if the price of oil had increased instead of decreased. This type of political risk is one of the main reasons why policymakers have limited incentives to enter into such insurance contracts. In fact, even articles that praised the Mexican Minister, Agustin Carstens, labelled this policy as a "gamble" rather than as a prudent insurance policy (Javier Blas, "Mexico's big gamble on oil pays off", Financial Times, 8 September 2009).

and demonstrate their benefits, it would be harder for self-interested politicians to reject the use of such instruments.

#### V. Conclusions

- 45. The financial and economic crisis of the past two years has highlighted the need for further policy actions both at the domestic and international levels in order to generate economic growth rates in developing countries capable of preserving debt sustainability as well as meeting the Millennium Development Goals. In this regard, it is important to distinguish between short-term actions aimed at minimizing the impact of the current crisis and longer-term policies that would need to be implemented to increase the robustness of the global economy and reduce global imbalances.
- 46. In times of crisis, low-income countries have smaller margins to manoeuvre when it comes to weathering external shocks. Accordingly, an immediate short-term measure to be adopted when a crisis erupts is for lenders to provide low-income countries with greater flexibility to respond to external shocks. Within the context of the current economic crisis, in April 2009 UNCTAD called for a debt moratorium on the sovereign debt of low-income countries to provide them with the breathing space they needed to mitigate the negative impact of the global crisis. Encouragingly, in July 2009 IMF announced the provision of interest payments relief to low-income countries in the form of zero payments for concessional lending facilities until the end of 2011.
- 47. At the Group of Eight (G-8) summit in Gleneagles and at the Millennium Summit of the United Nations, countries decided to increase official development assistance (ODA) flows to \$130 billion by 2010. Although there are encouraging signs that a number of countries are on track to meet their national targets, some countries have cut aid budgets at a time when ODA is more important than ever in mitigating the negative impact of the global economic and financial crisis. It is important that all donor countries fulfil the existing pledges, and go beyond them, in the light of the difficult situation faced by developing countries. Additional aid would be essential for meeting the Millennium Development Goals, as the current targets were agreed before the financial crisis slashed economic growth and Government revenues in developing countries and created a situation where a number of countries have to curtail their social spending in order to maintain macroeconomic stability and ensure debt sustainability.
- 48. Some heavily indebted poor countries are moving again towards an unsustainable debt position. The number of high-risk post-completion point countries increased from four to five over the last 12 months. <sup>19</sup> This increase is particularly worrisome, as there is no scope for further debt relief for this country group. Continued and increased access to highly concessional finance is therefore needed to maintain debt sustainability beyond the completion point.
- 49. In terms of longer-term actions, policies aimed at improving debt sustainability in low-income countries should start by recognizing that such countries have enormous needs in terms of investment in social and physical infrastructure but a

<sup>19 &</sup>quot;Heavily Indebted Poor Countries Initiative and Multilateral Debt Relief initiative: status of implementation", report prepared by the International Development Association and IMF, September 2009.

limited ability to sustain the external debt necessary to finance these investments. Such countries therefore face a dilemma. Either they must maintain sustainability and forego investment opportunities with high social returns, or they must try to borrow and invest as much as they can but then face recurrent debt crises. Both options will lead to low growth: the first, which is implicit in the World Bank/IMF debt sustainability framework, because of low investment and the second because of high volatility and stop-and-go cycles. A way out of this Hobson's choice would be full debt cancellation and a large step up in aid. Such a "big push" would produce a virtuous circle that might put today's low-income country on a path of stable growth and sustainable debt. Even though developed countries made several pledges to scale up aid to low-income countries (especially in Africa), there is no evidence of a major rethinking of international policy towards the debt problems of low-income countries.

- 50. Several middle-income countries entered the crisis with relatively strong fundamentals (as measured by current account surpluses and large international reserves). This position of relative strength, contributed to averting a more profound economic downturn than the one that some other middle-income countries are going through. As opposed to previous global shocks, several emerging market economies managed to avoid a collapse of their domestic currencies, and their banking sectors remained stable. As the world emerges from the near collapse of the global financial system, however, it is time to think about medium-term policies that would improve the financial prospects of emerging market countries.
- 51. It is worth mentioning that this crisis makes countries reconsider some of their policies and becomes an opportunity to introduce changes. It has, once again, shown the dangers of excessive foreign borrowing, both on a net and a gross basis (i.e., foreign borrowing that is not driven by a current account deficit). Hopefully, more developing countries will learn from this crisis and start to adopt prudent policies, which will isolate them from the vagaries of international finance. This transition, however, needs to be gradual. A sudden swing from a current account deficit to a current account surplus, which originates from a capital flow reversal, may have serious economic costs.
- 52. Economists and practitioners are now converging towards the idea that debt crises are related to both debt levels and debt composition and that there are important interactions between domestic public debt and external debt. Improving debt management capacity at the domestic level can lead to a more optimal debt composition and can reduce the risks of over-borrowing. At the same time, international policies can help developing countries to move to a safer debt structure, which would make the countries more resilient to external shocks. One of the reasons for developing countries' high cost of borrowing is that a lack of accurate and timely information on debt level and debt structure is associated with a perceived increase in the risk of the debt issued by these countries; the international community should devote more funds for technical assistance to reinforce the ability of developing countries to effectively manage debt and report accurate statistics.
- 53. Even in the presence of a more coherent international financial system, sovereign defaults are bound to happen. It is thus necessary to put in place a debt resolution mechanism aimed at guaranteeing a speedy and fair resolution of sovereign debt crises. UNCTAD has proposed the creation of such a mechanism for a number of years, and the current crisis has again demonstrated that the international financial system would greatly benefit from resolving debt problems in a rapid and equitable manner.

## **Appendix**

### External versus fiscal sustainability

- 1. Debt sustainability exercises for developing countries have traditionally concentrated on external debt. This is because of the paramount importance of the transfer problem and the fact that, until the early 1990s, most external debt of developing countries was public and most public debt of developing countries was external. The crises in the 1990s and 2000s, however, were characterized by the presence of either massive private external debt or a large stock of domestic public debt. In the current environment, about half of the long-term debt of developing countries is issued by private borrowers and more than 50 per cent of public debt is issued domestically.
- 2. Therefore, when policymakers talk about debt sustainability, they have in mind different definitions of debt. Some think about external debt sustainability and the associated transfer problem; others focus on public debt sustainability and the associated budgetary problem. Some even claim that there is no transfer problem associated with the presence of external private debt and that only external public debt should be of concern.<sup>1</sup>
- 3. Those who worry about external sustainability are interested in checking whether the country can generate the foreign currency necessary to service the external debt; however, they do not look at whether the different sectors of the economy are able to generate the resources necessary to pay their own debts. Those who worry about public debt sustainability look at the evolution of total public debt without worrying that servicing the public debt may require scarce foreign currency.
- 4. Both concepts are important, but mixing them up adds confusion to the debt sustainability discussion. The objective of the present appendix is to clarify the differences between different types of debt in terms of the different types of vulnerabilities that they create.

#### External sustainability

- 5. The observation that in order to repay its external debt a country needs to earn foreign currency on a net basis was at the basis of economist John Maynard Keynes' 1929 criticism of those who thought that a large external debt was mainly a budgetary problem.
- 6. The key difference between external and domestic debt is that the ability to generate international currency to pay interest and principal is not directly related to a country's ability to grow or to broaden its tax base. Thus, debt-to-GDP and debt-to-revenues ratios are not adequate measures of a country's ability to repay its external debt. Even the often used debt-to-exports ratio is problematic because a

<sup>&</sup>lt;sup>1</sup> This latter view is often referred to as the Lawson doctrine and takes its name from a 1988 speech by the British Chancellor of the Exchequer, Nigel Lawson, who, while commenting on the current account deficit of the United Kingdom of Great Britain and Northern Ireland, stated that: "in the past ... United Kingdom current account deficits were almost invariably associated with large budget deficits, poor economic performance, low reserves and exiguous net overseas assets. The present position could not be more different." Ironically, within one year from this speech, the United Kingdom entered into a deep recession.

large export sector is not sufficient to generate the needed resources if import growth outpaces export growth.

- 7. Unless a country's external debt is issued in its own currency, the money necessary to cover international obligations on a net basis (i.e., without creating new debt) can only be generated in the presence of a current account surplus. This means that net foreign debt is always a debt that has to be repaid in terms of internationally tradable goods and services.<sup>2</sup>
- 8. The accumulation of large net foreign liabilities is always the outcome of a persistent current account deficit. Thus, in order to evaluate whether a given amount of debt is sustainable or not, it is necessary to understand the mechanisms that drive the behaviour of the current account. There is evidence that large swings in the terms of trade like those following oil price hikes have immediate and quantitatively significant consequences for trade and current account balances. In the same vein, the reduction of deficits in countries with a sizable share of tradable industrial goods usually goes hand in hand with a devaluation of the nominal and the real value of the currencies affected. Indeed, empirical evidence has shown that changes in the real effective exchange rate have the potential to reduce deficits or to induce swings in the trade and current account from deficit to surplus.
- 9. In the light of this evidence, a large current account deficit accompanied by a real appreciation and a loss in overall competitiveness is a stronger indicator of unsustainability of the resulting debt than a deficit that is not accompanied by a loss of competitiveness. It is sometimes claimed that developing countries need to accept large inflows and the resulting currency appreciation because they do not possess enough of their own savings and hence need to import capital in order to invest and grow. This line of argument loses persuasive power, however, in a world where developing countries as a whole are both growing and investing at an unprecedented pace and are net exporters of capital.
- 10. Moreover, as the 2004 Economic Report of the President of the United States has put it: "The desirability of positive net capital flows and a current account deficit depend on what the capital inflows are used for. Household borrowing an excess of household spending or investment over saving provides a useful analogy. Household debt could reflect borrowing to finance an extravagant vacation, a mortgage to buy a home, or a loan to finance education. Without knowing its purpose, the appropriateness of the borrowing cannot be judged. Similarly for countries, borrowing from abroad can be productive or unproductive." (p. 256). Hence, debt piled up against one or the other activity appears in a different light, and debt sustainability cannot be evaluated on the basis of macroeconomic ratios only.
- 11. Thus, if a country or a region faces a sharp real revaluation, the concomitant net inflow of capital should not be interpreted as a sign of strength or as the result of the decision of investors to "save" in favour of this region. A sign of strength would be an inflow without an overvaluation. Otherwise, devaluing countries are exporting capital as the necessary complement of their success on the goods market and not as an autonomous resource transfer. As the movement in relative prices is the cause of

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<sup>&</sup>lt;sup>2</sup> In theory, this is also true when external debt is denominated in a country's own currency, but countries that can issue the currency in which their debt is denominated have the option to debase their debt by printing more money.

capital flows, it is inconsistent to complain about the negative effects of the overvaluation and to praise the net capital inflow at the same time.

12. These considerations bear some important lesson for the analysis of external sustainability. In particular, the analogy with calculations of sustainable Government debt is misleading, and we should refrain from following this path of analysis. Any attempt at measuring sustainability needs must include a thorough analysis of the causes of indebtedness.

#### Fiscal sustainability

- 13. The term "fiscal sustainability" is often used without having a clear definition in mind. The International Monetary Fund (IMF) defines a policy stance as sustainable if "a borrower is expected to be able to continue servicing its debt without an unrealistically large future correction to the balance of income and expenditure".<sup>3</sup>
- 14. Formal tests of sustainability tend to be problematic and rather demanding in terms of data requirements. Thus, analysts have developed rule-of-thumb indicators aimed at checking whether current policies can stabilize or reduce a given debt ratio for a given real interest rate, growth rate of the economy and initial stock of debt. This indicator is usually used to analyse the primary surplus that is required to stabilize the debt-to-GDP ratio:

Primary surplus = (interest rate - GDP growth) public debt

There are several caveats that apply to this approach. First, it is not solidly based on any well-specified definition of sustainability, and it mostly focuses on stabilizing a particular debt-to-GDP ratio but does not say anything about the optimality of that ratio. Second, the indicator does not establish necessary conditions for long-run sustainability. There are good reasons why a country may want to run a deficit, and it may be suboptimal to prevent a country from conducting countercyclical policies because these policies would lead to overshooting a fiscal ratio that corresponds to a long-run equilibrium. Third, evaluating the above equation requires assumptions about GDP growth, interest rates and Government expenditures and revenues and implicitly assumes that these variables are exogenous. Most of these variables tend to be endogenous, however, and correlated with one another. It is unrealistic to assume that changes in the primary deficit will have no effect on the interest rate and growth, or that changes in growth do not affect the primary surplus. In fact, deficits incurred to finance public investment should be treated differently from deficits incurred to finance current expenditure. According to current practice, public sector adjustment strategies bundle together current expenditure and public investment. The Rio Group (a permanent mechanism of political consultation and interaction among 19 Latin American countries) put forward a proposal aimed at excluding investment expenditure from fiscal deficit targets. The main argument in favour of this proposal is that, as current expenditure tends to be difficult to adjust (because it is mostly composed of wages and entitlement programmes), investment is the typical adjustment variable when the deficit exceeds the target. In the proposal, the Rio Group argues that the inclusion of investment expenditures in the target budget balance considers every increase in debt as a reduction in Government

<sup>&</sup>lt;sup>3</sup> IMF, "Assessing Sustainability", policy paper prepared by the Policy Development and Review Department, 28 May 2002, Washington, D.C., p. 4.

wealth, implicitly assigning no value to investment expenditure as an addition to net wealth. The Rio Group would instead favour the adoption of sustainability indicators similar to the one proposed by Buiter in 1985.<sup>4</sup>

15. Finally, the indicator does not take into account a host of factors that characterize the situation of most developing countries and greatly increase uncertainty. In particular, developing countries often have limited capacity to raise taxes (because of a large informal sector), have a volatile revenue base, are subject to large external shocks (both real and financial) that increase the volatility of GDP growth and that of debt service and are characterized by large levels of liability dollarization. All of these elements complicate the management of fiscal policy and greatly increase the difficulty of evaluating sustainability.

#### Interactions between external and fiscal sustainability

- 16. There are important linkages between external and fiscal sustainability. The most obvious among these linkages is that about 50 per cent of the external debt of developing countries is public debt and about 50 per cent of public debt of developing countries is issued externally. There are also less obvious linkages. For instance, in a country with no public debt but a large external private debt, the inability of private borrowers to service this debt can lead to a currency and banking crisis, which can then have negative implications on fiscal sustainability. Crisis can also originate in the market for domestic debt, however. The Mexican crisis of 1994/95 originated in the market for CETES, which are domestic currency domestic bonds, and the Russian crisis of 1998 originated in the market for GKOs, which are also domestic currency domestic bonds.
- 17. The most important interaction between fiscal and external sustainability has to do with the behaviour of the exchange rate; unfortunately, this interaction introduces an unpleasant trade-off. This can be seen by recalling that a real devaluation is a necessary condition for restoring external sustainability, that a large share of public debt in developing countries is denominated in foreign currency and that, as a consequence, a large devaluation can lead to a sudden jump in the debt-to-GDP ratio (for evidence along these lines, see Campos, Jaimovich and Panizza (2006) "The unexplained part of public debt", *Emerging Markets Review*, vol. 7/3, pp. 228-243).<sup>5</sup>
- 18. Hence, a currency appreciation can simultaneously have a positive effect on fiscal sustainability and a negative effect on external sustainability. If this situation is associated with a rapid deterioration of the current account, however, the improvement in fiscal conditions will only be temporary. This is exactly the problem with the Lawson doctrine, which may lead Governments to ignore their external

<sup>4</sup> Willem Buiter, "A Guide to public sector debt and deficits", *Economic Policy: A European Forum*, vol. I, pp. 13-79.

This is the reason why the literature on original sin and currency mismatches (Eichengreen, Hausmann and Panizza, "The pain of original sin" (see footnote 9)) argues that external borrowing may be dangerous even in the absence of a transfer problem. As the external debt of developing countries tends to be in foreign currency, a country's ability to repay its debt will depend on the behaviour of the real exchange rate, which in developing countries tends to be very volatile (Ricardo Hausmann, Ugo Panizza and Roberto Rigobon, "The long-run volatility puzzle of the real exchange rate", *Journal of International Money and Finance*, vol. 25/1, pp. 93-124, 2006). There should be no vulnerabilities for countries, like the United States, that can borrow abroad in their own currency (or, better, in a currency they can print).

financial fragility, which will eventually lead to a currency crisis and a fiscal crisis. This trade-off also implies, however, that allowing currency devaluation in the presence of foreign currency debt may lead to a debt crisis and possibly to a costly debt default. This is why some developing countries suffer from "fear of floating".

- 19. As a change in the composition of public debt and a switch to domestic borrowing can reduce these asymmetries and improve the trade-off discussed above, several developing countries are now retiring external public debt and substituting domestically issued debt. According to some commentators and economists, this switch in debt composition will shield developing countries from future debt crises. While it is true that domestic debt tends to be safer (from the point of view of the issuer), the recent switch from external to domestic borrowing may lead countries to trade one type of vulnerability for another. For instance, countries that are switching from external to domestic debt could be trading a currency mismatch for a maturity mismatch, and excessive domestic borrowing could have a negative effect on monetary credibility and thus lead to high domestic interest rates.<sup>6</sup>
- 20. These interactions between external and fiscal sustainability point to the fact that domestic debt should be included in debt sustainability analysis exercises. Currently, this is not common practice for at least two reasons. The first reason has to do with the fact that, while domestic debt may have an effect on external sustainability, the vulnerabilities of domestic debt are different from those of external debt. Thus, it would be wrong to simply add up the two types of debt. The second reason is more pragmatic and has to do with the fact that it is hard to find data on the level and composition of domestic debt. Even worse, we do not even have a good definition of domestic and external debt. In fact, while the official definition of external debt focuses on the residence of the creditor (external debt is debt owed to non-residents), most countries classify external and domestic debt based on the place of issuance and the legislation that regulates the debt contract (external debt is debt issued in foreign countries and under the jurisdiction of a foreign court).

<sup>&</sup>lt;sup>6</sup> See Guillermo Calvo, "Servicing the public debt: the role of expectations", *American Economic Review*, vol. 78/4, pp. 647-661 (1998).