
UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
GENEVA

TRADE AND DEVELOPMENT REPORT, 2008

Chapter VI

CURRENT ISSUES RELATED TO THE EXTERNAL DEBT OF DEVELOPING COUNTRIES



UNITED NATIONS
New York and Geneva, 2008

Chapter VI

CURRENT ISSUES RELATED TO THE EXTERNAL DEBT OF DEVELOPING COUNTRIES

A. Introduction

Large capital inflows are often seen as a sign of economic strength of a receiving country, and are sometimes cited as evidence of good institutions and investment opportunities. By contrast, large external debts are usually viewed as a sign of weakness, and developing countries are concerned about the accumulation of such debt. There is a lack of coherence in these perceptions, since debt accumulation is the natural consequence of large capital inflows, unless they take the form of grants or equity flows.

In case of excessive external borrowing, servicing of the external debt may become unsustainable, resulting in a financial crisis and reduced economic growth. A large foreign debt also reduces a country's policy space, as it limits the ability of the government to conduct an independent monetary or fiscal policy.

It is usually during periods of economic boom, when external capital is plentiful and external borrowing easy, that developing countries sow the seeds of future crises. These considerations are particularly important at the current juncture, as a large number of developing countries have strengthened their current-account positions, enabling them to reduce their external debt ratios. This improvement is likely to be due in part to better macroeconomic policies and debt management in debtor countries. It is also

due to considerable efforts by official creditors to provide debt relief to countries with unsustainable external debt burdens, starting with the launch of the Heavily Indebted Poor Countries (HIPC) Initiative in 1996, and especially since the beginning of the new millennium. But the major factor contributing to lower external debt ratios has been a favourable external environment, characterized by high commodity prices and low interest rates. The slowdown in growth in the developed economies (discussed in chapter I of this *Report*) and possible spillovers from the subprime crisis could reverse this favourable situation leading to a new deterioration in the debt situation of developing countries.

This chapter addresses a number of issues that could result from such a situation. Section B reviews recent trends in the external debt of developing countries and the different factors that have contributed to an improvement in traditional debt indicators. It shows that the overall debt situation has improved markedly over the past seven years, but with considerable differences across regions and countries, and mainly as the result of a favourable external environment.

Section C discusses the record of official debt relief and its contribution to the improvement of

the external debt situation of developing countries. In order to be effective, debt relief should not be a substitute for other forms of aid; rather, in most cases it should be accompanied by an increase in ODA in order to help countries accelerate growth and structural change, and to achieve the Millennium Development Goals (MDGs) set by the United Nations in 2000.

Although, as discussed in chapter V debt relief may not have been fully additional, it has helped a number of countries to attain more sustainable levels of external debt over the past few years. For these countries, but also for those that have not experienced serious debt crises in the recent past, the challenge is to build on recent improvements in economic indicators and accelerate the process of investment, growth and structural change while maintaining a sustainable debt situation. Against this background, section D examines in greater detail ways and means to maintain debt sustainability in the medium and long term. It attempts to clarify some of the concepts

and definitions linked to debt sustainability and points to some problems with the debt sustainability frameworks adopted by the Bretton Woods institutions. The main message of this section is that debt sustainability analysis has to include a detailed analysis of the reasons behind debt accumulation. Accordingly, it is necessary to go beyond simple exercises based on the analysis of a few, often poorly estimated, debt indicators and debt thresholds.

Recognizing that even with the best policies in place, debt crises cannot be entirely ruled out, and in most cases they are triggered by external financial shocks, section E revisits the discussion on the need for an international framework to address unsustainable debt situations in an orderly manner. It suggests that a statutory mechanism for the resolution of sovereign default is a key element that is missing from the international financial architecture. The chapter concludes with recommendations for policies at the national and international levels in support of sound external financing and debt strategies.

B. Recent trends in the external debt of developing countries

While there can be different definitions of external debt, the term as used in this chapter refers to debt owed by residents of a country to non-residents, independent of currency denomination. This is the definition officially adopted by the main compilers of statistical information on public debt.¹

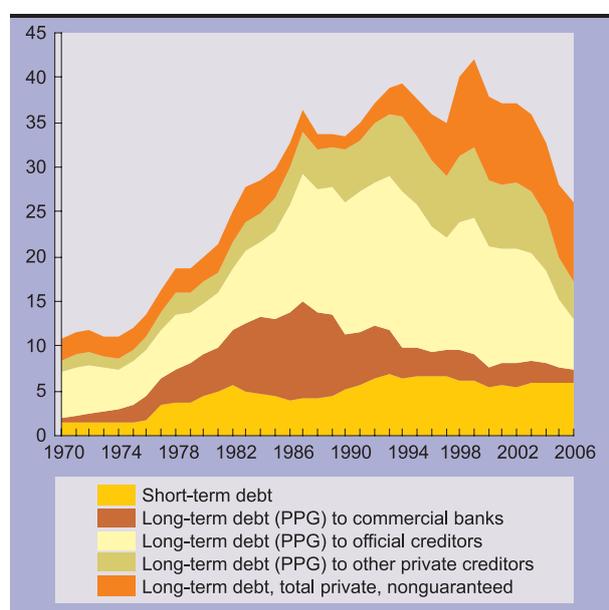
Over the past three decades developing countries have experienced several financial and economic crises that have been closely related to their external debt situation. In the early 1970s, the total external debt of developing countries was relatively low (about 11 per cent of their gross national income (GNI)) and stable (charts 6.1 and 6.2). After the oil shock of the

mid-1970s, their debt started to grow rapidly and their debt indicators deteriorated. This was mainly due to the rapidly rising debt owed to commercial banks and to short-term debt in the context of what came to be known as the “recycling of petro-dollars” (i.e. the financing of rising trade deficits in the oil-importing countries) in a liberalizing international financial environment. This trend was reinforced in the early 1980s after a sharp increase in interest rates in the developed economies following a shift in the monetary policy regime of the United States. Debt owed to commercial banks and other private institutional lenders rose rapidly, while output in most debtor countries stagnated or even declined. This

Chart 6.1

EVOLUTION OF EXTERNAL DEBT IN DEVELOPING COUNTRIES, 1970–2006

(Per cent of GNI)



Source: UNCTAD secretariat calculations, based on World Bank, *Global Development Finance* database.

Note: PPG is Public and Publicly Guaranteed debt.

triggered a deep economic crisis in many developing countries, especially in Latin America, that were indebted to international banking syndicates. Although there was little new lending (from this source), the accumulation of arrears by these countries led to an explosion of the external debt ratio, which reached 36 per cent of GNI in 1987.

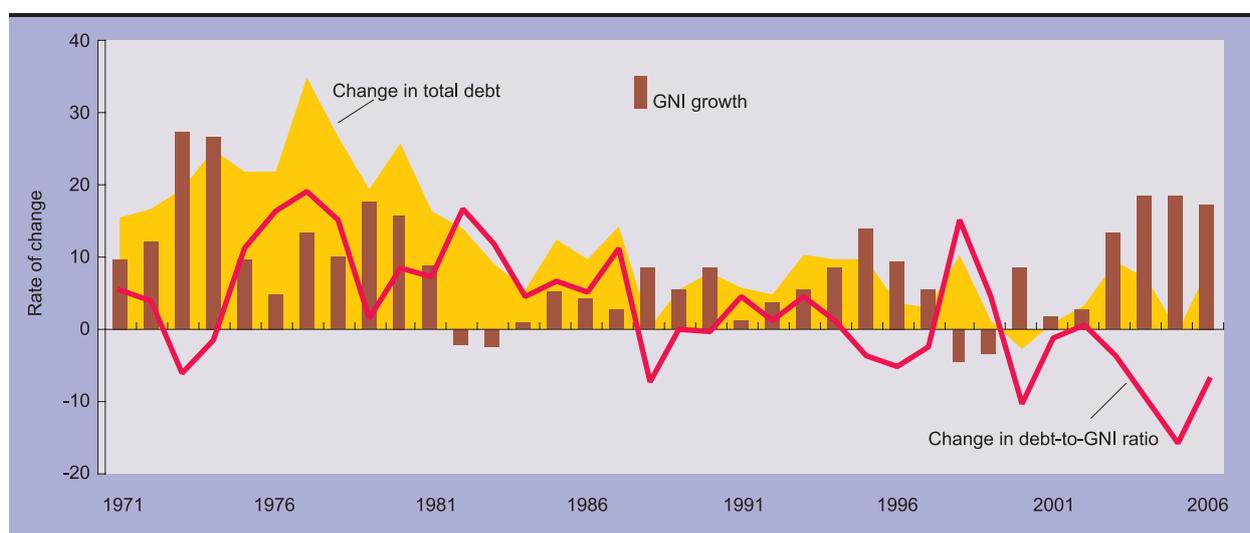
Debt remained at high levels even after several emerging market countries started exchanging their defaulted syndicated bank loans with sovereign bonds issued under the aegis of the Brady Plan. The Brady Plan was effective in reducing developing-country debt owed to commercial creditors, but it did not affect debt with official creditors. As a result, the share of debt owed to commercial creditors fell from 43 per cent of total external debt in 1988 to 28 per cent in 1995. The subsequent increase in external debt was influenced by a series of financial crises that hit the developing world in the second half of the 1990s.

Following the Asian financial crisis in 1997, developing countries as a group suffered a marked slowdown in GNI growth, while their total debt rose rapidly, leading to a spike in the aggregate debt-to-GNI ratio (chart 6.2 and table 6.1). The reversal of

Chart 6.2

DECOMPOSITION OF CHANGES IN THE DEBT-TO-GNI RATIO IN DEVELOPING COUNTRIES, 1971–2006

(Per cent)



Source: See chart 6.1.

Table 6.1

DEBT INDICATORS FOR DEVELOPING COUNTRIES, 1980–2007

(Per cent, unless otherwise indicated)

| | 1980– 1990 | 1991– 1995 | 1996– 2000 | 2001– 2005 | 2000 | 2005 | 2006 | 2007 |
|--|---------------|---------------|---------------|---------------|---------|---------|---------|---------|
| Total debt (\$ billion) | | | | | | | | |
| All countries | 892.3 | 1 627.4 | 2 192.2 | 2 538.9 | 2 256.6 | 2 739.9 | 2 983.7 | 3 357.2 |
| Sub-Saharan Africa | 111.0 | 202.1 | 221.7 | 220.5 | 211.9 | 216.2 | 173.5 | 193.8 |
| North Africa and Middle East | 106.1 | 152.9 | 155.2 | 154.2 | 145.2 | 148.9 | 141.3 | 151.3 |
| South Asia | 72.0 | 143.5 | 155.8 | 178.9 | 160.0 | 190.7 | 227.3 | 240.3 |
| East Asia and Pacific | 134.1 | 344.7 | 518.1 | 555.3 | 497.7 | 614.1 | 660.0 | 715.6 |
| Latin America and the Caribbean | 374.5 | 517.4 | 714.7 | 780.6 | 754.5 | 747.3 | 734.5 | 787.6 |
| Eastern Europe and Central Asia | 94.5 | 266.7 | 426.7 | 649.4 | 487.1 | 822.7 | 1 047.0 | 1 268.5 |
| Total debt as percentage of GNI | | | | | | | | |
| All countries | 30.3 | 38.6 | 39.3 | 35.4 | 38.9 | 28.4 | 26.4 | 24.4 |
| Sub-Saharan Africa | 44.5 | 70.6 | 69.3 | 54.3 | 66.5 | 37.1 | 26.2 | 25.4 |
| North Africa and Middle East | 47.5 | 63.7 | 44.4 | 34.5 | 38.4 | 26.2 | 21.9 | 19.5 |
| South Asia | 22.9 | 37.1 | 28.3 | 23.4 | 26.7 | 18.8 | 19.8 | 17.1 |
| East Asia and Pacific | 26.8 | 37.0 | 34.2 | 24.3 | 29.6 | 20.2 | 18.4 | 16.3 |
| Latin America and the Caribbean | 50.3 | 37.6 | 37.6 | 41.0 | 38.9 | 30.7 | 25.8 | 23.7 |
| Eastern Europe and Central Asia | .. | 28.0 | 46.6 | 48.1 | 54.9 | 40.7 | 43.2 | 40.9 |
| Total debt as percentage of exports^a | | | | | | | | |
| All countries | 173.6 | 172.0 | 141.9 | 103.2 | 122.6 | 73.6 | 65.8 | 62.0 |
| Sub-Saharan Africa | 180.7 | 250.2 | 213.3 | 143.9 | 178.9 | 88.8 | 59.8 | 57.8 |
| North Africa and Middle East | 165.8 | 159.0 | 134.4 | 86.0 | 103.7 | 59.8 | 49.1 | 45.9 |
| South Asia | 248.7 | 271.2 | 178.0 | 116.9 | 151.3 | 80.7 | 77.6 | 69.8 |
| East Asia and Pacific | 132.1 | 119.3 | 98.9 | 62.2 | 77.4 | 43.8 | 38.2 | 34.2 |
| Latin America and the Caribbean | 288.5 | 227.2 | 187.2 | 151.4 | 164.2 | 105.4 | 86.8 | 82.5 |
| Eastern Europe and Central Asia | .. | 128.2 | 127.5 | 112.7 | 128.4 | 92.6 | 95.6 | 94.1 |
| Debt service as percentage of exports^a | | | | | | | | |
| All countries | 21.8 | 17.5 | 19.9 | 16.8 | 20.2 | 13.6 | 12.6 | 9.7 |
| Sub-Saharan Africa | 14.6 | 13.3 | 13.9 | 8.9 | 11.4 | 8.3 | 7.4 | 5.0 |
| North Africa and Middle East | 19.4 | 19.9 | 16.7 | 10.8 | 12.7 | 8.7 | 10.4 | 6.1 |
| South Asia | 22.1 | 24.8 | 18.4 | 14.6 | 14.6 | 11.9 | 7.5 | 6.9 |
| East Asia and Pacific | 19.1 | 14.5 | 12.7 | 9.6 | 11.4 | 5.9 | 5.0 | 4.3 |
| Latin America and the Caribbean | 37.6 | 25.4 | 36.1 | 29.1 | 38.9 | 22.8 | 23.0 | 15.3 |
| Eastern Europe and Central Asia | .. | 12.0 | 15.9 | 21.3 | 19.0 | 21.7 | 20.0 | 16.7 |
| Debt service as percentage of GNI | | | | | | | | |
| All countries | 4.1 | 4.0 | 5.5 | 5.8 | 6.4 | 5.2 | 5.1 | 3.8 |
| Sub-Saharan Africa | 3.7 | 3.8 | 4.5 | 3.4 | 4.2 | 3.5 | 3.2 | 2.2 |
| North Africa and Middle East | 5.7 | 8.0 | 5.5 | 4.3 | 4.7 | 3.8 | 4.6 | 2.6 |
| South Asia | 2.0 | 3.4 | 2.9 | 2.9 | 2.6 | 2.8 | 1.9 | 1.7 |
| East Asia and Pacific | 3.9 | 4.5 | 4.4 | 3.7 | 4.3 | 2.7 | 2.4 | 2.1 |
| Latin America and the Caribbean | 6.8 | 4.2 | 7.4 | 7.9 | 9.2 | 6.6 | 6.9 | 4.4 |
| Eastern Europe and Central Asia | .. | 2.7 | 5.9 | 9.1 | 8.1 | 9.5 | 9.0 | 7.3 |
| Memo item: | | | | | | | | |
| International reserves (\$ billion) | | | | | | | | |
| All countries | 136.5 | 333.8 | 624.7 | 1 335.6 | 691.6 | 2 053.1 | 2 701.5 | 3 718.7 |
| Sub-Saharan Africa | 11.6 | 17.0 | 29.9 | 52.7 | 36.7 | 84.4 | 117.6 | 147.5 |
| North Africa and Middle East | 17.6 | 32.0 | 48.4 | 96.0 | 51.6 | 134.8 | 174.1 | 216.9 |
| South Asia | 11.8 | 22.5 | 38.6 | 114.4 | 47.2 | 156.7 | 198.5 | 277.3 |
| East Asia and Pacific | 40.7 | 116.2 | 248.6 | 629.4 | 283.0 | 1 020.4 | 1 315.7 | 1 856.8 |
| Latin America and the Caribbean | 46.1 | 108.1 | 163.8 | 199.8 | 158.4 | 257.3 | 312.8 | 444.7 |
| Eastern Europe and Central Asia | .. | 51.2 | 95.4 | 243.3 | 114.7 | 399.6 | 582.8 | 786.1 |

Source: UNCTAD secretariat calculations, based on World Bank, *Global Development Finance* database; and IMF, *World Economic Outlook* database for 2007 estimates.

Note: Country groupings are those of the source.

a Exports comprise the total value of goods and services exported, receipts of compensation of employees, and investment income.

this spike in 2000 is attributable to the rapid recovery of the East Asian economies. From 2000 onwards, debt levels fell, especially long-term public debt owed to official creditors. After a phase of relatively slow growth, recovery in developing countries since 2003 has resulted in a considerable decline in their debt-to-GNI and debt-to-exports ratios.

Nevertheless, the debt stock has continued to increase in absolute terms, albeit with important differences across countries and regions (table 6.1). Between 2000 and 2007 the amount of outstanding debt fell by more than 8 per cent in sub-Saharan Africa and remained almost constant in North Africa and Middle East, and in Latin America and the Caribbean. By contrast, it rose by more than 40 per cent in both South and East Asia and by more than 160 per cent in the Eastern Europe and Central Asia region, which in 2007 accounted for 37 per cent of the entire external debt of developing countries and economies in transition. Servicing of the external debt of the Eastern Europe and Central Asia region accounted for more than 7 per cent of GNI, a rate slightly higher than that registered for Latin America at the time of its debt crisis in the early 1980s. This development is all the more worrisome as the external environment has been much more favourable in terms of both interest rates and demand growth in the world economy.

The reduction in the external debt ratios of developing countries over the past few years has been accompanied by a sharp increase in their international reserves: by 440 per cent between 2000 and 2007 (table 6.1). This increase occurred not only in the regions where the stock of debt fell, but also in Eastern Europe and Central Asia, and in East and South Asia where the stock of debt rose. Such a situation reflects differences in the current-account performance of countries within these regions, as well as the fact that in some cases international reserves increased together with gross external debt. Indeed, Eastern Europe and Central Asia as a group saw the largest growth (in per cent terms) of

international reserves between 2000 and 2007 (by 585 per cent), followed by East Asia (556 per cent, but this region had the highest absolute growth in international reserves) and South Asia (488 per cent).

Since 2003, the debt-to-GNI and debt-to-exports ratios of developing countries have declined considerably.

Since 2006, total international reserves of all developing countries taken together have exceeded their total long-term debt. By the end of 2007, these reserves reached an estimated \$3.7 trillion, equivalent to two thirds of the world's entire foreign exchange reserves (IMF, 2008). As most international reserves are held in assets issued by developed countries, developing countries, as a group, no longer have a net external debt.

In this context it is worth noting that the trends in the aggregate data in table 6.1 are heavily influenced by the performance of a few large countries and of a few countries which, in the mid-1990s, had extremely high debt ratios.² This is reflected in the alternative indicators contained in chart 6.3, which compares both the average and the median debt-to-GNI ratios with the ratio for the aggregate of all developing countries. It shows that in 2006, the average debt-to-GNI ratio for a developing country stood at around 55 per cent, and the median of that ratio for all developing countries was 37 per cent. Chart 6.3, which also shows the debt-to-GNI ratios for the countries in the 10th and 90th percentiles of the distribution of this variable, again reveals considerable differences. In 1990, the country at the 90th percentile of the distribution had a debt-to-GNI ratio of 198 per cent – almost seven times that of the country at the 10th percentile of the distribution, which had a debt-to-GNI ratio of 28 per cent. In 2006, debt levels were lower, but the variation in debt levels was still substantial. The country at the 90th percentile of the distribution still had a debt-to-GNI ratio six times higher than that of the country at the 10th percentile of the distribution (102 per cent versus 17 per cent).

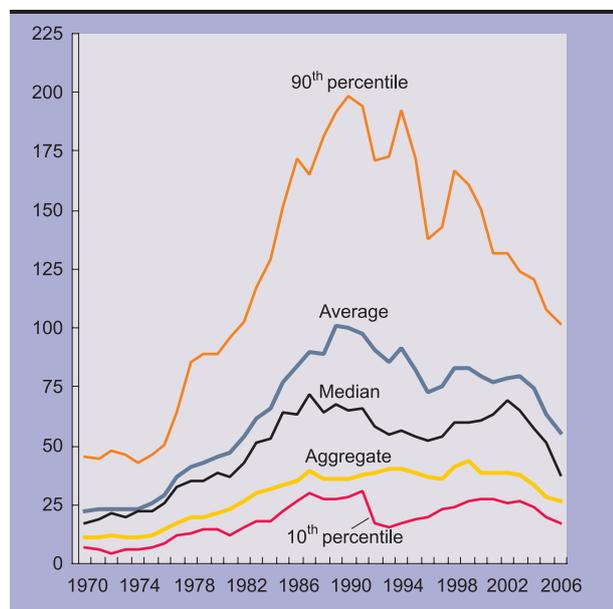
The reduction in the external debt ratios has been accompanied by a sharp increase in international reserves.

These trends in indicators of external indebtedness of developing countries have been accompanied by considerable changes in the composition of

Chart 6.3

ALTERNATIVE MEASURES OF DEBT-TO-GNI RATIO OF DEVELOPING COUNTRIES, 1970–2006

(Per cent)



Source: UNCTAD secretariat calculations, based on World Bank, *Global Development Finance* database.

Note: The average refers to simple cross-country average and the aggregate is the weighted average of table 6.1.

external debt (table 6.2). In 1990, about 95 per cent of the long-term external debt of developing countries was owed by governments or public sector entities, or was guaranteed by such entities. By 2007, the share of this public and publicly guaranteed debt had fallen to approximately 52 per cent of developing countries' long-term external debt. The decline in the share of the external public debt has been due partly to an overall reduction in the total public debt of developing countries since the beginning of the new millennium and to a rapid growth in private external borrowing. It is also due to an explicit strategy to substitute external public debt with domestically issued debt. In 1994, about 30 per cent of developing countries' total public debt was issued domestically; by 2005 this share had increased to 40 per cent (Panizza, 2008a). While more recent data for all developing countries are not available, there is some evidence that this trend continued over the 2005–2007 period, especially in large emerging market countries. There has also been a change in the composition of lenders: the public sector's long-term external debt owed to official creditors was more than 70 per cent in the early 1970s and fell to about 50 per cent in 2007 (table 6.2). These changes in the composition of the external and public debt have important implications for debt sustainability, because different types of debt lead to different vulnerabilities.

Table 6.2

COMPOSITION OF EXTERNAL DEBT IN DEVELOPING COUNTRIES, 1980–2007

(Billions of dollars, unless otherwise indicated)

| | 1980– 1990 | 1991– 1995 | 1996– 2000 | 2001– 2005 | 2000 | 2005 | 2006 | 2007 |
|---|---------------|---------------|---------------|---------------|---------|---------|---------|---------|
| Long-term debt | 761.4 | 1 326.1 | 1 783.1 | 2 028.2 | 1 888.3 | 2 128.6 | 2 305.3 | 2 557.8 |
| Public and publicly guaranteed debt | 685.7 | 1 192.5 | 1 345.9 | 1 413.1 | 1 350.1 | 1 365.8 | 1 267.1 | 1 335.4 |
| Private debt | 75.7 | 133.5 | 437.1 | 615.0 | 538.2 | 762.7 | 1 038.2 | 1 222.4 |
| Share of private debt in long-term debt (<i>per cent</i>) | 9.9 | 10.1 | 24.5 | 30.3 | 28.5 | 35.8 | 45.0 | 47.8 |
| Official creditors | 318.7 | 695.7 | 774.4 | 780.6 | 779.3 | 726.5 | 649.6 | 646.8 |
| Private creditors | 442.7 | 630.4 | 1 008.7 | 1 247.6 | 1 109.1 | 1 402.1 | 1 655.7 | 1 911.1 |
| Share of private creditors in long-term debt (<i>per cent</i>) | 58.1 | 47.5 | 56.6 | 61.5 | 58.7 | 65.9 | 71.8 | 74.7 |

Source: See table 6.1.

The switch from external to domestic borrowing in developing countries was facilitated by improvements in their current-account balance, which reduced the need for external financing in many developing countries. It was also facilitated by relatively low international interest rates and abundant global liquidity, which encouraged investors to increase their holding of local instruments issued by developing countries.³ However, it is not clear if this trend will continue in the current climate of tighter liquidity.⁴

Favourable external conditions, including relatively fast growth of the world economy and improved terms of trade for a large number of developing countries, have also driven the improvement in debt ratios over the past few years. A deep economic crisis in developed countries and a sudden rise in risk aversion among international investors could easily reverse the current positive trend. Thus,

The external debt remains a major constraint on the implementation of development strategies in many countries.

while there can be no doubt that the debt situation of a large number of developing countries is more relaxed than it was a decade ago, external debt remains a major constraint on the implementation of development strategies of many countries, especially the low-income and least developed countries (LDCs). The launching of the HIPC Initiative in 1996, the Enhanced HIPC Initiative in 1999 and the Multilateral Debt Relief Initiative (MDRI) in 2005 were based on the recognition by the international community that debt overhang constitutes a significant impediment to growth and poverty reduction in these countries. These initiatives to

alleviate the debt problem of developing countries, along with efforts within the broader framework of the Paris Club, have certainly contributed to the recent improvement of debt indicators. The following section takes a closer look at the results of these efforts.

C. Debt relief

One difficulty in measuring the actual benefits from debt relief is that, depending on the maturity structure, the net present value of the cancelled debt is considerably smaller than its face value (box 6.1). Moreover, a significant part of the forgiven debt was non-performing at the time of its cancellation, an aspect that is ignored by commonly used measures of debt relief. A recent study found that during 1990–2006, 6–7 per cent of debt relief represented recognition of arrears, and this share rose to about 15 per cent after the launch of the HIPC Initiative. For the HIPCs alone, arrears have represented up to 20 per cent of the debt relief received since 1996. Under the Enhanced HIPC Initiative, since 2000 this share has increased to 40 per cent (Panizza, 2008b). Thus, a considerable part of the debt relief granted under the

HIPC Initiative has been merely an accounting exercise, which may have had positive effects in terms of cleaning debtors' books but has not freed up any resources for public spending for other purposes.⁵

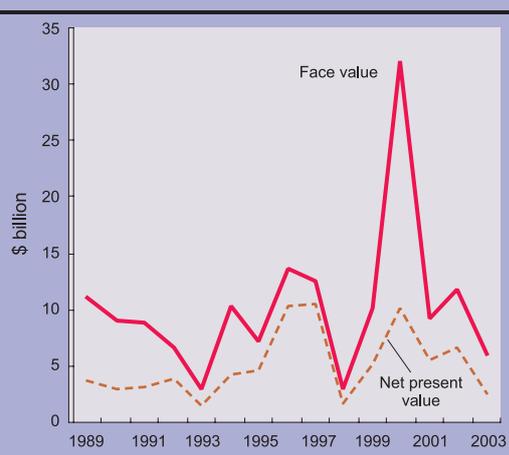
Until the second half of the 1990s, most of the debt relief and debt restructuring for low-income countries resulted from Paris Club rescheduling, and only covered bilateral debt.⁶ This changed after the launch of the HIPC Initiative in 1996. The aim of this Initiative was to provide broad-based additional assistance to countries for which traditional debt relief mechanisms had proved insufficient, and to provide an exit for highly indebted poor countries from the repeated debt rescheduling process. The rationale for massive debt relief was that debt overhang had

Box 6.1

FACE VALUE AND NET PRESENT VALUE OF DEBT RELIEF

Both GDF and DAC data report the face value of debt forgiven, neglecting the fact that the present value of this debt might be much lower than its face value. The problem can be illustrated by the following example: country A has a debt of \$100 million expiring in 2100, with an interest rate equal to the market rate; country B also has a debt of \$100 million expiring in the year 2100, but this debt carries an interest rate which is only half the market rate. Assuming a market rate of 7 per cent to discount the flows of payments associated with these two debts, the present value of country A's debt is \$100 million, while the present value of country B's debt is just over \$50 million. Since debt relief data focus on the face value of cancelled debt, a debt relief initiative that cancels the debt of both countries would be recorded as cancelling \$200 million worth of debt. But this overstates the amount of the actual debt relief.^a Depetris Chauvin and Kraay (2005) have developed two measures (one based on creditor-reported data and the other on debtor-reported data) aimed at estimating actual debt relief. A comparison of GDF data on face-value debt relief using these authors' estimates for the present value of debtor-reported debt relief shows that the present value is always lower than the face value, with differences ranging between 15 and 65 per cent of the face value of debt relief (see chart). GDF data report that over the period 1989–2003 developing countries received debt relief amounting to about \$137 billion. According to calculations by Depetris Chauvin and Kraay (2005), debtor-reported debt relief over the same period amounted to about \$76 billion.

DEBT RELIEF: FACE VALUE AND NET PRESENT VALUE, 1989–2003



Source: UNCTAD secretariat calculations, based on World Bank, *Global Development Finance* database; and Depetris Chauvin and Kraay, 2005.

^a This is not necessarily an issue relating to the calculation of debt relief as a proportion of total debt because both the denominator and the numerator may be affected by the same problem.

pushed the poor countries into a situation that prevented them not only from servicing their debt in an orderly manner, but also from achieving a growth path that would allow them to reduce poverty and narrow the income gap with the more developed countries.

Between 1996 and 2004, the HIPCs accounted for over two thirds of all debt relief granted by OECD countries and multilateral development banks. This share dropped to an average of less than 20 per cent in 2005 and 2006, when the bulk of debt relief was

granted to a few countries emerging from political and economic crises, in particular Afghanistan and Iraq, and one large middle-income debtor, Nigeria. The total amount of debt relief provided to developing countries, as a group, is fairly small compared to the total stock of developing-country debt. Thus, although debt relief has contributed significantly to improving the debt indicators of many countries individually (box 6.2), it explains only a small share of the improvement in aggregate debt indicators. The total debt relief provided to HIPCs and other countries between 1996 and 2006 amounted to \$75 billion in

Box 6.2

DEBT REDUCTION UNDER THE HIPC INITIATIVE AND MDRI^a

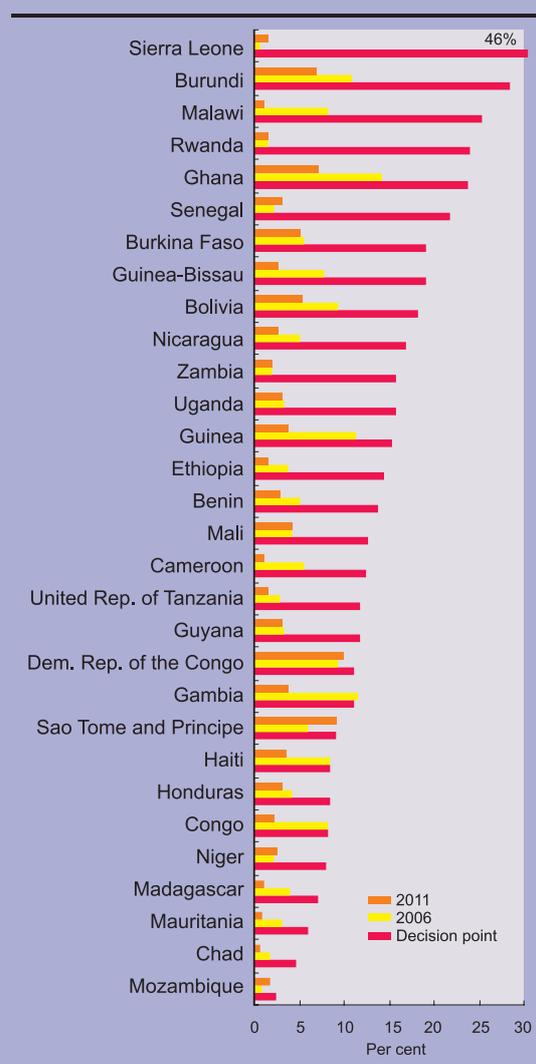
By December 2006, the HIPC Initiative and the MDRI had reduced by \$96 billion the net present value of the external debt owed by countries that had reached the decision point under the Initiative, which qualifies them for interim relief. This is more than twice the net present value of the total external debt stock of post-decision-point countries at the end of 2005. According to IMF and IDA estimates, debt reduction under HIPC and MDRI will lead to a \$1.3 billion reduction of debt service in 2007.

The initiatives were important in reducing the debt ratios of the participating countries. The average debt-service-to-export ratio fell from 18 per cent at decision point to 5.6 per cent in 2006, and is expected to reach 3.3 per cent in 2011. There are, however, large cross-country differences, and the reduction in debt service as per cent of GDP resulting from debt relief ranges between 0.3 per cent for Zambia and 1.8 per cent for Guyana.

The figure plots debt service as a share of exports for all post-decision-point countries at three points of time: at the decision point, at the end of 2006, and the projection for 2011. It shows that the Initiative drastically reduced debt service ratios in all participating countries, and that in most countries debt ratios are expected to keep declining in the near future (the exceptions being the Democratic Republic of the Congo, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal and Sierra Leone). However, even though debt relief provided under the two initiatives improved the debt ratios of the receiving countries, more than half of the post-completion-point countries are still considered as having either a moderate or a high risk of debt distress, and only 10 out of 22 post-completion-point countries have graduated to the low-risk category.

HIPC DEBT SERVICE AT DECISION POINT, IN 2006 AND 2011

(As a percentage of exports)



^a All the data reported in this box are based on IMF, 2007.

face value. This was equivalent to about 6 per cent of the 2006 stock of the long-term public external debt of developing countries, and accounted for 0.6 percentage points of the improvement in the aggregate debt-to-GNI ratio.⁷

Although the Monterrey Consensus urged the international community to pursue debt relief “vigorously and expeditiously”, not everybody agrees on the desirability of debt relief. It has been argued, for instance, that debt relief may be beneficial for

certain middle-income countries but not for HIPCs. According to this view, debt relief is considered beneficial for middle-income countries that suffer from debt overhang (i.e. a level of debt that is so high that creditors are unwilling to provide additional lending). This is not the case for HIPCs, where the main obstacle to investment is the lack of basic market institutions rather than debt overhang, as indicated by the fact that these countries have always had positive net transfers (Arslanalp and Henry, 2004; 2006). This view is consistent with the finding that debt relief provided to HIPCs does not lead to higher growth, whereas in other developing countries a debt cancellation equivalent to 1 per cent of GNI leads to an increase in the growth rate in the order of 0.2 percentage points (Hepp, 2005).⁸ On the other hand, another study suggests that debt relief is the most effective form of aid because it supposedly reduces the transaction costs of conventional aid programmes (Birdsall and Deese, 2004). The study argues that, unlike aid programmes, government officials in the recipient countries do not need to satisfy the different interests and priorities of various donor agencies, and that the resources freed by debt relief are equivalent to flexible budget support, enabling recipient countries to use them in line with their own priorities. Debt relief is also considered as potentially more effective than other forms of aid because it cannot be tied to purchases from donor countries.

Another important question is whether debt relief will be sufficient to guarantee debt sustainability in the medium and long term. Easterly (2002) shows that before 1996 debt relief did not achieve this objective, and there is no clear evidence as yet that this has changed since the launch of the HIPC Initiative, although, since then, debt sustainability analysis has become a key element in the determination of debt relief. Some countries that received debt relief under the HIPC Initiative are again accumulating debt at a rapid pace, which may soon return to an unsustainable level (World Bank, 2006a; Birdsall and Deese, 2004). This trend is sometimes explained by policy failures: in the presence of voracious (and perhaps dishonest) politicians who borrow as much as they can, any

Poor countries need both debt relief and more aid.

All poor countries should be allowed to benefit from the MDRI.

attempt at solving debt problems through debt relief will cause a temporary boom and then precipitate the country into a new unsustainable situation (Easterly, 2002). An alternative explanation for the rapid re-accumulation of debt by countries that benefited from debt relief is the large extent of unsatisfied basic needs in these countries. Hence, when debt relief relaxes their budget constraint, governments borrow and spend as much as possible in order to meet those needs. This view is at the centre of Sachs' proposal (2005) for ending poverty and of the United Nations' report (2005) on how to achieve the MDGs. According to this view, debt relief is not wasted, but poor countries need both debt relief and more aid. This problem is accentuated by the fact that, under current initiatives, debt relief is conditional on increases in social expenditure, which, in some cases, may require a shift of public expenditure away from investment projects that are directly productive and would help the economy to grow out of its debt problems.

In July 2005, the Multilateral Debt Relief Initiative (MDRI) was launched with the objective of complementing the HIPC debt relief process by freeing additional resources to support countries' efforts to achieve the MDGs. Under the MDRI, countries that have graduated from the HIPC Initiative are granted 100 per cent cancellation of their debt owed to the participating multilateral financial institutions. While all the major regional development banks participate in the HIPC Initiative, MDRI only covers debt owed to the IMF, the International Development Association (IDA) of the World Bank, and the African Development Fund (AfDF). The Inter-American Development Bank (IDB) joined the initiative later, but did not receive any compensation for the debt relief it granted under the MDRI.⁹

While the MDRI is an additional attempt to support efforts to combat poverty in highly indebted poor countries, it can lead to paradoxical outcomes, as it does not cover moderately indebted poor countries. To understand the problems with this approach, consider the case of two poor countries that have debt only with multilateral institutions.

Both have similarly low levels of income and similar needs to finance investment in social and physical infrastructure. The main difference is the level of their external debt. Country A has a net present value (NPV) of total external debt equivalent to 100 per cent of its gross domestic product (GDP). It is thus eligible for HIPC debt relief, and will also benefit from full debt cancellation under MDRI. Country B has an NPV of total external debt equivalent to 30 per cent of its GDP, and consequently does not qualify for HIPC debt relief, nor will it receive full debt cancellation under the MDRI. Following the granting of multilateral debt relief, the formerly highly indebted country A will have zero debt, while the moderately indebted country B will be left with its original debt. In order to prevent such discrimination against countries that were able to avoid unsustainable debt positions in the past, often at the cost of lower public investment and social spending, it would be more appropriate for participation in the MDRI not to be contingent on a country being highly indebted.

As discussed in chapter V, debt relief granted by official creditors is considered and accounted for

as a form of ODA. Overall, the net benefits of debt write-offs depend on the extent to which such relief results in a slower increase in other forms of ODA. So far, evaluations of debt relief have not included an explicit measure of the additionality of debt relief. Indeed, in the absence of a straightforward counterfactual, it is difficult to assess whether the debt relief granted over the past few years, including under the HIPC Initiative, has been fully additional. Nevertheless, the analysis in chapter V gives the impression that this has not been the case.

This result also justifies doubts as to whether the main objective of the debt relief initiatives (i.e. to reduce the indebtedness of problem countries to a sustainable level) can be achieved. Under the current initiatives, the granting of debt relief has been conditional, *inter alia*, on the findings of a debt sustainability exercise. Thus, only countries found to have a level of debt that is deemed unsustainable are granted debt relief. While this seems to be a reasonable approach, there is substantial confusion surrounding the concept of debt sustainability, which is discussed in the next section.

D. Debt sustainability

Debt sustainability analysis has been developed in the context of the debt relief initiatives as an instrument to determine whether, and to what extent, a country is eligible for debt relief. But the scope of such an analysis goes far beyond this specific purpose. An appropriate framework for debt sustainability analysis can be an important tool for effective debt management and for the design of financing strategies that aim at accelerated growth and structural change in the medium to long term. It can help developing countries avoid debt crises in the future, and thus render the development process more stable, providing a better investment climate. It is from this perspective that this section discusses various aspects of debt sustainability analysis. The objective is to

clarify some of the concepts and definitions linked to debt sustainability. In doing so, it also points to some weaknesses of the debt sustainability frameworks adopted by the Bretton Woods institutions.

1. *Standard frameworks for debt sustainability analysis*

There are two standard frameworks for assessing debt sustainability in developing countries. The first was developed by the IMF (2002a; 2003) and focuses on middle-income countries. The second was

developed jointly by the IMF and the World Bank and focuses on low-income countries. Both frameworks define a policy stance as sustainable if “a borrower is expected to be able to continue servicing its debt without an unrealistically large future correction of the balance of income and expenditure” (IMF, 2002a: 4). Both frameworks formulate a baseline scenario based on long- and medium-term projections of the evolution of policies and macroeconomic variables, and evaluate the sustainability of the resulting debt ratios. As a second step, the frameworks stress-test the model by using different assumptions relating to the behaviour of policy variables, contingent liabilities, external factors and macroeconomic developments. This sensitivity analysis is then used to establish an upper bound for the evolution of the debt-to-GNI ratio under a worst-case scenario, and the projected evolution of the debt ratio can be used as a sort of early warning system of an unsustainable path that would require policy adjustments.¹⁰

The two frameworks differ mainly in their definition of debt thresholds.¹¹ In discussing its debt sustainability framework for middle-income countries, the IMF (2003) suggests that the probability of a debt “correction” increases significantly when the external debt exceeds 40 per cent of GDP, but it does not establish an explicit threshold above which debt is deemed to be unsustainable. By contrast, such explicit thresholds are a central element of the debt sustainability framework for low-income countries. These thresholds are also used to guide grant allocation by the IDA and some other donors. In practice, the debt sustainability framework for low-income countries compares long- and medium-term projections of various debt ratios with debt burden thresholds for countries grouped according to the perceived quality of their policies and institutions as measured by the World Bank’s Country Policy and Institutional Assessment (CPIA) (see chapter IV, section D.3).

In this approach, the better the policies and institutions, the higher is the level of debt considered to be sustainable. On this basis, countries are classified into four groups: (i) low risk; (ii) moderate risk; (iii) high risk; and (iv) in debt distress.¹² High-risk IDA countries (also known as “red light” countries) receive 100 per cent grant financing from IDA at a

20 per cent volume discount (i.e. they receive less financing but entirely in the form of grants). Moderate-risk IDA countries (“yellow light” countries) receive 50 per cent grant financing at a 10 per cent volume discount. Low-risk countries (“green light” countries) receive 100 per cent loan financing without any volume discount.¹³

There has been much criticism of the use of the CPIA as the sole criterion for determining debt thresholds. Historical series for the CPIA index are not disclosed, and all analyses that link debt sustainability to the CPIA have been conducted by World Bank/IMF staff; no external researcher has been allowed to test the robustness of the links between these two variables. It is also questionable whether the quantitative impact of the CPIA on the probability of debt distress is large enough to formulate debt thresholds based only on the CPIA. Moreover, the CPIA tends to be an imperfect measure of policy and institutions (see chapter V).

There may be different judgements as to what constitutes “good policies and institutions”, and even if there was unanimity in this regard, it would still be necessary to recognize that not all types of “bad policies and institutions” constrain economic development in the same way at all times or in all countries (Rodrik, 2008). Therefore, while it may be reasonable to use a measure of policies (perhaps a more transparent one) as *one* of the criteria used to define debt thresholds, it is harder to justify an approach that uses policies as the *only* criterion for defining debt thresholds.

A criticism that applies to both frameworks is that they do not sufficiently account for the interactions between external and fiscal sustainability. The framework for low-income countries is explicitly restricted to external sustainability, while the framework for middle-income countries covers, in principle, both external and public debt, though its focus remains on external sustainability. Another shortcoming of both frameworks is that the assessment of debt sustainability neglects the fact that debt can be accumulated for very different reasons: debt accumulated to finance consumption will be less sustainable than the same debt stock used to finance high-return investment projects.

Debt sustainability analysis
can be an important tool for
effective debt management.

Debt sustainability analyses for developing countries normally concentrate on external debt, and the debt sustainability frameworks developed by the IMF and the World Bank are rooted in this tradition. The focus on external debt is due to the paramount importance of the transfer problem (Keynes, 1929), and to the perception that most of the external debt of developing countries is public and most of their public debt is external.¹⁴ However, the debt crises of the 1990s and since the beginning of the new millennium have been 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 (see table 6.2) and about 40 per cent of their public debt is issued domestically (Panizza, 2008a). Domestic public debt is not a new phenomenon in developing countries, and it has been shown that the large accumulation of such debt has triggered several external debt crises (Reinhart and Rogoff, 2008a and b).

External debt sustainability refers to the ability of an economy as a whole to generate the foreign currency necessary to service the external debt, independent of the ability of each sector of the economy to generate the resources necessary to service its own debt. By contrast, public debt sustainability refers to the budgetary implications of the evolution of total public debt in relation to current public revenues, no matter to whom this debt is owed and in which currency it is denominated. Both concepts are important, but mixing them up adds confusion to the debt sustainability discussion.

2. External debt sustainability

Unless a country's external debt is issued in its own currency, its repayment on a net basis (i.e. without creating new foreign liabilities) requires a current-account surplus. As more than 98 per cent of the external debt of developing countries is denominated in a foreign currency (Eichengreen, Hausmann and Panizza, 2005), the foreign debt of developing countries always has to be repaid in terms of internationally tradable goods and services.¹⁵ Since the

ability to generate the international currency necessary to service the debt is not necessarily related to a country's ability to grow or to broaden its tax base, debt-to-GNI or debt-to-public-revenue ratios do not reflect very well a country's ability to repay its external debt. Even the debt-to-exports ratio has its limitations as an indicator, because a large export sector is not sufficient to generate the needed resources if import growth outpaces export growth, or if additional exports have a high import content.

In order to evaluate whether a given amount of external debt is sustainable, it is necessary to understand how the mechanisms that drive the behaviour of the current account influence the external debt situation. The accumulation of net foreign liabilities is always the outcome of current-account deficits, while a net repayment of external debt requires a current-account surplus. Such a surplus can be generated

either by a gain in international competitiveness of producers in the debtor countries or by a negative growth differential between the debtor country and the creditor countries. Thus, a real devaluation is necessary to repay the debt if a slowdown or even a recession in the debtor country is to be avoided. Such a

devaluation may have an immediate negative effect in terms of a loss of confidence of foreign investors, and lead to a sharp increase in the debt-to-GDP ratio, but repayment of the debt will subsequently restore the country's credibility in the international capital markets.¹⁶

Debt sustainability cannot be analysed without considering how the borrowed funds are used: such funds could be used for productive or unproductive purposes, which have different effects on a country's ability to repay the debt.¹⁷ External borrowing that increases the value of a country's stock of assets is more likely to be sustainable than external borrowing used to finance consumption or white elephant projects. Therefore, debt sustainability cannot be evaluated on the basis of macroeconomic ratios alone, but should also consider the relationship between liabilities and assets.¹⁸

As external debt needs to be repaid in foreign currency, it should be used to finance projects that can increase foreign currency revenues. Clearly,

Debt sustainability cannot be analysed without considering how the borrowed funds are used.

foreign borrowing used to finance a consumption boom is likely to be unsustainable. However, there are conditions under which even debt used to finance investment projects can be unsustainable. For instance, if the debt is used to finance an investment project that has a return which is lower than the interest rate charged on the debt, but also if the debt is used to finance an investment project which has a high private or social return but no direct or indirect effect on a country's ability to increase its foreign exchange earnings. It is in this sense that proper debt management that is designed in a way to match debt structure with the flows of project funds plays a crucial role in guaranteeing debt sustainability.

3. Public debt sustainability

In assessments of public debt sustainability, the focus is not on the external transfer problem but on the internal transfer problem, which is related to a government's ability to raise enough tax revenues to service the public debt. In the presence of external public debt, the government will have both an internal transfer problem (raising tax revenues) and an external transfer problem (converting the tax revenues into foreign currency).

Unfortunately, most formal tests of fiscal sustainability are not applicable to developing countries because they tend to be too demanding in terms of data requirements.¹⁹ Moreover, evaluating fiscal (and external) sustainability requires long-term projections on the behaviour of GDP growth, the government budget and the interest rate. Formulating such long-term projections is practically impossible in developing countries that are characterized by high levels of volatility and frequent structural breaks (Wyplosz, 2007). As a consequence, fiscal sustainability is often evaluated by using rule-of-thumb indicators such as the relationship between the primary budget balance²⁰ and the size of the public debt. The public-debt-to-GNI ratio either falls or remains stable if the primary budget deficit balance is smaller or equal to the stock of debt multiplied by the difference between the interest rate of the public debt and the economy's growth rate.

While simple and intuitive, this approach has several problems. The first problem is that, although it allows studying the conditions for stabilizing a given debt-to-GNI ratio, it does not say anything about the optimality of this particular ratio. The second problem is that analyses based on the above equation implicitly assume that its components are exogenous with respect to each other. This is a highly unrealistic assumption, since changes in the primary surplus are likely to have an effect on demand growth. Thus, if a fiscal adjustment has a negative effect on GNI growth, the ultimate effect of a policy aimed at restoring debt sustainability may result in an increasing, and even less sustainable, debt ratio.

Targets or limits for the primary budget deficit can help maintain or achieve debt sustainability from the fiscal perspective, but in determining such targets it would also be useful to consider that government borrowing for investment is likely to have a different impact on long-term growth than debt incurred to finance current expenditure. Country programmes designed by the main international financial institutions usually contain fiscal targets, and, as current expenditure tends to be more rigid, investment is the typical adjustment variable when the deficit exceeds the target. This makes public investment extremely volatile. It would therefore be reasonable to exclude investment expenditure from fiscal targets.²¹ The rationale for this proposal is that the inclusion of investment expenditures in the fiscal target is equivalent to assuming that every increase in debt leads to a reduction in government wealth, implicitly assigning no value to investment expenditure. This suggests that an indicator aimed at stabilizing the debt-to-public-wealth ratio would be better than an indicator aimed at stabilizing the debt-to-GNI ratio.²²

The third problem is that developing countries often have a volatile revenue base and a limited capacity to raise taxes. They are also subject to large external shocks that increase the volatility of GNI growth and debt service. Yet fiscal sustainability exercises are usually centred on an analysis of the budget deficit, even though it has been shown that the budget deficit only explains a small share of the variation of the debt-to-GNI ratio in developing countries (Campos, Jaimovich and Panizza, 2006).

It would be reasonable to exclude investment expenditure from fiscal targets.

More than 90 per cent of this variance is explained by other factors, including external shocks and valuation effects linked to debt composition. This reinforces the argument for paying more attention to contingent liabilities and balance sheet effects associated with debt structure.

This discussion shows that there are no simple indicators of sustainability; any statement about a country's ability to meet its future debt obligations needs to be based on a careful analysis of several variables, including expectations on the future behaviour of a country's assets and liabilities. The fact that most shocks to the debt-to-GNI ratio depend on debt composition suggests that appropriate debt management can be as important as fiscal policy. The importance of debt composition is consistent with the recent findings that public debt levels are not closely related to the perception of default risk as indicated by sovereign credit ratings (IDB, 2006). It is also consistent with the absence of a robust correlation between the level of public debt and the probability that a debt crisis will actually occur (Manasse, Roubini and Schimmelpfennig, 2003).

4. Interactions between external and fiscal sustainability

The most obvious linkage between external and fiscal sustainability is that more than 50 per cent of the external debt of developing countries is public or publicly guaranteed and about 60 per cent of the public debt of developing countries is issued externally. But there are also less obvious linkages. In a country with 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 a negative impact on fiscal sustainability, as demonstrated by experiences during the Asian financial crisis that began in 1997. The opposite can also happen. A large domestic public debt has also often been at the root of several external debt crises

(Reinhart and Rogoff, 2008a): the Mexican crisis of 1994–1995 and the Russian crisis of 1998, both of which originated in the market for short-term domestic currency instruments, are examples.

Appropriate debt management can be as important as a prudent fiscal policy.

The most important interaction between fiscal and external sustainability has to do with the behaviour of the exchange rate. A real devaluation may be necessary for restoring external sustainability, but in the presence of a foreign-currency-

denominated debt a large devaluation can lead to a sudden jump in the public-debt-to-GNI ratio; the opposite can result from a currency appreciation. However, as a real appreciation tends to lead to a deterioration of the current account, any improvement in fiscal conditions will only be temporary. This trade-off also implies that allowing for a depreciation of the real exchange rate in the presence of a foreign currency-denominated debt may lead to a debt crisis and, possibly, to a costly debt default. Such a trade-off does not exist for countries that can borrow abroad in their own currency. In this case, a depreciation of the real exchange rate will have an immediate positive effect on both fiscal and external sustainability, which creates an argument for switching from external to domestically issued debt, even if the latter may imply a higher *ex-ante* interest rate.²³ According to some commentators, this switch in debt composition will shield developing countries from future debt crises. However, it is also necessary to recognize that a switch from external to domestic borrowing may lead to a new vulnerability resulting from a maturity mismatch. This is because the possibilities for most developing countries to issue

In most developing countries, the capacity to issue long-term debt in domestic currency is limited.

long-term debt in domestic currency are more limited. Therefore, one of the difficult tasks in debt management is that of having to choose the optimal debt structure by carefully evaluating these trade-offs.

The interactions between external and fiscal sustainability point to the need to include domestic debt in debt sustainability analyses. However, this would require more information than is currently available with regard to the level and composition of

domestic debt. Clearly, different types of debt yield different vulnerabilities, and simply adding them up for the calculation of a single debt ratio hides these vulnerabilities. The vulnerabilities could be grasped

by giving different weights to different types of debt according to their specific risk. This, in turn, would require more detailed information on the composition of the total debt.

E. Dealing with debt default

The main objective of debt sustainability analysis is to help policymakers avoid situations in which debt obligations cannot be met. However, even when countries adopt good policies such situations cannot be ruled out, not least because they can result from external shocks, the timing and strength of which are difficult to predict in a volatile international financial environment. Low-income countries tend to borrow from official creditors (governments or multilateral institutions), and when they cannot repay their debts, they renegotiate with these creditors, usually through the Paris Club. The situation of middle-income countries that have access to the international capital markets tends to be different. In this case, there are many, often anonymous, creditors and a large number of different debt instruments involved, and there is no appropriate institutional framework for renegotiations between sovereign debtors and private creditors. Consequently, sovereign defaults tend to be complicated, and often costly for debtors and creditors alike.²⁴

If a private borrower does not repay its debts, creditors have a well-defined claim on the borrower's assets, and these legal rights are a necessary condition for the existence of a private debt market. In the case of sovereign debt, on the other hand, creditors' rights are either not well defined or non-enforceable. Theoretically, a sovereign debtor will repay its debts only if the cost of defaulting is higher than the cost of repaying. In this sense, costly defaults are a

necessary condition for the existence of a sovereign debt market.

However, policymakers might believe that defaults are more costly than they actually are and, rather than defaulting too much and too early, they default too little and too late.²⁵ A recent survey of the costs of default (Borensztein and Panizza, 2008) found limited evidence that countries which default on their external debt obligations pay a high cost in terms of reputation that would reduce their access to

credit or render it more expensive. With regard to the cost of default in terms of lost output growth, it has been found that a default episode is associated with a decrease in growth of between 0.5 and 2 percentage points (Sturzenegger, 2004), but the causal relationship is not clear. An attempt at establishing

such a relationship by using higher frequency data indicates that it is the economic crisis that precedes the default and not the other way around. In particular, Levy Yeyati and Panizza (2005) have shown that a default episode often marks the end of an economic crisis and the beginning of recovery. This finding is consistent with the hypothesis of delayed defaults.

There are two possible explanations as to why defaults are delayed. The first relates to the fact that default episodes are often associated with political crises or, as a minimum, with the dismissal of the minister of finance of the defaulting country (for evidence, see Borensztein and Panizza, 2008).²⁶

Sovereign defaults tend to be costly for debtors and creditors alike.

As a consequence, self-interested politicians may choose to “gamble for redemption” and amplify the economic crisis by defaulting too late.²⁷

The second reason relates to the idea that strategic defaults are extremely costly in terms of reputation (which is why they are rarely observed in practice), but “unavoidable” defaults carry only a limited cost (Grossman and Van Huyck, 1988). If this is the case, policymakers may decide to postpone a default in order to signal that the default is unavoidable and not strategic. According to this view, a well-intentioned politician chooses the lesser of the two evils, and is willing to pay the cost linked to delaying default in order to spare the country a much harsher punishment. In this case, there would be much value added in implementing an impartial mechanism for the resolution of sovereign default.

Not only may defaults come too late, but also, under the current system, the cost may be amplified by an often lengthy debt-restructuring process. One concern in this context is the so-called “holdout problem” (Sturzenegger and Zettelmeyer, 2007), caused by creditors that refuse to participate in a debt restructuring process with the hope of obtaining a better deal later. In most cases, holdouts are not the original creditors, but investors – often called “vulture” funds – that buy the defaulted debt with the explicit intention of litigating. If a “holdout” creditor can obtain better treatment with respect to the creditors who participate in the debt restructuring process, every creditor will have an incentive to be a holdout. This will stall the restructuring process, prolong the default state, and leave the debtor without access to new finance and the creditors without any payments. Distinct from public debt, there is no holdout problem in connection with debt owed by private creditors, because bankruptcy legislation guarantees equal treatment to all creditors that are in the same class.

While tranquil periods are the best time to have a rational discussion about issues related to crisis resolution, attention to this topic tends to be cyclical and

only picks up once a crisis has erupted. Thus, it was against the background of the crises experienced in the years preceding the International Conference for Financing for Development in 2002 that the Monterrey Consensus emphasized “the importance of putting in place a set of clear principles for the management and resolution of financial crises that provide for fair burden-sharing between public and private sectors and between debtors, creditors and investors.” (United Nations, 2002: para. 51).

Specific proposals for the establishment of some form of international debt workout procedure had already been made

in *TDR 1998* (Part One, chap. IV.B) and *TDR 2001* (Part Two, chap. VI.B). Indeed, the issue had been raised as early as 1986 in the context of the debt crisis of the 1980s. At the time, the absence of a clear and impartial framework for resolving international debt problems trapped many developing countries in situations where they suffered the stigma of being judged *de facto* bankrupt without a degree of protection and relief comparable to that resulting from the status of *de jure* insolvency (*TDR 1986*: annex to chap. IV). UNCTAD was the first international organization to call for orderly workout procedures for the international debt of developing countries, drawing on certain principles of national bankruptcy laws, notably chapters 9 and 11 of the United States bankruptcy law.²⁸ These proposals recognized that building on the principle of maintenance of open capital accounts and convertibility and guaranteed repayment to creditors may not always be successful in stabilizing the markets and avoiding costly crises.

The debate on the need for establishing such a mechanism regained momentum when the IMF put forward a proposal for a Sovereign Debt Restructuring Mechanism (SDRM) (Krueger, 2001), which was considered

officially at a meeting in 2003 of the International Monetary and Financial Committee. However, many countries were concerned that the introduction of a statutory mechanism for debt restructuring would impair their access to international capital markets.²⁹ Another concern was that the proposal could result

A default episode often marks the end of an economic crisis and the beginning of recovery.

The number of emerging market issuers using CACs has grown continuously.

in a significant increase in the role of the IMF, as it would have the prerogative to decide about the sustainability of a country's external debt. As a result of these and other concerns, the SDRM proposal failed to elicit the required support.³⁰

By contrast, a number of emerging market economies expressed their preference for voluntary approaches to debt restructuring, especially the incorporation of collective action clauses (CACs) in new bond issues.³¹ However, while preferring this alternative, some issuers initially expressed concerns that the inclusion of CACs might be interpreted as an indication of limited ability or willingness to repay, and that investors would require larger spreads on such bonds. The experience with several bond issues by emerging market economies in the course of 2002 and 2003 alleviated these concerns, and the number of emerging market issuers using CACs has grown continuously.

In late 2007, about two thirds of the outstanding stock of emerging-market bonds included CACs, a share that it is expected to reach 80 per cent by 2010.³²

In the absence of a fully-fledged statutory mechanism modelled on national bankruptcy legislation in developed countries, the inclusion of CACs in bond contracts can play a positive role in achieving orderly debt workouts in the long run. However, it would be more effective if it were to be complemented by a more general, formalized and internationally agreed framework. Such a framework might allow for a unilateral standstill on debt repayments that would be sanctioned by an international body while lending into arrears would continue (*TDR 2001*, chap. III, section D, and chap. IV). Moreover, the features of a statutory structure should give sufficient confidence to creditors that the system does not increase the incentive to default.

F. Conclusions: policy recommendations

Since the mid-1990s an unprecedented amount of official debt relief has been granted to developing countries. It has been intended not only to help the poorest countries raise per capita incomes and reduce poverty, but also to support some middle-income countries and countries emerging from political conflict to achieve sustainable debt positions, in order to place them in a better position to implement their development strategies. However, the large amount of debt relief delivered over the past few years appears to have partly crowded out non-debt relief aid flows. Evaluations of debt relief initiatives should therefore include an explicit measure of the additionality of debt relief.

Full additionality of debt relief, as called for in the Monterrey Consensus, is essential to enhance the

ability of low-income countries to achieve the MDGs while maintaining debt sustainability. It should also enable them to undertake the investments in economic infrastructure and in the productive sectors that are necessary for creating employment and increasing

productivity. This is the only way they will be able to attain a level of per capita income that would allow sustained poverty reduction and lasting improvements in the other indicators contained in the MDGs.

Donors should also recognize that past debt relief efforts have neglected the considerable

development needs of other low-income countries that have low debt levels, often as a result of more prudent external financing strategies. In order not to discriminate against such countries, it would be appropriate to allow all poor countries to benefit from

Full additionality of debt relief is essential to enhance the ability of low-income countries to achieve the MDGs.

the MDRI; thus, participation in the MDRI should not be contingent on being highly indebted. Moreover, it may also be necessary to consider providing debt relief for developing countries that are not eligible under the HIPC Initiative and the MDRI.

Recent empirical evidence on the relationship between net foreign borrowing and growth suggests that the accumulation of external debt is not necessary for all developing countries or at all times. For various reasons, including, in particular, higher export prices for primary commodities and macroeconomic policies aimed at preventing exchange-rate overvaluation, net capital imports of most developing countries have slowed down or even been reversed in recent years. This has resulted in their external debt growing more slowly than their GNI or exports. Several developing countries have even reduced their stock of debt or become net creditors to the rest of the world. However, many countries continue to rely on external resources, either because of structural current-account deficits or weak domestic financing mechanisms. Depending on the purpose for which external financing is used, the effects of such financing on the economy, including the sustainability of the external debt burden, can differ considerably.

A key challenge now is to stabilize the improved indicators and improve them further, while ensuring that external capital is put to uses that are the most productive in terms of growth, structural change and social development.

In a survey of 500 years of debt crises, Reinhart and Rogoff (2008a) have shown that booms in capital flows are almost always followed by default waves. 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”. Borrowing for the right reason means that debt should be used only to finance projects that generate returns which are higher than the interest rate cost of the loan. Moreover, foreign currency borrowing should be limited to projects that can, either

directly or indirectly, generate the foreign currency necessary to service the debt.³³ In many cases, especially when the projects do not depend on imports, developing countries should seek to finance them with domestic resources. Debt strategies are therefore closely interrelated with renewed efforts to strengthen domestic financial systems, as discussed in chapter IV, and with macroeconomic and exchange-rate policies that aim at avoiding unnecessary current-account deficits.

Middle-income countries can reduce the probability of a debt crisis by using the current favourable external conditions to reduce their fiscal deficits, strengthen their domestic financial system and avoid an overvaluation of their exchange rate with a view to limiting the need for external borrowing. An important constraint for middle-income countries that have access to international financial markets is their vulnerability to the effects of the high volatility of these markets. Shocks that may lead to a liquidity crisis in the developing world often depend on external factors that may originate from policy decisions of developed countries. This is why developing countries must evince a particular interest in reform of the international monetary and financial system with a view to minimizing destabilizing speculative financial flows. They also need to push for the strengthening of institutions and mechanisms in support of macroeconomic policy coordination.

Implementing national policies to reduce the risk of a debt crisis is even more difficult for low-income countries. These countries have a very small domestic financial sector, and often depend on external resources to finance not only projects in the productive sectors of their economies and large infrastructure projects, but also the development of their health and education sectors. Although these social sectors yield high returns in the long run, they may not generate the cash flows necessary to service the debt in the short and medium term, and thus borrowing from external resources to finance these sectors could result in an unsustainable debt situation. This suggests that, since low-income

An accumulation of external debt is not necessary for all developing countries, or at all times.

The first step towards achieving debt sustainability is to borrow for the right reason and not borrow too much during “good times”.

countries cannot sustain high levels of debt, they should receive considerably greater external financial support in the form of grants.

In order to strengthen public and external debt management, a well-working mechanism for collecting and reporting data on the level and composition of sovereign debt, both external and domestic, is crucial.³⁴ This is a particularly difficult problem for countries with a federal structure and a large number of State-owned enterprises. Countries that issue debt instruments in the international capital markets and have a well-working domestic financial system should adopt a debt strategy that employs a comprehensive asset-liability management approach and takes into account differences in the cost and risk of the various debt instruments they issue. In particular the costs and benefits of issuing contingent and equity-like debt instruments should be evaluated carefully. Given that a large and increasing share of borrowing by emerging market countries originates from the private sector, these countries also need to carefully supervise the activities of private agents to ensure that private borrowing does not generate excessive vulnerabilities in the balance sheets of domestic banks and corporations.

International support for efforts aimed at improving debt sustainability in low-income countries should start by recognizing that these countries have enormous needs for investment in social and physical infrastructure, but a limited ability to sustain the external debt necessary to finance these investments. According to the World Bank/IMF debt sustainability framework, these countries would have to forgo investment that brings high social returns in order to maintain external debt sustainability. Full debt cancellation and a large increase in aid are likely to be necessary in these cases.

The use of innovative debt instruments that reduce the vulnerability of developing countries to shocks or unfavourable developments in the international economic and financial environment could

help maintain debt sustainability. The creation and dissemination of such instruments could be facilitated by support from the international community because of the required market size, externalities and the need for uniform standards. For instance, since few developing countries are able to issue external debt in their own currency, the international financial institutions could help create markets for local currency instruments by issuing their own bonds in the currencies of their borrowing countries.³⁵

The launching of contingent debt instruments, in particular GNI-indexed bonds that provide for lower debt service payments when capacity to pay is low,³⁶ could also be supported by the international community through technical assistance and strengthening of the quality and reliability of the statistics necessary for pricing such new instruments. International financial institutions might even consider issuing such contingent debt instruments themselves. In order to accept debt instruments with a more variable return, international investors are likely to ask for a premium, which can be considered a cost of insurance against external financial shocks. In the case of GNI-indexed bonds, the necessary premium has been estimated to amount to approximately 100 basis points (Borensztein et al., 2004). The international financial institutions could promote this kind of insurance by creating a critical mass of such instruments and demonstrating their benefits.

Finally, it must be acknowledged that, even with improved debt management and better and safer debt instruments, debt crises are bound to occur. Thus, the international community should not abandon the idea of creating a mechanism aimed at providing speedy resolutions of debt crises and fair burden-sharing among creditors and debtors.³⁷ To this end, it would be desirable to create an independent international body, mandated by both debtors and creditors, to evaluate the debt situation of all countries facing an external debt problem and decide on the level and form of debt relief they would need (*TDR 2001*). ■

Because of their vulnerability to external shocks, developing countries must evince a particular interest in reform of the international financial system.

Notes

- 1 See *External Debt Statistics: Guide for Compilers and Users*, jointly published by the Bank for International Settlements (BIS), Eurostat, the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the Paris Club, UNCTAD and the World Bank. However, it should be pointed out that a strict application of this definition is not possible, since most of the external debt due to private creditors is held by investors who are, in principle, anonymous. Consequently, most countries report figures for external and domestic debt by using information on the place of issuance and jurisdiction that regulates the debt contract. This is problematic, because there is anecdotal evidence that more and more international investors are entering the domestic financial markets of developing countries, and that domestic investors often hold bonds issued in international markets. An alternative definition would focus on the currency in which the debt is issued, with external debt defined as foreign currency debt. But this definition does not seem appropriate because several countries issue foreign-currency-denominated debt in their domestic markets and have recently started to issue domestic-currency-denominated debt in international markets. Moreover, there is limited information on the currency composition of debt issued on the domestic market.
- 2 The five largest economies accounted for 50 per cent of the total GNI of the developing world in 2000. China accounted for 60 per cent of the total GNI of the East Asia-Pacific region. Brazil and Mexico for 60 per cent of the total GNI of the Latin America and the Caribbean region, and the Russian Federation for 30 per cent of the total GNI of the Eastern Europe and Central Asia region.
- 3 Foreign investors' holdings of locally issued instruments are supposed to be classified as external debt and not domestic debt, but this is rarely done (see note 1).
- 4 Conventional wisdom suggests that private and public borrowers from emerging market countries can now sell domestic-currency-denominated debt to foreign investors because these investors expect an appreciation of the local currency against the dollar. However, this view is only justified if the lenders expect a larger appreciation than the borrowers, and it is not clear why this should be the case. Caballero and Cowan (2008) suggest that domestic-currency-denominated borrowing is now in vogue because the expected appreciation allows prudent policymakers to hide the implicit insurance premium embedded in this form of borrowing.
- 5 Data on the amount of debt relief also differ depending on whether reference is made to debtor-reported data, such as that of the World Bank's Global Development Finance (GDF) database, or to creditor-reported data in the database of the OECD's Development Assistance Committee (DAC). The main advantage of the GDF database is that it indicates debt relief from all official creditors, including those that are not members of DAC. The main problem with this source is related to the fact that not all developing countries have strong debt recording capacities, and hence GDF data suffer from substantial measurement errors. Creditor-reported data from the DAC database tend to be "cleaner" than GDF data, but the coverage of non-DAC members is limited. As a consequence, the DAC figures tend to be smaller than the GDF figures, and GDF data tend to show greater volatility than DAC data.
- 6 For a discussion of the Paris Club and its procedures, see Rieffel, 2003.
- 7 Data for debt relief are from DAC (OECD-IDS) and for debt-to-GNI ratio from GDF.
- 8 Depetris Chauvin and Kraay (2005) tested the relationship between debt relief, growth and the composition of public expenditure. They found a positive, but not statistically significant, correlation between debt relief and GDP growth, and a positive, statistically significant, but not very robust, correlation between debt relief and government spending on health and education.

- 9 The modalities of eligibility and delivery of debt relief under the MDRI vary among the multilateral institutions. Each institution is separately responsible for deciding the implementation and coverage of the debt relief. While the majority of HIPCs are fully covered by the participation of the African Development Bank (AfDB) and IDB, Afghanistan, Kyrgyzstan and Nepal are not, because the Asian Development Bank (ADB) does not participate in the MDRI.
- 10 The frameworks would provide an extremely early warning, as some debt sustainability analyses are based on 20-year projections.
- 11 A minor difference has to do with the stress-testing exercises. Stress-testing is more important in the framework for middle-income countries for at least two reasons. The first relates to data availability, as some low-income countries lack sufficient data. The second has to do with the fact that middle-income countries have a more complex debt structure and are more susceptible to large shocks to their financing costs.
- 12 Countries are classified as low risk if all debt indicators are below the debt burden threshold and will remain below this threshold even if these countries suffer a relatively large negative shock. Countries are classified as moderate risk if their debt indicators are below the debt burden threshold but they risk breaching the threshold in case of a negative shock. Countries are classified as high risk if the baseline projections indicate that the countries will breach the threshold. Countries are classified in debt distress if their debt ratios are in breach of the thresholds (for more details, see World Bank, 2006b).
- 13 While not receiving grants, low-risk countries benefit from the concessional element that is part of all IDA loans.
- 14 It is sometimes argued that there is no transfer problem associated with the presence of external private debt, and that the only problem comes from external public debt. This view is often referred to as the "Lawson doctrine", following a 1988 speech of the then British Chancellor of the Exchequer, Nigel Lawson, who, while commenting on the current-account deficit of the United Kingdom, stated that the position of his country was strong because the current-account deficit was driven by private sector and not public sector borrowing. The Asian crisis, which occurred in a context of low public debt and deficits and was driven by private borrowing, discredited the Lawson doctrine. Indeed, even the United Kingdom entered into a deep recession soon after Mr. Lawson delivered his famous speech.
- 15 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.
- 16 As a counterpart to the swing of the debtor country's current-account balance into surplus, creditors need to accept a worsening of their current-account balance, and debt sustainability exercises also need to take into account a potential unwillingness of creditors to accept this.
- 17 In the United States, the 2004 Economic Report of the President emphasized this point by stating: "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" (United States, 2004: 256).
- 18 Although the value of assets for which there is no secondary market can only be estimated by making several assumptions, in some countries figures for both public debt and public assets are published. One example is New Zealand, where figures for all government-owned financial and physical assets, including roads, bridges and schools, are reported. This approach is likely to be problematic for assessing external sustainability in developing countries, because assets such as public libraries, hospitals and schools have limited liquidity and are unlikely to generate the foreign currency necessary to repay external debt.
- 19 Some tests developed for the United States use more than 100 years of data (Hamilton and Flavin, 1986). See Izquierdo and Panizza (2006) for a recent survey.
- 20 The primary budget balance is the budget balance net of interest payments on the public debt.
- 21 Governors representing 11 borrowing members of the IDB acknowledged this problem, and in 2004 they signed an open letter, which became known as Carta de Lima, asking for the exclusion of investment spending from fiscal targets (see http://www.iadb.org/exr/am/2004/carta_lima.pdf; an English translation of relevant sections of the letter is available at: <http://www.iadb.org/exr/am/2004/index.cfm?op=press&pg=15>).
- 22 Buiter (1985) suggests such an indicator of sustainability, defined as:
- $$SUS = ps - (g - r) \frac{W}{GDP} ,$$
- where W is public sector net worth, ps is the primary surplus, r is the real interest rate, and g is the economy's growth rate.
- 23 Besides local currency bonds, developing countries could issue other types of financial instruments with

- an embedded insurance component. Such instruments include instruments with payments indexed to commodity prices, terms of trade, or the GNI growth rate. Alternatively, countries could obtain contingent coverage through the use of derivative contracts. However, many futures and options markets lack depth and liquidity, and therefore offer only limited scope for insurance (IDB, 2006). Some countries are starting to issue catastrophe (CAT) bonds. For a discussion of the benefits of country catastrophe insurance, see Borensztein, Cavallo and Valenzuela, 2007.
- 24 A sovereign default is usually defined as a situation in which a sovereign debtor fails to fully repay its debt obligations and reschedules those obligations on terms that are less favourable (with respect to the original debt contract) for the creditors (see Panizza, Sturzenegger and Zettlemeyer, 2008, for a survey of the law and economics of sovereign debt and default).
- 25 A memo prepared jointly by the central banks of the United Kingdom and of Canada states that: "The problem historically has not been that countries have been too eager to renege on their financial obligations, but often too reluctant" (Blustein, 2005: 102).
- 26 In some cases the opposite is true, and the decision to default is welcomed by the public. But this usually happens when the decision to default is made by a new government.
- 27 A policy that delays a necessary default might be costly because it may lead to restrictive fiscal and monetary policies and, by prolonging the climate of uncertainty, may have negative effects on investment decisions.
- 28 Similar to *TDR 2001*, Pettifor (2002) and Raffer (1990) have suggested adapting for the international debt market some features of chapter 9 of the United States bankruptcy code, which deals with municipal bankruptcies. According to their proposal, the adapted chapter 9 procedures would be chaired by neutral, ad hoc entities established by creditors and the debtor, as is traditional practice in international law.
- 29 For a more detailed discussion of the SDRM proposal, see Akyüz, 2003: 6–7.
- 30 For SDRM to become operational, the IMF's Articles of Agreement would have had to be amended, which would have required the support of three fifths of the members of the Fund and 85 per cent of the total votes. The amendment of the Articles of Agreement is de facto impossible without the support of the United States, which holds 17.1 per cent of the votes.
- 31 A CAC allows a supermajority of bondholders (usually between 75 and 90 per cent) to agree on a debt restructuring that is legally binding for all holders of the bond, including those who vote against the restructuring. CACs are regularly attached to bonds issued under British and Japanese laws. On the other hand, until 2003, bonds issued under New York law did not have CACs attached to them, making the restructuring of such bonds difficult, as it required the acceptance of the restructuring terms by all bondholders.
- 32 Keynote speech by the President of the European Central Bank, J.C. Trichet at the 25th Anniversary IIF Annual Membership Meeting, Washington DC, 20 October 2007, and IMF (2002b).
- 33 Since money is fungible, this does not need to be applied literally. However, whenever a country borrows abroad it needs to ensure that the economy can generate the external resources necessary to service the debt.
- 34 Data problems could be solved if there were political will to do so. In fact, lack of data on domestic debt is a fairly recent phenomenon. Reinhart and Rogoff (2008b) report that the League of Nations used to collect detailed data on the amount and composition of domestic public debt for both developed and developing economies, and that the United Nations continued to collect and publish such data until the early 1980s. It is not clear why it no longer does so.
- 35 Eichengreen and Hausmann (2005) have proposed that the multilateral development banks should issue bonds denominated in an index that pools currency risk from a diversified group of emerging economies.
- 36 For discussions of GNI-Indexed Bonds, see Borensztein and Mauro (2004) and Griffith-Jones and Sharma (2006).
- 37 The international community should also start thinking seriously about odious and illegitimate debt issues. These are controversial concepts on which there is a multiplicity of views. Some argue that odiousness should be defined *ex-post* (EURODAD, 2007), while others argue that declaring odiousness *ex-post* may generate some problems that could be solved by declaring odiousness *ex-ante* (Jayachandran and Kremer, 2006). Still others claim that, given the current state of knowledge, having an explicit odious debt policy, either *ex-post* or *ex-ante*, may do more harm than good (Rajan, 2004).

References

- Akyüz Y (2003). New sovereign debt restructuring mechanisms: Challenges and opportunities, *WIDER Angle*, 1.
- Arslanalp S and Henry PB (2004). Helping the poor to help themselves: Debt relief or aid. In: Jochnick C and Preston F, eds. *Sovereign Debt at the Crossroads: Challenges and Proposals for Resolving the Third World Debt Crisis*. Oxford, Oxford University Press.
- Arslanalp S and Henry PB (2006). Debt relief. *Journal of Economic Perspectives*, 20(1): 207–220.
- Birdsall N, Claessens S and Diwan I (2001). Will HIPC matter? The debt game and donor behavior in Africa (mimeo). Washington, DC, Carnegie Endowment for International Peace.
- Birdsall N and Deese B (2004). Beyond HIPC: Secure sustainable debt relief for poor countries. Working Paper No. 46, Center for Global Development, Washington, DC.
- Blustein P (2005). *And the Money Kept Rolling In (and Out): The World Bank, Wall Street, the IMF and the Bankrupting of Argentina*. New York, Public Affairs.
- Borensztein E, Cavallo E and Valenzuela P (2007). Debt sustainability under catastrophic risk: the case of government budget insurance. IDB Research Department Working Paper 607. Washington, DC, Inter-American Development Bank.
- Borensztein E and Mauro P (2004). The Case for GDP-indexed bonds. *Economic Policy*, 38: 165–216.
- Borensztein E and Panizza U (2008). The costs of default (unpublished). Washington, DC, International Monetary Fund.
- Borensztein E et al. (2004). Sovereign Debt Structure for Crisis Prevention. IMF Occasional Paper No. 237. Washington, DC, International Monetary Fund.
- Buiter W (1985). Guide to public sector debt and deficits. *Economic Policy: A European Forum*, 1: 949–963.
- Caballero RJ and Cowan K (2008). Financial integration without the volatility. MIT Department of Economics Working Paper No. 08-04. Cambridge, MA, Massachusetts Institute of Technology.
- Campos C, Jaimovich D and Panizza U (2006). The unexplained part of public debt. *Emerging Markets Review*, 7(3): 228–243.
- Cowan K et al. (2006). Sovereign debt in the Americas: new data and stylized facts. IDB Research Department Working Paper 57. Washington, DC, Inter-American Development Bank.
- Depetris Chauvin N and Kraay A (2005). What has 100 billion dollar worth of debt relief done for low-income countries? (Mimeo). Washington, DC, Inter-American Development Bank.
- Easterly W (2002). How did heavily indebted poor countries become heavily indebted? Reviewing two decades of debt relief. *World Development*, 30(10): 1677–1696.
- Eichengreen B and Hausmann R (2005). The road to redemption. In: Eichengreen B and Hausmann R, eds. *Other People's Money: Debt Denomination and Financial Instability in Emerging-Market Economies*. Chicago, University of Chicago Press: 267–288.
- Eichengreen B, Hausmann R and Panizza U (2005). The pain of original sin. In: Eichengreen B and Hausmann R, eds. *Other People's Money: Debt Denomination and Financial Instability in Emerging-Market Economies*. Chicago, University of Chicago Press: 13–47.
- EURODAD (2007). Skeletons in the cupboard: Illegitimate debt claims of the G7; at: http://www.eurodad.org/uploadedFiles/Whats_New/Reports/Eurodad%20SkeletonsCupboardG7Report.pdf.
- Griffith-Jones S and Sharma K (2006). GDP-indexed bonds: Making it happen. Working Paper 21, United Nations, Department of Economics and Social Affairs, New York.
- Grossman HI and Van Huyck JB (1988). Sovereign debt as a contingent claim: Excusable default, repudiation and reputation. *American Economic Review*, 78(5): 1088–1097.
- Hamilton J and Flavin M (1986). On the limitations of government borrowing: A framework for empirical testing. *American Economic Review*, 76: 809–819.

- Hepp R (2005). Can debt relief buy growth? (Mimeo). University of California, Davis.
- IDB (2006). *Living with Debt*. Cambridge, MA, Harvard University Press.
- IMF (2002a). Assessing sustainability. Policy Paper prepared by the Policy Review and Development Department. Washington, DC, International Monetary Fund, 28 May.
- IMF (2002b). Collective action clauses in sovereign bond contracts: Encouraging greater use. Washington, DC.
- IMF (2003). Sustainability assessments: Review of application and methodological refinements. Policy paper prepared by the Policy Review and Development Department, 10 June. Washington, DC, International Monetary Fund.
- IMF (2007). Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI): Status of implementation assembled by the staff of the IMF and IDA. Washington, DC, September; available at: <http://siteresources.worldbank.org/INTDEBTDEPT/ProgressReports/21656521/HIPCProgressReport20070927.pdf>
- IMF (2008). *World Economic Outlook*. Washington, DC, International Monetary Fund, April.
- Izquierdo A and Panizza U (2006). Fiscal sustainability: Issues for emerging market countries. In: Galal A and Ul Haque N, eds. *Fiscal Sustainability in Emerging Markets: International Experience and Implications for Egypt*. Cairo, American University in Cairo Press: 67–104.
- Jaimovich D and Panizza U (forthcoming). Public debt around the world. *Applied Economics Letters*.
- Jayachandran S and Kremer M (2006). Odious debt. *American Economic Review*, 96(1): 82–92.
- Jeanne O and Guscina A (2006). Government debt in emerging market countries: A new data set. IMF Working Paper No. 06/98. Washington, DC, International Monetary Fund.
- Keynes JM (1929). The German transfer problem; The reparation problem: A discussion; II. A rejoinder: Views on the transfer problem. III. A reply. *Economic Journal*, 39, March: 1–7; June: 172–178; September: 404–408.
- Krueger A (2001). International financial architecture for 2002: A new approach to sovereign debt restructuring. Address given at the National Economists Club Annual Member's Dinner, American Enterprise Institute, Washington, DC, 26 November.
- Levy Yeyati E and Panizza U (2005). The elusive costs of sovereign defaults. Washington, DC, Inter-American Development Bank.
- Manasse P, Roubini N and Schimmelpfennig A (2003). Predicting sovereign debt crises. IMF Working Paper 03/221. Washington, DC, International Monetary Fund.
- Ndikumana L (2004). Additionality of debt relief and debt forgiveness and implications for future volumes of official assistance. *International Review of Economics & Finance*, 13(3): 325–340.
- Panizza U (2008a). Domestic and external public debt in developing countries. UNCTAD Discussion Paper No. 188. Geneva, UNCTAD.
- Panizza U (2008b). The external debt contentious six years after the Monterrey Consensus. Paper presented at the review session on Chapter V (External debt) of the Preparatory Process on the Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus, New York, United Nations, 11 March.
- Panizza U, Sturzenegger F and Zettelmeyer J (2008). The law and economics of sovereign debt and default (unpublished). Washington, DC, IMF.
- Pettifor A (2002). Resolving international debt crises: The jubilee framework for international insolvency. NEF report. January.
- Powell R (2003). Debt relief, additionality and aid allocation in low-income countries. IMF Working Paper No. 03/175. Washington, DC, International Monetary Fund.
- Raffer K (1990). Applying Chapter 9 Insolvency to International Debts: An Economically Efficient Solution with a Human Face. *World Development* 18(2): 30.
- Rajan R (2004). Odious or just malodorous? *Finance and Development*, December.
- Reinhart C and Rogoff K (2008a). This time is different: a panoramic view of eight centuries of financial crises. NBER Working Paper No. 13882. Cambridge, MA, National Bureau of Economic Research.
- Reinhart C and Rogoff K (2008b). The forgotten history of domestic debt. NBER Working Paper No. 13946. Cambridge, MA, National Bureau of Economic Research.
- Rieffel L (2003). Restructuring sovereign debt: the case for ad hoc machinery. Washington, DC, Brookings Institution Press.
- Rodrik D (2008). Second best institutions (mimeo). Cambridge, MA, Harvard University.
- Sachs J (2005). *The End of Poverty: Economic Possibilities for Our Time*. New York, The Penguin Press.
- Sturzenegger F (2004). Toolkit for the analysis of debt problems. *Journal of Restructuring Finance*, 1(1): 201–203.
- Sturzenegger F and Zettelmeyer J (2007). *Debt Defaults and Lessons from a Decade of Crises*. Cambridge, MA, MIT Press.
- UNCTAD (various issues). *Trade and Development Report*. United Nations publications, New York and Geneva.
- United Nations (2002). Report of the International Conference on Financing for Development. Monterrey, Mexico, 18–22 March.
- United Nations (2005). A practical plan to achieve the Millennium Development Goals. New York.
- United States (2004). Economic Report of the President to the 108th Congress, 2nd Session, H. Doc. 108-145.

Washington, DC: United States Government Printing Office; available at: http://www.gpoaccess.gov/usbudget/fy05/pdf/2004_erp.pdf.

World Bank (2006a). Debt relief for the poorest. Washington, DC, Independent Evaluation Group, World Bank.

World Bank (2006b). How to do a debt sustainability analysis for low-income countries; available at:

http://siteresources.worldbank.org/INTDEBTDEPT/Resources/DSAGUIDE_EXT200610.pdf.

Wyplosz C (2007). Debt sustainability assessment: The IMF approach and alternatives. HEI Working Paper No: 03/2007. Geneva, Institut de Hautes Etudes Internationales et du Développement.