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Trade and Sustainable Finance for Development

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Abstract

Sustainable development is a long-term process, and as such must be examined carefully. Development implies structural changes of many different types, ranging from purely economic aspects to those affecting the personal circumstances of people.

Changes take time, all the more so when dealing with structural change in the economic composition of output/exports, as well as in the habits and norms that regulate consumption and saving patterns. Thus, we are dealing with a long-term process, in which the evolution of the process itself and initial conditions are of extreme importance. Here lies one of the advantages of tackling development from the point of view of a historian of economic persuasion. There may also be disadvantages, but one certainly learns how to keep a close watch on three issues: the need to consider long-term time horizon; the role of initial conditions, and the implications of structural change, both in economic and social terms.

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Any consideration of the long-term sustainability of external finance for developing countries must be evaluated within these simple but often ignored perspectives. The twenty-year old debt crisis is also a story about common sense facts, which at times have been either ignored or even isolated. Lessons have been learned, but with great difficulty. Nevertheless, the recent 1996 Heavily Indebted Poor Countries Initiative and the subsequent debates have brought to the fore some of this forgotten evidence. This should be used in efforts to outline a framework for finance for development which might be sustainable by debtor countries, thus preventing future crises.

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> *It is easier for a nation, in the same manner as for an individual, to raise itself from moderate degree of wealth to the highest opulence, than to acquire this moderate degree of wealth* (Adam Smith 1763: 579).

1 Trade in an open (and poor) economy

1.1 Sustainable development: a process

Sustainable development is a process—a long-term process—and as such needs to be examined with care. Development implies structural changes of many different types, ranging from purely economic aspects to those affecting the personal circumstances of people.

Changes take time, all the more so when dealing with structural change in the economic composition of output/exports, as well as in the habits and norms that regulate consumption and saving patterns. Thus, we are dealing with a long-term process, in which the evolution of the process itself and the initial conditions are of extreme importance. Here lies one of the advantages in tackling development from the point of view of a historian of economic persuasion. Although there may also be disadvantages, one certainly learns how to keep a close watch on three issues:

- the need to consider a long-run time horizon;
- the role of initial conditions, and
- and the implications of structural change, both in economic and social terms.

Any consideration about the long-term sustainability of external finance for developing countries must be evaluated within these simple but often ignored perspectives. The twenty-year old debt crisis is also a story about common sense facts, which at times have been either ignored or even isolated. Lessons have been learned, but with great difficulty. Nevertheless, the recent 1996 Heavily Indebted Poor Countries (HIPC) Initiative and the subsequent debates have brought to the fore some of this forgotten evidence. This should be used in efforts to outline a framework for finance for development which might be sustainable by debtor countries, thus preventing future crises.

1.2 Different countries in the 'south'

Let us briefly recall the fact there are two major groups of countries in the 'south' (see Vaggi 1999). Countries, which could be identified as *A-countries*, have an undiversified export base, heavy import dependence, large share of agriculture in GDP, and even larger share of the labour force in the primary sector. These nations do not have access to private flows; they are considered unable to comply with the rules of international financial markets. These countries also experience slow growth, major poverty problems and economic weaknesses. Furthermore, they usually have severe trade account deficits and equally bad current accounts. They typically display low saving and investment ratios. These are the severely indebted low-income countries (SILICs).

The second group, *B-countries*, on the other hand, has high S/Y and I/Y, diversified output and export base, trade and current accounts that can vary, but which are not systematically in the red. These countries have access to international capital markets, some of them also receive sizeable foreign direct investment (FDI). Typically, these are the moderately indebted middle-income countries (MIMIC).

The process/path towards sustainable development of the A-countries in particular is precarious, as they are still 'extremely fragile' in terms of their international trade patterns, and this reflects a weak production structure. The output composition and the technologies adopted are judged 'weak', not in absolute terms but from the point of view of sustainable foreign trade. A-countries are even less able to comply with the rules of international financial markets.

If one categorizes these countries according to Rostow's model of five stages (1960), we could say that A-countries are situated between the first and second stage; they are beginning the transition phase, but at times having not reached it yet. Few of the countries may be in the third stage, take-off phase with some process in capital accumulation already in place. Of course, many of these countries are in Sub-Saharan Africa. B-countries can be categorized between stage two and three, with many in the take-off phase with savings and investment ratios at times substantially higher than 20 per cent.

1.2 Bittersweet trade; liberalization in the 'north'

In his *L'Esprit des lois* of 1748, Charles Secondat Baron de Montesquieu describes the sweet aspects of trade, the *doux commerce*, to contrast the 'possible' gentle and soft norms of commerce and of the rising capitalism with the rough discipline of the feudal system that had ruled Europe for centuries.[1] Montesquieu goes further and maintains that 'the natural effect of commerce is to lead to peace' (quoted in Hirschman 1977: 80). Throughout the centuries, this view has received growing support and it is interesting to notice that even quite recently similar opinions have been applied to the case of regional economic integration in the Middle East.[2]

The document *Beyond Debt Relief* by the Italian government in preparation of the G-8 Summit of July 2001 in Genoa, asks the rich markets of the 'north'—US, EU, Japan—to open their economies to imports from the poorest countries of the 'south'. The same appeal has also come from many international organizations.[3] This is an essential element of a development strategy; without free access to the markets of 'rich' nations, poor countries will almost inevitably accumulate new debt stocks. The European Union needs to dismantle the Common Agricultural Policy and all rich countries should be more generous with the border treatment of textile imports. Trade liberalization in the north is an essential aspect of what in the 1980s and 1990s was called an 'enabling external environment' for the poorest countries.

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1 Albert Hirschman gives a fascinating description of the process which led to breakdown of the feudal society and of the role played by commerce in it (see Hirschman 1977: Part I).

2 See, for instance, Schiff and Winters (1998).

3 See government of Italy (2001: 4-ff).

But in order to take advantage of this opportunity, many LDCs will have to restructure their economy in order to achieve a reasonable degree of export diversification. Without diversification, dependency on a few exported commodities will continue (IMF-World Bank 2001; 8-10). Export expansion takes time, and not a single country either in the north or the south has ever achieved this structural transformation in less than a generation, say 20 years. Table 1 indicates that export composition is an extremely important factor in the process of long-run economic growth. The countries are classified according to major exports.[4]

It is not difficult to put these A- and B-countries into the this classification. If we switch to the usual geographical grouping, we see that Africa's share of exports in world trade has substantially decreased while Asia's share has increased (UNCTAD 1999). Table 2 presents GDP growth rates by geographic region for a long timeframe.

In Africa, the population grows at more than 2.5 per cent, at times topping even 3 per cent, thus GDP per capita is either stagnant or decreasing in many countries of the region. The same is true for several countries in all other developing regions outside Asia.

Table 1
GDP growth rate of developing countries according to the exporter type

	1960-70	1970-80	1980-92	1960-92
Exporters				
Non-oil commodities	4.3	3.0	1.4	2.8
Fuel	7.5	5.2	0.5	3.0
Services	5.9	5.1	2.6	4.5
Manufactures	6.5	6.5	6.8	7.0
Diversified	5.1	5.7	3.6	4.9
Memorandum item	6.0	5.3	3.2	4.5
Developing country average				

Source: World Bank (1994: 32).

Table 2
Real GDP growth rate (1966-2007)

	1966-73	1974-90	1991-97	1998	1999-2007 (forecasts)
World	5.1	2.8	2.3	1.8	2.9
High-income economies	4.9	2.7	2.1	1.7	2.4
Middle- and low-income economies	6.4	3.2	3.2	2.0	4.5
Of which:					
East Asia and Pacific	7.6	7.3	9.9	1.3	5.8
Latin America and Caribbean	6.6	2.5	3.3	2.3	3.7
Europe and Central Asia	6.1	3.1	-4.4	0.5	3.9
Middle East and North Africa	8.7	1.1	2.9	2.0	3.4
Sub-Saharan Africa	4.7	2.1	2.4	2.4	3.8

Source: World Bank (1999).

4 Major exports are those that account for 50 per cent or more of total exports (see World Bank 1994: 91).

1.2.1 Sweet trade

Asia exemplifies the 'sweet' face of trade with respect to at least figures indicating aggregate economic growth.[5] But what about the rest of developing world? Is there always a positive relationship between free trade and economic growth?

Was this the opinion of Adam Smith, the founding father of economic science and of economic liberalism? Largely so, but with several qualifications which unfortunately are often ignored in international and development economics. Volumes have been written about Smith's liberalism, but he was no naive supporter of free trade.[6] The benefits of free foreign trade are fundamentally of a dynamic nature and concern the possibility of achieving increasing returns to scale. The static advantages and the efficient allocation of resources according to natural endowments are only a very partial aspect of the overall process. Moreover, when Smith deals with the relationships between rich and poor nations, he says that there is no automatic mechanism which guarantees catching up, or convergence, of the poorer countries towards the level of income of the rich ones.

Wealthy nations have an interest in trading among themselves, because of their rich markets rather than with poor countries (Smith 1763: 578). Thus, poor countries experience great difficulties in the international markets; the first step is the most difficult one, because a threshold of sorts exists in the process of development. Why this difficulty? The reason lies in the very essence of the process of economic growth. In fact, quite often a poor country does not have the resources to adopt the production techniques of the richer world. Smith lists an impressive collection of impediments faced by the poor countries in their first steps towards development process. The following are quoted from Smith:

i) The extreme difficulty of beginning accumulations and … ,

ii) The many accidents to which it is exposed,

iii) The slowness and difficulty with which those things, which now appear the most simple inventions, were originally found out,

iv) A nation is not always in a condition to imitate and copy the inventions and improvements of its more wealthy neighbours,

v) The application of these [improvements] frequently requiring a stock which is not furnished,

vi) The oppressive and injudicious governments to which mankind are almost always subject, but more especially in the rude beginnings of society.

Thus development is a process, whose launch is the most difficult part of the procedure. Of all the impediments, the lack of capital is the crucial limitation. It is clear that the fundamental issue for Smith is not the lack of knowledge, but above all the lack of

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5 Of course, rapid economic growth is often a very rough process in itself, but we limit our considerations to a comparison of long-run growth rates of different developing regions.

6 For Smith's view of free trade, see the famous essay by Viner (1928) in Kelley (1966). See also Winch (1991).

necessary capital, because new technologies often require more capital. Productivity increases and technological progress depends on the accumulation of capital, a process difficult to trigger in countries that are late-comers to the international market.

As a matter of fact, Tables 1 and 2 lead to a rather sad conclusion for the A-countries in Africa. In 1990, the World Bank published a very interesting work—*Sub-Saharan Africa, From Crisis to Sustainable Development: A Long-Term Perspective Study*. The optimism of the title has not been confirmed by subsequent facts, not even in the medium term. In fact, the study itself highlights the extremely high dependence of African countries on the price oscillations of their exports, which are made up of very few commodities. These price changes could generate fluctuations of 5-6 percentage points in income (see World Bank 1989: 24). Most SSA countries are 'trade fragile', relying on a few commodities for their exports and it is difficult to see how the situation could improve rapidly, even in the presence of extensive foreign trade liberalization in the north.

1.2.2 Africa's 'bitter' trade

Africa typifies the 'bitter' face of trade and we all hope that the next 15-20 years might be 'sweeter' or at least less bitter for Africa. Trade liberalization in the north is one of the conditions necessary to promote growth and development in the south. It is one of the ingredients of an *enabling external environment*, but other measures are equally important and urgent. Foremost among them are substantial debt cancellations.

The report by UNCTAD on the 49 least developed countries shows that in the 1990s the GDP per head grew on average only 0.4 per cent. These countries have also adopted the remarkable liberalization of their economies, at times surpassing even that of OECD countries (UNCTAD 2001).

1.2.3 Time, regionalism and multilateralism

The southern countries should not liberalize their economy at the same pace as the north. While it is important to gain access to large and important northern markets, southern countries, without a temporary protection of their fragile manufacturing sectors, will incur major trade deficits. We must accept the fact that manufacturing and high value-added service industries in the A-countries need time to develop. The sequencing of liberalization was a major issue in the late 1980s with respect to countries of the former Soviet Union. Some lessons should have been learned from that experience, as the A-countries are in an even weaker condition than most of the former SU countries in 1988. Trade liberalization is not an once-and-for-all accomplishment, but must be seen as a sequence of events.

We must also remember that taxation of external trade is often the major source of revenue for these countries. Therefore, fiscal reforms are needed in order to shift the collection of revenue from foreign trade to income taxes. But again tax reform cannot take place by a *fiat*: it is a long-term, albeit painful, process, as the history of many European countries shows.

The processes of *regional economic integration* must not be seen as opposition to multilateral free trade agreements; instead, they are part of an overall strategy to give A-countries time to undertake measures for structural change and to help them to stand on their own feet. Indeed, in some cases, regional integration could help to reduce the time

required for these countries to be able to enter international trade without needing to protect their manufacturing sector.

In particular, A-counties should be careful *not to liberalize their capital account too early*. By now there is almost unanimous consensus on this point among scholars, even though this does not always translate into satisfactory policy suggestions for these countries. The problem of sequencing is also extremely important from the point of view of building sustainable finance for development.

1.3 Unsustainable debts

Even with trade liberalization in the north, many LD countries, particularly in Sub-Saharan Africa, will continue to accrue both trade and current account deficits. Furthermore, debt service may become a major additional impediment to those envisaged by Smith. Table 3 examines the external accounts for the 1980s and 1990s of some SILICs, most of which are also HIPC countries. All are situated in Sub-Saharan Africa.[7] The current account amounts are before official transfers.

We can observe from Table 3 that:

i) The trade balance has always been negative, except in 4 years: 1980, 1990, 1996, 1997;

ii) The current account has been positive only in 1996; and

iii) The trade deficit is usually much smaller than the current account deficit.

Point (iii) shows that the problem is not just trade-related; even with a trade account on balance or in the positive, this group of countries would have a had negative current account, mainly because of the external debt service.

The trade account and in particular the current account and their deficits give an indication of the magnitude of external financing needed by these countries. From the point of view of 'foreign exchange constraint', the current account is crucial.[8] It is important to notice that the trade deficit is smaller than the current one, thus the trade balance needs less foreign exchange to cover its deficit. This is a clear indication of the additional fragility of these countries with respect to trade relations only.

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7 We consider the following countries: Angola, Burkina Faso, Burundi, Cameroon, CAR, Congo Democratic Republic, Congo, Ivory Coast, Ethiopia, Gabon, Ghana, Guinea, Guinea Bissau, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Sao Tomè and Principe, Sierra Leone, Somalia, Sudan, Tanzania, Uganda, and Zambia.

8 We refer to the so-called 'two gaps theory', according to which capital accumulation is limited either by lack of foreign currency or by lack of domestic savings; this view originated in the 1960s. For details, see Basu (1997) and Bacha (1990).

Table 3
Trade and current account balances of 28 countries in Sub-Saharan Africa
(current USD)

Year	Trade balance	Current account
1980	2,662,968,721	-1,127,447,817
1981	-8,318,567,020	-13,378,538,461
1982	-8,508,527,815	-13,781,676,638
1983	-4,683,990,260	-9,038,092,663
1984	-823,181,960	-2,197,471,012
1985	-476,683,388	-949,168,590
1986	-3,876,573,960	-5,466,384,142
1987	-4,373,518,425	-5,777,398,250
1988	-3,963,889,032	-7,620,810,281
1989	-969,551,484	-4,080,938,822
1990	2,532,605,040	-2,003,412,093
1991	-1,984,519,097	-6,411,740,540
1992	-4,500,888,616	-5,250,537,173
1993	-6,271,986,176	-9,068,176,722
1994	-3,456,836,792	-8,216,181,320
1995	-3,175,457,620	-8,181,682,372
1996	3,271,128,212	824,542,291
1997	531,998,798	-3,652,537,054
1998	-6,356,905,338	-12,812,847,104

Source: World Bank (2000b).

Table 4 provides some additional interesting indications. The actual debt service has always constituted a relevant share of exports, in the range of 20 per cent. These countries have a large and negative balance on the net factor income. ODA and aid have substantially increased from the 1980s to the 1990s—ODA is smaller than debt service (DS) until 1985, but then exceeds DS from 1986 to 1998. The total debt stock is not large in comparison to the overall debt of developing countries, which is in the range of US$ 2,500 billion.

As shown in Table 4, there is a remarkable and striking similarity between the DS and ODA amounts in the 28 Sub-Saharan African countries under review. The figures seem to indicate that (i) aid has been used to service debt, at least partially; (ii) the relevant financial net outflows were much larger than the trade account and in the 1990s these flows were also larger than DS; (iii) interest on foreign debt is certainly a part of this negative net transfer before official aid. As a matter of fact, the two columns of ‘ODA and official aid’ and ‘negative net income from abroad’ have strikingly similar magnitudes—a further signal that aid, during those 19 years, has been largely employed to cover the foreign exchange gap of these countries.

Although overall net transfers have remained positive, it is clear that aid has been largely used to pay interests. In order for these countries to be able to take advantage of the north’s trade liberalization, ODA needs to be utilized fully to promote a process of social and economic transformation instead of being used for repaying past debt. This is a necessary condition for an *enabling external environment*.

Table 4
Debt and aid in 28 countries in Sub-Saharan Africa, 1980-98
(current USD)

Year	Total debt service	ODA and official aid	Net income from abroad	TDS/Export (%)	Total external debt
1980	5,657,100,032	5,703,600,032	-6,549,223,353	15.62	51,268,300,448
1981	6,520,800,000	5,390,600,032	-4,963,452,898	20.78	59,056,299,680
1982	6,539,700,032	5,701,599,968	-4,602,994,679	21.08	64,742,599,808
1983	6,607,100,064	5,435,400,000	-4,380,847,695	21.11	73,279,399,040
1984	8,302,899,936	5,768,590,048	-3,732,562,341	21.68	75,794,699,776
1985	9,263,199,840	6,849,389,904	-4,996,495,699	24.83	92,624,499,808
1986	7,717,699,936	8,366,920,000	-5,563,200,402	31.47	104,290,999,200
1987	6,701,600,000	9,567,700,160	-7,523,567,786	27.80	127,793,098,432
1988	7,804,699,968	10,877,069,936	-7,296,137,856	27.55	130,654,800,896
1989	7,407,000,032	11,054,140,144	-9,474,678,317	27.74	137,734,000,320
1990	8,767,000,160	13,096,550,016	-11,082,232,797	24.27	154,928,600,992
1991	8,165,200,000	13,292,059,968	-10,777,697,693	23.28	160,177,799,712
1992	8,103,399,936	14,126,259,968	-10,715,847,476	20.75	158,786,399,968
1993	5,477,700,096	12,892,470,064	-10,217,229,794	19.91	164,176,700,672
1994	6,695,599,904	14,366,090,064	-9,751,335,532	22.86	172,260,899,584
1995	9,041,699,840	13,864,060,096	-10,316,368,035	26.21	180,935,198,144
1996	8,443,400,064	11,882,650,080	-11,203,770,728	19.65	176,696,001,696
1997	6,928,500,032	10,947,809,936	-10,815,163,892	17.13	167,280,600,032
1998	6,441,700,064	8,748,989,984	-10,901,016,161	18.40	164,372,100,640

Source: World Bank (2000b).

Parallel to trade liberalization in the north, debt relief—or forgiveness or cancellation—is a necessary component of the overall strategy to put these countries on a sustainable development path.

During the 1980s and 1990s, these countries serviced only a part of their scheduled obligations on foreign debt. If the servicing of debt is to continue, even without fully meeting the scheduled DS, these SSA countries would have to generate a large positive trade balance to overcome the negative current account caused by debt service. More importantly, this large trade surplus should become immediately available, because foreign debt has to be serviced now. These countries do not have the time to introduce the structural change and export diversification needed to achieve a sustainable trade account.

If the overall current account continues to be negative, then the stock of foreign debt will inevitably pile up. This is not completely accurate: these countries could go on living on aid, and could continue to assume the role of the poor cousin, not to mention that of world beggars.

Apart from aid, no forms of external finance—neither commercial loans, FDI, nor portfolio investments—have adequately met the external financing needs of these countries, as can be seen from the composition of the flows to SSA countries in the 1990s (see World Bank 2000a).

Even though the markets are well aware of the distinction between the two country groups (A and B), most FDI goes to very few countries, all of them in group B. In 1997, only 2 per cent of FDI went to Sub-Saharan Africa.[9] Table 5 shows that in the 28 SSA countries under review, FDI accounts for less than 1 per cent of GDP, and FDI attributes less than 6 per cent of gross domestic investments. In order to attract foreign direct investment, there must be expectations of sustainable economic growth, but given their initial economic conditions, that is precisely the problem of the A-countries—trying to launch onto the path of development.

Table 5 also shows that these countries have very low savings ratios; thus, according to the 'two gaps' approach, they may experience a 'saving constraint'. How, then, can they realistically finance a development process? In a sense and in particular because of the large debt stock, these countries are caught in a trap where both constraints are limiting.

We can try to roughly evaluate the investment ratio, I/Y, needed to sustain an increase of 3 per cent in the GDP per capita. If population grows at 3 per cent per year, we must have a target growth rate of the economy of 6 per cent.[10] In order to raise GDP, these countries must accumulate capital, K, and hence invest, I. We take an ICOR (incremental capital output ratio = dk/dy), of around 4 which is consistent with the World Bank estimates for Sub-Saharan Africa. Then, each year these countries should invest 24 per cent of their GDP, a portion substantially higher than the 16 per cent which is the average I/Y for these countries in 1998. Given the low level of domestic savings, these countries will have to resort to foreign savings to finance their growth process.

Let us go back to the notion of *enabling external environment*. We have two clear policy indications:

i) Trade liberalization in the north might help to improve the trade account deficit of these SSA countries, but will not eliminate it in the short to medium term;

ii) Debt cancellation would relieve the negative current account and thus reduce the 'foreign exchange constraint' in the accumulation process, thereby enabling ODA to be used to support new investments both in physical capital and in human development.

Debt cancellation is an absolutely necessary measure in order establish the minimal conditions needed for these countries to take, as Adam Smith said, the 'first step'—the most difficult one—on the road to development. However, the two measures above will not bring immediate relieve to the trade and current accounts because (i) output and exports diversification needs time; (ii) credibility has to be strengthen in order to attract private funds and this usually requires both high growth records and political stability; and (iii) increasing the saving ratio through tax reform and more accountable credit and financial system is also a time consuming process.

9 See the World Bank's *World Development Report 1999-2000*: 72.

10 This is also the target in the April 2001 document of the Development Committee, see IMF-World Bank (2001: 8).

Table 5
FDI and savings in 28 countries in Sub-Saharan Africa for the period 1990-98, as a percentage of GDP

Year	Foreign direct investment	Savings
1990	0.49	8.37
1991	0.52	8.57
1992	0.55	6.01
1993	0.6	6.78
1994	0.94	7.07
1995	0.82	8.36
1996	0.86	9.65
1997	0.89	11.04
1998	1.16	10.29
Average for the 1990s	0.93	9.26

Source: World Bank (2000b).

Furthermore, after two decades of economic and social crises, these countries must, at the same time, achieve high rates of both capital accumulation and human development and this may imply an overall ICOR higher than 4. There must be further financial means to recover from the economic stagnation of the last 20 years.

Given these considerations, funds for development are an absolute necessity, at least for the A-countries, even in the event that the entire foreign debt is cancelled, an option which as yet is not the case.

2 Sustainable development finance

It is obvious that the A-countries need foreign financial help. Financial flows can accrue from various sources, ranging from pure grants to portfolio investments. However, the options available for the A-countries are more limited and these nations virtually have no direct access to international financial markets.

In a sense, the A-countries are lucky that portfolio investments and short-term flows do not reach them. Surely these countries do not need volatile funds at a time when their reliance on ODA is in question. This fact has also been highlighted by the executive directors of IMF and World Bank who now say that A-type countries should not borrow on non-concessional terms (see IMF-World Bank 2001).

2.1 A world of contracts

What are, then, the arguments advanced by those reluctant to cancel this debt? We can simplify the debate by indicating three major reasons:

i) the need to prevent damage to the international financial system,

ii) the need not to charge the taxpayers of the lending countries, and

iii) moral hazard.

Of course, one could counter these arguments by maintaining that the debt will never be repaid in full; non-cancellation will produce further misery for already very poor people and the amount involved is extremely small when compared to the incomes of the rich countries.

Debt cancellation, however, is not a act of pure benevolence. It should be part of a workable development strategy for the twenty-first century. But the world is governed by the principle of contracts. Development is about change—from countryside to cities, from agriculture to industry—from the values and norms of a peasant society to those of a society largely based on trade, interests and contracts. Money borrowing and financial techniques are among the most complicated forms of contracts. The debt debate fundamentally concerns the training of people to operate according to the rules of a 'market and contract society'. Some of the training is appropriate—good governance, financial solidity, the respect for contracts—but financial markets do not consider latecomers: they are not granted time to practice and learn. The 'time dimension' implicit in most financial transactions is extremely short and far removed from the day-to-day experience of people in the developing world. At times even the ruling elites are not equipped for the game and they learn, but at enormous costs.

The game, then, is *unfair* and *inefficient*, but the rules of the game have become 'principles', similar to natural laws. If you participate, then you must not default, or 'moral hazard' *automatically* follows.

The problem is that the game itself is flawed from the very beginning, at least because of the different capabilities of the players. This is a major lesson from the debt debate with all its reschedulings: Toronto, London, Naples Terms, etc. The various 'plans' and 'terms' have gone on for almost 20 years without solving the problem. It is time to come up with *new contracts*, which are *transparent*, *straightforward* and *workable*, from the very beginning. These should be new principles to help the debtors, but to also reduce problems like long negotiations, free riding and moral hazard.

2.2 On sustainability

The IMF and the World Bank define the external debt sustainability of a country as its ability to 'meet the current and future external debt service obligations in full, without recourse to debt rescheduling or the accumulation of arrears *and without compromising growth'* (emphasis added).[11] This is a valuable point of view and must be recognized, but one to which some further considerations could be added. The debt debate has shown that funds for development are not a short-term issue. Debt sustainability is a *long-term* problem. No country has achieved economic development in less than a generation, thus development lending must be provided on a sufficiently long time horizon, possibly 25-30 years, with considerable 'grace periods'.

The notion of sustainability includes the following three criteria:

11 IMF-World Bank (2001: 4). Almost exactly the same words appear in World Bank (1998: 55, where it is specified that it is a quotation from Claessens *et al.* 1996), but where there is no reference to growth. Growth is a welcome addendum particularly because we deal with long-term sustainability.

i) A debt may realistically be expected to be repaid according to the rules of the financial contract;

ii) Sustainability allows a decent growth rate in GDP per capita in the long term;

iii) Sustainability is compatible with human development improvements even in the short term.

Points (ii) and (iii) are necessary in order to make the whole repayment debate (point (i)) credible. Increased social exclusion from repeated economic and social crises in the short run excludes a country from the appropriate development path/process and inevitably jeopardizes scheduled debt service and overall repayment.

There are *social safety nets*, which in principle should cope with the social and human hardships caused by economic and financial crises, but they do not seem to have worked well in the experience of the transition economies.

Furthermore, there is the problem of new and acceptable conditionalities. A safety net is a buffer mechanism against adverse circumstances, but is not part of the lending/borrowing contract. If stringent social and human development conditions are to be included in a lending contract, then the terms of the contract itself must be equitable and realistic from the beginning. Safety nets should come into the picture only as an extreme measure.

2.3 Some traditional analysis of debt sustainability[12]

2.3.1 Decreasing trends of debt ratios

The literature on the sustainability of foreign debt is closely derived from the debates of the 1980s on public debt sustainability (see, for instance, Spaventa 1987). The discussion is conducted in strict economic and financial terms, and is hence limited to the point (i) of the sustainability notion.

Let us recall the arithmetic of debt sustainability:

D = overall foreign debt

X = GDP = gross domestic product

g_n = (dX/dt)/X is the nominal growth rate.

The change of D/X over time is given by the following expression:

$$[d(D/X)/dt] = (dD/dt)/X - g_nD/X \quad (1)$$

Take the following definitions:

E (M) = exports (imports) of goods and non factor services,

[12] Of course this is not an exhaustive listing of all possible approaches to sustainability. Some of the views expressed in this section apprear in Vaggi (2000).

NFI = net factor incomes,

NCF = net capital flows (net of changes in reserves),

i_n = nominal interest rate on foreign borrowing.

Items such as foreign direct investments, fully concessional loans, capital flights, etc. do not exist, so capital flows consist only of new loans and the repayment of previous ones. Net factor incomes do not include items other than interest payments abroad: workers' remittances and the repatriation of profits on direct investments are ignored. In the balance of payment, the current account balance is equal to capital movements, net of changes in reserves (see UNCTAD 1990: 37):

$$E-M+NFI = - NCF \qquad (2)$$

To be precise, E-M is the balance of the 'non-interest current account', which however largely overlaps with the trade account.

dD/dt is the net change in the debt stock over time: new loans obtained minus the repayment of previous loans in a given year; hence dD/dt = NCF and NFI = $-i_nD$, that is interest payments on existing debt. Equation (2) becomes:

$$E - M - i_nD = - dD/dt$$

and substituting this expression in (1):

$$d(D/X)/dt = i_nD/X - gD/X - (E - M)/X.$$

By re-arranging the terms and deflating both sides of the equation we obtain:

$$d(D/X)/dt = (i - g)D/X - (E - M)/X \qquad (3)$$

where i and g are the real interest rate and real GDP growth rate, respectively. For debt to be sustainable, D/X must stabilize, that is to say, must not increase over time and should possibly decrease. Hence, an ever-growing D/X is clearly unsustainable, while a moderately decreasing ratio is regarded as sustainable.

The debt-to-GDP ratio is either constant or declines if d(D/X)/dt is zero or negative. If we take a zero non-interest current account E = M, this brings to the fore the correlation between the interest rate and the growth rate.[13]

Therefore g > i is regarded as the main condition securing the sustainability of a debt.

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13 Bhaduri shows that the condition g > i by itself does not guarantee that an economy will be able to avoid the debt trap (1987: 270-3). The trade deficit could be so large as to require new foreign borrowing which would lead to an increase in the debt-output ratio. In order to achieve self-reliant growth with foreign borrowing, not only must the growth rate exceed the real rate of interest, but the marginal propensity to export (with respect to GDP) must be higher than the marginal propensity to import.

2.3.2 Solvency

When public debt is mainly owned by residents, it is a matter of distributive agreements between generations. In the case of foreign debt, there is a contract between external actors, no children and parents, and actual payments are required every single year. Therefore solvency becomes a more immediate concern, particularly when countries experience very low growth rates which may be lower than the real rate of interest. But even this situation does not necessarily lead to default on foreign debt. In a very interesting model, Cohen argues that in order to maintain solvency, it is sufficient that the present discounted value of all future payments equals the initial face value of the debt (1985: 142, 162). As Cohen shows, this happens if the debt grows at a rate g_d which is strictly less than the real rate of interest:

$$(D_t - D_{t-1})/D_{t-1} = g_d < i.$$

In this case, the discounted value of the debt at a certain time *t*, possibly quite far in the future, will be 0 because:

$$\lim_{t\to\infty} D_t/(1+i)^t = 0$$

Future payments, whose present value should match the face value of the debt, are derived from the trade surplus and are a proportion of the export earnings of the debtor country, hence it is possible to calculate the percentage of future export earnings needed to guarantee a country's solvency (Cohen 1985: 146-9).[14] In order to have $g_d < i$, it is enough to repay part of the interest payments due each year, rolling over the principal and remaining interest payments. By extending the period of future repayments to infinity, we can always identify a share of export earnings small enough to justify the solvency of the debtor country.

This methodology clarifies the theoretical background which characterized the *rescheduling* approach to the debt crisis adopted by Bretton Wood institutions and by the Paris Club creditors from the crisis outbreak in 1982. The main feature of all the reschedulings plans has been an increase in maturity. Moreover, it is clear that in the case of foreign debt, what matters is the ability of the economy to earn foreign exchange and this is why exports are vital. Therefore, typical debt ratios are in relation to export rather than to GDP, as is the case for the domestic debt. However, the crucial hypothesis which allows the mechanism to work is the *time horizon*, a decisive element for the repayment of the entire debt.

In the end, sustainability can only be achieved by a decrease of D/X over time, i.e. there must be a horizon of credible partial repayments. Export base diversification is a crucial step in the process of economic emancipation. But the problem is precisely that of providing the external conditions, including the financial ones that are a part of an

14 More precisely if $g_d < i$, we know that at any particular moment in the future the debt will have a market value equal to the discounted value of future payments. Therefore creditors will be able to sell the assets representing the sovereign debt on the secondary market, and if all creditors share this opinion, there is no reason to doubt the solvency of the debtor country (see Cohen 1985: 142-3). Cohen (2000) introduces the idea of using the value of debt on the secondary market to assess the probability that a debt should not be fully repaid.

enabling external environment to promote the economic transformations necessary to put these countries on a sustainable long-run economic growth path.

2.3.3 Thresholds

The HIPC Initiative defines sustainability through certain debt indicators. In the original framework, debt was regarded sustainable if ratios of the net present value (NPV) of debt to exports was in the range of 200-250 per cent and the debt service ratio in the range of 20-25 per cent of exports.[15] For particularly open economies with a large export base, there was also a fiscal indicator of NPV to government revenues of 280 per cent.[16] For a country with indicators below these thresholds, foreign debt was regarded as sustainable.

After the July 1999 meeting of the G-8 in Cologne, the HIPC Initiative was 'enhanced' and indicators were lowered. The NPV of debt-to-exports ratio is now 150 per cent of export and debt service-to-exports ratio ranges between 15-20 per cent, while the fiscal ratio is down to a NPV of 250 per cent of government revenues. The purpose of the enhanced HIPC is to bring actual ratios within these limits after application of all the debt relief measures included in HIPC itself and available in other debt relief plans, such as the Naples Terms, etc. Admittedly, these values are a 'rule of thumb', dictated by empirical analysis on countries which have managed to avoid rescheduling.

It should be noted that in the public debt literature, there are thresholds which have become quite famous, thanks to the convergence of some European countries towards the European Monetary Union. They are the 'Maastricht parameters' and are indicators of the process of convergence—an overall fiscal deficit of 3 per cent of GDP and a debt stock-to-GDP ratio of 60 per cent. All these debt indicators are related, and there should therefore be coherent values for the assigned targets.[17]

It is important to note that since the days of the original HIPC to the present-day debates, the fiscal criterion relating sustainability to government revenue has gained more and more relevance with respect to export ratios. The ability to obtain foreign currency through export earnings is no longer the only criterion of sustainability. Usually the debtor country uses public resources to service its foreign debt, and this could undermine other public expenditures, at times also including important ones such as education and health. Sustainability must, therefore, also be evaluated in relation to the fiscal revenue of a country.[18]

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15 See IMF-World Bank (2001: 5).

16 The net present value is the discounted value of future payments on today's terms of debt. It may be lower than the nominal debt because the discount rate, usually a market rate, may be higher than the actual rate when a debt includes more convenient conditions than those obtainable on the market, these more favourable terms are known as grant element(see IMF-World Bank 2001: 18). Of course the size of NPV may vary a lot depending on the discount rate.

17 Sometimes the analytical relationship is clear; in other cases further assumptions are required. For a interesting analysis of these relationships in the case of the 'Maastricht parameters', see Pasinetti (1998).

18 Most of the foreign debt of A-countries is publicly owned, consisting of bilateral and multilateral credits.

However, projections on future exports are still a crucial element of the debt sustainability analysis (DSA) carried out by the World Bank. Progress is being made, but it is not yet enough. If the mentioned-above criteria points (ii) and (iii) for debt sustainability are not satisfied, there is no reason to assume that debt service will not produce a negative impact on human development.

2.3.4A lost decade, or two?

Debt itself creates negative conditions for the growth process. First, 'debt overhang' is a well-known problem. This is the general climate of uncertainty which surrounds a heavily indebted economy and discourages investment. Businessmen may be reluctant to start new enterprises, when they know that benefits will be reaped by foreign creditors (see Krugman 1988: 254-ff; Sachs 1989).[19]

Second, debt service itself is detrimental to growth because it negatively affects national savings and investments (see Bacha 1990). Debt service is a foreign claim on domestic savings, and if we assume that it has seniority with respect to investments, then investments must be lower than domestic savings. In other words, debt service crowds out domestic investments (see Cohen 1989: 8). In all likelihood, a positive debt service reduces both domestic investments and the growth rate below the level they could have reached based on the value of domestic savings.

Unfortunately we have already seen a clear example of the extremely negative impact of debt service on economic growth: the so-called 'lost decade' of the 1980s, when growth rates were negative for many developing countries, particularly in Latin America and Africa. In the subsequent years after the debt crisis in August 1982 and for most of the 1980s, financial transfers were negative:

> … developing countries have been exporting more goods and non-factor services to the developed countries than they receive—a reversal of the pattern before the 1980s (World Bank 1990-91: 9).

The adverse effect of debt and debt service on growth was already clearly recognized in the 1989 *World Development Report*, in which the World Bank analyses the impact of a 20 per cent debt reduction on investment and growth. If:

> … the reduction in net resource transfer in the form of interest payments associated with the reduction in debt stocks ... is used to import needed investment goods, investment rates would raise several percentage points (World Bank 1989: 21).

This, after three years, should lead to an additional 1 per cent increase in GDP on top of the spontaneous growth rate and the improvement could be as large as 2 per cent for Argentina, Brazil, Mexico and Nigeria (*ibid*).

So much for the 1980s. The next decade did not experience similar negative net transfers, thanks mainly to grants, at least, for Africa (IMF-World Bank 2001: 21), but in terms of growth rates, the outcome was not much better. This is even more worrying

19 When a debt is too large, its servicing may represent a sort of 100 per cent marginal tax on foreign earnings; the country is on the declining side of the debt Laffer curve, and there are no incentives to improve its economic performance (see Edwards 1989: 268).

in view of the fact that GDP per capita had decreased between 1982 and 1990 in many developing countries. Consequently, in purely arithmetical terms a recovery of the growth rate should have been easier.

Two decades have been lost from the point of view of economic and human development. It is time to try to do better, and sustainable finance for development should be part of a more encouraging progress for the twenty-first century.

2.4 The 'human factor' approach to sustainability

A-countries are quite likely to need some form of development finance in the coming years. Is it possible to avoid a debt crisis in the future? Is there a debt which can be fully serviced without undermining economic growth and human development? Which are the appropriate indicators for the long-term sustainability of an external debt?

Long before Shakespeare's *The Merchant of Venice*, debt repayment has provoked emotions particularly unfavourable to creditors; all the more so when—contrary to Shylock and the Venetian merchant Antonio—the borrowers are so much poorer than the lenders. But how to take into account human development considerations? In the following there is a concise summary of the 'human factor' approach to debt sustainability.[20]

Take the following definitions:

Y_k = GNP per capita,

POP = population,

k = rate of growth of Y_k,

p = rate of growth of population.

We have the following identities:

$Y = Y_k POP$,

$y = k + p$.

We can introduce population growth and GNP per capita increases as a proxy of the trend in people's living standards into a model of external debt sustainability, which could be described as the 'human face' approach. k and p are assumed to be constant for the entire maturity of the debt; p is a positive datum, k may be negative, but we can regard a positive k as a policy target. Therefore we define:

$h = k + p$

as the growth rate of Y which satisfies the condition of leading to annual increases of GNP per capita equal to k, we regard h as the 'human factor'. Suppose that at time 0 before the external borrowing originates, GNP and GDP are equal magnitudes, $X_0 = Y_0$ and there is no debt service, $DS_0 = 0$.

[20] For an extensive analysis see Vaggi (1993: chapter 7).

$$Y_{hj} = Y_0 (1+h)j$$

is the value of GNP at time j which is necessary to fulfil the target of securing an average growth rate of k in GNP per capita for each year during the period 0-j. We can regard Y_{hj} as that part of GNP which must be reserved for domestic absorption in order to guarantee a decent increase in the standard of living for the people.

2.4.1 The debt stock

Assume that the 'autonomous' rate of growth of GNP, y, is equal to that of GDP, g; we can calculate which part of the GNP of year j, Y_j, can be used to service the debt, without worsening the living conditions of the people within the debtor country; this is $Y_{fj} = Y_j - Y_{hj}$.

$$Y_{fj} = Y_0[(1+g)^j - (1+h)^j] \qquad (4)$$

is the part of GNP which can be 'freely' transferred abroad to service the debt, compatible with 'human face' conditions, that is, an average increase of *k* in GNP per capita during the first j years. The sum of all Y_{fj} for the entire maturity gives the value of the debt stock at time 0 which has a repayment schedule satisfying human factor *h*. From equation (4) we have:

$$D_{f0} = \Sigma_j \, Y_{fj}/(1+i)_j, \qquad \text{with } j = 1,2,.....,n.$$

Notice that the sequence on the right-hand side of the above equation implies that servicing the debt allows an increase in GNP per capita *in each year during the entire maturity*. D_{f0} is not the actual value of the debt at time 0 but the present value of the stream of payments which may be sustained according to the human factor. With appropriate manipulations we can calculate the debt/GNP ratio which allows the payment of the debt service without violating human development conditions:[21]

$$D_{f0}/Y_0 = \{[1-(1+g)^n/(1+i)^n](1+g)/(i-g)\} - \{[1-(1+h)^n/(1+i)^n](1+h)/(i-h)\} \qquad (5)$$

Equation (5) brings to the fore the relationship between the 'spontaneous' rate of growth g and human factor h, which includes the target rate of increase in GNP per capita k and the rate of population increase p. The interest and growth rates, i and g, appear in (5) together with human factor h. But the crucial relationship is now that between the latter and the growth rate, and it must be g>h. The condition that the real growth rate must be higher than the real rate of interest, g>i, guarantees that the debt-to-GDP ratio decreases over time, but is not sufficient to secure sustainability according to the human factor.

Notice that h is itself a threshold, but a *qualitative* one, because the human factor approach requires a comparison of h with the expected growth rate g and not with some given ratios which are the same for all countries. h can be different for different countries, depending on population growth rates p, and also on the GNP per capita increase which is regarded as necessary in order to meet the human development targets. In principle a poorer country with a lower human development index may have

21 We could use debt ratios to exports instead of GDP; exports may be a better indication of the financial ability to pay, but exports' earnings fluctuate more rapidly than GDP, and we want to asses the long-run sustainability of external debt.

a larger k than a country which has already achieved an acceptable degree of human development.

It is possible to calculate for each country the proportion of GNP (government revenue, exports) that has to be spent on health and education if specific human development targets are to be achieved within a certain number of years. This becomes part of the human factor and provides an idea of the magnitude of resources to be *put aside* every year in order reach a certain target level in human conditions. The remaining part of the GNP (government revenue, exports) is the residual to be used to pay interest and repay debts; this gives an indication of the debt servicing capacity of a country according to the human factor.[22]

In the human factor approach, debt service is the residual and human development expenditures the priority; in the traditional approach, external debt service is the priority. For example, a 3 per cent average annual increase in GNP per capita is often regarded as a necessary, albeit insufficient, condition to reduce poverty.[23] The United Nations' *20-20 Initiative*—which sets the cost of poverty reduction at 1 per cent of developing countries income (UNDP 1997: 112-4)—provides a similar target increase in GDP per capita, because in low-income countries population growth rates are around 2 per cent.

Then, the human factor could be h = p+k = 2%+3% = 5%.

A debt can be sustained in the long run only if $g > h$; when this condition is not satisfied, the country will not have enough income to achieve human development and to simultaneously repay its foreign debt, however small. The country will have to resort to grants only.

Equation (5) satisfies both sustainability criteria points (ii) and (iii) (see above), and it also satisfies criterion (i), actual ability to repay, provided that the country borrows from abroad a proportion of its GNP no higher than D_{f0}/Y_0. It is easy to see that with medium- and long-term maturities, the condition $g > h$ allows a country to borrow very large amounts of money. But equation (5) requires that GNP per capita increases at rate k, say 3 per cent, *each year* during the entire maturity period, and thus rules out economic crisis in the short run, even in a single year.

It is possible to derive a *less stringent human factor* formula that only requires that the growth rate g satisfies the human factor conditions set by h *on average over the entire repayment period*. This condition is satisfied by equation (6), where n is the maturity (see Vaggi 1993: 136-7):

$$D_{f'0} = [(1 + g)^n - (1 + h)^n]n/(1 + i) \qquad (6)$$

Notice that when $g > h$, the value $D_{f'0}$ is systematically higher than D_{f0} from equation (5). In this case, short-term crisis could develop, thus violating point (iii) of the three sustainability criteria.

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22 Another interesting approach emphasizing human development is in Northover (2001).

23 See World Bank (1999-2000: 26) and UNDP (1997: 73, 109-110).

2.4.2 The debt service

If g > h it is possible to calculate, with some technical manipulations, debt service (DS) which can be paid each year during the entire maturity of the debt without violating the human factor. We derive a formula for the less stringent human factor condition, hence we find the average value of debt service which is compatible with an average GNP per capita growth of k, say 3 per cent, over a number of years q ≤ n:

$$\sum_j DS_{fj}/q = \{(1+g) + \ldots + (1+g)^q - [(1+h) + \ldots + (1+h)^q]\}/q \qquad \text{with } j = 1, \ldots q$$

In the second term, there are two geometric sequences whose ratios are (1+g) and (1+h) therefore:

$$\sum_j DS_{fj}/q = -\{[1-(1+g)^q](1+g)/g - [1-(1+h)^q](1+h)/h\}/q \qquad (7)$$

The sustainable debt according to the human factor derives from a discounting procedure like the net present value. Thus the human factor approach also requires a comparison of *long-run growth rates* with human factor h, given a target increase k in GNP per capita. The long run should be the average maturity of the external debt. In order to achieve the necessary structural change in the composition of both output and exports, this long run may be in the order of 20-30 years, which should be the length of the repayment period.

As for the NPV also in the human factor approach, debt sustainability evaluation is based on growth rate projections, and one must decide which types of growth rates have to be compared with human factor h.[24]

2.5 The past and the future: a role for history

Projections of future growth rates can vary a lot and can be unreliable. This is one of the problems with the HIPC sustainability assessment (see World Bank 1997: 43). In order to analyse future sustainability of debt, it is important to consider the assumptions on which these projections are based. Usually scenarios have been built on a 5-6 year base, which is not a very long period to evaluate future sustainability.

Table 6 examines the 41 countries which are part of the HIPC Initiative and compares the highest growth rates experienced during the past 40 years (period indicated in the second column) with those used by the World Bank in the growth scenarios for debt sustainability analysis.

[24] Debt ratios projections are extremely sensitive to small changes in the growth rate; a 0.5 per cent difference in the average real growth rate over a period of 18 years may double the foreign debt servicing capacity (see Vaggi 1993: 138). The same is true for projections of either exports or government revenue.

Table 6
Actual and expected GDP growth rates, population growth and debt service in HIPC countries

	Historically highest rates		World Bank projections	Average population growth rate [b]	Actual growth in 1987-97	Average DS paid in 1987-97
	Years	GDP %	GDP % [a]		% of GDP	
Angola	1960-70	4.8	7.5	3.0	-5.6	12.3
Benin	1976-86	4.5	5.5	3.0	3.8	2.1
Bolivia	1970-78	5.6	6.2	2.3	4.4	6.8
Burkina Faso	1987-97	4.4	5.7	2.8	2.8	1.8
Burundi	1960-70	4.4	3.9	2.4	-1.3	3.8
Cameroon	1976-86	8.7	5.3	2.8	-2.3	5.6
Chad	1970-78	1.7	5.7	2.0	2.4	1.5
Ivory Coast	1960-70	8.0	5.6	3.3	2.2	14.4
Ethiopia	1960-70	4.4	7.4	3.2	2.5	3.6
Ghana	1987-97	4.4	6.0	3.0	4.5	7.2
Guinea	1970-78	5.4	5.6	3.9	4.6	4.7
Guinea Bissau	1987-97	3.9	4.9	2.0	3.9	5.7
Equatorial Guinea	1987-97	9.6	10.1	2.5	9.6	4.5
Guyana	1987-97	3.5	4.8	0.9	3.5	25.8
Honduras	1960-70	5.1	5.3	3.0	3.5	11.2
Kenya	1970-78	6.7	4.2	3.1	2.5	9.7
Liberia	1960-70	5.1	na	2.8	na	na
Madagascar	1960-70	2.9	5.5	3.3	1.4	5.2
Mali	1970-78	4.6	5	3.1	3.1	3.3
Mauritania	1960-70	8.1	4.6	2.5	3.6	11.5
Mozambique	1960-70	4.6	9.6	2.4	4.1	7.7
Myanmar	1976-86	5.3	na	1.8	na	na
Nicaragua	1960-70	7.2	5.8	2.3	1.5	11.6
Niger	1960-70	2.9	4.5	3.3	1.2	4.9
Nigeria	1970-78	6.2	na	3.0	4.7	8.7
Central African Republic	1970-78	3.2	4.3	2.3	0.4	2.0
Congo	1976-86	9.8	2.4	2.9	-0.2	19.3
Yemen	1970-78	7.9	5.9	4.4	2.0	2.9
Congo, Dem. Rep.(Zaire)	1960-70	3.6	7.9	3.6	-6.9	1.9
Laos Pop. Dem. Rep.	1987-97	6.7	na	3.1	6.7	1.4
Rwanda	1976-86	5.1	7.2	2.2	-4.5	1.3
Sao Tomé & Principe	1976-86	1.2	3	2.6	1.1	8.4
Senegal	1960-70	2.5	5.2	2.7	2.2	6.2
Sierra Leone	1960-70	4.2	22.6	2.8	-3.1	5.5
Somalia	1970-78	3.1	na	2.2	na	2.2
Sudan	1987-97	5.7	na	2.3	5.7	0.8
Tanzania	1960-70	6	5.5	3.2	4.4	4.9
Togo	1960-70	8.5	6.0	3.0	1.2	4.6
Uganda	1987-97	7.1	5.5	2.9	7.1	4.3
Vietnam	1987-97	7.7	4.5	2.1	7.7	2.2
Zambia	1960-70	5	5.5	2.3	0.1	16.4

Notes: [a] The projection period is either 1998-2002 or 1998-2015.
[b] Average rates for the period 1987-97.

Source: World Bank (1999b) and *Countries at a glance* on the World Bank's website.

We can see that for 23 of the 35 countries for which projections are available, the average expected growth rate is higher than any rate experienced since 1960. Projected growth rates are 6 per cent or more for 10 countries, and higher than 7 per cent for six countries. Among these, we have Angola, Ethiopia, Mozambique, and Congo.

The second last column of Table 6 shows the average growth rates for the period 1987-97, actual growth performance of the very recent past. Only in two cases, Uganda and Vietnam, do rates exceed those used in the DSA projections. All other HIPCs experience a much less exciting economic performance. It is hoped that many other countries can repeat the positive growth performance of the 1980s of Vietnam and Uganda. But historical experience, both recent and less recent, suggests some caution.[25] Moreover, Table 6 indicates that in the near past, that is to say in 1987-97, in only eight countries out of 41 has the economy grown at the fastest pace. If we consider the last few decades, we note that there was more economic performance in 1960s and 1970s than in the 1980s and 1990s. During the last decade, seven countries had negative growth rates, and many others suffered from very poor economic performance. This is exactly the kind of 'poverty trap' from which these countries should emerge and development financing should be geared to help in this process.

In development economics, one needs to be optimistic, but realism is needed not only to avoid future disappointments, but also to draft debt contracts based on plausible assumptions. This is not just an obvious methodological principle, but an essential requirement for the credibility of the contracts themselves and the related conditionalities.

2.5.1 The human factor: an example

We use the human factor approach to evaluate the long-term external debt sustainability of the 41 HIPCs. Let us take the World Bank projections on future economic growth given in the third column of Table 6, thus subscribing to the optimistic scenario.

We wish to determine if external debt in this optimistic scenario is sustainable according to the human factor. The fourth column of Table 6 gives the actual population growth rate p during the period 1987-97; this value can be added to a 'target' increase in GNP per capita of 1 or 3 per cent, $k = 1$ and $k = 3$ respectively. Hence we obtain the corresponding human factor $h = p + k$ for each of the two scenarios. We do not present these values which can be easily derived from p. For each country, we compare the value of h with the growth rate g taken from the World Bank projections given in Table 6. When $h > g$ the debt is clearly unsustainable, this is the qualitative threshold characteristic of the human factor.

Of the 35 countries for which World Bank projections are available, we see that with a 3-per cent target increase in GNP per capita per year, only 14 countries fulfil the condition $h \leq g$. Debt is unsustainable for the remaining 21 countries. If $k = 1$ per cent, debt becomes sustainable for all, with the exception of Congo.

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25 Uganda is a 'good case', but it was hypothesized in the country's balance-of-payments projections and in its debt sustainability analysis when it joined the HIPC Initiative, that the average annual change of terms of trade would go from –27.5 per cent to a complete stabilization in five years (1996-2001). Moreover, the baseline scenarios considered neither negative nor positive shocks (see IMF-World Bank 1997; World Bank 1996, and IMF 1996).

If we compare human factor h with the actual growth rates for the period 1987-97, we can observe that only five countries satisfy the human factor criteria with k = 3 per cent, but this increases to 12 countries once we accept the more modest GNP per head increase of 1 per cent. However, from 1987 to 1997, all HIPC countries had to service their external debt, and were at times required to allocate a relevant percentage of GDP for this purpose, as the last column of Table 6 shows.

If we consider an average annual population growth rate of 2-3 per cent in the years to come, we can say that most of these 41 countries have no hope of being able to service any future debt according to the human factor. Vietnam, Uganda, Equatorial Guinea and Lao PDR may become exceptions if they managing to maintain their excellent growth rates.

3 Conclusions

Scenarios on future growth rates should be closely correlated to past experience. Past growth rates over the last decades seem to provide a good indication of the growth capacity of a country. These data and the growth experience achieved in a more recent period, like the decade 1987-97, provide some evidence of the *initial conditions* that affect each country as it begins to evolve towards its development process and any growth scenario should take these circumstances into account.

The processes governing economics and history may accelerate, and optimism must be a part of any development analysis, but the 'leap' must relate to past experiences and present conditions.

There are three major types of risks involved in an overoptimistic debt sustainability analysis:

i) There will be disillusions if the expected performance is not achieved;

ii) Conditions attached to the lending/borrowing contracts may not be fulfilled, including the various types of conditionality, because the assumptions behind the contract itself are unrealistic, and renegotiations are always costly and painful;

iii) Credibility of the institution, or institutions, preparing future debt sustainability scenarios suffer. If, in addition, this institution is also a lender, its credibility as a lender will deteriorate. Of course, this is particularly true from the point of view of the borrowers in the south, but may also cause disappointment to those northern savers who would like to invest part of their savings in financial instruments linked to some development initiatives.

After 20 years of different plans and many false promises, debt cancellation appears as a necessity for most low-income economies. It must be part of the *external enabling environment* that should help these nations work towards a sustainable development process. But the debt debates tells us a lot in terms of the criteria and requirements of development finance. Structural change and export diversification take time and developing countries, particularly the A-countries, will need to borrow from abroad. Good domestic governance and accountability are essential aspects of a sustainable

external debt, but appropriate financial instruments are also needed. The terms of lending contracts and related conditions must be realistic, with rational forecasts concerning a borrowing country's ability to repay. Twenty years have already been wasted from the point of view of economic and human development. Let us hope that we have at last learned some lessons.

Appendix: New market instruments for development finance

In the search for development funds, one can think either of increasing bilateral transfer from the industrialized countries to southern countries, or more give more money from rich countries to multilateral agencies. In both cases the additional funds must be raised through taxation. This is a perfectly acceptable way of providing additional financing for development (FfD); one may also think of taxing international financial transactions. But there are other possibilities which may be worth exploring.

A1 The World Bank

Development lending must be on a long-run time horizon, 25-30 years, with considerable 'grace periods'; IDA lending meets many of the long-term criteria for development financing to the poorest countries.

The Bank is a borrower in financial markets with *high credibility*, high reputation, the one-to-one debt/equity ratio, an 'AAA' rating attached to its bonds, etc. The Bank is, then, in an ideal position to act as an intermediary institution between the savers in rich countries and the borrowers in the poor countries.

Elements such as (i) high credibility; (ii) below-markets interest rates, and (iii) long-term lending are the essential ingredients of an appropriate FfD. The World Bank could act as a buffer between existing rules of international financial markets and those considered fair for the developing countries.

There are at least three possibilities for the Bank to take advantage of the situation:

i) By *issuing more development bonds*;

ii) By *increasing the leverage of the Bank.* The Bank is already using some leverage through the International Financial Corporation (IFC), mainly in the form of guarantees in Asia and Latin America. There has been the well-known case of Electricity Generating Company of Thailand (EGAT) in which the Bank guaranteed the principal on an EGAT bond plus some interest payments. This guarantee reduced the spread to less than 300 basis points on US Treasury. However, guarantees can be meaningfully applied only to initiatives already capable of generating a positive cash flow in the short/medium term and are more costly than straight Bank loans to developing countries;

iii) *By possibly increasing the share of IDA lending* in the World Bank's overall lending; it could dedicate more resources to A-countries and to the twin purpose of triggering economic growth, and to improving human development.

Special note: The Bank is a credible financial intermediary but its activities are often criticized as duplicating the IMF type of macroeconomic conditionality. Furthermore, the Bank has been accused of paying insufficient attention to human development and the environment. Some savers in the north might prefer not to channel more funds through the Bank.

A2 Ethic funds (EF)

The market for *ethical saving* is increasing in OECD countries, as is highlighted by the fact that there are several 'ethical banks' and that commercial banks open 'ethical accounts'.

The United Nations can also be considered to take responsibility for targeted development funds (TDF) that are either dedicated to specific development issues/targets such as education, health, gender, information technology facilities, or to specific countries and areas.

The fact that these funds are targeted for HIPCs and poor countries with a high degree of 'human development conditionality' attached to them, should help to reduce moral hazard. The borrowing countries would have considerable incentive to maintain 'good behaviour', and the possibility of placing blame for slow growth or unsuccessful poverty reduction on the Washington institutions is limited. Of course, the UN should be allowed to issue bonds directly to northern savers, with IDA-type conditions attached.

The World Bank could also be responsible for targeted development funds, but it may be more interesting to have *more than one international institution in the capacity of money collector in the north and money lender in the south.* This would give the industrial countries more opportunities, and possibly also increase the overall funds raised. A multiplicity of institutions/agencies acting as credit intermediaries for the TDF might also prevent any single institution from assuming a monopolistic position and all the problems that go with the territory.

3 Private non-profit companies

Private, non-profit companies might be interested in sharing the DF and EF markets but they will need to achieve a high degrees of (i) financial soundness and reputation, the triple AAA rate, criteria, and (ii) ethical credibility.

The combination of these two requisites may vary, but it is difficult to see profit-operating financial funds getting into this market. This could be easier for some 'ethic banks' that are managed according to both bank and NGO principles, thus these organizations are considered fundamentally as non-profit. Of course these small initiatives will not get the triple-A rating, but in the case of ethic funds, economic soundness could replace financial reputation, that is to say: with a focus on (i) prudent lending; (ii) close scrutiny and direct knowledge of the borrowers, and (iii) the small size of each credit and the large numbers of borrowers, i.e. the principle of risk sharing.

All these possibilities would increase the instruments for *ethical development finance*. The potential size of this market is not clear at the moment, but as for many other markets, financial ones in particular, we will never know their real potentiality unless we invent in the market itself, as in the case of derivative markets.

A4 Tax facilities

The OECD countries could consider making the money earmarked to TDF as income tax deductible. Alternatively, the annual income tax declaration could include the possibility to devote part of the taxes, say in the range of ½-1 per cent, to SDF.

This could be an additional method of improving the present ODA-to-GDP ratio of the OECD countries and of moving towards the 0.7 per cent target. By now, that particular target has also long a story, and aid fatigue is apparent in the endless discussions on aid requirements which only very few countries have been able to meet. Either we must come up with something innovative to help reach that target, or then to refrain from further discussion. To rely on government decisions about bilateral and multilateral aid has already proved to be largely useless for almost 20 years.

A5 Conclusion

For the two possibilities—ethic funds and targeted development funds—to be financed either through bond issues or more tax facilities for northern taxpayers is not mutually exclusive. The general idea is to test the intentions and orientations of northern savers, either through markets or through open mechanisms like tax declaration. These instruments are more innovative and they have some obvious advantages over a 'compulsory' new tax for debt cancellation. Moreover, ethic funds and targeted development funds would provide new products on the credit market.

In general we must increase the number of possibilities available to northern savers who want to invest in funds for development. Let us see what the northern savers think of these possibilities. They will decide on the intermediary agent they prefer, be it the World Bank, United Nations, ethnic banks, and by how much. OECD governments and international organizations must provide the necessary framework, but the ultimate decision must be left to savers/taxpayers. Let us see what they have to say.

References

Bacha, E. L. (1990). 'A Three-Gap Model of Foreign Transfer and GDP Growth Rate in Developing Countries'. *Journal of Development Economics*, 32.

Basu, K. (1997). *Analytical Development Economics-The Less developed Countries Revisited*. Cambridge, MA: The MIT Press.

Bhaduri, A. (1987). 'Dependent and Self-Reliant Growth with Foreign Borrowing'. *Cambridge Journal of Economics*, 11 (3): September.

Calamoris, C., and A. Meltzer (1999). *Reforming the IMF* (known as the Meltzer report).

Claessens, S., E. Detragiache, R. Kanbur, and P. Wickham (1996). 'Analytical Aspects of Debt Problems of Heavily Indebted Poor Countries'. Policy Research Working paper 1618. Washington, DC: World Bank.

Cohen, D. (1985). 'How to Evaluate the Solvency of an Indebted Nation'. *Economic Policy*, November.

Cohen, D. (1989). 'Slow Growth and Large LDC Debt in the Eighties: an Empirical Analysis'. Paris: CEPREMAP. Mimeo.

Cohen, D. (2000). 'The HIPC Initiative: True and False Promises'. Technical Papers No 166. Paris: OECD Development Centre.

Eatwell, J. (1997). 'International Financial Liberalization: The Impact on World Development'. UNDP Discussion Paper Series, May. New York: UNDP.

Edwards, S. (1989). 'A Market Solution for the Debt Crisis?', in G. Luciani (ed.), *La finanza americana fra euforia e crisi*. Rome: Adriano Olivetti Foundation.

Fischer, S. (1999) 'Reforming the International Financial System'. *The Economic Journal*, 109 (459): November.

Gilbert, C., A. Powell, and D. Vines (1999). 'Positioning the World Bank'. *The Economic Journal*, 109 (459): November.

Government of Italy (2001). *Beyond Debt Relief.* Rome: March.

Hirschman, A. O. (1977). *The Passions and the Interest-Political Arguments for Capitalism before its Triumph*. Princeton, NJ: Princeton University Press.

IMF (1996). 'Uganda, Background Paper on Issues in Financial Sector Reform'. Washington, DC: IMF.

IMF-World Bank (1997). *Preliminary Document on the HIPC Initiative: Uganda*. Washington, DC: IMF and the World Bank.

IMF-World Bank (2001). *Development Committee, The Challenge of Maintaining Long-Term External Debt Sustainability*. Washington, DC: IMF and World Bank.

Iqbal, Z., and R. Kanbur (eds) (1997). *External Finance for Low-Income Countries*. Washington, DC: IMF.

Krugman, P. (1988). 'Financing vs. Forgiving a Debt Overhang'. *Journal of Development Economics*, 29 (3): November.

Northover, H. (2001). *The Human Development Approach to Debt Sustainability Analysis for the World's Poor*. CAFOD.

Pasinetti, L. L. (1998). 'The Myth (or Folly) of the 3 Per Cent Deficit: GDP Maastricht "Parameter" ' . *Cambridge Journal of Economics*, 22 (1).

Rostow, W. (1960). *The Stages of Economic Growth*. Cambridge: Cambridge University Press.

Sachs, J. D. (1989). 'The Debt Overhang of Developing Countries', in R. Findlay (ed.), *Debt, Stabilization and Development: Essays in Memory of Carlos Diaz-Alejandro*. Oxford: Basil Blackwell.

Schiff, M., and L. A. Winters (1998). 'Regional Integration as Diplomacy'. *The World Bank Economic Review*, 12 (2).

Sen, Sunanda (1998). *Finance and Development*. Calcutta: Centre for Studies in Social Sciences.

Smith, A. (1763). 'Early Draft of Part of the Wealth of Nations', in R. L. Meek, D. D. Raphael and P. G. Stein (eds) (1978), *Lectures on Jurisprudence.* Oxford: Clarendon Press.

Spaventa, L. (1987). 'The Growth of Public Debt'. *IMF Staff Papers*, 34 (2).

Stiglitz, J. E. (1999). 'The World Bank at the Millennium'. *The Economic Journal*, 109 (459): November.

UNCTAD (2001). *The Least Developed Countries.* Geneva: UNCTAD.

UNCTAD (various years). *Trade and Development Report* for 1990, 1999, 2001. Geneva: UNCTAD.

UNDP (1997). *Human Development Report 1997*. New York: UNDP.

United Nations (1990). *External Debt Crisis and Development*. New York: UN.

Vaggi, G. (1993). 'Sustainable Debts and the Human Factor', in G. Vaggi (ed.), *From the Debt Crisis to Sustainable Development.* Basingstoke and New York: Macmillan and St. Martin's Press.

Vaggi, G. (2000). 'Debt Sustainability and the Financing of the HIPC Initiative'. ESAS in Co-operation and Development Occasional Paper Series.

Viner, J. (1928). 'Adam Smith and Laissez Faire', in Paul Douglas and Jacob Hollander, Jacob *et. al.*(eds), *Adam Smith, 1776-1926*. New York: Augustus M. Kelley, Pubs.

Winch, D. (1991). 'Adam Smith: The Prophet of Free Enterprise?'. *History of Economics Review*, 16: Summer.

World Bank (various years). *World Development Report*, various years. Oxford: Oxford University Press for the World Bank.

World Bank 1999, Global Economic Prospects for Developing Countries.

World Bank (1989). *Sub-Saharan Africa-From Crisis to Sustainable Development—A Long-Term Perspective Study*. Washington, DC: World Bank.

World Bank (1990-91). *World Debt Tables 1990-91*, 2 vols. Washington, DC: World Bank.

World Bank (1994). *Global Economic Prospects and the Developing Countries*. Washington, DC: World Bank.

World Bank (1996). 'Uganda, The Challenge of Growth and Poverty Reduction'. World Bank Country Study. Washington, DC: World Bank.

World Bank (1998). *Global Development Finance*. Washington, DC: World Bank.

World Bank (1999). *Global Economic Prospects for Developing Countries*. Washington, DC: World Bank.

World Bank (2000a). *Global Development Finance*. Washington, DC: World Bank.

World Bank (2000b). *World Development Indicators.* Washington, DC: World Bank.