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Towards a New Modus Operandi of the International Financial System

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Governance of Globalization

Towards a New Modus Operandi of the International Financial System

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Introduction

The Bretton Woods system was conceived as a fixed exchange rate regime, allowing for a few devaluations, with the IMF supplying a line of credits to countries in 'transitory' difficulties. It was far less ambitious than the idea put forward by Keynes, who wanted to switch directly to a truly international monetary system based upon a world currency, the *bancor* as he meant to call it[2]. Sixty years later, the advent of the euro in Europe has shown that the idea of a supranational currency was not unfeasible after all. One clearly sees however the set of political and economic difficulties at hand. The stability pact, to give one example, which was geared at imposing fiscal discipline on the member states, has proved extremely difficult to implement. As Argentina or Brazil have demonstrated in a different context, it is indeed very difficult to hold the 'provinces' accountable to financial discipline when there is a 'free lunch', namely a common currency. After the war, the US was willing to lend or grant money to the rest of the world (as the Marshall plan later demonstrated), but not as a matter of principle.

On the other hand, a supranational currency is at least consistent with greater financial integration. Given the 'Mundell triangle', something has to give with free capital mobility:

either an independent monetary policy (and, one would add, a fiscal stance as well) or a fixed-exchange rate. The collapse of the Bretton Woods (BW) system, formally in the seventies, in practice as early as in the early sixties, can be interpreted as driven by the Mundell logic, when monetary policy would not surrender despite financial integration. As capital mobility expands, the system becomes rapidly untenable. As devaluations are anticipated, exchange-rate crises often get out of control. As financial integration deepens, the need for credit lines is of a different nature. The role of the IMF is no longer to finance 'transitory' balance of payments disequilibria, which almost by definition can be dealt with by financial integration. If financial markets refuse to assist a country, this must arise from some kind of crises. Some of them have to do with the intrinsic instability of financial markets, others with the lack of self-imposed discipline from the debtor countries themselves. Overall, for most emerging countries, the post BW world has been as much a risk, say, as an opportunity. As shown by Eichengreen and Bordo, crisis frequency has risen, being now about twice more frequent than in the period 1880-1913. Three quarters of financial crises after 1973 took place in developing countries. The widespread debt crisis of the 1980s became 'the lost decade' for Latin America, and the banks ultimately had to accept substantial write-offs. The Asian crisis of 1997-98 was devastating at the time. The Russian default of August 1998 was settled relatively quickly, but even quicker were the shock waves it sent out to the financial markets – with some role in the failure of LTCM, a sharp rise of all emerging market bond spreads, and the subsequent Brazilian exchange-rate crisis. Dealing

with country debt crises is always very messy, often protracted and very costly to both debtor and creditors.

Orderly resolution of sovereign debt crises has in fact become more difficult in the past decade. The shift from the syndicated bank loans of the 1970s to a mix of short-term bank finance and bonds has created a much wider group of creditors and instruments. This exacerbates the 'rush to exits' by creditors in a crisis and the collective action problems involved in debt restructuring. What seems rational for an individual creditor trying to get his money out becomes counterproductive when all try to do so simultaneously, or when they cannot agree to accept some loss if some think they can do better acting alone.

The debtor knows that restructuring will be difficult in these circumstances and therefore may do everything possible to delay the inevitable, often as a result making it worse when it does come. Then, once a restructuring is finally agreed by most creditors, holdout ('rogue') creditors can seek to extract full payment – so all creditors are concerned *ex ante* about such free-rider behaviour, and that itself impedes agreement. During a protracted restructuring, the debtor faces severe financing problems – it may be impossible to get 'new money', often including trade credit. The abrupt compression of imports and shift into exports can be a very painful adjustment, often accompanied by deep falls in output. The absence of a framework for orderly workouts increases the pressure on the IMF and G7 to step in with bailout packages, because a disorderly workout appears too unpalatable.

There are alternatives. After the Mexican crisis of 1994-95, Jeffrey Sachs [3] proposed an international bankruptcy regime modelled on Chapter 11 of the US bankruptcy code. Eichengreen and Portes (1995) argued instead for a combination of contractual and institutional changes that would not require an international bankruptcy court [4]. The G10 deputies issued a report in May 1996 that advocated the latter route [5]. Nothing was done, because the G10 left any action to the initiative of market participants. But the lenders had already expressed their opposition to any measures that would, as they put it, 'make default easier'. It should instead be as 'bad and ugly' as possible, they said, in order to deter any violation of the sanctity of contracts.

The discussions on the international financial architecture that followed the Asian crisis of 1997-98 revived the debate, but both the conclusions and the results were the same as before: no change. The crises in Turkey and Argentina were handled in much the same way as the Asian crises – a pre-crisis period of exchange-rate rigidity, endorsed by the IMF, followed by big bailout packages when trouble came. Only the debacle and default of Argentina broke the pattern, and the consequences are disastrous for that country, if not for the international financial system. One proposal came from Stanley Fischer, declaring to be in favor of IMF action as lender of last resort (LLR). Another one was by Anne Krueger (Fischer's successor as the Fund's number 2), advocating a Sovereign Debt Restructuring Mechanism (SDRM), a mechanism facilitating declaration of insolvency for over-indebted countries along the lines of Chapter 11. One of the institutional manifestations of the Fischer

proposal is the use of the CCL facility, which enables countries affected by a contagion crisis to draw on additional lines of credit. No country, however, made use of this facility which was eventually shelved in 2004. The Krueger proposal was also eventually shelved although, four months after her first declaration, she responded to criticism by reducing significantly the implementing role of the IMF; but her plan would still have required an international treaty or amendment of the IMF Articles of Agreement. John Taylor, US Undersecretary of the Treasury for International Affairs, responded immediately with a version of the proposals for contractual changes that had appeared in 1995-96. The G7 has endorsed the US position, and at the end the whole exercise was abandoned.

Both these proposals (LLR and SDRM) have proved, with the benefit of hindsight, too ambitious. The LLR reform, to take this one first, must have at its disposal either the resources to inject an indeterminate quantity of fresh liquidity or perfect information regarding solvent and insolvent financial intermediaries. As the latter assumption is virtually ruled out by the very nature of financial crises, the former is tantamount to giving the IMF the means to create liquidity *ex nihilo*. Such a transfer of monetary sovereignty -- and we have seen how difficult it was to implement in the European case -- seems unrealistic on a world scale. If there is to be a world LLR, it is rather for the large central banks (Fed, ECB and BoJ) to play this role, but it is hard to imagine that this could be formalized in a systematic way, although some commentators have offered to reactivate the SDR as a means for creating world liquidity (e.g. Soros). The proposal of a bankruptcy court, for its part, has also been

the subject of intense discussions (see Rogoff and Zeltmeyer, 2003, for a review). Here too, the political difficulty of setting up an international court with authority over the handling of sovereign debt, an excellent idea in itself, has appeared be unattainable for essentially the same reason, i.e. the substantial transfer of sovereignty that would be needed in order to give an international court the statutory possibility of suspending legal procedures against a country. This is why a realistic agenda of reforms needs to be one step below this ambitious proposal. At the risk of appearing to be too cautious, I will suggest in this report a new modus operandi rather than a big bang approach to the reform of the system.

Standstills and CACs

Given the lack of consensus for a bankruptcy court, steps first have to be taken which at least enhance the collective rationality of the various stakeholders. In our joint work with Richard Portes, we suggest, in the first place, the use of standstills that would enable a country in crisis to freeze its external commitments, imposing capital controls and suspending debt service for a short period of three months (Buiter and Sibert have suggested incorporating this feature in the contract themselves). This transition period would provide the necessary respite in order to launch a debt settlement procedure with creditors, sheltered from the disastrous (and in the circumstances partly self-fulfilling) effects of currency crisis and capital flight. The resolution of the crisis, through a restructuring of the debt in the case where it is unsustainable, or its consolidation in the case of a liquidity crisis, would take place under the aegis of the IMF, which would be able to make a judgement regarding the nature of

the crisis and provide, in appropriate cases, the liquidity enabling the country to maintain a normal level of activity (a procedure akin to the 'lending into arrears' of the 1980s). On the side of the creditors, the Collective Action Clauses are the instrument making it possible to reach rapid agreement. We propose two simple innovations in this respect: first, on the part of the principal financial sectors (New York, London, Paris, etc.) a coordinated measure prohibiting debt issues that do not contain CACs; second, the creation, alongside the Paris Club (dealing with sovereign debt) and the London Club (dealing with bank debt) of a new club to handle bond debt that might be called the New York Club. With time perhaps, this structure could become the basis of a true bankruptcy court.

A lender of *first* resort

One critical reason why the distinction between confidence crises and crises of fundamentals is difficult to make is that the former often rapidly turn into the latter: if interest rates rise, debt can rapidly be subject to a snowball effect, which then becomes self-fulfilling with regard to the fundamentals themselves. This is the argument used by Williamson to characterize the present Brazilian crisis: the debt is at a level made unsustainable by high interest rates but which would rapidly be brought down to an equilibrium level (remembering the government's primary surpluses) by low interest rates. In these circumstances, economists talk of multiple equilibrium: low rates represent one equilibrium, high rates another. This idea is attractive, but the reality of the crises, as we shall report, is not so clear-cut. What remains true however is that the cost of debt may sometimes represent more than

half the cause of the debt build up (as we shall see this has been the case in Brazil and Turkey).

It is this dimension that has led us, with Richard Portes, to make the following proposal. IMF Members should be able to commit themselves *ex ante*, should they so wish, to an 'indebtedness regime' (similar to the 'fixed-exchange-rate regime' to which they subscribed for many years) making it possible for them to carry out preventive action regarding the evolution of debt. The idea is to give them the means to act before the snowball effect comes into play, since analysis of the debt build-up mechanism shows that it takes time, and therefore provides time, before the situation becomes explosive. This 'indebtedness regime' would be based on the spreads paid. For the sake of simplicity, let us suppose that a country undertakes never to borrow at spreads greater than 400 basis points. The 'indebtedness regime' signifies that the country will take all necessary steps to hold its indebtedness down to a level compatible with this level of interest rates. If the regime is 'credible', in other words if investors are convinced that rates will never go above this level, multiple equilibrium is ruled out, in that the mechanism 'coordinates' expectations on a low level. Moreover, and in our view more importantly, this indebtedness regime has the merit of committing the country to a prudent strategy and, in particular, of avoiding the widespread temptation to allow problems to accumulate before tackling them and in so doing to expose itself to a crisis of confidence which it is then too late to deal with at all easily. The IMF can help a country achieve its goals by offering a program and providing liquidity even though

the country itself still has access to the world financial markets. It is this function that we coin as a lender of first resort, when the country wants to act to restore confidence, before it is too late

A Post HIPC Agenda for the Poorest Countries

The mechanisms which are suited for the countries which have access to the financial markets are not suited to the poorest whose creditors are most often governments of the rich countries. The HIPC Initiative, which has involved 38 eligible countries, has shown however that debt reduction is no less important for the poorest than for the middle income debtors. The Initiative, while welcome in most quarters of the spectrum, has raised a number of questions from at least three different angles.

For some, although necessary, this is an unfortunate event, inasmuch as it weakens the 'culture of credit' among low-income countries (LICs) and creates a harmful precedent with respect to the 'sanctity of contracts'. For others, at the other extreme, it does not go far enough and leaves poor countries vulnerable to future debt crises. Supporting this pessimism is the fact, for example, that among the group of 13 countries that have reached the Completion Point (CP) at the beginning of 2004, 3 of them (Benin, Burkina Faso, Uganda – the first HIPC) are already above the enhanced Initiative's target of a 150% debt-to-export ratio. Equally worrying, this has happened even though one of them (Burkina Faso) has necessitated, and was granted, a 'topping up' of debt relief at CP – and more countries now approaching their respective CPs are expected to need such topping-up (for example Niger).

These facts can legitimately be viewed as a critical wake-up call against the idea that the debt problem has been solved for good. Adverse shocks, most significantly, will remain an important dimension of the poor countries' pattern of growth. Debt is likely to remain a hot issue.

For a third group of critics, the Initiative is flawed to the extent that it allocates ODA to the wrong people: HIPCs are poor by definition, but among this group of beneficiaries, it is neither the poorest nor the most deserving countries which get the most out of it. In addition, one has also argued that debt relief distorts general ODA patterns towards indebted low-income countries, to the detriment of other, equally poor but less indebted, developing countries. Again, we will report facts that do support this view. To those who advocate a 100% cancellation of the debt, this is a warning: unless one can demonstrate that the debt write off will not crowd out other ODAs, this puts the non-HIPC countries, and within the HIPC themselves the poorest of the group at risk of receiving less resources.

A FAIR proposal

On the other hand, debt relief does offer a number of attractive features to channel ODA. It has a relatively small transaction cost, and supply budget support in a predictable fashion. Given the fact that new money has been committed to poor countries in order to achieve the MDG, there is obviously room to go beyond the HIPC initiative, provided that care is taken of the distortive effect of debt cancellation on the allocation of ODA. One idea that we offer in the report follows the PAIR proposal made by a group of distinguished

Belgium economists. Given the fact that each poor country can expect to receive until 2015 a given amount of resources in order to achieve the MGDs, one could allow the HIPC to cash (part of) the promises that they are entitled to (say from the IFF facility promised by the English and the French governments), upfront, through a one-off debt reduction. The non-HIPC countries would receive their share in due time (i.e. before 2015). A discount on the swap of the HIPC countries, reflecting the 'market price' of the debt could be offered to those countries; by which they could turn 100 of grant into say 150 of debt reduction. This would have the great merit of being both consistent with the sunset clause of the HIPC initiative; of giving new room for manoeuvre to the multilateral and of addressing the fairness question that has been opposed to the debt reduction process. We call it a 'FAIR' proposal.

Smoothing commodity shocks

Beyond this technical solution to the debt problem of the poorest countries, the critical problem that remains to be addressed is the fact that the poorest countries are still overly dependent upon commodity prices for their export earnings. Financial markets do very little to insurance them against these shocks. At most 12 to 18 months forward contracts are offered.

Following the permanent income theory of consumption, one can think of two opposite cases. If a country wants to avoid the soaring cost of debt, it should react to any permanent bad shock by a corresponding increase of its surplus. In the case of a transitory shock instead, no action should be taken at all. The problem is that most commodity shocks

are neither permanent nor transitory. They usually have a tendency to return to normal, but this is a long process. Some have argued that, given the long swings of commodity prices, exporting countries should behave as if any commodity shock was bound to be permanent, and adjust consequently. This is obviously too far fetched. There is no reason why countries should not find ways to get protected, if not indefinitely, at least a little against adverse shocks. The idea that we develop in this paper builds upon this intuition.

Assume that countries get protected against deviation of commodity prices from a moving average of past prices. The reference price is known in advance to the producers and yet is allowed to follow smoothly market trends. This avoids the pitfalls of past stabilization funds, and yet give countries time to adjust to permanent shocks. The question that we then ask in this paper is: how much would it cost to create a Fund that would protect producers against deviation from a five years moving average? The answer is: it would cost a one off endowment worth about two years of market volumes. There are clearly many ways by which this mechanism could be used. One is indeed to create a Fund that producers would be free to participate to, and which would be endowed accordingly. Another would be to filter traditional ODA according to the moving average idea that we defend. Commodity exporters would receive ODA that would vary along with deviations of commodity prices from past averages. Our computation would then help donors assess what is the extra cost to proceed along the lines that we suggest. In the long run, this Fund could help create new financial instruments that would do a better job at protecting the poorest countries.

Content of the paper

The rest of the paper comes as follows. We first offer a brief history of financial crises after 1973, highlighting the differences between the 1980s and the 1990s. We then discuss a platform of reforms for the middle income countries. In the last section we address the poorest countries needs.

A Brief History of Financial Crises after 1973

From the seventies into the eighties

A popular view in the 1970s was that world excess savings (brought about by the oil shocks) were efficiently recycled to the developing countries through the eurodollar market. According to this view, current account deficits of the developing countries were an 'equilibrium' phenomenon which enabled these countries to absorb aggregate shocks smoothly. For all practical matters, the balance of payments was portrayed as following a pattern mimicking the cash flow of an infinitely lived individual subject to an intertemporal budget constraint. Thanks to financial integration, nobody should worry about the current account disequilibria[6].

The 1980s, however, became the decade when the debt accumulated in the seventies became a bitter component of the developing countries' life. World interest rates shot up and the time horizon of the lenders consequently got shorter. Against the view that balance of payments disequilibria were equilibrium phenomena, rose the opposite view that debt could well be unsustainable. The following table relates the probability of a debt crisis to the level

of debt accumulated in the early eighties by a developing country.

Table 9.1 Debt reschedulings in the 1980s

D/X	Probability of rescheduling
200%	60%
250%	69%
300%	93%

Source: Cohen (2001).

The new question was: given the shock to the interest rate and given the new impatience of creditors to reduce their exposure on the poor countries, would the country be willing to service their debt in full[7]? A number of approaches have been tried which converge on a narrow range of answers. Whatever the methodology, there was no question that the debt had (eventually) to be written down. An early proponent of debt write-off in the eighties was Kenen (1983). In defence of voluntary debt write-off, see also Williamson (1988). Why it took almost a decade to reach such a conclusion is one of the most troublesome questions of the period.

One aspect that made the need for a debt write-down obvious, was the fact that the debt of most middle-income debtors was quoted on a secondary market that would simply reveal what the lenders themselves were thinking. In cases such as Bolivia, the discount on the debt came down as low as 95 per cent, which meant that the creditors were willing to sell a claim nominally priced at one dollar for five cents. The Brady initiative itself offered to cut the nominal value of the debt by a significant amount. In the (extreme) case of Bolivia, for

instance, the Brady deal carried an 84 per cent discount. In the less severe cases of Brazil and Mexico, one of the key options offered to the commercial banks involved a 35 per cent discount. For Ecuador, the write-off discount agreed upon after the Brady deal amounted to 45 per cent. Yet, even in the immediate aftermath of the Brady deal, the debt was still quoted at a significant discount. In the case of Argentina, the discounted bond was traded at 61 cents on the dollar in July 1992. In the case of Nigeria which is closer to the HIPC problem to be examined below, the debt was quoted at 25 cents on the dollar (i.e. a 75 per cent discount). These numbers, which were an integral part of the debate at the time of the Brady deal, were strong evidence of the discrepancy between the market and the face values of the debt at the time when the Brady deals were signed.

In order to analyse the potential of debt write off as a solution to the debt crisis, Bulow and Rogoff (1989) have offered a critical distinction between average and marginal value of debt (see also Cohen and Verdier, 1995). When a country owes a debt that already extends its ability to service it, at the margin, accumulating one extra dollar of credit will bring nothing to the investors as a whole, although one individual investor would clearly be richer. Conversely, when a creditor reduces its claim on a debtor by one dollar, by how much does it really reduce the burden of the debtor? Obviously by less than the face value of the write off but also by less than the average (market) value of the debt. In the extreme example where, no matter what, the country will always pay a fixed number, the marginal price of the debt is zero so long as the debt is larger than that number. Building upon these insights, I

have calibrated the difference between the average and the marginal price of the debt such as it was quoted prior to the Brady deal for emerging countries. The results are shown in the following table.

Table 9.2 Market value of debt circa 1990

D/X	Market Value	Marginal price
150%	78.5%	30%
200%	87.9%	9.5%
250%	90%	2.1%
300%	89%	-3%

Source: Cohen (2001).

One sees from table 2 that countries whose Debt-to-Export ratio above 250% have reached the stage where the marginal value of the debt is estimated to be nil by secondary market participants. In those cases, one could speak of a 'Debt Laffer Curve' problem, as Paul Krugman once put it: more debt reduces its market value, something labelled as a 'debt overhang' in the literature. A debt-to-export ratio of 250% then appears, in this context, as the absolute maximum for debt accumulation. We return below to this critical dimension to analyse the lessons of the HIPC initiative.

Are the financial crises of the 1990s different from those of the 1980s? [8]

In the period leading up to 1982, when Mexico suspended payment on its debt, spreads were very low, rarely exceeding 200-250 basis points, as most bankers at the time

thought that countries did not default. Spreads on both Mexican and Brazilian debt did rise in the few months before the debt moratoria, but the syndicated bank lending of the 1970s and early 1980s showed no signs of recollection of the 1930s. Although spreads did vary somewhat with the characteristics of the borrower, there was no perceptible market analysis of the risk involved. The bulk of the financial crises involved syndicated loans with very low spreads, and the average real rate of interest on sovereign borrowing in the 1970s was negative. The debt crisis of the 1980s was simply not anticipated by the lenders. This changed, to a large extent, in the 1990s. The agents became different. Corporate borrowers joined sovereign debtors. Lenders were different too: bondholders replaced bank loan syndicates. The 1980s story according to which high public deficits created high debt was not the only one at hand. Confidence crises created new scenarios. Crises were more complex: the Asian crises, the Mexican crisis, the Russian crisis give a range of cases that are difficult to subsume under one story. Some crises were expected, some were unexpected, and quite often, in each case, for good reasons. During the 1990s, the critical questions became to investigate the extent to which 'confidence' crises could disrupt a country without any references to its fundamentals, and whether a new global monitoring of the financial system was needed.

In order to create a typology of new debt crises in the nineties, let us distinguish cases where the spread before the crisis was large enough that one could speak of 'foretold' crises from cases where they were telling nothing about the likelihood of a forthcoming crisis. Take,

for instances of the first category, the cases of Argentina and Ecuador; and, at the other extreme, take Korea or Mexico.

Table 9.3 Case 1: Foretold Crises: Argentina, Ecuador
(Data two years before the crisis)

	Argentina	Ecuador
D/X	380%	250%
D/GDP	36%	85%
Spreads (basis points)	1000	1000
Current account (% of GCP)	-5%	-11%

Table 9.4 Case 2: Unexpected Crises: Mexico, Korea
(Data two years before the crisis)

	Mexico	Korea
D/X	180%	76%
D/GDP	35%	25%
Spreads (basis points)	200	150
Current account	-7.2%	-1.9%

(% of GDP)

From the comparison of these two cases, it is fairly clear that Argentina and Ecuador were fundamentally insolvent, at least with respect to one of the two criteria which are commonly used: debt-to-export ratio above 200% and/or debt-to GDP ratio above 50% (note, however, that it takes both indicators to anticipate a crisis, on which more later). Huge spreads were paid, and at the time when the crisis erupted, no lender could claim that it was taken by surprise. Yet despite this apparent market discipline, many lenders were taken by surprise; and the discipline of higher spreads had little perceptible effect on the policies of Argentina or its creditors. Argentina was able to borrow at excessive spreads, which simply worsened its fiscal position and exacerbated the crisis and its consequences. This is a case where a write-down of the debt is needed, in order to return as soon as possible to sustainable growth.

Case 2 is exactly the opposite. No major macroeconomic disequilibria were observable, insofar as the outstanding stocks were concerned; spreads were correspondingly low. In the case of Mexico, however, it is clear that the large current-account deficit was creating liquidity pressures. On the other hand, Korea failed by none of these criteria. Indeed, its weakness came from elsewhere, i.e. the short-term nature of its debt. As the current account demonstrates, however, there was no particular need for a major exchange rate adjustment.

Table 9.5 Case 3: Foretold Crises without Apparent Macroeconomic Disequilibria (Data two years before the crisis)

	Turkey	Russia
D/X	194%	121%
D/GDP	54%	26%
Spreads	500	800
Current Account	-0.7%	+0.7%

In Case 3, the sovereign risk pertains to the nature of the debtor. Despite good macroeconomic performance, creditors could examine the macroeconomics and perceive the risk of defaults that the shaky government or the shaky banking system could create. The spreads were correspondingly high.

Let us summarize the discussion so far with the following table.

Table 9.6 Summary Table

	High Debt	Low Debt
Low Spread	None	Case 2
High Spread	Case 1	Case 3

Compared to the 1980s, then, it does not appear to be the case that large disequilibria went unnoticed by the markets. The high-debt/low-spread cell is empty.

The Dynamics of high debt/high spreads

Case 1 is a case where high debt comes with high spreads. Clearly high debt is bound to cause high spreads, but the reverse is also true: high spreads cause high debt through the snowball effect of the interest bill on debt accumulation. In order to shed some light on this debate, we have decomposed the debt dynamics into the following identity:

Increase of the Debt-to-GDP ratio =

real interest rate * Debt-to-GDP ratio

- Growth rate of the economy * Debt-to-GDP ratio

- Primary Surplus/GDP

The real interest rate is the nominal rate (risk free rate + spread) adjusted for the deviation of the exchange rate from PPP. The dynamics are computed up to the year of the debt crisis itself. We present this decomposition below by dividing each of the three terms of the right-hand side by the sum of their absolute values (the sum of absolute value then adds to one). We reach the following results.

Table 9.7 Debt Dynamics

	Int+Change	Croissance	Déficit
Argentina	0,16	-0,51	0,33
Brazil	0,47	-0,51	0,02
Colombia	0,01	-0,98	-0,01
Korea	0,22	-0,26	0,52
Ecuador	0,42	-0,54	-0,04
India	0,35	-0,49	0,16
Indonesia	0,10	-0,73	0,17
Malaysia	-0,07	-0,49	0,44
Mexico	-0,45	-0,51	0,04
Pakistan	-0,25	-0,45	0,30
Panama	0,07	-0,40	-0,54
Papoua	0,51	-0,37	0,12
Peru	0,25	-0,73	-0,02
Philippines	-0,46	-0,07	-0,47
Russia	+0.50	-0.50	0
Thailand	-0,06	-0,33	0,61
Turkey	0,52	-0,10	-0,39

Uruguay	-0,85	0,00	0,14
Venezuela	-0,41	-0,08	-0,51
Zimbabwe	0,29	-0,50	-0,20

Each item expressed as a fraction of the sum of absolute value

The first term is roughly interpreted as a *confidence premium*, the second term as a measure of the underlying fundamentals and the third term as a measure of the policy choices. We see that, on average, the growth component (second column) is the critical factor behind the dynamics of debt. The confidence premium factor (first column) is the second important item, while the deficit itself appears to play the least important role. Some countries are heavily burdened by the confidence crisis term: Brazil, Ecuador, Turkey, Russia are all instances where it almost entirely cancels the (beneficial) growth factor. This decomposition suggests two policy implications. Given the fact that bad 'fundamentals' are also a major part of the story, we conclude that debt write-off may also be needed. Finally, the role of the confidence term suggests that efficient measures (taken *ex ante* and *ex post*) could alleviate the importance of that term.

A brief investigation into the Lucas Paradox [9]

While default in the eighties came as a surprise to many lenders (whose maxim at the time was that countries do not default), it was certainly not news to economic historians. A collection of papers in Eichengreen and Lindert (1989) reminded the profession, in retrospect,

of the history of past defaults in the 19th century and in the 1930s. In a recent paper Reinhart and Rogoff (2003) call the phenomenon 'serial default' and make the link between the pattern of default of many emerging countries (especially Latin American) and what is called the Lucas Paradox. The paradox is that capital does not flow into the poor countries where capital is scarce, against the neo-classical view that the return to capital accumulation should be higher where capital is rare. Lucas concludes that the neo-classical paradigm should be abandoned, while Reinhart and Rogoff conclude that the risk premium due to bad behavior is the main culprit. Following my work with Marcelo Soto, I want to sketch here why there is in fact no paradox at all, once account is taken of the lack of integration of the goods and services markets.

In Cohen and Soto (2003), we present capital stock data that first confirm that capital accumulation is indeed significantly lower in poor countries. The data come as follows.

Table 9.8 Capital/ output ratio (volume, Summers-Heston data)

	Physical output to physical capital
Rich countries	1
Middle- and low-income countries excluding SSA	1.86
Sub-Saharan Africa (SSA)	3.77

Source: see Cohen and Soto (2002) for sources and sample used.

The capital output ratio is about three times lower in Africa and about 50% lower in Latin America than in the rich countries. These data however, are used in volume terms, using Summers and Heston data after PPP corrections (as they should be from the perspective of a producer). But these results clearly do not hold when using current values. When investments and output are evaluated in current dollars (at current exchange rates), there is no paradox at all: the capital output ratios are fairly identical across countries.

Table 9.9 Capital/ output ratio (value, current dollars)

Rich countries	1
Middle- and low-income countries excluding SSA	1.02
Sub-Saharan Africa (SSA)	0.90

This shed a new perspective on the cause of capital shortage. No foreign investors would invest in a local grocery store. Its market value, in current prices, is too low, due to the fact that its customers are essentially too poor. This is precisely what the Summers and Heston data intend to correct. From a Wall Street perspective, however, this is not good enough. The reason why capital markets do not deliver an equalization of capital ratios has therefore more to do with the fact that goods markets remain poorly integrated (the share of non traded goods

remaining a critical dimension of most economies) than because of capital imperfection themselves.

As proof that this is indeed the case, one can simply measure the capital/output ratio in manufacturing (the traded good sector). In this case, one finds that the capital output ratio is in fact higher in the poor countries than in the rich, and even much higher in Africa than in other poor countries.

Table 9.10 Capital/ output ratio (manufacturing)

	Physical output to physical capital
Rich countries	1
Middle- and low-income countries excluding SSA	1.33
Sub-Saharan Africa (SSA)	1.76

Source: Causa and Cohen and Soto (2004) for sources and sample used.

This table shows that in poor countries there is no shortage of capital. In fact, Africa which was among the least endowed countries in infrastructure appears to be among the best capitalised countries in terms of physical capital. More generally, in Causa and Cohen (2004), we find that the capital output ratio is in general the highest among the poor countries. This can be coined as *an anti-Lucas Paradox*. The intuition that we offer is that poor countries, lacking other inputs such as infrastructure use physical capital as a substitute for the scarcity

of those missing inputs. If we take this line of interpretation, this means that poor countries do not borrow too little. The problem seems rather that they borrow too much, borrowed capital being one way to supplement other missing inputs. It should then come as no surprise, from a neo-classical perspective, that the returns to foreign capital are low. This sheds a different light on what one should expect the financial markets to perform. Rather than focusing on raising the transfer of capital from rich to poor countries, financial markets are more needed to diversify risk or to accommodate shocks. This is unfortunately the function that they do worse. This is why the resolution of crises which are the worst way to deal with unforeseen events, comes first on the list of any agenda of reform of the financial architecture.

An Agenda of Reforms

The debate over debt sustainability has gained a number of critical insights over the course of the last three decades. We know more about the willingness of countries to sustain external debt in face of an adverse shock, we know better of the market value of external debt and its determinant. We also learn much of the role of confidence crisis in undermining the solvency of a country. Where we have learnt little however is on how to avoid debt crises to be endlessly repeated, how to address them when they start, how to close them when they erupt. This is the topic that we now address.

Bankruptcy court

In November 2001, Anne Krueger, First Deputy Managing Director of the IMF, advocated a Sovereign Debt Restructuring Mechanism (SDRM) to facilitate a declaration of insolvency for an over-indebted country along the lines of Chapter 11 of the US Bankruptcy Code (Krueger, 2001). Despite subsequent revisions that reduced the role of the IMF (Krueger, 2002), the SDRM was shelved, at the April 2003 meetings, specifically because it would have required an amendment to the Articles (IMF, 2003). Setting up an international court with authority over the handling of sovereign debt would entail a substantial transfer of sovereignty, in order to give the court the statutory basis for suspending legal procedures against a country. This was felt to go too far, especially by the US government.

Beyond these political constraints, a number of authors have argued that one should be careful before making a comparison between sovereign and corporate debts. For one thing, a firm that goes bankrupt keeps an intrinsic value, which can be sold by creditors. This is not the case for a country. Aggregate GDP is not something that can be shipped home by the creditors. Some kind of willingness to pay on the part of the country is always needed. Second, because creditors have no collateral, the value of their claim is proportionate to the harm that they can inflict on defaulting countries. Defaults need to be 'bad and ugly' if one wants to deter debtors from reneging on their debt. This is bad *ex post* for the country but may be good *ex ante*, insofar as it may raise the supply of credit. This is one reason why many big debtors such as Brazil are reluctant to participate in a SDRM: they fear that the mechanism would frighten their creditors and precipitate the crisis.

Neither of these arguments is fully convincing, however. For one thing, although it is true that payment always depends on the 'willingness to pay' of indebted countries, it is also clearly the case that this willingness, being conditioned by the threat of sanctions, is proportional to GDP or exports, although clearly by a factor lower than one (see above). But this brings us to a second argument. There are two ways of interpreting 'bad and ugly' renegotiations. Take a country that has the choice between paying its debt in full or default. Payment in full will be preferred over default whenever the debt is lower than a given threshold. Past this threshold, however, the optimum strategy is not to let the country default but to get it to pay an amount below the face value of the debt. This is obviously superior to outright default both *ex post* (the country is perhaps indifferent but the creditors get something) and *ex ante* (since this results in higher lending initially). This is why, just like any usual bankruptcy court, a mechanism that enhances collective rationality of decision making in case of default should be welcome.

There is however an additional critical difference between a country and firm that relates to the risk of a confidence crisis. If a country finds it difficult to borrow for whatever reason, then it may be endogenously obliged to default, in effect fulfilling the initial fear. Self-fulfilling debt crises are a phenomenon whose theoretical rationale has been pointed out by Calvo (1988), Cole and Kehoe (1996, 2001) and others. The intuitive rationale is quite simple: perception of high risk raises the spread, which in turn raises the debt service burden, which in turn provokes the debt crises. The reason why this may happen as a rational

equilibrium is the fact that the fundamentals out of which a country can service its debt are partly endogenous to its creditworthiness. If default reduces the amount that a country can service (even reduces this ability to nothing in the case of outright default) then lenders that expect that nothing will be paid do indeed get nothing. This is less likely in the case of corporate debt if default simply amounts, say, to changing the management of the firm.

Drawing on this analogy I show analytically, in Cohen (2003), that *an* ex post *efficient debt resolution mechanism destroys the risk of a self-fulfilling debt crisis* . The intuition behind this proposition is straightforward. A self-fulfilling debt crisis originates from the fact that the fundamentals out of which the debt is repaid may be endogeneously lowered in case of outright default. When an efficient debt workout is implemented instead, the fundamentals are unaffected by the debt contract. The risk of a self fulfilling debt crisis disappears. This is why, focusing on efficient ex post solution is also critical from an ex ante point of view.

CACs

In the absence of an SDRM, ex post efficient renegotiations remains a daunting issue. The broad phrase ‘collective action clauses’ has been extended to cover a wide range of proposals aimed at circumventing the absence of a bankruptcy court. As specified in Eichengreen and Portes (1995) and supplemented recently by Taylor (2003), these would bring into bond contracts (and indeed to bank lending instruments) a range of clauses that would promote orderly workouts of international debt, rather than the chaotic sequel to default that we observe now, for example, in the Argentine case. These would include

initiation and engagement clauses detailing how negotiations would proceed; a clause permitting changes by a qualified majority in the terms of the debt, including amounts and dates payable; a sharing clause that would require pro-rata distribution to all bondholders of any payment made to any one of them; and a nonacceleration clause to avoid having one missed payment trigger an immediate full repayment obligation[10]. An additional contractual innovation that would facilitate restructurings would be to utilize the trust deed form for bonds (common under UK law but not in New York – see Buchheit). Here the trustee acts for all holders of a given security and centralizes enforcement of any decisions (in particular, the trustee shares among the bondholders the proceeds of any settlement).

In addition to the existing Paris Club and London Club mechanisms, which deal with debt to governments and to banks respectively, there would be a permanent (but 'light') bondholders committee – the 'New York Club', say. It would look not unlike the previous CFB and FBPC. It would oversee bondholders' negotiations with the debtor. There might also be a new mediation agency– again, an administratively 'light' structure that would coordinate the Paris Club, London Club, and New York Club, primarily ensuring the timely exchange of information and comparison of assumptions. It would verify claims and oversee bondholder voting. It might take on other roles, e.g. endorsing (or not) a proposed standstill. The proposal of the Institute for International Finance to bring all creditors into a single negotiating committee seems unnecessarily to override existing structures, the Paris and London clubs, that work efficiently.

There is a relatively simple, feasible way of implementing these proposals. The mandates of the American SEC and the British FSA include duties to protect investors and to maintain orderly markets. That is sufficient justification and authority, without new legislation, for them to intervene. It is clear from the case of Argentina that those markets were and are disorderly and that investors have not been adequately protected against the eventuality of default by having adequate post-default procedures in place.

Thus we propose that the American, British and other major financial center regulatory authorities stipulate that bonds issued or traded in their markets must include CACs and other workout-friendly clauses. The IMF could organize and indeed help to fund a voluntary exchange program (with enhancements) for outstanding stocks of securities without such clauses. And the Fund should make access to the SRF (indeed, any Fund programme) open only to countries that use CACs.

LLR and LFR

Drawing upon the lessons of the Asian crisis Stanley Fischer (1999) first proposed that the IMF act as international lender of last resort (ILLR). As argued by many commentators however (e.g. Wyplosz, 2003), an ILLR must have at its disposal either the resources to inject an indeterminate quantity of fresh liquidity or perfect information regarding solvent and insolvent financial intermediaries. As the latter assumption is virtually ruled out by the very nature of financial crises, the former is tantamount to giving the IMF the means to create liquidity *ex nihilo*. Such a transfer of monetary sovereignty, which was

extremely difficult to implement in the European case, seems totally unrealistic on a world scale. If there is to be a world LLR, it is rather for the large central banks (Fed, ECB and BoJ) to play this role.

The LLR role, however, is not singled peak. Two cases can actually arise. One in which confidence lost can only be restored by big bail outs. This is the standard LLR case such as evidenced with Mexico in 1995. Cole and Kehoe have shown, however, that another case was also possible. This is when a country which is losing the confidence of the market would want, on its own, to reduce its debt in order to restore the confidence lost. In this case, a country needs to buy time in order to willingly move out of the 'danger zone' where spreads are rising and the risk of a confidence crisis looms. This is the case of Brazil now, which attempts, despite the odds of the creditors, to escape the danger zone of high spreads/high debt. It would be a shame, for the sake of the future of the financial markets, that it would fail in this attempt. This is a case where, we argue with Richard Portes, a lender of *first* resort would be needed.

Assume that a country manages to commit itself *not* to borrow at punitive rates. Think for instance of a kind of 'usury law' that the country would apply to itself, forbidding it to borrow above a given interest threshold, say a spread over 400 basis points. In models of self-fulfilling debt crises, a debtor that is the victim of a confidence shock may want to get out of the danger zone by taking stringent actions. A country which could have gained credibility in reacting to such fears may buy time to get out of the danger zone.

Let us now investigate what it takes to make such a mechanism credible. Assume that a country initially borrows at low spreads: think of Mexico today, and assume that a new shock (fall in the price of oil…) suddenly lowers the market's assessment of its creditworthiness. If the country accepts higher spreads, it 'gambles for resurrection' by taking the chance that things will eventually settle down, or simply buys time in order to make internal adjustments. The problem with this option is that the debt may meanwhile spiral upwards, making it more difficult *ex post* to get the country to act decisively. For a country that is committed, say, to a 300-400 basis point spread, the IMF should work with the country on an analysis of the cause of the problem and of the remedies which could resolve it. A program would then be designed, which, if agreed upon by the country, could grant access to IMF money if needed.

Nothing should be automatic in this process. Countries signal *ex ante* their willingness to avoid the snowball effect of rising spreads and rising debts and seek to avoid it at an early stage. But IMF support remains conditional on taking appropriate measures, so that it is not a free lunch. Furthermore, IMF money could be granted at a rate that incorporates a spread, say of 300 basis points, so that countries will not necessarily want to tap IMF resources.

One may fear that the informational content of spreads will be reduced as they become a policy variable (a version of Goodhart's law). It is true that lenders, being aware of the fact that countries will take actions against rising spreads, will change their pricing policy. If, as a result, spreads become lower, this is in itself a good thing as it reduces the snowball

effect. But it is very unlikely that they could fail to detect a country that becomes insolvent. Indeed, actions to correct imbalances are voluntary, not automatic. Lenders must then keep track of a debtor's solvency. But the policy may achieve the role of making self-fulfilling spread crises if not impossible, at least less likely.

The merit of this approach, we believe, is that it allows the country to take very early corrective actions, with the support of IMF loans. By acting early the measures should not be daunting. By showing its willingness to act, the country further boosts its reputation, not too late as is often the case, but early on when the country can still see the benefit of raising its profile in the eyes of international investors. In our view this mechanism could replace the now defunct Contingent Credit Line Facility. The CCL was created to help 'first-class policy' countries to face confidence shocks. The reason why no country ever decided to use the CCL was the fear of sending a wrong signal to the market, despite the quasi-pre-qualification clauses that were attached to it. Our mechanism instead is one which relies only on market signal (spreads) so that it would not run into such risk. The reason why we attach so much importance to spreads is that they both reveal a problem and contribute to creating it.

Conclusion

Building upon the previous discussion, we find it useful to distinguish three different cases pertaining to the debt accumulated by an emerging country.

- *Hair Cut*: this occurs when the debt is too large, and a debt write down is needed. This was typical of the Brady initiative, although it took too long to be acknowledged. This is the case which is usually associated to a bankruptcy court, or an SDRM[11]. The key role of the IMF should then to act as an umpire of the debt reduction discussion between debtors and creditors. ('We provide the programme, you deliver the money' as was coined by the managing director of the IMF in the eighties).
- *Big Bailout*: this is the case where only a massive rescue of a country can salvage a country from a confidence crisis. This was typically the Mexican or the Asian cases. This is the branch which is usually associated with the Lender of Last Resort. Many commentators argue that this is rather a role for central banks than for the IMF.
- *Lender of* first *resort*: This is a case where the country wants to take action to restore confidence, even though they still have access to the financial markets. The IMF can help, as usual with liquidity and a programme, to gain time. This is the case of Brazil now.

Only when these three functions are each given an institutional recognition will it become easier to avoid the endless repetition of financial crises.

Poor Countries: A Post HIPC Agenda[12]

The HIPC Initiative has involved 38 eligible countries. To date, debt reduction packages have been approved for 27 countries, 23 of them in Africa, providing $31 billion (net present value terms) in debt service relief over time. Taking the 27 countries together, the NPV of total debt is projected to be reduced by 53%. For all HIPCs, the debt relief under

the Initiative accounts for a weighted average of 33% of their GNI. By 2005, the weighted average NPV of debt-to-exports ratio for the 27 DC countries is projected to decline from almost 300% before HIPC relief to 128%, while the weighted average NPV of the debt to GDP is projected to decline from 60% before HIPC relief to 30%. By 2001, the average debt-service-to-exports ratio for HIPCs had already fallen below the corresponding ratio in other low-income countries.

However, although the broad picture that emerges from these facts is encouraging, a number of critical questions must be addressed, regarding the high degree of diversity in the debt situations of HIPCs. First, the dispersion among HIPCs is significant. In terms of relief to GNI, while the maximum debt relief is reaped by Sao Tomé (227% of GNI), at the lower end of the spectrum other HIPCs such as Senegal or Honduras are receiving debt relief for only 10% of their GNI. Within HIPC countries the effect of the initiative are therefore wide open. Furthermore, while debt relief is by definition well correlated to the level of debt, it has, within HIPC countries themselves, no correlation whatsoever with poverty, however defined (see Cohen and Vellutini, 2003).

If one analyses the implications of the Initiative across HIPC and non HIPC the outcomes are not better. In 1999, ODA to HIPCs accounted for 26% of ODA to LICs. In 2001, the proportion had risen to 32%. These figures are consistent with the fact that, as argued by Powell (2000), the enhanced Initiative, by lowering the qualification thresholds and by setting more ambitious objectives in terms of debt reduction (namely, of ratio of debt to

exports of 150% instead of 200% previously), is effectively introducing a bias in favour of HIPCs – to the detriment of other poor countries. Importantly, Powell (2000) emphasises that this re-allocation is unrelated to poverty prevalence and policy performance. Furthermore, beyond the provision of financial resources, an important objective of the HIPC Initiative is to encourage policy and institutional reforms. The integration of the HIPC process with PRSPs is in itself a positive development. There does not appear however to be any positive correlation between the HIPC relief and policy performance. Countries that are projected to mostly benefit from the HIPC are in fact the countries with the worse policy environment.

Finally, a central premise of the HIPC Initiative is that debt relief should be additional to existing aid assistance. Ensuring additionality ex ante has been notoriously difficult, essentially because aid flows at the donors' end are affected by the very phenomenon that has proved pervasive in beneficiary countries: fungibility. Indeed, it is always an open possibility for donors to totally or partially compensate for their debt relief effort by a reduction of their other aid flows, be it at country-by-country level, regionally or globally. Not surprisingly, there is no formal mechanism for monitoring additionality in the Initiative, let alone enforcing it. The only attempts made to assess additionality have inevitably been on an ex post basis, looking back at how debt relief has affected net aid flows. The longest experience in debt relief is by far the one of bilateral donors[13]. The evidence suggests that the additionality of the debt relief provided by bilateral donors, for which a long track record already exists, has been weak, to say the least. (see Birdsall, Claessens and Diwan 2002).

How to achieve more Debt Relief

To sum up, debt relief comes up with a central problem: its impact of aid allocation across LICs. This fact thus makes it difficult to simple recommend a unqualified new round of debt relief. Despite its pitfalls in terms of resource allocation, however, debt relief has some interesting characteristics of fresh budget support – first and foremost because it is not allocated to specific projects but is rather supporting the entire governmental programme. In addition, debt relief does not exhibit some of the problematic characteristics of aid flows: low stability, low predictability and high pro-cyclicality. Several studies have found that aid flows

are even more volatile than fiscal revenue or output and highly unpredictable (the difference between committed and disbursed flows, for example, is very significant)[14]. They are also sometimes found to be pro-cyclical. In this context, debt reduction can be viewed as a special form of budget support that strengthens the public monitoring process. In contrast a plethora of separate donor funded project makes it harder for domestic stakeholders to monitor flows of funds and implementation of government plans.

It would obviously create a perverse incentive to enhance resource transfers in the form of debt relief to countries that are debt-stressed and poor while ignoring LICs that are managing their debt servicing outflows but are also subject to the same MDG financing deficits. The principles guiding ODA should be about fully funding the MDGs – whether the LICs being considered are heavily indebted or not. The risk of the debt forgiveness approach, again, is that providing additional debt relief benefits those countries that have built up large debts, at the expense of those which have not. As summed up above, one of the key problems with the HIPC Initiative is the lack of correlation between poverty needs, good governance and debt reduction. The poorest nations are not receiving the most through the HIPC Initiative, nor do the best governed ones. The Initiative is in this respect a hybrid mix, which acknowledges that the indebted countries are too poor to sustain their debt and yet, by itself, ignores the situation of other countries which either made the effort to service their debt or were excluded in the first place from borrowing.

In response to this criticism, NGOs have proposed a common approach to financing LICs. The idea is to give an 'equivalent' amount to HIPC and non-HIPC in the form of budget support. This forms the basis of the PAIR proposal which we now present[15].

The PAIR proposal, formulated by four Belgian economists [16] and first presented by the Belgian Prime Minister at the Monterrey Conference in March 2002 and later at the OECD Ministerial Meeting in Paris in May 2002, goes a long way towards addressing this question. The proposal draws on the debt sustainability approach formulated by CAFOD and extends it in three directions: (i) the proposed eligibility criterion is defined by a HDI lower than 0.5 in 1997; this characterises 49 countries, compared with 41 eligible HIPCs; (ii) donors should be the 23 richer countries with a financial contribution for 15 years consisting of two parts: a flat contribution equal to 0.05% of GDP and a variable contribution equal to the gap between their current ODA levels and the reference target of 0.7% of GDP; and (iii) a 15-year firm program should be established, fully funded from the start, for implementing the DAC/MDG targets and extinguishing the foreign debt of the 49 poor countries selected.

The annual contributions of the 23 countries estimated at some $22 billion would be paid to a Trust Fund that would acquire all the eligible public and publicly guaranteed debt of the selected 49 countries, which in 1997 NPV terms is estimated at $188 billion, offering a price to creditors reflecting its market value at an estimated amount of $88 billion. Only the unsustainable part of the debt would be cancelled. The sustainable part, now owed by the Trust Fund, would continue to be serviced with the proceeds used towards financing the

Millennium Development Goals targets, in addition to the remaining budget of the Fund. This approach, backed by the human development sustainability definition, corresponds to an objective of distributive fairness across poor countries, as sustainable debt service provide resources to human development in all poor countries, not only the debtor country itself.

If one were to separate the debt problem from the achievement of the Millennium Development Goals targets, the Trust Fund budget could be reduced from $325 to $88 billion. Most of the needed funding would be transferred to the Fund debt instruments held by rich countries or multilateral institutions. The debt eligible for total cancellation is the long term, public or publicly guaranteed debt (PPG), outstanding and disbursed (DOD), with respect to official (multilateral and bilateral) donors as well as private creditors. It also includes interest arrears on long term debt as well as the use of IMF credit. It does not include private debt which is not publicly guaranteed nor short term PPG debt due to private creditors.

As said, the debt in 1997 NPV terms of the 49 poorest countries is of $188 billion. Its budgetary cost is estimated taking into account the fact that the debt will not realistically be fully serviced. The actual write-off of the debt from its NPV to its market or economic value is considered as a balance sheet clean-up operation. In fact, different discount rates are applied by the Belgian economists according to the nature of the creditors. For instance, the debt held by the IMF and the World Bank is valued at full NPV, given the particular seniority status of these creditors. The amount estimated to compensate multilateral creditors is thus

estimated at 55 billion US$, including 21 billion for non-concessional and 34 billion for concessional debt. For bilateral official creditors, the residual economic value is set at 30% of NPV for non-concessional debt and 15% for concessional debt; the total cost is thus estimated at 25 billion US$, with 20 billion for non-concessional and 5 billion for concessional debt. For private creditors, assuming they agree on a *pari passu* discount, a buy-back value of 30% to the claims yields a cost of 8 billion US$.

A 'FAIR' proposal[17]

The PAIR proposal came before the Monterrey commitments. It may be possible to present a leaner version of this project, based on the promises that have been offered, while keeping the overall approach. Britain and France, for instance, have proposed an innovative financing mechanism to double ODA quickly. According to this proposal, an International Financing Facility (IFF) would raise funds by issuing bonds on capital markets, and would provide predictable and guaranteed assistance flows up to 2015. After that date, with bonds falling due, aid flows would decline. The attractiveness of this scheme comes from the fact that it would provide large and predictable increases in aid in the period during which the MDG should be met. The IFF would be supportive of best practices to reduce poverty, and to be predictable enough to finance medium and long-term strategies. We would envisage our proposal within this or a similar facility.

These ODA commitments would allow the international community to proceed in a more orderly way. They offer new opportunities to further the HIPC Initiative in ways which

are not detrimental to non-HIPC countries. Within the IFF framework, every poor country is entitled to a predictable amount of budget support. One idea, following the PAIR proposal, would then be to entitle HIPCs to cash in (part of) the ODA that they are entitled to, upfront, through a one-off debt reduction, while the non-HIPC countries would receive their share in due time.

If the one-off swap (future grants against debt cancellation) was made at face value, this would bring some benefits to the poor countries but it is unlikely that many of them would be interested in the swap. A discount on the swap, reflecting the 'market price' of the debt could however be offered to those countries; by which they could turn $100 of grant into say $150 of debt reduction. This would have the great merit of being both consistent with the Initiative's sunset clause; of giving new room of manoeuvre to multilateral donors and of addressing the fairness issue that has been used so often as an argument against the debt reduction process. The discount that would be offered to LICs on their external, official debt is a highly political question, but it should be grounded on the economics of debt repayment. I documented in section 2 what was the 'price' of LDC debt, based upon market valuation by the banks of middle income debt on the late eighties. This could be a basis for action. According to the computations presented in table 2 above, a debt that is worth 150% of exports, yields a 'market' value representing approximately 100% of exports. (By comparison, for a debt worth 250% of exports, the market value only represented 90% of exports.)

The idea of a one-off swap at a discount is supported by a number of precedents that do exist in LICs[18]. A particularly interesting example of this is a number of Paris Club agreements containing a debt swap provision, *at a discount*. It enabled creditor countries to undertake LIC debt swaps on a bilateral and voluntary basis. These operations may be 'debt for nature[19]', 'debt for aid'[20], debt for equity swaps or other local currency debt swaps. Debt to equity, for example, typically involve the sale of the debt by the creditor government – at a discount – to an investor who in turn sells the debt to the debtor government in return for shares in a local company or for local currency to be used in projects in the debtor country. The debt-swap option is available for low-income countries and lower-middle income countries. The discount rates have reportedly varied between 50 and 95% of face value. And the US government, which is mandated by Congress to estimate the present value of it loan portfolio in value, applies a 92% discount to its HIPC debt.

We can summarise this idea as follows: each country, within the Monterrey/IFF framework, is entitled in the future to a given amount of budget support. HIPCs could have the right to front load part of this budget support through a one-off swap of the grant that they expect into debt reduction. A discount on the debt would be offered. We call it a FAIR proposal.

In Favor of a Fund to Stabilize Poor Countries' Income[21]

Debt relief is only a technical ploy. The crux of the matter for poor countries remains the fact that they are heavily dependent on a few commodities which make their income

highly volatile. Because commodity prices are slow to recover from adverse shocks, any attempt to stabilize prices at a given level has failed in the past. Either there is a positive shock and the stabilization Fund becomes so rich that the temptation to expropriate it becomes too strong. Or there is a bad shock and soon the Fund becomes insolvent. This explains why most people have concluded that not much should be done to stabilize commodity prices.

As explained in the introduction, this should not imply that nothing should be done at all. What is needed is a less ambitious scheme which nevertheless provides some insurance to the poorest countries. In what follows, we calibrate how much it would cost to offer the poor countries with an insurance scheme that would protect the price of the commodities that they sell against deviation from a moving average of past prices. By doing so, we accomplish two things. We make the income of the poor countries more predictable. We do not offer to lean against the wind. If the price of a commodity rise or fall for long, we do translate, with a lag, the change in the price levels into the income of the country. By this mechanism, we avoid the pitfalls of past stabilization schemes.

Technically, we seek to analyze how a stabilization agency could guarantee a price p_t^* to an exporting country, where p_t^* is a moving average of and its previous values $p_{t-d-1}, p_{t-d-2}, \ldots, p_{t-d-h}$, in which h is the time horizon over which the average is taken and d is the delay between the spot and the moving average. The stabilization is done through a

Fund, which is initially endowed with an amount $F_0 > 0$ in period t>0. The quantity exported by the country is normalized to unity. Subsequently, for t>1, the Fund evolves according to the following rule:

$$F_t = (1+r)F_{t-1} + (p_t - p_t^*)$$

The real interest rate r is assumed to be constant over time. The aim of this paper is to determine the probability of depletion of the Fund and to investigate how much resources are needed to avoid (with various degrees of probability) its bankruptcy.

In order to calibrate our results, we use monthly commodity price reported in the International Monetary Fund's International Financial Statistics, for the period January 1957 to December 2003. The commodities used for the study are presented in Table1. For each selected commodity, it presents the sample period used for the study, the spot price in July 2003, then a figure which can be regarded as a rough estimate of the total exports of developing countries and, finally, the IFS series code of the data used. In the following analysis, all prices will be real prices, deflated by an US producer prices index, taking July 2003 as the reference.[1]

Table 9.11 Selected commodities

Commodities	Sample period	Price 7/2003	Annual Value (million US$)
Bananas	1/75-12/2003	296,3US$/ton	3438
Cocoa Beans	1/1957-12/2003	1556,87 US$/ton	43287
Cotton	1/1957-12/2003	60,19 US cts/lb	4248
Rice	1/1957-12/2003	199,48 US$/ton	3970

Table 12 reports our key results.

Table 9.12 Endowment needed to stabilize prices (as a fraction of trade volumes)
(n= 5 years lag, r=interest rate=5%, h=50 years of simulations)

Commodity	50%	90%	95%	99%	Upper Bound
Bananas	0,39	1,12	1,36	1,87	2,68
Cocoa	0,78	1,8	1,97	2,19	2,68
Cotton	0,65	1,26	1,4	1,62	2,68
Rice	0,93	1,75	1,9	2,11	2,68

For example, the line of table about cocoa means that, if stabilization is done for cocoa beans: With an initial endowment of 1.8 times the annual value of trade (bl 7.5 of 2003 US$), the fund will remain always positive with probability 90%. With an initial endowment worth

2.6 times the volume of trade, the fund will never become negative, even at an infinite time horizon (this is in fact a general statistical property that we document in a companion working paper).

The scheme so defined could be used in a variety of fashions: either to directly help producers protect themselves against adverse shocks, or to calibrate ODA to a government against the fluctuation of the economy. The scheme could also help tailor new loans to commodity dependent countries, which could smooth their repayment pattern accordingly. The order of magnitudes that we present should allow whichever party is interested in provisioning the mechanism, and make it credible.

Still another option would be to create *new debt instruments* that explicitly account for exogenous risks. In essence, these instruments would link debt service directly to commodity prices and index the debt service profile to a commodity price index, such that commodity price declines could trigger postponement or adjustment in the debt service. This is much in the spirit of Hausmann and Rigobon (2002), who indeed have gone even further. They argue that IDA loans should be in local currencies, with only a clause pertaining to inflation. LICs have good reasons to borrow in foreign currency: domestic currency markets abroad are essentially non-existent. Even the IBRD window of the World Bank lends in dollars because it must fund itself in the same capital markets that do not accept local currency denominations. The IDA window also lends in dollars but does not have this excuse. It is funded with fiscal resources and could lend, in principle, in any unit it wishes to. Haussman

and Rigobon thus argue that it should lend in inflation-indexed domestic currency. With 83 member countries, IDA should be able to achieve, they argue, a significant amount of risk diversification among its members. Such purchasing power-adjusted loans would actually carry little risk given IDA's portfolio: simulating over the past twenty years the numerical implications of their recommendation they find that the IDA would have suffered no loss.

Yet such contingent loans have been rare, particularly those that would index debt service upon terms of trade fluctuations. In Cohen and Vellutini (2003) we review examples that come closest to the concept of a contingent lending facility as just defined. It can be seen that none of them in scope and in essence can be readily used for the purpose of covering exogenous shocks in LICs, except, potentially, the EC's B Envelope. Should the international community take seriously the idea that debt crisis prevention should be kept at the forefront of policy priorities, there is clearly a need for new policy instruments to act speedily upon debt signals, be it through a revived Trust Fund. One option would then be to prolong the Trust Fund, which could then keep the role that it has had in the framework of the HIPC Initiative: to enable the World Bank, IMF and other multilateral donors to provision their claims and to write them off when needed, subject to a careful analysis of the underlying causes. This Trust Fund could then be granted a one-off endowment, out of the Monterrey commitments, to the benefit of multilateral agencies themselves.

Conclusion

To summarize the key ideas that we have developed in this report, what the international financial system needs is both a set of new instruments, especially for the poorest countries, new rules of behavior especially for the middle income countries, and a new set of institutions geared towards more co-operative outcome between creditors and debtors. This falls short of the kind of institutions that exist within a sovereign state, but it would be illusory to think that these could emerge from scratch. Time is needed to build new institutions, which is why one should not lose time in creating their premises.

Chapter 9 Notes

[1] This paper draws on joint work with Richard Portes (Cohen and Portes, 2003), Charles Vellutini (Cohen and Vellutini, 2003) and Thibault Fally and Sebastien Villemot (Cohen et al. 2004). I thank them all for inspiration. The usual disclaimer applies.

[2]An intriguing question is whether Harry Dexter White, the US counterpart to Keynes was, as ascertained in a recent book (Craig, 2004), a Soviet "correspondent". If proved, this could somehow weaken the thesis that the IMF was only designed to enhance US interest.

[3] J Sachs, 1995, 'Do We Need an International Lender of Last Resort?', Graham Lecture, Princeton University.

[4] B Eichengreen and R Portes, 1995, *Crisis? What Crisis? Orderly Workouts for Sovereign Debtors*, London, Centre for Economic Policy Research.

[5] *The Resolution of Sovereign Liquidity Crises*, 1996, BIS.

[6] The analysis of a country's balance of payments in an intertemporal framework was renewed by the work of Bazdarich (1978), Dornbusch and Fischer (1980), Sachs (1981), and Razin and Svensson (1983). The guiding line of these papers was to apply the permanent income theory to the case of a nation portrayed as an infinitely lived agent and to interpret the so-called "disequilibria" of the balance of payments as an equilibrium phenomenon. Further models paid specific attention to the problem of aggregating the intertemporal budget constraints of an infinite number of finitely lived agents. The key

papers include Buiter (1981), Dornbusch (1985), and the work by Frenkel and Razin (1989).

[7] The theory of debt repudiation has then been brought to life by the work of Eaton and Gersovitz (1981). Early work on the topic also includes Kharas (1984), Kletzer (1984), Krugman (1985), OzIer (1986), and Cohen and Sachs (1984). The early survey by Sachs (1984) and Eaton *et al.* (1986) as well as the other papers in the special issue of the *European Economic Review* (June 1986) give an overview of the state of the art in 1985.

[8] This section is based on Cohen and Portes (2003).

[9] This section is based on Cohen and Soto (2002).

[10] It has been objected that including such clauses in international debt contracts would weaken the bonding role of debt and thereby provoke lenders to withdraw, reducing or disrupting market access for countries that now have it or aspire to it. Such objections ignore or dismiss well-supported empirical results from comparisons of 'British-style' bonds, which typically do have such CACs, to otherwise equivalent 'American-style' bonds, which do not. This work shows at most some tendency for terms to 'bad' borrowers to be inferior under the 'British' bonds, whereas the terms to 'good' borrowers (as measured by credit ratings) are in fact better than under the American bonds (Eichengreen and Mody, ; Richards, et al.). Problems remain – for example, how to deal with old bonds that do not include such clauses? Bonds are often exchanged, and this could be facilitated with 'sweeteners' if necessary. The New York Club could deal with cross-issue coordination – there is ample historical precedent

in the activities of the CFB and FBPC. It seems infeasible and perhaps undesirable to have in each instrument a 'meta-CAC' that would in effect impose qualified majority voting among all bondholders, whose result would cover all outstanding instruments of a given debtor. The 'aggregation problem' is not trivial, but the combination of new institutions and CACs can deal with it satisfactorily.

[11] See Eichengreen and Portes (1995), Krueger (2002), Rogoff and Zettelmeyer (20023, Sachs (1995).

[12] This section relies on Cohen and Vellutini (2003)

[13] See for example OED (2003).

[14] See for example IMF, (2001c).

[15] I thank, without implicating, Francis Lemoine from Eurodad for useful discussions on this topic.

[16] See Berlage, Cassimon, Dreze and Reding (2000).

[17] This section draws on useful discussions with representatives of Eurodad. The authors of the report bear obviously sole responsibility for its content.

[18] As is well know, middle-income countries have extensively used debt swaps (see for example Cohen (2000)).

[19] With the objective of funding environmental projects.

[20] Essentially a similar mechanism as the one used by the HIPC Initiative, through using foregone debt service as aid – but, again, with a key difference: at a discount.

[21]This section is based on Cohen Fally and Villemot (2004)

[22] We computed some tests to fit a statistical model for each of the price series. We have restricted ourselves to ARMA models for the price series, either stationary around a linear trend, or difference-stationary. The statistical models we have fitted now enable us to simulate the behavior of the commodity prices (using Monte-Carlo simulations), and therefore the behavior of the stabilization fund.

Chapter 9 References

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