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Policies to Reduce the Vulnerability of Low-Income Countries

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A perennial concern of low-income countries has been their vulnerability to exogenous shocks. The best-known of these are terms of trade shocks, which stem primarily from variations in the prices of commodities that still form the staple exports of most low-income countries, but may also come from variations in import prices (especially of oil). Output shocks, either caused by climatic abnormalities or by political developments (like revolutions or civil wars), have also been important in many countries. Hurricanes can also cause macroeconomically-significant damage in small countries, much of which takes the form of losses to the capital stock. My impression was that interest rate shocks and shocks to the flow of capital tend to be less important than in middle-income countries, but so far as the flow of capital is concerned this turns out to be a misleading characterisation of the 1990s, and may be even less true in future.

But the reason that countries are vulnerable to shocks is not just because shocks happen: it is also a function of policy reactions. Perhaps the most common problem is that countries run their economies without leaving the slack that is necessary if they are to react to shocks in a stabilising way. Doubtless it would be preferable from the standpoint of developing countries to reduce their vulnerability by creating

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international mechanisms (like buffer stocks or a revival of the IMF's Contingency Financing Facility or the Birdsall-Williamson contingency protection mechanism for HIPC countries) that would attenuate the impact of shocks on poor countries, but in the best of worlds there is also going to be a role for better economic management.

The chapter starts by examining the nature of the balance of payments shocks that hit poor countries. It proceeds to look at the possibilities of international action in order to reduce the impact of shocks on small developing countries. The final section focuses on what countries could do for themselves to reduce their vulnerability to shocks.

1 The Nature of Balance of Payments Shocks

Table 1 shows a measure of the relative size of four different shocks to the balance of payments outcomes of developing countries, disaggregated into low-income countries, small low-income countries (the former group excluding countries with a population above 100 million people), and middle-income countries. The boundary line between low- and middle-income countries is the standard World Bank dividing line of a per capita income below or above \$735 per annum in 2002, with income converted at market exchange rates rather than PPP.

The measure of the shock is in principle the standard deviation of the dollar value of foreign exchange receipts or payments on the particular item in question, as a proportion of the standard deviation of the average of total current account imbalances. For interest payments and remittances this is straightforward. For capital flows one might ask what sense it makes to express the shocks relative to the size of shocks to the current account; the answer is that this is purely a normalisation, to be able to see how important these shocks are relative to other shocks. The terms of trade shock is more complex. What we did is take the World Bank's World Development Indicators (WDI) figure for the terms of trade, which is the volume of imports that can be bought with a given volume of exports, expressed in constant local currency terms. This would be the same as the single factoral terms of trade if productivity in the export-producing industry were constant. That figure was converted into dollars by the IFS figure for the average annual dollar exchange rate during the year, and then its standard deviation was calculated. Unfortunately, this procedure produces nonsensical results for a few countries that suffered from hyperinflation

1)) v 2002 (Relative to Carrent Recount Shoeks)				
Country Group	Standard Deviation of Total Interest Payments	Standard Deviation of Remittances	Standard Deviation of Terms of Trade Shocks	Standard Deviation of Total Capital Flows
LICs ¹	16%	27%	120%	132%
Small LICs	16%	25%	128%	140%
MICs ¹	21%	39%	3102%	116%
Excluding Outlie	rs^2 :			
LICs	14%	27%	67%	134%
Small LICs	15%	24%	69%	142%
MICs	20%	40%	44%	116%

Table 1Balance of Payment Shocks to Developing Countries1990-2002 (Relative to Current Account Shocks)

Sources:

Terms of trade data from World Bank (2004a); current account data (BN.CAB.XOKA.CD), interest payment data (DT.INT.DECT.CD), remittances data (BX.TRF.PWKR.CD) and total capital flows data (DT.NFA.DLXF.CD) from World Bank (2004b); exchange rate data from IMF (2004).

Notes:

¹ LICs: low-income countries; MICs: middle-income countries.

² Outlier identified as having a terms of trade standard deviation denominated in dollar of more than 1,000% of the country's current account balance. Following outliers excluded; Nicaragua (LIC), Zambia (LIC), Armenia (MIC), Brazil (MIC), Bulgaria (MIC) and Romania (MIC).

at some time in the 1990s, presumably because the conversion to dollar terms can produce an answer that is enormously different to the correct one. The second half of Table 1 therefore shows the results excluding those cases in which the calculated standard deviation of the terms of trade exceeded 1,000 percent.

Each entry in the table therefore shows how important the item in question is in producing balance of payments shocks relative to shocks in the current account balance. For example, the table shows that for lowincome countries shocks to interest payments average only 16 percent of the size of shocks to the current account balance, while shocks to remittances average 27 percent of the size of shocks to the current account. The dominant source of shocks to the current account turns out to be shocks to the terms of trade, as expected. However, shocks to capital flows are considerably more important, and turn out to be even larger than shocks to the current account. This fact surprised me in regard to the low-income countries (as it did some other participants in

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the conference) but not in regard to the middle-income countries. But it did not surprise Matthew Martin, whose work for the Commission for Africa (see Chapter 4) had also revealed much volatility in capital inflows – and especially in aid receipts – in low-income countries. Stijn Claessens suggested a possible reconciliation: that perhaps higher moments in the probability distribution than the second are indeed greater in middle-income countries, and perhaps it is these higher moments that are really important in inducing crises.

One might suspect that terms of trade shocks are larger in the small low-income countries than in the large ones, which export a wider variety of goods and therefore have more chance to diversify such variability away. The second row in Table 1 therefore shows the results excluding the large countries, defined as those with a population exceeding 100 million persons. The terms of trade effect is indeed marginally larger, although the results are in any event dominated by the large number of small countries. The result for the middle-income countries is dominated by the hyperinflation cases. After excluding these (the bottom section of the table), it can be seen that terms of trade shocks are much smaller for middle-income than for low-income countries. Indeed, terms of trade shocks are little bigger than shocks to remittances! While the low-income countries suffer rather more instability from capital flows than do middle-income countries (on the measure used), in the middle-income countries - unlike low-income countries - capital-flow instability is the dominant source of balance of payments shocks.

Shocks to the balance of payments are important because they feed through into shocks to the real economy. A loss in export revenue has a multiplier effect on domestic spending. It also causes a loss of tax revenue, often directly but in any event as a result of the slowdown in consumption. Any negative shock to the balance of payments gives a country less to spend abroad, which may result in the government being forced to further restrict demand. It may be able to avoid such a cutback in imports, by either running down the reserves or borrowing more. So a country faced by a negative shock to the balance of payments has a choice between accepting lower activity and more poverty and unemployment, or else seeing both domestic and foreign debt increase. I shall argue subsequently that a country can mitigate the impact of a negative payments shock, but that is by keeping enough reserves that it can afford to lose some and a low enough debt that it can afford to borrow more. In that case shocks will impact even more on debt levels.

2 Possibilities of International Action

Traditionally attention has been focused primarily on stabilising the prices of primary commodities. Variations in these prices are indeed the principal source of terms of trade variability, and as shown above therefore a major source of the exogenous shocks in small countries, so it is a natural reaction.

During the 1970s negotiations to establish a "new international economic order" included an attempt to establish a "common pool" to finance buffer stocks of the principal commodities entering world trade. Insofar as the price fluctuations of those commodities are less than perfectly correlated, a given level of assurance that the buffer stock will not run out of money can be provided with a lower cash outlay by financing the buffer stocks through a common pool rather than individually. Those negotiations ended in failure, and indeed those few buffer stocks that had survived up to the 1970s (like tin) subsequently collapsed. The idea of commodity price stabilisation has nowadays practically disappeared from the international agenda.

Perhaps we have gone too far in abandoning such ideas. Perhaps we have allowed ourselves to be too impressed by the fact that mistakes were surely made in running buffer stock schemes. It was surely a mistake, for example, to try to construct buffer stock mechanisms that would improve the sellers' average sales price; or that would stabilise prices within a narrow range; or that would stabilise the price around an unchanging mean. Price stabilisation is something different to (and perhaps less difficult than) improving the sellers' terms of trade, and a mechanism that is intended to stabilise prices should be strictly limited to that task. And it should be obvious that any attempt to stabilise price within a range narrower than that within which it is possible to make a reasonable estimate of the equilibrium price is doomed to failure. Moreover, new techniques and demands are liable to change the equilibrium price over time (just as new information may change our estimate of that equilibrium price), so that a failure to embody a feedback mechanism that changes the estimate of the equilibrium price in response to new facts and new information must doom a commodity stabilisation scheme to failure.

But suppose that the world learnt those lessons, and was suitably unambitious about what it asked of a new scheme. Specifically, consider the feasibility of stabilising the price of oil within a broad band, as has been urged by Fred Bergsten (2004). The argument is that the price of oil is currently so high because there has been so little investment in the recent past, and that investment has been deterred by the fear of the price of oil collapsing again as it did in the late 1990s. A credible promise of the consumers to cooperate with the producers in preventing a new price collapse could, it is argued, induce a new wave of exploration and investment that would bring the price back down. Bergsten suggests a price zone of \$15 to \$25 a barrel; I suppose that my instincts would suggest a rather higher range, more like \$20 to \$30 a barrel initially. (Of course, the range might subsequently be changed, if evidence suggested that the equilibrium price lay outside the band.) The key questions are: What instruments would be potentially available to defend such a range? And: Would producers find the promise to deploy such instruments sufficiently credible to persuade them to change their investment policy accordingly? Obviously any such agreement that started under conditions such as those currently prevailing would not initially attempt to enforce the upper margin as a maximum; that would become feasible only as excess capacity was rebuilt.

Could one defend even the bottom of such a range, and how? To make a minimum price credible, which would be essential to it inducing more investment, one would want membership by all the main producing countries, including the non-OPEC ones, and the main consuming countries, especially those that have a policy of building up strategic stockpiles. The producing countries would have to commit themselves to constraining production in the event of the price threatening to fall through the price floor, to complement the restraint that OPEC tries to exert on its members. One would certainly want participation in such an arrangement by Canada, Mexico, Norway, and Russia, as well as OPEC, all of which would need to agree to cut back production to less than the nationally-optimal level in the eventuality of low prices. The cooperation of the importing countries would be necessary in the first place to give their blessing to such action by the exporting countries, since in the past some of them - most especially the United States - have been sharply critical of any action to restrain production in the interest of keeping prices up. Furthermore, however, those importing countries that manage a strategic stockpile would need to agree to vary the rate of addition to the stockpile with the deliberate objective of price stabilisation. At the very least, they should agree to suspend purchases at a time when the price of oil is being pushed up above the top of whatever price range were established. Conversely, they should be willing to accelerate stockpiling at a time such as 1999

when an oil glut was pushing prices down below the bottom of the price range. The benefit of a successful oil price stabilisation scheme would be the avoidance of "oil shocks" to the world economy.

In one way it would be exceptionally difficult to stabilise the price of oil, because it would be unlikely that an international authority could be created in order to run a typical commodity stabilisation fund able to sell its holding to depress prices when the price threatened to rise to the top of its permitted range. Because of the strategic importance of oil, one would have to expect that the consuming countries would want to maintain control over the disposition of oil in reserves held on their nation's territory, which would raise questions as to whether the international agency responsible would be free to sell at its discretion. On the other hand, the strategic importance of oil means that several of the major countries already have strategic reserves, whose rate of acquisition could in principle be varied in the interest of price stabilisation.

It would be simpler to build up internationally controlled stockpiles of most of the other main commodities, even though there would not be available the policy tool of varying the offtake into nationallymanaged reserves. The main issues would, once again, be obtaining the finance to buy for the stockpile, and setting the price limits that would govern purchases and sales. In the first instance the stockpile would only be able to post a purchase price, since by hypothesis it would have nothing to sell. That purchase price might be set at, say, 20 percent below the central rate, which should be determined by a formula to ensure that it would respond to changes in the equilibrium price and that no attempt would be made to use it as an instrument for securing a secular improvement in the terms of trade of commodity exporters. The formula should be expressed in SDRs (so that changes in the value of the dollar did not distort real prices significantly) and might be, say, the average price of the commodity over the preceding ten years.

A buffer stock costs money. The question has to be asked whether it is a good use of resources to invest them in building up buffer stocks rather than investing elsewhere. The IMF seems to have decided that the interest and carrying costs of buffer stock schemes outweigh the benefits of price stabilisation. Kees van Dijkhuizen (see Chapter 3) points out that this scepticism had received powerful support from an IMF paper by Cashin, Liang, and Dermott (1999). Their analysis showed that in nearly two-thirds of major commodities (27 out of 44) the price shocks experienced over the 40-year period 1957-98 had lasted on average at least 5 years. Since one can only stabilise price



Figure 1 Compensatory and Contingency Financing Facility 1963-99 (in millions of SDR)

Source: IMF data.

shocks that are temporary, this suggests that it would be uneconomic, or even impossible, to stabilise the prices of the majority of primary commodities. Thus this sort of scheme is at best one that might work only for a minority of primary commodities.

It was such scepticism which caused the international community, when such schemes were proposed in the 1960s, to create instead (in 1963) a mechanism that allowed a commodity exporting country hit by a terms of trade shock to borrow under a low-conditionality IMF facility, the Compensatory Financing Facility (CFF). This had the advantage of also covering shocks due to output declines, e.g. as a result of climatic factors or natural disasters, which are probably more often temporary than price declines. That Facility was progressively liberalised through the next 18 years, with a Buffer Stock Financing Facility being added in 1969, several liberalisations of access, and the addition of a right to draw in response to an excess in the cost of importing cereals in 1981. However, in 1983 the tide turned and access to the Facility started to be tightened. In 1988 a comprehensive restructuring of the Facility occurred. One element of this was addition of an External Contingency Mechanism (ECM), which added to what a country could draw under the Fund's regular facilities if certain critical external variables (like export prices and interest rates) turned out to be less favourable to the borrowing country than had been assumed when its programme was drawn up. As a result, the facility was renamed the Compensatory and Contingency Financing Facility (CCFF). But other elements involved cutting back what a country was entitled to draw, and tightening the conditions, under the old compensatory programme. As Figure 1 shows, the net effect of the

reforms was to accentuate the reduction in the use of the Facility that had occurred after 1983, interrupted only by a brief surge in use in 1991 as a result of the dislocations caused by the first Gulf War and a large drawing by Russia in 1998. Since 1988 the facility has remained largely unchanged, apart from elimination of the Buffer Stock Financing option and the ECM as a part of the Fund's post-Asia crisis rationalisation.

The CFF is intended to allow a member country to borrow when it has a balance of payments need and suffers a temporary overall shortfall in the value of exports (or surge in the cost of cereal imports) as a result of factors beyond its control. The member country is required to cooperate with the Fund in resolving its payments problems, but since this phrase is not further defined it amounted in practice to low conditionality. A staff paper issued prior to the 2000 Board discussion of the Facility² argued that there is no longer a strong rationale for the Facility. In almost all cases of a need for balance of payments financing, there is also a need for adjustment, which in the Fund view implies a need for high conditionality so as to give reasonable assurance that the required adjustment will actually occur. Second, most middle-income members have access to alternative (private) sources of finance. And third, most low-income countries cannot afford the relatively high interest rates of the CFF, and should instead borrow an increased sum from the highly concessional Poverty Reduction and Growth Facility intended for these countries.

I do not find all these arguments completely convincing. Most countries that have some balance of payments need also need some measure of adjustment: if they don't, then surely they will find it easy to borrow from the private markets. A key question is whether one agrees that any country that ought to be adjusting also ought to borrow under high-conditionality facilities that give the Fund the right to supervise its adjustment programme. Most countries prefer to manage their own programme, without being "nannied" by the IMF. If they show themselves incapable of managing their own programme, then there is not much option but to bring in the IMF to supervise the adjustment programme, but one can wish for them to be given the benefit of the doubt initially. And even if a middle-income country

² Review of the Compensatory and Contingency Financing Facility and the Buffer Stock Financing Facility – Preliminary Considerations, Dec. 9, 1999, at http://www.imf.org/external/np/ccffbsff/review/index.htm.

would be able to borrow from the private market, doesn't international solidarity with a country hit by adverse circumstances beyond its control suggest that the international community can reasonably extend it credit on the mildly concessional terms inherent in a regular Fund programme? These arguments would suggest that the CFF should be restored to something like its former state so far as middleincome countries are concerned.

The Fund's argument is more persuasive where the low-income countries are concerned. It does indeed seem desirable to give them credit on the highly-concessional terms of the PRGF. Admittedly some of us think it would be logical to make the interest charge a country pays dependent on the identity of the borrower rather than the identity of the Facility from which it borrows, but if that is unacceptable to the Fund's accountant then the solution may be to augment a PRGF loan when an exogenous shock hits. It was suggested by several participants in the FONDAD conference that one advantage of this is that it would permit bilateral donors with grant funds available to buy out such loans, thus combining relatively prompt action by the IMF with grant aid (which most donors can provide only with a lag) in response to a negative exogenous shock. Perhaps the most contentious issue will be whether any such "shocks window" within the PRGF will be subject to high or low conditionality. As with middle-income countries, I favour starting off with low conditionality and tightening this only if the country is failing to adjust.

Another possible mechanism for giving poor countries some protection against exogenous shocks was proposed by Nancy Birdsall and John Williamson (2002) in our study of debt relief. While rejecting the idea of 100 percent debt cancellation for the group of countries that were already in the HIPC Initiative, we suggested three ways in which that initiative could be expanded. One of these was to legislate a ceiling of 2 percent of GDP on the sum that any HIPC should pay in debt service: if it looked to be in danger of breaching that ceiling, additional debt should be forgiven so as to eliminate the possibility. It is not clear, however, that any HIPCs still remain in danger of breaching that ceiling. A second extension was to expand the country eligibility to all poor countries,³ which meant in practice to allow large countries like Indonesia, Nigeria, and Pakistan to become eligible. It seems that

 $^{^{3}}$ I.e. those with average income below the IDA threshold then at \$735 per annum at market exchange rates.

Indonesia and Pakistan are coping fine without debt forgiveness, but Nigeria is another matter and clearly ought to be allowed to become eligible for HIPC relief. The third proposed extension is the one that is of relevance in this context, since it proposed a contingency mechanism to help countries hit by adverse shocks.

The aim of the HIPC Initiative was to ensure that any qualifying country should have its debt reduced to less than 150 percent of exports, on the argument that history showed that most countries were capable of carrying that much debt, but not too much more, without undermining their ability to manage their economy. To try and ensure that a qualifying country would be in that situation for some years after reaching Decision Point, joint teams from the IMF and World Bank projected key variables like debt, GDP, and exports for 15 years from the base date. These projections, especially for the growth of exports, were widely held to be on the optimistic side. If that is correct – and the number of countries that were forced to take advantage of the possibility of taking an extra bite at the cherry of debt relief between Decision Point and Completion Point suggests that it was – this would imply that many countries are liable to find themselves over-indebted again before many years.

The usual conclusion that has been drawn from this analysis is that indebted countries need more debt relief than they were provided under the HIPC Initiative. We suggested, however, that it would be a more efficient use of resources to provide more debt relief in those specific instances where events showed there to be a need for more relief, rather than universally. In order to avoid distorting incentives, it is important that this relief should be given only where a country suffered an increase in its debt/export ratio as a result of circumstances beyond its control. Similarly, to leave an incentive for export diversification one wants to make this extension of the existing "topping-up" provision of finite duration; we suggested ten years. The programme might be administered by requiring the IFIs agreeing on a HIPC programme to state their assumptions about the price trend of important commodity exports; if a programme country subsequently suffered an export shortfall that could be attributed to a below-projected trend price to an extent that threatened to push debt/exports above 150 percent, it should be entitled to compensation to pay down its debt.

Who would administer such a programme and where would its money come from? We envisaged the IMF as the administrator, for two reasons. First, the IMF has had the experience of administering the CFF over the years, which has given it expertise - or at least agreement on a set of conventions - needed to estimate whether export shortfalls can be attributed to circumstances beyond a country's control. Second, the IMF has a potential source of the finance that would be needed to run such a facility. Specifically, we suggested using some of the IMF's stock of redundant gold, which is presently carried on the IMF's books at a fraction of the current free market price of gold, for this purpose. It has to be admitted that the authors were not in full agreement on how the IMF's gold should be mobilised for this purpose: one of us believed in the straightforward technique of selling the stuff, while the other was happy to contemplate a repeat of the financial shenanigans that were used to mobilise part of the IMF's gold stock in 1999. This involved increasing the price at which a part of the gold was carried on the IMF's books, and using the increase in the Fund's net worth to forgive some part of its debts from the HIPCs. (The problem with this technique is that it eats into the Fund's free currency resources, since some of these are used to pay off the HIPC's creditors, raising the possibility that to keep the Fund liquid the industrial countries will in due course have to supply it with more resources.)

While economic shocks will never disappear, terms of trade shocks are a sufficiently regular part of economic life that one would have thought that it ought to be possible to attenuate their impact on the poorest countries. That the international community could do a good deal more than it currently does is strongly suggested by one example that Ariel Buira drew to our attention at the conference: the experience of Greece. Here is a country with weak fundamentals that has nevertheless not suffered crises at the hands of the financial markets, presumably because it was assumed that the EU would come to its rescue if necessary. Commodity stabilisation funds, a reinvigorated CFF, and a contingency fund for the HIPCs are three progressively less ambitious ways in which the international system could help its poorest members deal with shocks, if it so chose.

Several participants in the conference also argued that low-income countries could do a fair amount to protect themselves against such shocks, by taking advantage of the risk-sharing techniques already present in financial markets. Producers of primary commodities can, for example, sell their crops forward at planting time (well, the producers of annual crops can, even if those of tree crops cannot). Most producers can buy insurance against climatic disasters. The World Bank is beginning to help low-income countries to access such

facilities. A new study of mine (Williamson, 2005) advocates a number of these techniques, including the sale of growth-linked bonds by sovereign debtors. There is surely scope for a number of these techniques to help, though it is doubtful whether they should displace the mechanisms previously discussed.

3 Domestic Policies for Curbing the Impact of Shocks

While many shocks are external in origin, they have usually had such devastating effects on developing countries because of the policies that these countries have chosen to pursue. Four main lines of policy are at fault. First, countries have often been unable to adopt counter-cyclical fiscal policies designed to prop up demand in the face of a shock because they have more or less exhausted their borrowing possibilities during the good times. It is easy for a country to find itself in this situation because a country's credit ceiling may well be lowered when it encounters difficulties. So unless it has used the good times to run surpluses and work down the debt/GDP ratio it may easily find it impractical to borrow more under bad conditions. Second, many countries have chosen to use the exchange rate as a nominal anchor in order to reduce inflation when the international capital market was willing to lend freely, and have then found themselves defending an overvalued exchange rate when a sudden stop sets in. Third, countries have borrowed internationally up to the hilt when the opportunity arose, thus building up excessive debt, often of short maturity, in the good times. Fourth, many of those debts have been expressed in foreign rather than domestic currency, thus resulting in a large increase in indebtedness when it was necessary to devalue the national currency.

Reducing the vulnerability of developing countries to adverse shocks means changing these four patterns of behaviour. I propose to discuss them sequentially.

3.1 Fiscal Policy

Standard Keynesian analysis argues that countries should run budget deficits so as to keep activity up when the economy is tending toward recession, and surpluses in the good times. In practice, most developing countries have the fiscal space to run deficits in bad times only if they have previously gone out of their way to run surpluses so as to reduce the debt/GDP ratio to a level that will not frighten creditors from buying more assets when the economy is in recession. Counter-cyclical policy in developing countries has to start in the boom. (While any country with a non-independent central bank could order the central bank to buy more government debt, this is likely to feed rapidly through into inflation in the absence of a willingness of the public to buy additional interest-bearing debt.) Some might question whether this does not make a counter-cyclical fiscal policy excessively costly, for it implies that a country will have to forego investment and consumption during the boom if it is to be in a position to expand spending during a recession. But what is necessary to run a counter-cyclical policy is a redistribution of spending through time rather than a reduction in the average level of spending. On the contrary, if the policy is successful it will keep production up during the recession and thus increase rather than reduce the average level of spending.

It has been claimed that pro-cyclical fiscal policies may be optimal (Talvi and Vegh, 2000). The logic is that budget surpluses create politically irresistible pressures for increased public spending, combined with the belief that it is economically preferable to cut taxes and thus allow the private sector to spend extra money rather than channel it into inferior public expenditures. However, this is not really a ground for saying that optimal fiscal policy is pro-cyclical so much as to say that the second-best tax policy, given the political unsustainability of budget surpluses, is to cut taxes during booms and thus pre-empt an increase of public expenditure that would otherwise occur.

Keynes got it right: optimal fiscal policy involves a counter-cyclical fiscal policy, running budget surpluses in good times and deficits in bad times. Lags in the operation of fiscal policy may make this difficult even if the government is well-motivated and not subject to populist political pressures of the Talvi-Vegh type. But this does not mean that all thought of a counter-cyclical policy should be abandoned, it simply means that reliance should be placed on the automatic fiscal stabilisers rather than discretionary policy, which is indeed the main mechanism for anti-cyclical fiscal policy in developed countries. Of course, even that may not be possible until a period of fiscal surpluses has strengthened debt positions so that governments can afford to run deficits in bad times without provoking an excessive rise in interest rates. But a fiscal policy that gave unfettered play to the automatic stabilisers would be a vast improvement over the current tendency to cut spending during the recession and cut taxes during the boom. And the automatic

stabilisers would be enhanced if governments aimed to build up social safety nets over time, as one expects to happen as countries modernise.

What can be done to shift policy in that direction, recognising that the problem is essentially one of political economy? The first step is to recognise, publicly and explicitly, what is desirable. This means not just enunciating the desirability of a counter-cyclical policy, but also a target for the average fiscal balance over the cycle. A natural candidate for this role is the so-called Golden Rule of public finance: at least balance the revenue budget over the cycle, so that debt increases only to the extent that the public sector is building up assets on the other side of the balance sheet. (Naturally these should be assets with a yield at least as high as the interest rate that the government incurs on the liabilities it issues to finance this investment.) If the government starts off with debts that are too large to permit it to run a counter-cyclical policy, then the target for the structural budget surplus should initially be larger than the Golden Rule so as to bring the debt/GDP ratio down over time. (This is the policy that several emerging markets, like Brazil, Jamaica, and Turkey, already seem to have adopted. An obstacle to low-income countries following their lead is the predilection of donors for seeing their money spent on hard projects. Donors need to learn to give programme aid and to like seeing it used to build up contingency reserves and run down debt.) Once such rules had been adopted, those who wished to splurge during a boom would clearly face the onus of making their case. Could one go further in a democracy?

In a recent publication (Kuczynski and Williamson, 2003, especially chapter 4), we argued that it might be possible to create political reinforcement for a prudent counter-cyclical fiscal policy by designing a mechanism for regional peer monitoring of fiscal obligations.⁴ The rules might be those spelt out above. The problem would be to find a suitable organisation to undertake the monitoring and apply the peer pressure. It would need to be an organisation that was felt to be under the control of the debtors rather than their creditors: one of the regional development banks rather than the World Bank, for example. It would need to command the technical expertise to give it credibility. None of the existing international organisations seem completely appropriate for the task, but the regional development banks might be

⁴ The idea was inspired by the European Growth and Stability Pact, though that is not to endorse the rather primitive (and in some circumstances procyclical) specific rules embodied in that pact.

the most promising place to build the technical expertise that would be needed.

3.2 Exchange Rate Policy

Numerous crises have in the past been sparked by the attempt to hold a fixed exchange rate, especially in recent years when a country had decided to treat a fixed (or predetermined) exchange rate as its nominal anchor. However, those days appear to be over. Nowadays most of the larger countries have adopted a floating exchange rate, and even though they have not abjured all thought of intervention as the purists might hope, the danger of their being forced into offering a one-way bet to the market has vanished. Some of the smaller countries have taken the ultimate step of dollarisation: whatever one may think about the wisdom of this, it at least precludes an exchange rate crisis. Thus this issue no longer has the salience it used to.

3.3 International Borrowing

For some years the flow of financial capital to emerging markets has been highly volatile (see Table 1 above), and these variations have been the principal cause of strong cyclical fluctuations in the middle-income countries. Financial markets generate powerful forces, arising from the incentive that remuneration practices create for managers not to stray far from the market benchmark, plus the fact that a creditworthy borrower is one to whom others are willing to lend, which tend to explain why these variations have been so strong. Moreover, since there is no reason to believe that these forces are being undermined, strong fluctuations in the desire to lend seem likely to persist in future. This suggests that, if the flow of finance is to be stabilised, it will have to occur as a result of changes in the behaviour of borrowers. Since it is impractical to borrow more than the lenders are willing to lend, change will have to result from greater restraint by borrowers when the markets are pushing money at emerging markets.

The public sector can directly control its own borrowing (which in the past was often a major part of the problem). A country that follows the rules for fiscal discipline that were discussed above would find its own borrowing needs were limited. There is also the question of where such borrowing should occur, at home or abroad. In the past many countries have borrowed on the world market and therefore in foreign

currency, partly because this was almost always cheaper (in the sense of requiring a lower interest rate) and usually easier, and partly because they needed the foreign exchange that borrowing on the world market would bring in. However, it will be argued below that there is a good case for terminating borrowing in foreign currency, and that borrowing should be done on the domestic market in domestic currency. Most emerging markets now have domestic bond markets where this would be possible, and of course some foreign funds would be likely to flow in over the exchanges in order to buy debt so this does not amount to refusing to tap the international capital market.

Borrowing by the private sector is not subject to direct policy control in the same way. If a government wishes to limit private borrowing during a boom, then it will have to use capital controls or some substitute, such as a tax, an *encaje*, or increased reserve requirements on the banking system. The most desirable of the options is a tax or an *encaje*: they are relatively non-distortive, market-friendly, comparatively difficult to evade, and avoid penalising domestic financial intermediation as an incidental by-product of discouraging capital inflows.

The international community needs to make a collective decision as to what attitude to take to the use of *encajes* or substitute mechanisms. It looks as though there is a danger of their being ruled out of court as a result of a unilateral decision of a single country to pressure other countries one at a time into excluding their future use.⁵ If other countries wish to avoid this, then they need to raise that issue as a policy matter in an appropriate international forum. The IMF is the obvious candidate.

3.4 Currency Denomination

When most emerging markets raise a loan abroad, it is almost always denominated in foreign currency, typically dollars. Implying a belief that these countries have no other way of borrowing abroad, Ricardo Hausmann has dubbed this phenomenon "original sin" (see, for example, Eichengreen and Hausmann, 2003). Most developed countries, like a few emerging markets (such as South Africa and India), borrow primarily in domestic currency, but they do this by floating

⁵ I refer to the US decision to force the countries with which it has signed bilateral free trade agreements, Chile and Singapore, to virtually renounce use of capital controls even in self-defense during a foreign exchange crisis.

bonds in their domestic markets and allowing foreigners to buy some of them. An increasing number of emerging markets have been adopting a similar path in recent years.

However, when a developing country borrows in dollars (or allows a significant volume of domestic loans to be denominated in dollars) it is liable to create a "currency mismatch" (Goldstein and Turner, 2004). That is, either the financial intermediary that takes a dollar loan and lends in local currency, or the corporation that borrows in dollars and has local currency receipts, acquires a balance sheet that is unbalanced in its currency assets and liabilities. If the corporation is selling abroad then it has some element of a natural hedge, although even then this need not be a very good hedge unless sales are overwhelmingly in the dollar bloc rather than to a diversified world market.

The consequence of this practice is to add an important element of instability to the economies that engage in currency mismatching. In particular, currency devaluation results in an increase in the burden of debt relative to debt servicing capacity. Since currency devaluation is part of the normal and efficient reaction to a wide range of adverse shocks, this results in an increased burden of debt servicing at the worst possible time.

The reason that the practice arose is that foreign lenders were reluctant to lend in a currency that would enable the borrower to inflate away its debts, especially since many of the countries appeared all too willing to resort to inflation in times of difficulty. An obvious solution is to index debt instruments to the country's own price level, which prevents the issuing country inflating away its debt, unless it is also able and willing to fiddle its statistics, which is normally possible only within rather narrow limits. Unfortunately, financial markets are characteristically conservative, and therefore suspicious of innovative solutions, such as those that would help an economy to function reasonably efficiently despite the absence of assured price stability. Indexation preserves the basic advantage of domestic currency debt: the burden of debt service is eroded, rather than increased, by (real) depreciation. In this crucial way indexation is very different to denomination in dollars. It is only to the extent that the depreciation feeds through into inflation that the lender is protected, but this is sufficient to protect lenders from what really matters, the ability of the debtor to arbitrarily expropriate the wealth of creditors.

One of the major sources of currency mismatch has traditionally been the lending of the multilateral development banks (MDBs), since

these have mostly made loans denominated in dollars. Eichengreen and Hausmann (2003) have argued that it does not have to be this way, and have proposed an ingenious scheme to permit official debt to the MDBs to be transformed into indexed domestic currency debt.⁶ The specifics of their proposal were oriented to the World Bank, which they proposed should issue bonds denominated in a basket of indexed emerging market currencies, for sale to international investors (who are known as "Belgian dentists" in the trade). The World Bank would avoid exposure to currency risk by making indexed loans to the countries whose currencies compose the basket, in the same proportions as constitute the basket. Kees van Dijkhuizen raises the issue of how the MDBs would maintain matching assets and liabilities, given that one would want to fix the composition of the currency basket so as to enhance the liquidity of assets denominated in it (see Chapter 3). His own suggestion is that the MDBs might use such bonds for only a part of their portfolios, and keep some debt denominated in foreign currency. An alternative possibility might be for the MDB to cover a part of its liabilities on the forward market, so as to maintain a balanced book.

Another perennial worry about this proposal is whether a basket of emerging market currencies would be sufficiently stable to attract "Belgian dentists", given that a crisis in one emerging market often spills over into others so that a number of their currencies depreciate simultaneously. This is in fact a question that Eichengreen and Hausmann asked themselves, and they performed what seems to me to be the appropriate test: they ran a simulation of how such baskets would have behaved based on past experience. They concluded that such a basket would have been no more unstable in terms of the dollar than major international currencies like the euro or Swiss franc in which it is perfectly possible to denominate loans.

Emerging markets also sell many bonds to international investors, borrow from international banks, and so on. Governments could start to transform that debt also: partly into assets like the growth-linked bonds referred to earlier, and partly into indexed local currency debt. Investors would doubtless demand a higher real interest rate *ex ante* for holding such debt, but it would be worthwhile for governments to pay

⁶ Let me make it clear that I am not endorsing the Eichengreen-Hausmann thesis that foreign currency borrowing is unavoidable, but simply their proposal for eliminating the use of foreign currencies in denominating MDB loans.

a higher real interest rate because of the better risk-sharing characteristics of such debts. And initially investors might refuse to hold long-dated debt, so that any gain in avoiding currency mismatching would be offset by a loss in increased maturity mismatching. One would hope that this would prove an infant-market problem: insofar as investors are better placed to carry these risks than are the governments of the borrowing countries, there would eventually be a real social gain in shifting from foreign currency denominated debt to indexed domestic debt.

It is conceivable that the emergence of a market in government bonds denominated in domestic currency would stimulate an equivalent market for private debt. However, it might also be that such a market – especially for non-indexed debt, as would be needed for the short-term paper that is much more important in private borrowing – would require some additional incentive. If so, a natural instrument would be differential tax rates, in which a tax surcharge would be applied to the interest payments, and/or the interest receipts, on loans denominated in foreign currency. Such a surcharge might be increased gradually to create pressure for a progressive but non-traumatic shift of debt obligations from foreign to domestic currency.

4 Concluding Remarks

Developing countries, and particularly low-income countries, are subject to important shocks emanating from exogenous variations in their balance of payments. Various mechanisms might be used by the international community to attenuate the impact of terms of trade shocks, and three, of progressively diminishing scope, have been examined in this chapter: commodity stabilisation agreements, the revival of the IMF's Commodity Financing Facility, and a HIPC contingency facility. Any such agreements should be complemented and supplemented by a conduct of macroeconomic policy on the part of developing countries that would enable them to limit the impact of shocks on their economies. Fiscal policy should aim to lower debt/GDP ratios during booms so that countries have the scope to finance borrowing in time of recession. Exchange rates should be maintained at a competitive level rather than used as a nominal anchor. Countries should limit their borrowing to levels that they can service even under unfavourable conditions. And they should borrow in domestic rather than foreign currency and in growth-linked bonds.

References

- Bergsten, C. Fred (2004), "Risks Ahead for the World Economy", In: *The Economist*, 11 September.
- Birdsall, Nancy and John Williamson (2002), *Delivering on Debt Relief: From IMF Gold to a New Aid Architecture*, Center for Global Development/Institute for International Economics, Washington D.C.
- Cashin, Paul, Hong Liang and C. John McDermott (2000), "How Persistent Are Shocks to World Commodity Prices?", IMF Staff Papers, Vol. 47, No. 2, IMF, Washington D.C.
- Eichengreen, Barry and Ricardo Hausmann (2003), "The Road to Redemption", In: B. Eichengreen and R. Hausmann (eds.), Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economies, University of Chicago Press, Chicago.
- Goldstein, Morris and Philip Turner (2004), *Controlling Currency Mismatches in Emerging Markets*, Institute for International Economics, Washington D.C.
- IMF (2004), International Financial Statistics, IMF, Washington D.C., October.
- Kuczynski, Pedro-Pablo and John Williamson (2003), After the Washington Consensus: Restarting Growth and Reform in Latin America, Institute for International Economics, Washington D.C.
- Talvi, Ernesto and Carlos A. Vegh (2000), "Tax Base Variability and Procyclical Fiscal Policy", NBER Working Paper 7499, Cambridge MA.
- Williamson, John (2005), Curbing the Boom-Bust Cycle: Stabilizing Capital Flows to Emerging Markets, Institute for International Economics, Washington D.C.
- World Bank (2004a), *World Development Indicators*, World Bank, Washington D.C.
- World Bank (2004b), *Global Development Finance*, World Bank, Washington D.C.