
An Action Program

It has been taken for granted throughout this study that the major flows of capital from developed countries to emerging markets will be organized through the private sector. That is not to dismiss the role of the public sector, which will remain of critical importance in the poorest and least creditworthy countries, in responding to financial and humanitarian emergencies, and in the provision of international public goods. It is now abundantly clear, however, that countries that have advanced to the point where they are capable of absorbing significant sums will in the future look mainly to the private markets.

The historical experience with private capital flows has been punctuated by crises that were costly for both creditors and borrowers. Recent years have witnessed much discussion of how these can be avoided in the future. In addition to the customary exhortations to emerging markets to run responsible policies regarding macroeconomic management and bank supervision and to press forward with the development of local bond markets and the implementation of standards and codes, this study endorsed a number of proposals that collectively constitute an action program.

1. Adoption of forward-looking provisioning on the Spanish model by commercial banks in all countries, so that it would cover both loans to emerging markets from banks in industrial countries and the operations of banks in emerging markets.
2. Calculation of the reported maturity of bonds by the time until the next put option falls due instead of by the time until the bond matures if put options are never exercised.

3. Adoption of the prudent-man principle to govern the investment decisions of insurance companies to replace regulations that limit insurance companies to holding investment-grade bonds. If this suggestion is too radical, the minimum that should be done is replace the requirement that insurance companies *hold* only investment-grade bonds with an amended requirement that says they may *acquire* only investment-grade bonds.
4. Retention of the right and ability of emerging markets to use capital controls in certain situations. Even prohibitions and administrative restrictions should be allowed if necessary in times of crisis. Normally such measures should be avoided, and any needed influence over capital flows should be achieved via (1) the imposition of uncompensated reserve requirements (on the Chilean model), (2) the taxation of capital flows, or (3) the creation of a parallel foreign exchange market through which pension funds and mutual funds would be obliged to channel their transactions.
5. Creation of a fiscal incentive for borrowers and lenders in emerging markets to issue and hold assets denominated in local currency.
6. A switch in the lending policies of the MDBs on the lines advocated by Eichengreen and Hausmann (2003). MDBs would borrow in a new synthetic currency unit, the value of which would be defined by a basket of emerging-market currencies indexed to the countries' CPIs. The MDBs would largely avoid currency exposure by lending to emerging markets in their own currencies, on an indexed basis, in roughly the same proportions that the basket is composed. This would eliminate currency mismatches in the borrowing of emerging markets from MDBs without exposing the MDBs to significant currency risk.
7. Limitation (and maybe ultimate elimination) of foreign currency borrowing by emerging-market governments. Instead, these governments should start issuing GDP-linked bonds on the international market and inflation-indexed bonds and plain-vanilla bonds denominated in the national currency on their local markets.

These recommendations may be divided into three categories. Some are suggestions for ways of doing things differently from how they are done at the moment, but they essentially suggest alternative rules for things that have to be done in any event. In this category one might place the first three recommendations on the preceding list. For example, banks are going to be subject to rules that govern how many provisions they have to put aside against bad loans; the first recommendation is that the rules should require them to look forward and estimate how much they will ultimately need to put aside if statistical experience is normal rather than wait for bad events to materialize. Similarly, rules exist that govern the

reported maturity of bonds, and the issue dealt with in the second recommendation is whether the maturity that has to be reported should represent a period over which the borrower can rely on not having to repay. Again, insurance companies are subject to regulations; the question is what the substance of those regulations should be.

A second set of recommendations deals with yes-no questions. A country may decide to forgo capital controls and operate with a completely open capital account, or it may decide to retain capital controls. The fourth recommendation above argues that, if an emerging-market country is serious about controlling the boom-bust cycle, it needs to retain the possibility of resorting to capital controls in certain situations. For emerging markets to be able to resort to capital controls when necessary, the country itself must be convinced that this is appropriate, but the developed countries also need to be supportive. They will have to stop inserting clauses in bilateral free trade agreements that could emasculate the use of capital controls by their trading partners, and they may need to support a revision of the IMF's Articles of Agreement that will withdraw the blanket proscription of multiple exchange rates that is presently embodied in the Articles. The fifth recommendation is that countries should create a fiscal incentive to encourage their residents to use the national currency rather than a foreign currency for denominating debt contracts. It is perfectly possible to envisage a world without such an incentive—indeed, that is the world we are living in. Or it is possible to envisage a world with only a limited pressure to diminish foreign currency mismatches, for this is what Goldstein and Turner (2004) propose. The text argues that one should go further and use a fiscal incentive.

Recommendations in the third category are perhaps the most radical. They involve the creation of new financial instruments—bonds whose value is determined by an indexed basket of emerging-market currencies in the sixth case, and GDP-indexed bonds in the last case. Not all economists (for example, Rajan 2004) are in favor of “clever solutions,” as they have been dismissively termed. These economists argue that, if the market has not already come up with such an instrument, this is probably because there is something wrong with it. That is possible, and any such proposal should indeed be examined carefully. However, many innovations have eventually been accepted by the financial markets (compare the multiplicity of instruments that are available nowadays with what the markets used to offer, say, 30 years ago). In some cases, ideas were suggested and lay around unexploited for many years, until one day their use exploded. Collective action clauses in sovereign bond contracts, to cite a recent example, were first advocated by Eichengreen and Portes in 1995, but they were adopted in the standard New York bond issued by emerging markets only in 2003. Or “the market for credit default swaps remained small for years but took off rapidly as soon as the standards for a

'credit event' were properly defined and became broadly accepted" (Borensztein and Mauro 2004, 189).

One clearly needs to ask why financial innovation that could be of general benefit might fail to occur. This subject is explored in some depth by Borensztein and Mauro (2004) in the paper in which they develop the case for GDP-indexed bonds. They suggest five possible impediments to beneficial financial innovation:¹

- **Critical mass.** New and complex instruments may be illiquid. Pricing them involves computational costs. Launching a new instrument therefore requires a concerted effort to achieve critical mass so as to attain market liquidity and spread computational costs. For example, in the particular case of GDP-indexed bonds, the reduction in default risk that is one of the major expected benefits will be realized only once the share of the debt held in these bonds is substantial.
- **Product uncertainty.** Investors are uncertain about the nature of a new financial instrument and will therefore hold it only if offered a premium, but such a premium may deter borrowers from issuing the new instrument. No individual borrower will wish to bear the costs of pioneering a new instrument. There is an infant-market benefit of such pioneering that may merit some form of social subsidy.
- **Externalities and coordination problems.** A large number of borrowers have to issue a new financial instrument before investors can diversify risk by holding an appropriate portfolio of similar instruments. However, an individual borrower will not take into account the social benefit of assisting others issue similar instruments. The holders of GDP-indexed bonds are not rewarded for reducing the likelihood that the borrowing country will be forced to default and impose losses on the holders of plain-vanilla bonds.
- **Competition in financial markets.** A private financial institution that develops a new financial instrument will incur costs that it will be unable to recoup by maintaining a subsequent monopoly over its provision because such instruments are in general not patentable and imitation of a successful innovation is easy. The private incentive to develop such instruments is therefore low even if the social benefit is high.
- **Need for standardization.** A liquid secondary market where investors are able to diversify their portfolios requires instruments with the same features for all the issuers. This is particularly important for con-

1. They acknowledge that their list was inspired by Allen and Gale (1994).

ditional instruments where the size of the payment depends on certain standards that need to be unambiguous, verifiable, and similar.

These considerations provide ample grounds for understanding why the fact that a financial innovation is socially desirable does not necessarily lead to its adoption by the markets. Indeed, the preceding list offers a compelling explanation of why the markets so often appear to some of us to be absurdly conservative. But the international community has certain organizations—specifically, the international financial institutions—that it can potentially use to further internationally desired objectives, such as socially beneficial innovations in international financial instruments. One should therefore ask whether there are reasons for believing that the two innovations advocated in this study—MDB bonds denominated in a basket of indexed emerging-market currencies and GDP-linked bonds—could be fostered by the international financial institutions.

Consider first the Eichengreen-Hausmann proposal for the World Bank to issue bonds denominated in a basket of indexed emerging-market currencies. This proposal is, in fact, one for the World Bank itself. Admittedly the World Bank's treasury department would have to take an initiative of a character that it has not in the past been keen to grasp, but if the international community—presumably in the form of the International Monetary and Financial Committee—instructed the Bank that it wanted this done, the Bank's treasury department would possess all the needed technical skills.

The only possible reason I can see to question whether this proposal could be successfully initiated by the World Bank is that some economists (e.g., my colleagues Goldstein and Turner 2004) doubt whether investors could be persuaded to buy bonds denominated in a unit with which they are not familiar. They talk about how complicated a basket of indexed emerging-market currencies would be, even though it is far less complex than many of the derivatives nowadays traded in financial markets. Eichengreen and Hausmann have shown that on past experience such a basket would be no more variable in terms of the dollar than the currencies of other industrial countries in which it is perfectly possible to issue bonds. Hence, I see little reason to doubt that, given a premium, investors could be persuaded to buy and hold such assets. As familiarity grew, they might even cease to demand a premium (especially since the inflation-proofing feature implies that this bond would tend to appreciate over time in terms of the currencies of most or all industrial countries).

In contrast, GDP-linked bonds would be issued by the governments of emerging-market countries rather than by an international organization, so that they could not be launched directly by an international initiative as in the previous case. Unfortunately, the obstacles to a decentralized initiative that were discussed above are sufficiently acute to make spontaneous action by an individual country unlikely, at least outside of a debt-

restructuring exercise. Perhaps the use of bonds with a GDP growth link in order to give investors an upside bonus, as in the Argentinean debt restructuring, is the way that such bonds will be introduced into investors' portfolios in the short run although it is not clear that the link with Argentina will impress investors with the desirability of this innovation. Even if GDP-linked bonds gain a toehold in this way, some form of initiative by an international organization like the IMF or World Bank might be able to help generalize a market in GDP-linked bonds. This issue too is considered by Borensztein and Mauro (2004, 204).

Possible areas where international financial institutions could play a role in fostering the creation of a market for GDP-indexed bonds include promoting their use through the dialogue with member countries and encouraging country authorities to take a longer horizon perspective than is often dictated by electoral cycles; gauging interest for these securities among potential investors, and providing information on the likelihood that a critical mass of issuing countries would be willing to use GDP-indexed bonds; encouraging countries to ensure the independence of their statistical agencies and providing technical assistance to improve the quality and transparency of national income statistics, and helping guarantee their reliability; and gathering the necessary information for pricing the instruments, including estimates of co-movement of output among countries and the relationship between economic variables and default risk.

My own guess is that a formal role for some international organization, probably the IMF, in guaranteeing the reliability of national income statistics would be an essential condition for such a market to function. Beyond that, an initiative for a joint swap of a substantial part of emerging-market debt into GDP-linked bonds would probably best come from a group of emerging markets themselves, with an organization like the IMF responding to a request from them to undertake the nitty-gritty of co-ordination. This seems the best hope for establishing GDP-linked bonds as a regular and important vehicle for the foreign sovereign borrowing of emerging markets.

Can one prioritize among the seven items in the action program suggested at the beginning of this chapter? No one could claim that the suggested reforms, from reporting bond maturities as the time remaining to the next put option to the introduction of GDP-linked bonds, are of equal importance. Prioritization makes sense only if the reforms are in some way competitive with one another, and they are certainly not competitive in the sense that adopting any one of them would preclude any of the others. If they are competitive at all, it can only be because reformers have a limited amount of time and energy and can therefore be expected to focus on only one or two reforms at a time. If that is a real constraint, the most demanding reforms would seem to be those that call for the introduction of new financial instruments (reforms 6 and 7), while perhaps the biggest bang for the buck would be offered by reforms 1 and 4 (forward-looking provisioning and retention of the right to impose capi-

tal controls). Prioritization would make no sense at all if it were true that all the reforms must be implemented as a package deal in order to make any impact on the boom-bust cycle, but this too seems untenable. Rather, this is a case where any reforms should be welcomed and the more the merrier.

The boom-bust cycle in capital flows has driven the cycle of the emerging markets for the past three decades. Some cyclical fluctuations seem to be an inherent feature of the financial markets of capitalist economies, but their relatively benign form in the industrial countries in the 60 years since World War II demonstrates that they do not have to be as destructive as they have been in the emerging markets. The action program that has been developed in this study is intended to facilitate a process of financial maturing similar to the one that has already occurred in the industrial countries.

