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The Case for an IMF Insurance Facility

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Financial crises are costly. Episodes of financial distress are often followed by widespread unemployment, social unrest, political instability, and institutional damage. Can financial crises be avoided altogether in a financially integrated world? Probably not. Can the international community do anything to reduce their incidence? Recent evidence strongly suggests so. Indeed, there is an increasing consensus that most of the latest financial crises were triggered by sudden upsurges in perceived rollover risk—not concerns about long-run solvency—leading to the escalation of interest rates, thus rendering otherwise sustainable debt levels unsustainable. If this is the case, there is scope for the creation of a country insurance scheme that isolates fundamentally sound countries from avoidable liquidity runs. The design of such a scheme in a way that mitigates the real hazard of self-fulfilling crises without creating additional moral hazard is the focus of this paper.

Because available insurance options against self-fulfilling runs are limited and costly at present, we propose the creation of a country insurance facility (CIF)—that is, of a liquidity window that could be freely tapped

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during periods of unanticipated liquidity shortages.[1] In our view, the very existence of a facility that insures emerging markets against destabilizing confidence crises could, in many instances, avoid the occurrence of self-fulfilling runs altogether. In addition, we believe that the presence of a country insurance scheme, by lengthening the policymaker's planning horizon, could also foster incentives to undertake politically costly reforms that would, in turn, enhance the country's resilience to market swings and, thus, its overall financial strength (Cordella and Levy Yeyati 2004).

Naturally, an ill-designed insurance scheme, by weakening the link between the cost of borrowing and the quality of macroeconomic fundamentals, could lessen market discipline and detract from reform incentives. Thus, the CIF needs to strike the right balance between protecting the country from self-fulfilling runs and avoiding complacency toward those unsound policies that can ultimately compromise the country's solvency. We provide here a detailed outline of the principles and procedures of the proposed scheme. In addition, we argue that the IMF is uniquely qualified to offer this type of streamlined facility, which we believe could become one of the most useful Fund "products" for a growing group of emerging economies.

The idea of a streamlined IMF lending facility is not new. Indeed, the need to expedite the lending process in the event of an exceptionally large capital account reversal was debated at the IMF Executive Board as early as in 1972 and again in late 1994, right before the Mexican crisis. This debate heated up after the Asian crises, which were largely regarded as the outcome of sudden liquidity shortages. Since the late 1990s, the premise that the IMF should act as international lender of last resort has been discussed extensively (see Fischer 1999, among others). However, IMF major shareholders have lacked the political will to reform the international financial architecture in this direction.

The call for more automatic disbursements—needed to prevent liquidity runs—has been qualified by the fear of moral hazard, the new bête noire of IMF critics. If the anticipation of a rescue leads countries to misbehave, as moral hazard advocates would claim, the IMF should preserve some constructive ambiguity to foster the right policies (Jeanne and Zettelmeyer 2001). Thus, while the Council on Foreign Relations (Task Force 1999) suggests that IMF assistance to countries suffering from financial contagion should be "free of policy conditions," it opposes automaticity and explicitly discourages the possibility of prequalification. In turn, the report of the International Financial Institutions Advisory Commission (IFIAC 2000)—the Meltzer Commission report—proposed that Fund liquidity assistance be offered to only prequalified countries but also raised the qualifying bar to exclude almost all candidate users. More recently, Daniel Cohen and Richard Portes (2004, 17), making the case for a simpli-

1. This proposal was first laid down in Cordella and Levy Yeyati (2005).

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fied IMF lending facility (which they refer to as the lender of first resort), also emphasize that "nothing should be automatic in this process" as "IMF support remains conditional on taking appropriate measures."[2]

Thus, while the concepts of prequalification and ex ante conditionality have been central to many of the recent proposals for IMF reform, to our knowledge the CIF proposal is the first to combine predictable qualifying criteria and automatic access. The facility can be best described as a liquidity window through which eligible countries have automatic access to a line of credit at a predetermined interest rate to cover short-term financing needs.[3] By offering instant liquidity at reasonable rates, the CIF would place a ceiling on the rollover costs faced by the country and would avoid liquidity runs triggered by unsustainable refinancing rates. In this context, automaticity is critical for reducing the scope for speculation or coordination problems, a source of vulnerability that other (conditional) IMF facilities or IMF-led packages cannot alleviate.

Available Insurance Options

The uncertainty associated with both the amount and the timing of IMF lending makes existing Fund facilities unsuited to preventing self-fulfilling runs. Emerging markets have thus searched for alternative ways of insuring themselves against sudden shifts in market sentiment. In principle, there are two ways in which a country can insure itself against a liquidity shortage: self-insurance through the holding of a substantial stock of foreign currency–denominated liquid assets, and external insurance through a contract with private providers of dollar liquidity—typically a consortium of financial institutions.

An increasing number of emerging economies have favored the first option. Numbers speak for themselves: For the emerging markets included in JP Morgan's Emerging Markets Bond Index Global portfolio, the average reserves-to-GDP ratio increased from 6.8 percent in 1992 to 22.6 percent in 2004—this at a time when the same ratio decreased in most developed countries[4]—despite the fact that the cost of self-insurance is nonnegligible for most emerging economies.[5]

2. Despite the semantic differences, this is in line with Michael Mussa's view (chapter 21 of this volume) of the IMF as lender of final resort that provides resources at reasonable (as opposed to penalty) rates "but with important conditions and constraints on the borrower."

3. In that sense, the facility is perhaps the closest to an international lender of last resort.

4. For example, reserves to GDP decreased from 0.6 to 0.4 percent in the United States and from 3.2 to 1.8 percent in the United Kingdom.

5. A back-of-the-envelope calculation would indicate that a sovereign spread of 300 basis points on a stock of reserves of 20 percent of GDP would add 0.6 percent of GDP to the fiscal deficit.

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One alternative to this precautionary approach is the outsourcing of the insurance function. Private external insurance, in its simplest form, is an option to borrow dollar liquidity at a predetermined price from a consortium of international banks that have access to liquidity at times when the country does not. This solution, however, suffers from two important drawbacks. First, the insurer's scope to diversify sovereign risk is likely to be limited, leading to insufficient coverage or, worse, inducing a reverse moral hazard problem whereby insurers, tempted by juicy commissions, promise a larger coverage than they can reasonably deliver. Second, as the probability of a crisis mounts and the insurance option gets deeper in the money, individual insurer banks may have incentives to hedge their growing exposure by selling the country's assets, thus severely limiting the degree of effective insurance.[6]

International financial institutions such as the IMF are natural candidates for circumventing the pitfalls of private insurance. The IMF's existing facilities, however, are designed with the purpose of helping countries dealing with crises that are rooted in weak fundamentals. For this very reason, they are not suited for preventing self-fulfilling liquidity crises. This does not mean that the Fund does not recognize the importance of such liquidity crises; indeed, to cope with possible runs the Fund has tried to soften its requirements and expedite the approval process in specific cases.[7] Results, however, have been modest at best.

The most ambitious attempt was the Contingent Credit Line (CCL) initiative, launched in 1999 as a tool to help countries with sound fundamentals cope with liquidity crises. To qualify for the CCL, a country had to make an explicit request to the IMF that had to be approved by the Executive Board. No country ever made such a request. Many factors may have contributed to the CCL failure; among these, observers have highlighted the limited size, the lack of automaticity, as well as a potential signaling problem: Because CCL eligibility was contingent on IMF approval and coverage was too limited to fully insure the country, governments may have been disheartened by the possibility that a mere request (let alone a re-

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6. See Broda and Levy Yeyati (2003). A combination of these two aspects may help explain the disappointing track record of private country insurance. In the case of the Argentine contingent repurchase agreement, coverage was rather limited and the execution was delayed until August 2001 when the liquidity run was well under way and after an agreement with the IMF that prompted, albeit momentarily, the price of bonds. In the case of the Mexican contingent credit line subscribed in November 1997, insuring banks protested the government's decision to draw down the line in late 1998 and, although they finally agreed to fulfill their end of the deal, they subsequently refused to renew it.

7. An example was the fast renewal of the line of credit to Brazil in 2003 and 2004. Note, however, that in that instance the country was already prequalified by an ongoing Fund program. The course of events could have been different if the Brazilian authorities had needed to start negotiations at the very moment that market confidence waned.

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jected one) could be interpreted by the market as a warning.[8] The facility was finally discontinued in November 2003.

A New Country Insurance Facility

Rather than relying on or playing around with the existing facilities, we believe a more effective way of shielding countries with sound fundamentals from sudden changes in market sentiments would be to provide them with automatic access to a line of credit at a predetermined fixed rate. The CIF that we propose here amounts essentially to that: an interest rate insurance designed to minimize the rollover risk that is at the root of self-fulfilling crises. Or, more plainly, a window that provides short-term loans at reasonable rates to ensure that a government can meet its financing needs without compromising its solvency, thereby eliminating private lenders' incentives to pull out.

By insuring emerging markets against sudden changes in perceived risk, the CIF would reduce both the uncertainty surrounding the timely access to finance and the associated financing costs while it would preserve the incentives to resort to private markets under normal circumstances. Indeed, the single distinctive characteristic of the CIF relative to any other existing IMF facility is its predictability: Access to liquidity assistance should be absolutely automatic subject to observable ex ante conditions.

It is well known that there is no easy way to determine without controversy the quality of a country's fundamentals so as to be able to distinguish between problems of illiquidity and problems of insolvency when an economy is under stress. This means that if eligibility criteria are set too tight, they would risk preempting access to the facility to illiquid but solvent countries (a Type I error).[9] Conversely, criteria that are set too loose would grant access to the facility to insolvent countries (a Type II error). Note, however, that this trade-off between Type I and Type II errors needs to be resolved in the way the criteria are chosen rather than in the way they are applied. Indeed, randomizing access according to a constructive-ambiguity approach would introduce doubts about the total availability of liquid funds, the very source of uncertainty that the scheme is intended to address.

For this reason, to make the CIF operational, it is essential to define precisely the eligibility criteria and the terms and conditions of the credit line, including what a country can and cannot do while indebted with the CIF. We now address each of these issues in more detail.

8. For a detailed discussion of the CCL experience, see IMF (2003).

9. This assumes that the null hypothesis is that the country is solvent.

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Eligibility

Eligibility criteria should be chosen to meet two basic principles: (1) effectiveness in screening solvent and iliquid countries from illiquid and insolvent ones, and (2) transparency in ensuring that no doubt should arise at any time on whether a country has access to the facility.

It is natural, then, that eligibility conditions should focus primarily on debt stocks and deficits in order to ensure debt sustainability in a reasonably adverse scenario. Specifically, in the event of an adverse shock, a borrowing country should be able to repay the CIF and refinance its additional obligations without major changes in its fiscal stance, provided that borrowing costs are kept within reasonable bounds.[10]

From an operational perspective, the quantitative definition of these criteria would need to strike a balance between accuracy and simplicity. For example, both debt and deficit eligibility conditions would be subject to cyclical fluctuations. Theoretically, this problem could be mitigated by the use of cyclically adjusted measures, albeit at the expense of a loss of transparency. As a practical alternative, deficit limits could be set high enough to let automatic stabilizers work but low enough to prevent unduly expansionary policies: A Maastricht-inspired rule, by which the deficit cannot exceed 3 percent in each of the three preceding years, may be a useful reference. In turn, the use of simple n-year moving averages would be a sensible compromise for the condition on debt ratios.[11] Similarly, while a value-at-risk approach could be more appropriate to calibrate the solvency conditions, its implementation would require country- and time-specific information and complex probabilistic models that would detract from the transparency of the whole scheme, suggesting the use of uniform thresholds.

The time structure of the country's obligations introduces an additional condition. Default on private obligations (and the associated financial panic) would still be possible if government short-term financing requirements far exceeded the size of the CIF credit line. Thus, to effectively preempt liquidity runs, insurance coverage (namely, the ratio between the

10. Note that eligibility conditions based on the market interest rate faced by the country would yield multiple equilibrium problems as increases in the country-risk premium would move an eligible (or ineligible) country closer to (or further from) the threshold level, thereby further increasing the premium. Note also that the Maastricht criteria included conditions on interest rate convergence that were aimed at reducing the perception of an implicit regional lender of last resort to mitigate free riding. The CIF, on the contrary, is intended to play the role of international lender of last resort, inducing interest rate convergence as a result.

11. Related operational issues include the way in which international reserves (and off-balance-sheet items) should enter the computation of debt ratios as well as the relative weight to be assigned to domestic and foreign currency–denominated debt to account for their different risk profiles (a back-of-the-envelope calculation in Cordella and Levy Yeyati [2005] estimates that a unit of the latter should be weighted as 1.60 units of the former).

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size of the CIF credit line and the financial obligations maturing over the life of the CIF loan) should be set close to 100 percent. In turn, for a given size of the facility, this condition imposes an additional subceiling over the stock of short-run debt.

At this point, it is important to stress an aspect related to the size of IMF lending that is often misunderstood. As noted by Gregor Irwin and Chris Salmon (chapter 15 of this volume), recent IMF-led packages have fallen short of full insurance coverage in a failed attempt to exploit the catalytic role of IMF finance—namely, its capacity to induce private-sector lending when the debtor's solvency is not at stake. However, the fact that this strategic complementarity between official and private lending may not materialize in practice does not weaken the case for the IMF as a lender of last resort.[12] On the contrary, it emphasizes the crucial importance of counting on adequate assistance to preempt liquidity crises or, if crises nonetheless occur (that is, if the facility is tested by the market), to prevent costly rollovers with persistent consequences for the country's solvency.[13]

In Cordella and Levy Yeyati (2005) we provide a stylized example based on the following conditions: (1) an average public (local currency–denominated) debt-to-GDP ratio over the preceding three years below 60 percent (and a weight of 1.6 on foreign currency–denominated debt) and (2) a fiscal deficit below 3 percent in each of the preceding three years. We find a few emerging economies that would have been eligible in the past decade and were charged high spreads (for example, Korea and Thailand at the onset of the Asian crisis). In addition, we conjecture that the existence of the CIF could have dissuaded eligible Chile from tightening monetary policy preventively in response to the 1998–99 Asian crises and could have helped mitigate the debt buildup in Brazil caused by recurrent liquidity runs during the 1990s.

These numbers are offered merely as an illustration: Actual calibration would have to ponder the trade-off between inclusiveness (the number of potentially eligible countries) and risk (the strictness of the eligibility conditions). However, the long-run relevance of the CIF should factor in the incentive aspect. Indeed, the fact that only a few—fundamentally sound—countries would have been eligible suggests not only that these criteria would not have favored unwarranted lending to debt-addicted countries but also that the very presence of the facility would have given govern-

12. Indeed, this complementarity is quite unusual also in the case of a domestic lender of last resort.

13. It is interesting that IMF lending packages get a high grade when evaluated on whether they prevent costly debt restructurings (see, for example, Cline [chapter 14 of this volume]). However, the scorecard looks less favorable when losses in debtor countries (specifically, the real and financial costs of the liquidity run) are taken into consideration. It is precisely in this role—preventing temporary liquidity shocks from having persistent effects—that current IMF facilities fall short of providing adequate lender-of-last-resort assistance.

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ments in noneligible economies the incentives to adopt the policies that would have allowed them to become members of the select group.

Terms

The motivation of the CIF is the presence of (short-lived) self-fulfilling liquidity runs that, absent deeper fundamental problems, could be quickly reverted. Therefore, CIF loans should aim at covering the country's financing needs over a period of, say, one year.[14] For example, the CIF loan could be extended for six months, renewable at a slightly higher spread for another six months, as a shorter alternative to the Supplemental Reserve Facility (SRF), currently the shortest IMF facility.[15]

Emulating the lender-of-last-resort premise, the CIF should lend at a penalty rate relative to precrisis levels in order to maximize the incentives to repay without compromising the country's repayment capacity. Specifically, the CIF lending rate could be set as the sum of the corresponding risk-free rate—which would capture changes in global liquidity that affect the cost of international capital—and a uniform risk premium. Again, the IMF's SRF provides a reasonable reference: A six-month CIF loan may charge a spread of 350 basis points (slightly above the 300 basis point surcharge on an SRF during the first year), with a 50 basis point increase (as in the SRF case) if extended for an additional six-month period.

Whereas visibly inadequate insurance coverage would do little to deter a run, an excessively large credit line may fuel the risk of strategic default or renegotiation as the country's CIF exposure surges. In addition, if CIF assistance is to be phased into a Fund program if the crisis deepens, the need to preserve the margin to impose ex post conditionality on key policy measures would recommend a CIF size below the funds commonly available through IMF-led packages. While there is certainly room for different combinations, it is easy to devise reasonable conditions that meet all three criteria.

A good starting point is provided by the condition on insurance coverage (short-term below the size of the CIF loan) that, coupled with a condition on the country's CIF exposure (that is, CIF claims over GDP), already imposes a limit on the share of short-term debt over GDP. For example, a CIF loan ceiling of 10 percent of GDP and a minimum insurance coverage of 100 percent would imply a subceiling on short-term debt of 10 percent of GDP that, for the sample of emerging economies, represents an average

14. A run that is not averted within the year may signal more fundamental problems that call for a standard IMF program. The CIF is thus analogous to central bank liquidity assistance, which is followed by direct central bank intervention if liquidity problems do not subside.

15. The SRF offers one-year loans renewable for a subsequent 18 months at a rising cost (an increase of 50 basis points every six months).

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loan-to-IMF quota factor of 5.5, well below the amounts committed in the context of the average IMF bailout.[16]

Additional Considerations

To preserve the solvency of the CIF, it is essential that countries do not use CIF funds to increase public expenditure, thereby increasing the total stock of debt and diluting CIF claims. The eligibility condition on the fiscal balance, which for consistency should be met over the life of the loan, should largely rule out this possibility. However, the country may channel CIF resources to transfers to the private sector (for example, through the purchase of distressed assets at book value) that are not immediately recorded as expenditure in the fiscal accounts as usually defined. Although this practice could be monitored and discouraged by the Fund in the context of its regular consultations, the problem could be further alleviated if eligibility were assessed on the basis of the new IMF definition of overall fiscal balance (IMF 2001, 53).[17] Another way in which the country could misuse CIF funds is by defaulting on its private creditors after CIF assistance is received, thus defeating the very objective of the facility. Needless to say, a default on any private creditor should be tantamount to a default on the CIF.

Although the CIF, a priori, is not free from the time inconsistency problem that plagues other IMF facilities (owing to the costs of pulling out when it becomes clear that the intervention has failed to deliver the desired response), the fact that, in this case, countries will still have the option of requesting a standard Fund program lends credibility to the threat of termination of the CIF loan. Even when the financial turmoil grows into a deeper fundamental crisis, the CIF may still play a positive role as a buffer that reduces the losses during the (typically lengthy) negotiations of an IMF program.

The proposed design of the CIF removes most of the factors identified in IMF (2003) as underlying the failure of the CCL, except for one: the so-called exit problem. Specifically, the facility may amplify the effects of a shock as a country gets close to the eligibility threshold in any of the

16. IMF disbursements alone (that is, excluding the funds provided by other official partners) reached 5 times the country's quota for Mexico (1995), 18 times for Korea (1998), 7.7 times for Brazil (2001 and 2002 combined), and 17 times for Turkey (1999–2001 and 2002 combined), according to Roubini and Setser (2004).

17. According to this new definition, in the overall fiscal balance "net lending/borrowing [is] adjusted through the rearrangements of transactions in assets and liabilities that are deemed to be for public policy purposes. Notably . . . subsidies given in the form of loans would be recognized as an expense." In plain English, according to this definition, debt issued for the purpose of compensating private-sector losses in the event of a crisis would be considered as an expense and thus be reflected in the deficit.

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relevant dimensions. In particular, an adverse shock may inflict on a borderline country a severe blow.[18] One could correct the calibration of the weight assigned to foreign currency debt according to some (inevitably controversial) measure of the overvaluation of the local currency or could compute debt and fiscal ratios on the basis of medium-term (cyclically adjusted) averages at the expense of making the whole scheme less transparent and predictable. Alternatively, the problem could be partially mitigated by the use of moving averages, which should smooth the eligibility criteria, attenuating their response sensitivity to individual shocks. At any rate, the issue deserves a careful treatment.

Final Remarks

The view that many of the financial crises of the past decade have had a self-fulfilling component is gaining increasing support. Against this background, a few observers have highlighted the shortcomings of current IMF lending policies and the need for easier and more rapid access to international liquidity support. More often, however, critics have blamed IMF packages for undermining market discipline and policymakers' incentives through the IMF's excessive largesse. As a result, the debate on how to reform the international financial architecture has centered on how to limit financial assistance rather than on how to make it more accessible. Meanwhile, the ex post conditionality associated with current IMF facilities has started to look too costly or inadequate, prompting the search for alternative arrangements such as the Chiang Mai Initiative in Asia, which may soon be emulated in other regions. The IMF can still usefully provide insurance to the rapidly growing class of emerging economies—by far its most important clients—by exploiting its advantages relative to individual and regional self-insurance options: its lower costs of carry and its greater scope for diversification. Indeed, the future of the Fund as a relevant international player may hinge on this new line of business.

The untested presumption that financial assistance reduces the stimulus to put in place sustainable policies is not necessarily true, particularly when crises are triggered by factors beyond policymakers' control (Cordella and Levy Yeyati 2004). On the contrary, liquidity insurance schemes such as the CIF described here should provide policymakers with the right incentives by ensuring that long-run efforts are rewarded. In addition, by offering the inducement of automatic access, the CIF eligibility

18. In particular, a minor economic contraction or real exchange rate adjustment may place a formerly eligible country on the wrong side of the debt threshold, inducing an immediate upward adjustment in borrowing costs that may open the door for a run on the now uninsured economy.

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criteria should replace the standard ex post conditionality with voluntary conditionality.

Ultimately, the CIF should complement existing IMF facilities, particularly IMF-led packages intended to rescue countries from a critical condition. To date, the IMF has provided financially distressed countries with an air bag that has preserved the passengers' lives without preventing the car from crashing. By contrast, a well-designed CIF should work like an antilock brake system to prevent avoidable accidents altogether. This, in our view, is the main contribution that the international community can make to facilitate the successful financial integration of developing economies.

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