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Reflections on the Resolution of International Financial Crises

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Constrained Discretion and Collective Action Problems: Reflections on the Resolution of International Financial Crises

Arminio Fraga and Daniel L. Gleizer[1]

20 November, 2001

Abstract

The purpose of the paper is to highlight some essential features of an approach to the resolution of international financial crises, based upon an assessment of what has been essential for restoring normal relations between debtors and creditors in recent crises. We focus on the nexus between the debtor and the private creditors and on what they can do together to solve the collective action problems that bedevil the resolution of crises, recognising that the official sector has a catalytic role to play. This contrasts with the emphasis on the relationship between the official sector and the debtor, and on the connection between the official sector and the private sector. The essence of a lasting solution is finding practical ways to enable debtors and creditors to conclude and implement explicit and implicit agreements relating to the amount and timing of credit flows and debt repayments.

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[1] The authors are, respectively, Governor and Deputy Governor for International Affairs at the Central Bank of Brazil. Gavin Bingham provided the inspiration for, and many of the central ideas in, this essay. Peter Kenen, Mervyn King, Daniel Marx, John Murray, Ted Truman and Whitney Debevoise all provided insightful comments and penetrating observations. We alone, however, are responsible for the conclusions and proposals.

Introduction

The prospect of recurrent and uncontrolled financial crises is one of the gravest threats to an open and liberal international economic order. The crisis that started in Asia in 1997 and then spread to Russia and Brazil led to sharp declines in income, widespread unemployment and, in some countries, significant changes in the political order, culminating in the most severe international financial crisis in sixty years. Recent events in Turkey and Argentina demonstrate that financial crises with potentially profound consequences for economic and political stability are not a thing of the past. They also demonstrate the continued urgency of finding practical and concrete means to handle the crises that do occur.

This is not to belittle the progress that has been made so far. In the years since the outbreak of the Asian crisis a broad consensus has been developed within the international community on the basic elements of international crisis management. The bulk of the advancements achieved, however, lie in the realm of crisis prevention, where there is widespread acceptance of the need to maintain sound macroeconomic fundamentals and to adopt best practice standards in several areas including financial supervision and regulation, data dissemination and overall policy transparency, debt management, corporate governance, accounting, auditing, etc.

Less agreement has been reached in the area of crisis resolution. There is considerable understanding of the need for clarity in the way in which the international community will respond in different conditions and recognition that the response will have to vary depending on the circumstances of the country and the world economy. But this broad accord masks disagreement on the concrete actions that should be taken in the event of a crisis. One school contends that a discretionary response to future crises will achieve a superior outcome because it will allow actions to be tailored to the factors causing the crisis and the circumstances in which it occurs. By contrast, the second school stresses the importance of clear limits on the amounts of official financing and reliance on alternative instruments such as standstills to deal with payments crises.

The differences of view between the two schools do not arise primarily from disagreement about the importance of promoting efficiency and stability in financial markets or other related economic issues. Nor do they arise from difference in objectives. Both camps desire to improve the pricing of risk and the predictability of outcomes. Both recognise the importance of keying action off the achievement of medium-term debt sustainability. And both acknowledge the importance of containing contagion.

The differences in views have their origins in two factors. One is discontent with how discretion is currently exercised. The second is a difference of view about the nature of the market imperfections that require public action and how best to contend with the risks associated with moral hazard. One school is convinced that vicious circles, herding and contagion are a serious threat to international financial stability. They recognise the costs associated with providing public finance when a crisis occurs, but they think that the benefits from avoiding a "bad equilibrium" outweigh the costs. They do not think that it will ever be possible to set out a mechanical rule that will deal with all the instances of multiple equilibria, and they feel that the central bankers' tried and true rule of "constructive ambiguity" will be adequate for addressing the problem of creditor moral hazard.[2] They note that Russia was widely regarded as "too nuclear to fail", yet the international community declined to make additional funds available in autumn 1998. This, more than any official pronouncement, has greatly reduced moral hazard.

The second school stresses the longer-term distortions in the allocation of capital and the pricing of risk that can arise when creditors expect that debtors will be able to obtain funds to cope with a serious international financial crisis. They acknowledge that a case can be made for providing emergency assistance in certain, very rare circumstances, but contend that the repeated provision of finance

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2 Both of the schools agree that creditor moral hazard is of greater concern than debtor moral hazard. Debtors are already enduring considerable pain when they find themselves unable to repay their debt. It is highly unlikely that they will "cut off their noses to spite their faces". However, creditors are more likely to lend without thorough credit analyses if they have reason to expect that they will receive compensation in the event that the debtor cannot or does not pay.

shapes expectations and alters “the rules of the game”. In their view the succession of financial crises that the world has experienced can be attributed to the prospect that official money will be made available in the event of a crisis, leading to excessively cheap finance. Lower than warranted interest rates have prompted greater and sometimes excessive lending. In their view the best way to ensure that risk is adequately priced is to introduce strict limits on official funding, and exceed them in only the most exceptional circumstances. Increased predictability will promote more accurate pricing.

There are other reasons for wanting to limit reliance on large-scale official financial assistance. Some argue that, even in a clear-cut liquidity case, big packages may not be large enough by themselves to restore confidence. This is because the need for tranching to enforce conditionality raises uncertainty about the amount of money available up front. An additional consideration is the tendency for large-scale official financing to produce unequal treatment, to the extent that big problems (countries) get big packages and small problems (countries) get small packages. Small countries will then be forced to implement more draconian adjustment policies and/or to rely to a greater extent on potentially more costly private sector financing, even when they face liquidity problems rather than solvency problems.

Despite these differences, all sides acknowledge the need to add more structure to the debate. In practice, the problem has been framed as one about the amount of private sector involvement (PSI) that is needed or recommended in a crisis. Recent discussion of PSI already indicates a degree of convergence, one side arguing for constrained discretion, the other for flexible rules.

The purpose of this note is to highlight some essential features of an approach to crisis resolution, drawn from an assessment of what has been essential for restoring normal relations between debtors and creditors in recent crises. We focus on the ***nexus between the debtor and the private creditors*** and on what they can do together to solve the collective action problems that bedevil the resolution of crises, ***recognising that the official sector has a catalytic role to play***. This contrasts with the emphasis on the relationship ***between the official sector and the***

debtor, and on the connection ***between the official sector and the private sector,*** that are the defining features of the two views mentioned above.

Our premise is that sustainability of a country's policies is the outcome of a complex intertemporal game involving the sovereign debtor, a shifting pool of varied investors and the official international community. These various actors have partially congruent and partially divergent interests. Success is dependent on finding ways to allow the several parties to co-operate. Without such cooperation, conditions can deteriorate rapidly and a crisis erupt. This is particularly the case where financing is provided mainly in the form of marketable securities which are held and traded by well-capitalised intermediaries and final investors. At times co-operation can be achieved by making the structure of the game and its risks and rewards explicit. In some instances, however, co-ordination might require changing the structure and/or the pay-offs of the underlying game. The official sector should be the first to move, operating as a catalyst, ***even when its move is merely the confirmation that it will not provide financing***. However, the essence of a lasting solution is finding practical ways to enable debtors and creditors to conclude and implement explicit and implicit agreements relating to the amount and timing of credit flows and debt repayments.

An essential element is the creation of an appropriate array of incentives and ex-ante understandings or contractual arrangements that eliminate the risk of market discontinuities when unexpected events occur. A common feature of many of the proposals is the provision of greater certainty about the actions that could be undertaken when a crisis occurs.

Such proposals include

- Wider use of collective action clauses and/or exit consents
- More extensive use of contingent financing arrangements from commercial banks that could be drawn on in times of difficulty
- Embedding call options in interbank lines that provide a contractual basis for an extension of maturities

- Use of structured bonds that link payment to economic developments

Success in finding a unique set of required steps is complicated by the diverse nature of financial crises. Financial crises occur and then spread from one country to another for a multitude of reasons. In some cases the cause is a common external shock as, for example, when commodity and/or energy prices move unexpectedly or when global interest rates or exchange rates among the three major currency blocks shift unpredictably. In other cases it may be because of a shift in investors' risk appetite, as occurred in October 1998, when risk premia on first class assets with little default risk increased perceptibly, and then affected rates across the whole spectrum of financial assets.

One common challenge present in most cases has been the need to foster dialogue among the main sets of actors and, more particularly, to find a way to secure coordination among members of the same class of actors, especially creditors.

Six financial crises

In order to understand what has worked in practice, we consider the ways in which sovereign debtors and private creditors have sought and found a resolution in six separate cases: Brazil, Ecuador, Korea, Pakistan, Russia and Ukraine.[3]

The six cases differ considerably with respect to the size of the country, the nature and amount of the debt involved, the speed with which the problem was resolved, the amount of official financing made available, and the extent to which it was necessary to alter the nominal value and/or discounted present value of the debt. Yet these six episodes provide important insights into how to address four related issues: (i) determining the amount and nature of the debt that needs to be

[3] Two other cases have been omitted. One is Romania, which continued to service its private sector debt by making radical adjustments in its trade flows despite a provision in its Letter of Intent that implied negotiations with private creditors. The other is Indonesia where the focus of the initial debt work out process was on private debt owed to private creditors, though some of the subsequent negotiations involved the Indonesian authorities. Argentina and Turkey are omitted because they are so recent.

reprofiled, (ii) structuring negotiations between the debtor and creditors, (iii) procedural choices and (iv) dealing with inter-creditor equity issues.

In all of the cases, there were three sets of actors whose actions shaped the outcome: (i) the authorities in the debtor country, (ii) the private creditors and (iii) the official community acting through the IMF and other multilateral institutions. The behaviour of these three sets of actors can best be understood in terms of their principal objectives:

- For the debtor, the immediate objective in many cases is to retain or regain market access quickly and on **sustainable terms**. In order to do this, the debtor will first need to establish a sustainable debt profile, taking into account the socio-economic costs associated with macroeconomic adjustment (unemployment, poverty and bankruptcies) and the maintenance of sufficient political support to remain in power. Unsustainable solutions sow the seeds of new rounds and are, by definition, self-defeating.

- For the private creditors, the objective is to maximise the value of existing and potential claims on the debtor.

- For the official community the key objectives are to foster the recovery of crisis stricken countries, in ways consistent with the continued smooth operation of the international capital market. This often involves facilitating the upturn and mitigating pain in the country in crisis, but doing so in ways that do not introduce systemic distortions through the creation of creditor or debtor moral hazard. Governments also have a responsibility to see that their taxpayers' funds are used prudently when official money is made available to assist a country in crisis.

Determining the nature and amount of the debt to be rolled over, renegotiated or restructured

The first step in the sequential game is to determine how much official money will be made available. Only then will it be possible to determine the nature and extent of required PSI. Here we follow the framework set forth in the IMFC's communiqué of April 16, 2000:

"14. In some cases, the combination of catalytic official financing and policy adjustment should allow the country to regain full market access quickly. In some cases, emphasis should be placed on encouraging voluntary approaches, as needed, to overcome creditor coordination problems. In other cases, the early restoration of full market access on terms consistent with medium-term external sustainability may be judged unrealistic, and a broader spectrum of actions by private sector creditors, including comprehensive debt restructuring, may be warranted to provide for an adequately financed program and a viable medium-term payments profile."

Whatever the outcome of such an exercise, private sector financing will in general be necessary and desirable. Necessary because official finance will often not suffice to meet the needs of the debtor if the crisis is serious. And desirable because it is inappropriate for the official sector to crowd out the private sector in the provision of finance. The only question – but a crucial one - is how it is to be arranged. The total amount of finance needed from the private sector is endogenous. It will depend on the resources available to the debtor and the size and timing of its payment obligations coming due. These in turn depend on the maturity and currency composition of its liabilities as well as on the amount of funds provided by the international community. They also depend on the extent to which adjustment is permitted to take place through exchange rate movements and the extent of *de facto* capital account convertibility.[4]

In the case of Korea, interbank claims constituted a significant proportion of total liabilities. They were rolled over through targeted negotiations with a small number of bank creditors. Similarly, Brazil´s interbank credits were rolled over within the context of a monitoring program put in place as the country addressed

[4] Where capital account convertibility is not full, what matters is the efficacy of capital controls.

its fiscal problems and let its currency float. By contrast, in the other four cases the importance of bonds in total debt meant that no meaningful solution could be found without including these liabilities in the negotiations.

In many instances, serious discussions between the debtor and its creditors do not begin until an adjustment program has been agreed with the IMF and there is a measure of clarity about the amount of financing that will be provided by the official sector. For example, negotiations between bank creditors and both Korea and Brazil on the rollover of exposures began in earnest only after the size of official commitments was known. Similarly, although Ecuador announced in August 1999 that it would interrupt payments on its Brady and Euro bonds, discussions on an exchange offer tended to become meaningful only after the signing of a letter of intent in April 2000. However, debtors and creditors do on occasion reach agreement in the absence of a Fund program. For example, Ukraine's 2000 bond exchange took place without an IMF program.

The increase in the importance of bonds as a source of finance for emerging market economies has made the inclusion of these instruments in debt restructurings unavoidable. The Russian default in August 1998 demonstrated that an unexpected cessation of service on debt instruments, domestic or foreign, by a systemically significant country can lead to a large and undifferentiated increase in emerging market spreads and reduced market access. The de-leveraging process that ensued was analogous to a bank run. Recent episodes involving bonds have been more salutary. They suggest that bonds can be included in debt workouts without necessarily having significant adverse consequences for the market. Indeed, access by creditworthy borrowers improved during the period in which Pakistan, Ukraine and Ecuador were negotiating the bond workouts (although spreads increased significantly at the time of the Ecuadorian "restructuring"). Moreover, compared to the second half of 1998, investors have more recently shown an enhanced capacity to differentiate among emerging market borrowers and have not shunned the entire asset class because of default by some borrowers. The greater prudence shown by investors has meant that funds are not always readily available on the same terms as in the past. Nonetheless, creditworthy borrowers from emerging markets are able to access the market.

Structuring dialogue between the debtor and creditors

Dialogue between creditors and debtors has always been an essential feature of crisis resolution. However, the changes that have occurred in the pattern of financing over the past decade have made it more important than ever by radically altering the dynamics of the relationship between creditors and debtors. Today, financing takes a variety of forms, and it is provided by a range of different creditors who have divergent objectives and interests. Tradable securities have become more important. Moreover, ultimate investors and financial intermediaries, who tend to be better capitalised than in the past, often place only a small part of their large portfolios in any asset class. The establishment and maintenance of long-term relationships is less important for these market participants who have fiduciary responsibilities to their stakeholders. By contrast, the opening of the banking markets in many emerging markets to foreign investors mean that international banks often have a strategic long term interest in the country. Even though the bulk of their lending may be short-term interbank claims, their interests may sometimes be longer term.

The nature of the interaction between the debtor and private creditors has varied considerably across the six cases. In some, the provision of continuous information by the debtor helped to promote understanding of the debtor's circumstances (Brazil). In others the debtor engaged in explicit negotiations on the terms of a rollover and/or restructuring with a limited number of market participants (Korea, Russia). In still others, the debtor did not negotiate with representatives of the creditors but instead made an exchange offer prepared in consultation with advisers familiar with the emerging country debt market. In cases where the debt is issued in negotiable form and widely held, informal consultation between debtors and their creditors leading to exchange offers has become common. The reasons for this are:

- Assembling an appropriate set of creditor representatives is difficult when the community of creditors is diffuse and heterogeneous.

- Debtors recognise that creditors, once organised, may seek their own remedies.

- The emergence of a secondary market helps those who craft an exchange offer to determine terms and conditions that will be acceptable to a large proportion of the creditors without prolonged and complex negotiations. To be sure, not all creditors mark to market and some bonds are very thinly traded so that their price may not accurately reflect expectations. Nonetheless, once a bond trades at distress levels, exchanges seem to be easier. Most of the recent offers have entailed substantial marked to market gains for those who acquired bonds at distress prices.

- Conducting confidential negotiations with a subset of creditors creates problems of insider information that may be avoided when an exchange offer is made.

- Compared with the early 1980s most creditors are better able to bear the losses associated with debt exchanges, which can therefore take place more quickly.

Rollovers, standstills and moratoria

Inability to meet the original terms of the debt contract on time and in full is a defining feature of financial crises. Typically, the resolution of the crisis involves renewing existing exposures or replacing the original contracts with ones that the debtor can be expected to meet in time and in full, though it is also possible to adjust the terms on existing contracts.

Existing contracts may be rolled over or a new contract may be substituted for an existing one through negotiation or an exchange offer while the old one is being serviced, as was the case with Korea, Brazil and Pakistan. However, in other cases delays in payment or the accumulation of arrears occur before a new profile of payments can be agreed. For instance, both Russia and Ukraine stopped making debt payments at certain stages and imposed exchange controls.

Falling into arrears or arranging a standstill[5] will provide a debtor with transitory relief. However, such an event of default opens the way for the creditor (or for one or more classes of creditors if there are cross default clauses) to seek legal remedy. Despite the occurrence of an event of default, creditors may, and often do, agree implicitly or explicitly to a temporary stay on litigation while a solution is sought. In some cases the contract may provide for a grace period and the debtor can seek to regularise his payments during this period. Even without such provisions, creditors may delay seeking legal redress, thus providing the debtor with some respite. Creditors sometimes refrain from taking legal action immediately because they are convinced that the debtor is genuinely seeking a sustainable solution. Or it may be because the costs of legal action and the time it takes to secure and enforce a judgement make the expected value of a court award less than the expected value of a cooperative settlement.

Actions by the official community affect these calculations. Lending into arrears can and should be a sign that, in the view of the Fund, the debtor is making efforts to implement a program that will raise the expected value of the outstanding debt. Such a program may contain provisions encouraging the debtor to work with its creditors. For example the April 2000 program for Ecuador had such provisions. Agreement on a program also makes it clear how much official money will be available.

In short there is a spectrum of actions for dealing with debt distress ranging from remaining current on obligations and negotiating new money or new terms through negotiating a temporary standstill in payments to the declaration of a moratorium or even the complete repudiation of the debt. The decision of the

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5 The *Rey Report* distinguished between payment suspensions undertaken with the explicit or implicit agreement of creditors (standstills) and unilateral payment suspensions by debtors (moratoria), but noted that the boundaries can become blurred, for instance if a moratorium receives the tacit approval of creditors.

debtor regarding any particular course of action will be shaped - at least in part - by the expected impact on the availability and the cost of funds in the future. The decisions of the creditors will be shaped by the impact on the present value of expected future receipts. The official community by its actions can influence both sets of calculations.

Dealing with inter-creditor equity issues

In some respects each of the three classes of actors is homogeneous. Unless the debtor engages in selective default, the members of each class will have common interests and share common objectives. However, the value of any individual creditor's claim depends not only on the capacity of the debtor to pay but also on the actions of other creditors. If a small set of creditors succeeds in securing preferential treatment, this will reduce the amount available for other creditors. For this reason, credible workout arrangements must deal not only with the interrelationship between the debtor and different classes of creditors, but also with questions of comparability across classes and within classes.

Short-term creditors

If the debt is largely short-term and greatly exceeds the foreign exchange reserves of the country, as was the case in Korea at the end of 1997, the value of any individual creditor's claim depends on the willingness of other creditors to roll over their exposures. This creates a collective action problem.

In the case of Korea it was resolved through targeted negotiations with a limited number of large bank creditors that took place under the patronage of the authorities in the main financial centres. The provision of guarantees by a fiscally sound debtor government enhanced the value of the new credits. The liquidity problem was resolved when most (but not all) bank creditors agreed to roll $22 billion in short-term exposures into longer maturity (one to three-year) claims.

To help stop the erosion of lender confidence, Brazil combined major macroeconomic reforms (such as the adoption of a floating exchange rate regime and fiscal adjustment), an IMF program and coordinated bilateral financial with a system designed to monitor the rollover of its short-term interbank credits**.** The system provided creditors with information on the actions and intentions of other creditors and thus helped reduce the collective action problem. Once creditors saw that other creditors were willing to roll over their exposures to a country that was making serious efforts to deal with its macro-economic imbalances they became willing to roll over theirs. Moreover, the existence of effective monitoring arrangements meant that banks were able to understand the reasons for changes in exposures, thereby reducing the risk of a hasty and unjustified rush for the exits at the first sign of a decline in the rollover ratio. For example, they could differentiate changes in exposures caused by a corporate restructuring in a particular bank from changes that denoted a re-assessment of the risk associated with Brazil.

In the case of both Korea and Brazil, large amounts of official money were made available in support of adjustment programs, and the two countries remained current on their debts while they extended their maturity or arranged rollovers. It has been suggested that, instead of relying on official finance, these countries could have temporarily interrupted payments on their short-term debt while they negotiated an extension or rollover. There is no experience to assess how such an approach would have worked, but there are clear strategic problems associated with it. Most countries encountering payments difficulties tend to service short-term trade-related debt because of its immediate importance for their economies. Moreover, at any point in time long term credits will often be falling due. Defaulting on the payment of these credits would raise questions of creditor equity and could lead to the activation of cross default clauses. The past experience of some countries such as Brazil suggests that a strategy based on payments interruptions has very high and long lasting costs, ranging from loss of access to prohibitively expensive financing costs, even if a subset of the debt is serviced on time.

Long-term creditors

Because some proportion of a country's long-term debt is generally maturing in any given period, the distinction between short and long term creditors cannot be rigid. Nonetheless, successful resolution of a debt crisis involving longer-term claims involves establishing a payment schedule that is sustainable. In most of the recent cases the old debt has been replaced with a new contract containing new payment terms. Creditors generally accept an exchange offer when they believe that the relief brought by the exchange will make the debtor better able to meet his new obligations. However, some creditors may elect to hold out in the hope that they will be paid according to the original contract, be able to seize assets or be "bought out" by other creditors. This raises inter-creditor equity issues and may delay the resolution of the debt problem.

In the case of Pakistan and Ukraine, holdouts did not obstruct restructuring of Eurobonds. The fact that some, though not all, the contracts contained qualified majority voting provisions may have helped. In these cases, holdouts have known that they will not be able to impede a solution acceptable to a large majority of creditors. In Ukraine's case, majority voting provisions were used to bind holdout creditors. In the case of Pakistan, the majority amendment provisions were not used, but the presence of a trustee meant that no individual holder could initiate litigation unless he held 25% of the outstanding amount of the bonds. In addition the proceeds of any litigation would have had to be shared among the creditors. By contrast, certain creditors have sought and obtained judgements against Russia. In these cases, the actions appear to have been motivated by the delay in reaching settlement and payment.

Official and private creditors

Inter-creditor equity issues also arise between official and private creditors. The purpose of the provision of official money is to finance an adjustment program. Properly implemented, such a program will raise the discounted present value of existing debt. This is the economic rationale according implicit seniority to official finance extended to finance an adjustment program. However, official money is fungible and can be used to delay adjustment while maintaining debt service payments to creditors. Performance criteria and provisions that directly or indirectly promote the re-negotiation of private debt help to alleviate this risk. For example, the floors for reserve holdings that were set in the case of Ukraine meant that the country had to seek accommodation from its creditors in 1998 and 1999. A provision in the Paris Club rescheduling agreement for Pakistan called for the inclusion of Eurobonds in the re-negotiation of private debt.

Chronic debt problems

Inter-creditor equity and coordination problems are particularly acute in cases of protracted debt problems, where debt is rescheduled repeatedly. For example, Russia's London Club creditors concluded a new agreement in February 2000, six months after an earlier Paris Club rescheduling had been concluded but before a new rescheduling of bilateral official debt that many observers felt would be needed. In cases where there are a series of Fund programs and repeated reschedulings, private creditors may elect not to wait for final clarity about the amount of official finance. They do so because they recognise that protracted delay will greatly reduce the discounted present value of their claims. The moves in such an ongoing game and the nature of claims for equitable treatment are complicated by the fact that the composition of different classes changes as the debt is traded.

Protracted debt problems also complicate the resolution process, because the rules of the game may change as the game is being played. Indeed, some of the actions of both the creditors and debtors may be aimed at altering the rules of the game, thereby shifting future pay-offs.

Conclusion

The experience of recent crises demonstrates that creditors and debtors can work together in ways that enable debtors to regain and retain market access on sustainable terms and creditors to maximise the value of their present and future claims. This helps to reduce the risk that crises will spread to other countries. Its key elements are:

- **Appropriate policies.** Unless a country adopts a set of policies that credibly addresses the domestic causes of the financing difficulties, it will not succeed in inducing its creditors to co-operate. To be sure, events outside the country, such as sudden and pervasive shifts in risk appetite, may trigger or contribute to the crisis, and the country cannot reasonably be expected to resolve those problems, but contagion often affects those who are weak and vulnerable. In these cases action can and should be taken to reduce vulnerability.

- **Official sector financing.** Clarity is needed about whether official sector financing will be forthcoming and, in case the answer is positive, about the terms and conditions on which it will be provided <u>before</u> serious debt discussions take place between creditors and debtors. The key factor determining the amount and nature of official financing should be the extent to which policies being pursued contribute to a sustainable degree of leverage in the economy. Sustainability will, in cases where the currency is fully convertible, depend upon willingness of both residents and non-residents to hold domestic currency claims. There will of course be cases where this may not be achievable without some debt reprofiling. The more interesting situations, however, are those where the official sector can play the catalytic role which allows the country to move from a bad equilibrium, where creditors run, to a good one, where creditors find it in their collective and individual interest to maintain their exposures to the country.

- **Speed.** It is important to address payments problems quickly. Delay reduces the net present value of creditors' existing claims and makes it difficult or costly for the debtor to issue new ones. Speed will also reduce the risk of contagion and promote the continuity of markets needed to ensure accurate pricing.

- **Coordination and communication among creditors – resolving collective action problems.** A crisis is frequently associated with very delicate and finely balanced expectational dynamics that have to be handled by the official sector with considerable care. In order to avoid the “rush for the exits” associated with a number of recent crises, it is important to keep in mind that creditors are as interested in the actions of other creditors as in the policies of the authorities in the sovereign debtor. Accordingly, it is important to provide information on creditors’ actions, intentions and motivations. The debtor and the official sector in the creditor countries can help to corroborate the accuracy of the information. This will reduce the incentive to free-ride on the back of misrepresented intentions. (See box on Brazil.)

- **Inter-creditor equity.** The outcome will be quicker and less acrimonious if considerations of equity are born in mind. All creditors with a material exposure need to be involved in finding a solution. However fair treatment need not mean identical treatment. Creditors have different objective functions, time horizons and internal discount rates. These differences need to be taken into account.

- **Essential finance and implicit seniority.** Since it is in the interest of the community of creditors taken together to make minimum essential finance available to the debtor during periods of stress, there is often reason to accord implicit seniority to certain types of debt (trade credit; official credit financing adjustment policies). Such seniority should be confined to essential finance. It should not in general be given to hold-out, but it may be sensible to eliminate *de minimis* claims.

- **Pricing.** The pricing of new or substitute forms of finance should reflect the expected present value of the claim. In principle, markets will price the claims accordingly, but in practice they do not always do so because of insufficient information and thin trading. Ambiguities in the regulatory treatment of some types of instrument like global bonds can also hamper pricing.

- **Procedures.** The three sets of actors need to address the following issues in order to reach a rapid, sustainable and fair outcome. Because each crisis is different, it would not be feasible or desirable to use identical procedures in all cases. Nonetheless, having a non-exhaustive list of options describing procedures that have worked in the past will expedite crisis resolution. Among the issues on that list are:

Creditor representation: Is it needed? If so, how should it be structured;

Provision of debtor information. How should information from the debtor to the creditors be provided (publicly, through agent banks in key markets, through a creditors' committee)? How can it be obtained if the debtor does not have in place a comprehensive debt monitoring program without creating the fear among investors that it is the prelude to the imposition of capital controls? How can debtor information best be verified (through IMF releases; through creditor data sources)? How can the problem of privileged information be dealt with?

Provision of creditor information. How should information about the actions and intentions of creditors be provided to other creditors (by the official community or by agent banks in key markets)? How can it be obtained and verified, particularly if the debtor does not already have a reporting system in place? If there is some form of commitment to roll-over exposures, what information is needed to ensure that the creditor is not "shorting" the country in some other way? How can the debtor's ongoing market intelligence be used to best advantage?

Paris Club information. What types of information should be provided, to whom and when?

Priority financing. How can essential financing be arranged, and what implicit or explicit seniority should it have?

Hold-out creditors. What actions should debtors and other creditors take in the event that a minority of creditors decline to participate?

Standfast agreements (informal, non-binding understandings that sets of creditors will roll over exposures for a set time). Is there a need for them? How long should they last? In what conditions should they be allowed to lapse?

Annex: Brazil's 1998/99 experience with creditor co-ordination

Brazil's experience dealing with the creditor co-ordination problem is instructive. Very early in its debt negotiations, it realised the importance of demonstrating to individual creditors that other creditors were prepared to roll over their exposures. In the road shows undertaken in late 1998 to explain the country's policies, creditor after creditor expressed concerns about what other creditors would do. The story was always the same. While the speakers themselves were confident that Brazil's policies would enable the country to service its debts, they were suspicious that other creditors would "rush for the exits".

Brazil's strategy was to show to its creditors that the country's adjustment efforts together with the financial support being provided by the international official sector would allow a transition to an over-financed balance of payments in case they opted to maintain their exposures to the country. Given that their returns would be higher in this scenario, it would be rational for creditors to voluntarily roll-over their exposures.

The main challenge was to demonstrate to individual creditors that other creditors would maintain their lines. Brazil met this challenge by adopting a focused communications policy. It continued to explain its policies to its creditors. It also designated a single, well-respected private financial institution as its "focal point" in each of the main financial centres. The task of the focal point was to disseminate information collected by the Brazilian authorities about the overall foreign exposure to Brazil, as well as the rollover performance of institutions based in other financial centres. By providing a means to demonstrate to banks in, say, London that banks in the other major centres were prepared to renew their lines, they resolved the "prisoner's dilemma". Armed with information about what other banks were doing, banks were prepared to make an informal undertaking to stand behind Brazil and roll over their exposures.

The Brazilians respected the confidentiality of bank-by-bank information by communicating the rollover data centre by centre rather than institution by institution. However, it also sought to explain the reasons for individual institution's actions. For example, mergers and acquisitions led to changes in some institutions' overall investment strategies. Such changes in broad strategy may affect the propensity to hold emerging market debt in general. It was important to demonstrate to other creditors that any change in willingness to hold Brazilian debt was the result of exogenous factors, not a sign of lack of confidence in Brazil's performance or prospects.

Co-operation with the authorities in the main financial centres was also important. Their interest in developments in a country in crisis stems from their overall concern about systemic stability and their interest in the health of the financial institutions that they supervise. In several centres the meetings between the Brazilian authorities and the main creditor institutions were hosted by the local central bank which took an active role in explaining to its financial institutions the logic behind the approach being proposed. Moreover, the authorities in the main financial centres also collected and disseminated information on creditor exposure and held regular conference calls among themselves to exchange information. The Brazilian authorities joined these calls and helped to provide information on their policies and to reconcile debtor and creditor information on rollovers.

The success of the Brazilian's efforts to resolve the creditor co-ordination problem can be attributed to: (1) an effective debt monitoring program, (2) the use of "focal points" in key financial centres to communicate information about other creditors, (3) the assistance provided by the official sector in the main creditor countries, as well as the international official sector, in supporting the initiative and helping disseminate the systemic as well as individual advantages of a voluntary and coordinated approach, (4) the nature of its counterparties, which had an interest in a longer term relation despite extending short term credit, and of course (5) the sustained pursuit of policies that made the country creditworthy.

One should not, however, underestimate the difficulties involved. The data requirements are enormous. Parties in all transactions have to be clearly identified, imposing very high demands on information. Creditor and debtor data are difficult to reconcile, opening the door to differences in interpretation of underlying behaviour. The surveillance exercise has to be undertaken on a very high frequency, so as to capture changes in behaviour early on, imposing a very high demand on resources. Finally, the nature of the credit subject to the voluntary exposure maintenance understanding is key in determining whether the system of monitoring and disseminating information is an appropriate way to tackle the free-rider problem.

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