INTERNATIONAL MONETARY FUND BAILOUTS, MORAL HAZARD AND PRIVATE SECTOR INVOLVEMENT

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Abstract:
Since the mid-1990s, the IMF has provided large financial assistance to a number of member countries affected by serious financial and exchange rate crises. Because of the unprecedented size of these packages and possible negative side effects, the desirability of such assistance has become a hotly discussed issue. A consensus is now forming that official lending to country in crisis should not cease completely, but at the same time, official funds cannot be expected to fill in any existing financing gap. The article evaluates the risk of moral hazard connected with IMF lending. Although the substantial assistance inevitably influences the behavior and expectations of all players, there is little support for argument that lending created serious moral hazard. The role of the IMF conditionality as the traditional tool of reducing moral hazard is described in the circumstances of the new capital account developments.

Keywords: IMF, financial assistance, moral hazard, financial and exchange rate crisis

JEL Classification: F330, F340, F350

1. Introduction

Since the mid-1990s, the International Monetary Fund (IMF) has provided extensive financial assistance to a number of member countries that have been affected by serious financial and exchange rate crises. Historically, the size of these packages has been unprecedented, both in absolute volumes or as a per cent of members' quotas or GDP. Not surprisingly, the desirability of such large official financial assistance to countries in distress has become a hotly-discussed issue. Many analysts and commentators have come to the conclusion that the IMF was misguided when it rescued countries in crisis by providing them large amounts of money.

As the intensity of discussion and wide range of views suggest, the appropriate role of the IMF in assisting member countries in deep financial crisis has become one of the Fund's most difficult and controversial issues. There are many reasons why providing large official assistance to countries in distress could have undesi-

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**) Views in this article are the author's own and do not reflect the official position of the IMF.

rable side effects, if not immediately, then at some point in the future. Equally serious arguments state that not helping the countries in trouble could entail significant costs, not only to the affected countries themselves, but possibly to other countries as well.

While many would certainly argue that not enough progress has been made in resolving this dilemma, it is undeniable that important progress has been made in improving our understanding about the trade-offs involved in deciding on the best course of action in dealing with countries in financial crisis. Extreme solutions on both sides of the spectrum – either continue providing whatever official financing is necessary to cover the financing gap in countries in crisis, or abstain completely from providing new money and allow the country to default – do not seem to receive much support. A consensus is now forming that official lending to countries in crisis should not cease completely, but at the same time, official funds cannot be expected to fill in any existing financing gap. This brings out the issue of how to involve the private sector in crisis resolution. There are, however, many possible approaches to implementing this strategy of private sector involvement, and many questions remain unresolved. For example, should the international official community seek to establish strict criteria for private sector involvement in a crisis? Or should there be a sufficient degree of ambiguity and flexibility that would allow treatment of private sector involvement in each country on its own merit, taking into account its specific circumstances? How forceful should the official community be in trying to involve the private sector? How should different categories of investors be treated?

This article addresses some of these issues. As background for this discussion, we will first provide some information about the shifts in official and private financial flows to emerging market countries. Second, we will discuss the criticism directed to the IMF in connection with these "financial bailouts". We will assess the risk of moral hazard connected with IMF lending, and provide some empirical evidence about the importance of this problem. As we will see, there is little empirical support for the argument that IMF lending has contributed to a serious moral hazard problem. We will, however, note some qualifications to that conclusion, and we recognize that substantial financial assistance inevitably affects the behavior and expectations of all players (governments, investors), and that resolving a financial crisis by using significant official financial support could have important undesirable effects on these players' behavior.

We will describe what the IMF does to mitigate the problem of moral hazard. We note the role of the IMF conditionality as a traditional tool of reducing moral hazard, and also its limits under the new circumstances when IMF lending is driven more by capital account developments. One way to address this problem is the policy of private sector involvement in crisis resolution. We will discuss the possible approaches to involving the private sector in resolving liquidity and insolvency crises. We will conclude with some thoughts about how private sector involvement is going to evolve in the future.

2. Changing Structure of International Capital Flows

One of the salient features of development in the international financial system during the 1990s has been the rapid increase in volume and diversity of international capital flows. There are political, economic and technological reasons for this increase. Many former centrally-planned economies, as well as developing countries, have embraced political and economic reforms that have resulted in a substantial liberalization, deregulation and privatization of their economies. With these chan-

ges there have come improved economic performance, and increased attractiveness of these economies to foreign investors. At the same time, rapid technological changes have made it possible to gather, analyze and disperse information faster and at lower cost. The so-called emerging markets, countries that have embraced market-friendly reforms but that have not yet reached the status of developed countries, have become attractive targets for investors in rich countries, who see the opportunity of higher returns at acceptably moderate risk.

In one sense, the developments in the 1990s have their precedent in the era of the gold standard in late 19th and early 20th centuries, which were characterized by large international capital flows. However, as Bordo et. al. (1999) show, there are large differences in the international capital market integration one hundred years ago and now. While capital flows during that era were large relative to the size of the recipient economies, these flows were limited to several sectors of the economy (a classical example being railroads) and to a few instruments (long-term bonds). In addition, debt financing played a more important role than equity financing. Perhaps the most important factor in the changing structure of international capital flow today compared with the gold standard era is the reduction in information asymmetries between creditors and debtors (see Bordo et. al., 1998). In the earlier period, the relative lack of information and the high risk of doing business in foreign countries led investors to invest only in undertakings with tangible and easy to monitor assets, such as railroads or telegraph lines. The information asymmetry problem has been progressively reduced, and the legal and institutional frameworks in borrowing countries has evolved. That has resulted in reduction of investors' risk and allowed gradual diversification of investment into areas that would earlier have been considered too risky.

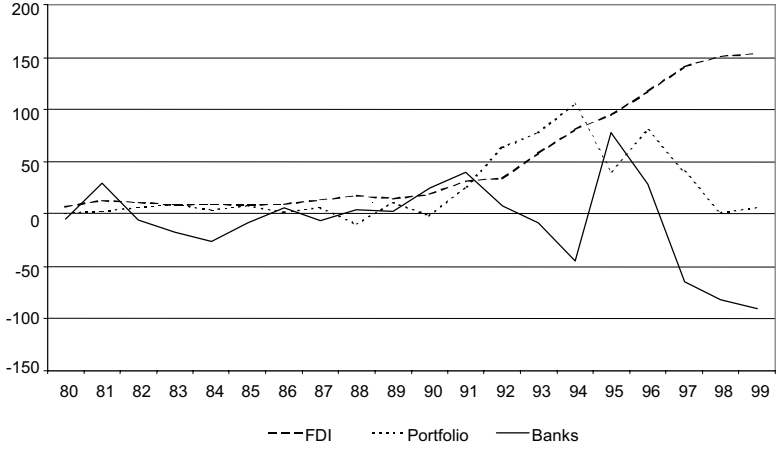
As a consequence, while the size of capital flows today may not be that much different relative to the size of the economies, the qualitative aspects of capital flows have changed. First, the speed of transmission of information has increased dramatically, from weeks before the invention of telegraph to seconds with the advent of modern information transmission technology. Second, there has been a sizeable increase in regional diversity of lenders and borrowers. Third, international capital flows now finance a much wider scope of economic activities. Fourth, as a result of ongoing financial innovation, an increasing diversity of investment instruments is used in international capital financing.

What about financial and currency crises in the earlier period of large international capital flows? While the era of the gold standard is sometimes described as the era of financial stability, this is a highly misleading picture. During the 19th and early 20th centuries, serious financial and currency crises were not a rare occurrence. In some respects, however, these crises were different from their modern cousins (see Bordo et. al., 1999). On average, these crises were less costly in terms of output loss, though there were some notable exceptions. Currency crises were reversed relatively quickly, which is explained by the mechanism of the gold standard. Countries that were forced to abandon gold parity during a currency crisis usually tried to return quickly to the gold standard and re-establish pre-crisis parity. Investors did not much fear the risk of continued depreciation and inflation, and quickly came back. On the other hand, financial crises were more protracted earlier than now. The most probable explanation is the absence of a lender of the last resort that would help to restore depositor's confidence quickly. The question is whether the absence of the lender of the last resort did not also mean that there was less risk of moral hazard, and thus a better functioning of financial markets. Bordo et. al. (1999) suggest that this could have been the case.

Despite the relatively frequent occurrence and comparable seriousness of financial and currency crises one hundred year ago, there was little perception of impotence among politicians in the face of large capital flows. It is hard to imagine that Theodore Roosevelt would complain the way President Clinton did that in his future life, he would like to be born as a bond market, in his view a more powerful institution that the office of the U.S. President. Clearly, financial markets and capital flows today have much stronger effects on economic policies.[1)]

It does not require the span of a hundred years, between the era of the gold standard and today, to produce significant shifts in the size and composition of capital flows. We can detect important changes in the structure of capital flows to emerging markets just during the modern period. Before the debt crisis of the 1980s began, banks were the main providers of private financing to emerging markets. To illustrate, in 1984, emerging markets' external debt to bank creditors was nine times higher than the debt owed to non-bank private creditors. In 1996, debt owed to bank private creditors was roughly equal to the debt owed to non-bank private creditors (see Cline, 2000). Chart 1 illustrates these trends. While in the early 1980s, banks were the main creditors, on a net basis, they did not provide much new financing to emerging markets, and with few exceptions, they have been reducing their exposure over the last 20 years. As a result, the relative role of banks as sources of lending to emerging markets has declined significantly, and this trend is expected to continue. On the contrary, emerging market borrowers are now raising a larger percentage of their funds in international capital markets, as evidenced by the increasing size of net portfolio flows, though this source of financing could be highly volatile. The most remarkable is the dominance and stability of foreign direct investment, which shows a continued increase since the end of the 1980s.

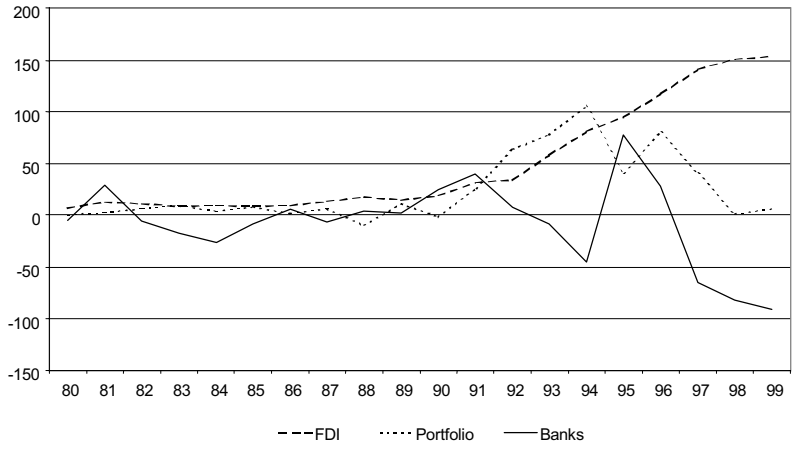
Chart 1
Net Private Capital Flows to Emerging Markets (billion USD)



1) One can argue that this is true both in a good and a bad sense. Sometimes, they prevent the government from pursuing irresponsible policies, and thus play a disciplining role. Sometimes, however, they prevent the government from pursuing a policy that would be otherwise in the best interest of the country, as, for example, when during a crisis financial policies need to be tightened to demonstrate the commitment to price stability.

Finally, we should note another important trend in the development of international capital flows, namely the shifting role of private and public financing. For most of the 1980s, the size of public financing exceeded private financing. During the 1990s, however, the situation has reversed dramatically, as illustrated in Chart 2, and private financial flows to emerging markets have begun to dominate. In 1989, net private financial flows for the first time since 1981 exceeded net official financial flows, and the difference widened dramatically by the mid-1990s. Even during the turbulent years of financial crises in the latter half of the 1990s, the time of large official financial packages and large capital outflow from many emerging market countries, private financing remained higher than official financing.

Chart 2
Net Capital Flows to Emerging Markets (billion USD)



Starting with the Mexican crisis that erupted in late 1994, the second half of the 1990s has been characterized by a large number of relatively serious financial and currency crises. As can be seen from Chart 1, these crises were reflected in the sudden large outflow of capital (both foreign and domestic) from emerging market countries. The size and speed of this outflow had dramatic effects on the affected economies. These crises presented a new challenge to the international financial community, and particularly to the International Monetary Fund, which is responsible for international financial stability, and which was thus called upon to deal with these crises.

We can see how serious were the crises in the second half of the 1990s when we look at the size of balance of payments adjustment that the affected countries had to undertake, and the size of official financing packages that were assembled under the IMF rescue programs. Table 1 shows the extent of current account adjustment, as a percentage of GDP, in the affected emerging market countries after the financial or currency crisis hit. Table 2 shows the size of the IMF financial support provided to these countries, both in absolute terms and in terms of GDP and countries' IMF quotas.

The size of balance of payment adjustment was particularly impressive in Korea and Thailand, and to a lesser extent in Indonesia. In Korea and Thailand, the change in the current account balance between year t and $t + 1$ reached 14 – 15 per cent of GDP, which required a significant restriction of domestic demand, with accompa-

Table 1
Countries in Crisis: Current Account Balances (in % of GDP)

Country (*t*-year)[1)]	*t*-1	*t*	*t*+1	*t*+2
Argentina (2000)	-4.4	-3.4	-3.4	-3.0
Turkey (2000)	-0.7	-4.8	0.4	0.1
Brazil (1999)	-4.5	-4.7	-4.2	-4.5
Russia (1998)	-1.3	0.3	12.4	18.4
Indonesia (1997)	-3.5	-3.0	3.4	4.1
Thailand (1997)	-7.9	-1.9	12.1	10.2
Korea (1997)	-4.9	-1.8	13.1	6.0
Mexico (1994)	-6.5	-7.0	-0.6	-0.6

1) IMF May 2001 World Economic Outlook, forecast for countries where *t*+1 and *t*+2 mean years 2001 and 2002.
Source: IMF World Economic Outlook, different issues.

nying adverse effects on domestic economic activity. However, large currency depreciations, combined with strong import demand growth (particularly in the United States) also spurred Asian exports, and has thus somewhat facilitated the current account adjustment. This is also true in the case of Russia, where the high price of oil was the main cause of large improvement in current account. In Mexico and Turkey, current account adjustments were much smaller than in Asia, and it is practically non-existent in Brazil and Argentina. There are several reasons for this different adjustment in Asia and Latin America. Crises in Asia were more virulent, and

Table 2
Countries in Crisis: IMF Financial Assistance[1)]

Country	USD milion[2)]	Per cent of quota	Per cent of GDP[3)]
Argentina	13 956	500	4.68
Turkey	15 036	1560	9.38
Brazil	10 400	343	1.60
Russia	13 200	222	3.80
Indonesia	8 340	400	5.70
Thailand	2 900	505	3.00
Korea	15 500	950	4.10
Mexico	15 200	500	4.10

1) Approved assistance which was not always disbursed fully.
2) IMF loans are denominated in SDR, USD equivalent was calculated using the rate SDR 1 = USD 1.26.
3) GDP figures are for the following years: Argentina and Turkey, for year 2000, Brazil for 1998, Mexico for 1994, other countries for 1997. Large exchange rate fluctuations after the crises can significantly change GDP in USD and thus the size of financial assistance in terms of GDP.
Source: IMF.

have affected the banking sector more seriously. Asian economies are also more open, measured in terms of trade flows relative to GDP, and thus can achieve larger adjustments in current account balance for the same percentage changes in trade flows.

Despite the much larger size of current account adjustments, Asian crisis countries have received comparably large IMF financial assistance.[2] This suggests that dealing with their problems required both large adjustments and large financing. The main reason was the huge capital outflow and absence of new market financing, but also the desire to accumulate large foreign reserves that would serve as cushions against any future market shocks. In contrast, Brazil and Argentina have experienced relatively smaller capital outflow, and despite the problems with access to new private financing, the need for current account adjustment was therefore comparatively smaller.

3. International Monetary Fund Lending: Quick Recovery versus Moral Hazard

This unprecedented financial assistance has provoked a lively debate about the costs and benefits of large official bailouts of countries facing balance of payment problems, and about the proper role of the IMF. Some have strongly criticized these large financial rescues, while others have argued that despite some problems, they were necessary to prevent even worse outcomes. This is a crucial issue. Did the large IMF-led financial rescues to countries in crisis prevent even larger economic collapse of economic activity, and even more serious disruptions in the international financial system? Or did they create a serious risk of moral hazard that could, in the future, result in more irresponsible behavior of investors, in misallocation of capital, and thus in the increased likelihood of new crises?

We have noted in the previous section that nowadays, countries are recovering faster from domestic banking crises, and that one possible explanation of faster recovery is the presence of lenders of the last resort in the domestic economies that have prevented protracted large loss of confidence in the financial soundness of banking sectors. Similarly, one can argue that in the international context, the presence of the International Monetary Fund and other multilateral institutions has been conducive to a faster recovery in market confidence in international financial markets. When we examine the experience of countries suffering from financial crisis and from a loss of access to international capital market today, we see that recovery from crisis takes much less time than in the past.

While it took half a century for Argentina to regain access to international borrowing after its default in the first half of the 19th century, and it took a decade for countries to regain the access after the debt crisis in the 1980s, countries affected by crisis in the 1990s were generally able to renew access to international capital market in a matter of one year or so (with some exception like Russia). Asian countries, Mexico and Brazil all suffered dramatic collapse of economic activity, but this collapse did not last long, and in many cases, was followed by a very swift recovery (see Table 3). These countries where recovery did not take place, such as Indonesia or Turkey, have suffered from serious political problems that did not allow them to tackle the crisis decisively, and thus benefit from a swift recovery as other countries did.

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2) It should be noted that IMF loans represented usually only a part – though the largest and most of what was actually used – of a larger financial package to which other multilateral and bilateral official creditors contributed. For example, in case of Mexico, total external financing package amounted to more than USD 50 billion. The United States provided bilateral support of USD 20 billion.

Table 3
Countries in Crisis: Collapse and Recovery (growth in real GDP)

Country (*t*-year)[1)]	*t*-1	*t*	*t*+1	*t*+2
Argentina (2000)	-3.4	-0.5	2.0	3.8
Turkey (2000)	4.7	7.2	-2.6	4.9
Brazil (1999)	0.2	0.8	4.2	4.5
Russia (1998)	0.8	-4.8	3.2	7.5
Indonesia (1997)	8.0	4.6	-13.7	0.8
Thailand (1997)	5.5	-0.4	-8.0	4.2
Korea (1997)	7.1	5.5	-5.5	10.9
Mexico (1994)	3.5	3.7	-6.9	7.0

1) IMF May 2001 World Economic Outlook, forecast for countries where *t*+1 and *t*+2 mean years 2001 and 2002.
Source: IMF World Economic Outlook, different issues.

However, these benefits of large IMF lending have not been much emphasized. One reason why this may be the case is the sequence of crises. Once a crisis was over in one country or region, problems began to appear elsewhere. When Mexico began its recovery from a crisis, troubles started in Asia, and as soon as Asia began its recovery, crises followed in Russia and than in Brazil, Turkey and Argentina. Second, even in countries that have recovered spectacularly, mainly Korea and Thailand, this recovery began to weaken in 2000 and 2001, on account of weakening of global economic activity and their export markets in the United States particularly, but also because of incomplete structural reforms.

Therefore, the discussion of the effects of IMF lending has focused mostly on the potential negative consequences of official financial assistance. Critics of IMF lending argue that providing large official financial assistance to countries in financial crisis is wrong because it allows private investors to liquidate their high-return investments without suffering losses. Investment to emerging markets provides higher return only because it is more risky. If investors are protected from the negative consequences of their investment decisions, and if they are always allowed to realize high returns, their investment decisions will be distorted, with adverse consequences for the allocation of capital.

This line of argument is taken in the so-called Meltzer Report (see International Financial Institution Advisory Commission, 2000), which argues that "the importance of the moral hazard problem cannot be overstated. The powerful root of moral hazard lies in the IMF's encouragement, or lenders' perception of its encouragement, of short-term, foreign currency loans to developing countries." The Report suggested that the IMF and U.S. Treasury-led rescue of Mexico in 1995 subsequently stimulated acceleration of short-term capital flow to countries in Asia, and thus directly contributed to the Asian crisis in 1997 – 1998.

However, the assertion in the Meltzer Report that the problem of moral hazard cannot be overstated seems to be denied by this very report. There is no doubt that the presence of IMF lending, like any other form of insurance, affects the behavior of the players (here creditors and debtors, both private and public). With the IMF lending acting as insurance against undesirable outcomes, both investors and deb-

tors may take more risk, and this in turn could increase the likelihood that such undesirable outcome actually happens. The question is not whether IMF presence reduces the uncertainty and risk facing both investors and debtors, but the degree to which it does.

The evidence does not seem to support the argument that IMF lending creates a serious moral hazard problem. To begin with, we have to keep in mind that not every reduction of risk is undesirable, and not every reduction of risk causes moral hazard in the sense of encouraging undesirable behavior. IMF lending encourages the pursuit of sound macroeconomic policies and structural reforms which are bound to improve the economic performance of a borrowing country. If IMF lending contributes to improved economic performance, if it prevents a costly collapse of an economy, sharp depreciation of a currency and steep decline in asset values, it obviously reduces the risk that investors face and increases their risk-adjusted return. As a result, the IMF thus increases their incentive to invest in a country. If such investment is productively used, if it enhances the productive capacity of a country and at the same time provides a positive return to investors, could we argue that there is a moral hazard problem caused by the IMF lending? Hardly so. IMF lending would create a moral hazard problem only if it supported the continuation of bad policies and distortions that could encourage excessive risk-taking.

What do we know about the importance of moral hazard as a result of IMF lending operations? Several authors have attempted to find an answer to this question, and the emerging conclusion is that the contribution of IMF lending to the moral hazard problem is small.

Take the specific question of whether the official rescue of Mexico contributed directly to the Asian crisis, as the Meltzer Report claims? After the Mexico rescue, there appeared to exist strong evidence that this bailout had indeed created a serious problem of moral hazard. In the aftermath of the Mexican rescue in 1995 and 1996, capital flows to emerging markets accelerated and borrowing costs declined sharply. However, there are serious conceptual objections to the argument that the IMF rescue of Mexico was responsible for these developments (see, for example, Eichengreen, 2000). From the investor's perspective, why would a rescue of Mexico result in a sudden surge of capital flow to Southeast Asia and not to Latin America? Does the collapse of Mexico make more likely a collapse and subsequent rescue on the other side of the globe? There is also the political economy argument: financial assistance to Mexico has been subsequently strongly criticized, among others by the U.S. Congress, which even took legal steps to temporarily prevent the U.S. Treasury from using money from the Exchange Stabilization Fund. In such a political climate, distant countries such as Thailand or Korea should not be seen as likely recipients of large official financial assistance. Even more importantly, however, in the aftermath of the Mexican rescue, countries in Southeast Asia did not look like strong candidates for financial crisis. At that time, they still enjoyed the image of "Asian tigers", and though more careful (some would say excessively suspicious) analysts detected signs of possible vulnerabilities in financial systems in some countries, such concerns have received scarce attention in light of the generally strong macroeconomic performances.[3)]

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3) To illustrate the optimistic mood that prevailed in Southeast Asia even in the second half of 1997, after the crisis was already unfolding in Thailand, let's quote Mark Mobius, the manager of Templeton Global Strategy Fund. Mobius stated in the TGSF Fact Sheet from September 1997 that " the recovery in the global electronics industry should be a big positive for Korea and real growth in the economy is expected to accelerate to 6.8 per cent in 1998 from 5.9 per cent in 1997." Well, not exactly. Korea's growth in 1998 did not accelerate, but plummeted to -5.8 per cent.

Available empirical evidence seems to render support to this view that the IMF bailout of Mexico was not the main factor behind accelerated capital flows to emerging markets, and that IMF financing is not a large source of moral hazard. The hypothesis that the IMF Mexican bailout contributed to the subsequent high volume of lending to emerging Asian markets and to the financial crisis was tested and refused by Zhang (1999). Zhang came to the conclusion that large capital inflows were driven mainly by the economic fundamentals of the recipient countries. Similarly, Lane and Phillips (2000) consider whether IMF bailouts are a source of moral hazard. They look at the behavior of borrowing spreads at times of crisis and find that this behavior contradicts the market expectation of a blanket guarantee. Further, they look at individual IMF announcements of support to countries in difficulties and find that these announcements do not result in narrowing spreads, as would be the case if moral hazard was present.

Some authors also point to the fact that in Russia and Asia, private investors have suffered significant losses, and that the issue of moral hazard is exaggerated.[4] But this argument is less persuasive and does not provide bulletproof evidence against the presence of moral hazard. It is necessary to compare these losses with the exceptional returns realized by the same investors before the crisis. Moreover, distortions resulting from moral hazard could be present even if some private investors are not rescued from the adverse consequences of their investment decisions. While some investors may suffer large losses, others could realize large profits. Foreign banks that have provided short-term and thus liquid loans generally did not suffer any losses. Their loans are not market to market, do not lose value, and can be quickly shut off. Even in cases where banks were encouraged by the official sector to roll over short-term loans, they did it under conditions that guaranteed them solid profits.

We have to be careful, however, when interpreting the apparent lack of persuasive evidence of moral hazard in international capital flows resulting from IMF lending. Several points need to be made.

First, the IMF is not the only potential source of moral hazard. An important potential source could be guarantees provided by governments to their banking system liabilities. Similarly, the readiness of the authorities to maintain fixed exchange rates has created a guarantee against exchange rate risk.[5] The combination of relatively high domestic interest rates, perception of banking sector guarantees and fixed exchange rates provided attractive investment opportunities for foreign creditors, and equally attractive borrowing opportunities for domestic debtors. Honig and Sonali (2001) tested whether the presence of government guarantees to the banking system in Asian countries before the crisis produced moral hazard. They used detailed micro-level data on banks balance sheets and found strong evidence of moral hazard among bank creditors and managers alike.

Second, we have to note the case of Russia. It is now widely recognized that the readiness of the official financial community to continue providing financial assistance to Russia, despite its lack of progress in addressing the most serious economic

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4) The Institute of International Finance (IIF) estimates that losses of private investors in East Asia and Russia may have amounted to USD 240 billion for foreign equity investors, USD 60 billion for international banks, and USD 50 billion for other private creditors (see IIF, 1999).

5) If the willingness of the IMF to provide financial support to a country with a pegged exchange rate is seen as increasing the probability that this peg will be sustained, then it could be argued that the IMF has contributed to the imprudent behavior that pegged exchange rates have stimulated. But this argument is weakened by the well-known hesitation of many Southeast Asian countries before the crisis to approach the IMF and ask for financial support.

problems, led foreign investors to believe that it was too important to be allowed to default on its debt, and that it was thus a good investment opportunity, offering high returns and low expected probability of default. Market participants were talking about Russia's "moral hazard play". After the 1998 Russian devaluation and default, investors were genuinely caught by surprise and they suffered losses. It could be expected that in the future, they will invest in Russia much more carefully. It is also remarkable that economic policies in Russia have improved notably after the 1998 crisis. When the authorities realized that they could no longer count on official financial support, they were finally forced to address the most serious structural problems. Though much remains to be done, genuine progress has been achieved in structural and institutional reforms, and in the conduct of macroeconomic policy. In connection with the favorable terms of trade shock resulting from high oil prices, the 1998 crisis seem to have provided the incentive to pursue the right policies.

Third, the extent to which moral hazard is present in international capital flows has not yet been tested after the most recent large IMF financial packages to Turkey and Argentina. One can argue that these two financing packages may have increased the perception of IMF guarantees to countries that are too important to be allowed to fail. On the other side, the Russian experience should suggest that there are limits to the IMF willingness to support a country that repeatedly fails to correct underlying economic problems. Furthermore, the extent of the moral hazard problem may be changing in light of private sector involvement, a process which is still developing.

On balance, we can draw two conclusions. First, the evidence noted above does not support the hypothesis that IMF lending was an important source of moral hazard in international capital flows. Specifically, there is little evidence that Mexico's rescue contributed to excessive capital flows and the subsequent crisis in Asia. Second, in spite of this evidence, we cannot rule out the possibility that IMF lending may have undesirable effects on the investors' and debtors' behavior. In the present uncertain global environment, capital flows to emerging markets are more volatile and generally less abundant. Therefore, the problem of moral hazard in international lending does not seem to be presently acute. But this does not mean that we can be confident that large official financial assistance provided by the IMF and other official creditors does not create a serious risk of moral hazard. As global economic prospects stabilize and investors' aversion to risk declines, capital flows to emerging market countries is likely to pick up, and moral hazard could become a more serious problem.

4. To Lend or Not to Lend?

International Monetary Fund lending to member countries affected by financial crisis can provide important benefits. It can help countries to recover faster from a crisis, and it can prevent the crisis from spreading into other countries and regions. What can be done to reduce the undesirable side effect of the IMF lending, the increased risk of moral hazard?

Some would argue that the best solution should be to completely avoid extending financial assistance to countries suffering capital outflows and let private creditors and debtors work out the problem on their own. However, such a market-based solution suffers from serious problems which make it unattractive in practice. What does it mean exactly if we say that creditors and debtors alone should solve the problem? In most cases, it would mean that the debtor would default its debt payments. Defaulting of debt obligations could be a potentially disruptive and costly event, and it could have serious long-term costs for the affected country. In all like-

lihood, such a country would lose access to private foreign financing for a long time. At best, it would be able to borrow abroad only at a high price, which would reflect the increased risk premium charged by investors concerned about another debt default. Moreover, default by one country would adversely affect other countries seen by investors as sharing similar characteristics, and thus similar problems. These countries would see their access to foreign borrowing limited and more expensive, even if there was no change in their economic fundamentals and policies. For these reasons, default is not an attractive option, and there is not much willingness to use it as a standard tool to resolve countries' financial problems.

A more promising way is to explore how IMF lending could continue, without allowing moral hazard to create large distortions in international capital flows that would increase the likelihood of future financial turbulence and crises. There are many possible approaches. Some already have been applied for some time, others are now being explored. In the latter category, private sector involvement is the most important and promising approach.

A useful way to discuss the rationale for private sector involvement is to look at the role of central banks as lenders of the last resort in domestic financial systems. Today, central banks and governments in most countries provide a safety net to banks (and sometimes to other financial institutions) to protect them against a sudden large withdrawal of deposits. But governments did not always act as guarantors of bank liquidity. During the era of the gold standard, in most countries there was little if any such support available to banks. Bank runs and bank crises occurred frequently, but they were less serious than modern banking crises, measured in terms of negative net worth and losses to creditors and depositors or taxpayers more recently (see Calomiris, 2001).

Today, the rationale for safety nets in domestic banking systems is well understood and generally accepted. The main purpose of the safety net is to provide assurance to bank depositors that their deposits will not be at risk simply because some other depositors decided to withdraw their money. This protection does not come unconditionally, however. As governments have extended protection to depositors, they simultaneously have increased the intensity of bank regulation. Banks have been subject to increasingly strict regulations and requirements that restrict them from taking too much risk. The government safety net has substantially reduced the disciplining role of market forces such as bank runs on bank managers' behavior. In order to avoid a serious problem of moral hazard, governments have had to resume the role of disciplinarian of market mechanisms. Providing protection in the form of a safety net creates a moral hazard problem, and increasing bank regulation is a way to reduce this moral hazard. For this reason, banks are today the most regulated industry even in the most liberal countries. [6)]

A country can find itself in difficulty similar to a bank. For different reasons, sometimes not directly related to developments in that country, foreign and domestic investors may decide to unwind their positions and liquidate holdings of the country's assets (bank deposits in local currency, portfolio investments, trade credits, etc.). If this outflow is sufficiently large, it can quickly exhaust a country's foreign reserves, in the same way in which depositor run on a bank could exhaust its reserves. Because investors know that a country's foreign reserves are limited, when panic starts and capital begins to leave country, it is in their interest to leave such

6) A revealing illustration of how extensive the regulation of banks has become is the presently discussed Basel Committee proposal to amend the rules on how much capital banks must set aside (so-called Basel II), which contains about 500 pages.

country as soon as possible. Otherwise, they would be taking the risk that the country will run out of foreign reserves and they will be unable to liquidate their domestic currency investment. The fact that domestic currency and asset values are likely to decline sharply in the course of this panic would only add to investors' effort not to be the last in line.

How can countries defend themselves against such potentially damaging runs? Before World War II, there was no formal mechanism, no international lender of the last resort that would provide a country in need temporary liquidity.[7] After the war, the IMF, the World Bank and other multilateral financial organization came into existence. These institutions began to provide loans to individual countries, either for development purposes, or to help to stabilize the balance of payments. For some time after World War II, however, capital account transactions were restricted, and sudden large capital movements were not a serious problem of the international financial system. The IMF has financed mostly trade balance deficits. Only in the 1980s most advanced economies have completed capital account liberalization, and in the 1990s, an increasing number of emerging market countries began to liberalize capital account transactions as well. In this environment, international capital flows began to increase rapidly, as was shown in part one, and simultaneously, the risk of serious financial disturbances connected with sudden large capital outflows became more likely. As financial crises erupted in the second half of the 1990s, the IMF found itself in a situation where it was financing large capital outflows.

Thus, more by default than by design, the IMF began to play a role similar to that of domestic central banks. It was providing large liquidity support to countries suffering large capital outflows. Formally, one can argue that the IMF was just pursuing its mandate specified in the Articles of Agreement, which is to give confidence to member countries affected by adverse shocks by assisting them in adjusting to these shocks in an orderly way. However, *de facto,* this was an important change. In domestic context, creation of a safety net to help banks deal with liquidity problems was accompanied by tighter regulatory and supervisory rules, so as to avoid increased risk of moral hazard. Similarly, the provision by the IMF of a safety net to countries suffering from large capital outflow has increased the risk of moral hazard in the international context. In the same logic, this new role of the IMF in financing capital outflows has made it important to introduce measures that would mitigate such risk.

There are several ways for the IMF to reduce the risk of moral hazard resulting from its lending. As we have indicated, some measures had already been applied before the financial crises of the 1990s. Among them, the most important is the IMF conditionality. Conditionality comprises a set of conditions that a country must meet in order to become eligible to receive IMF loans. Generally, these conditions are designed to ensure than a borrowing country corrects the problems that led it to ask for IMF assistance. By attaching conditions to its financial assistance, the IMF seeks to avoid a situation where its money would be used to finance irresponsible policies and postpone painful and unpopular adjustment. Therefore, conditionality should reduce moral hazard on the side of a borrowing country, in other words the risk that its policymakers would pursue irresponsible policies in the knowledge that the IMF could help them to overcome the adverse consequences of that irresponsibility.

For several reasons, however, conditionality is not a perfect tool to reduce the risk of moral hazard in IMF lending. First, while it can help to prevent undesirable

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7) During the gold standard era, private financial companies sometimes provided temporary liquidity support to otherwise creditworthy countries in trouble.

behavior by policymakers in the borrowing country, it does not affect the behavior of the country's private sector creditors. This might not have mattered much at times when the IMF was financing mainly trade deficits, but it can become a serious constraint when the IMF finances capital outflows. In the former case, the need for IMF financial support has traditionally arisen from imbalances originating in the public sector, as a result of excessively expansionary macroeconomic policies. In the latter case, the need for IMF financial assistance is more closely connected with the behavior of private agents who are now important or dominant players in intermediating international capital flows.

Second, conditions agreed between the IMF and a country are subject to relatively frequent revisions and waivers in case of noncompliance. IMF conditions for loan disbursements are not used as a clear-cut indicator of whether the country's program is on track and whether it deserves the money or not. Given the imperfections in understanding how economies work and how economic indicators monitored for conditionality purposes will evolve in the future, IMF conditionality serves rather as a signalling device, as a red flag that something does not work as expected. This could be because of policy slippages, or because of external shocks, or simply because of making mistakes when the program supported by the IMF was put together. The point is that there is a lot of uncertainty surrounding the IMF programs, and that originally-agreed conditions cannot be interpreted as rigorously as would be the case if our understanding of the workings of economies was more perfect. Inevitably, there are elements of subjective judgment and negotiation involved in interpreting the deviations from original conditionality indicators, which may thus weaken their disciplining role.

Third, IMF conditionality affects the behavior of a borrowing country only during the period when the loan is being disbursed in installments (tranches), but little if at all after the money has been disbursed. The ability of the IMF to affect the behavior of a country that has completed drawing money or that does not need IMF money at all is more limited. The IMF conducts regular monitoring of member countries' policies, but it has little leverage to see that its recommendations are implemented and concerns addressed. If a country borrows excessively during good times and its short-term debt increases dangerously, the ability of the IMF to stop such behavior is much less than the ability of domestic regulators to stop a bank from accumulating large risky exposures. Yet, if such country gets into trouble, past bad behavior and disregard for IMF advice will not disqualify it from IMF financial assistance.

For these reasons, IMF conditionality alone may not reduce the risk of moral hazard acceptably. These limits of conditionality to deal with moral hazard consequences of IMF lending to countries in crisis have become a handicap particularly in the 1990s, as international capital flows began to pick up. In the absence of additional steps, it was likely that increased official lending to finance capital outflows would increase the risk of moral hazard. The IMF has approached this problem from several sides.

First, the IMF began to change the focus of conditionality. Because the IMF was now providing financial support to countries that suffered problems in capital account, often in connection with weaknesses in the domestic financial sector, conditionality began to focus more on financial sector vulnerabilities and structural policies.

Second, in response to financial crises in Mexico and Asia, the IMF has created new lending facilities that have made it possible to provide larger and faster financial assistance. That created the risk that increased access to the IMF funds would be misused by countries that are able to secure private financing, but instead use cheaper official financing. Therefore, the IMF has decided to make the conditions

for access to these facilities less attractive to borrowers, in order to force countries to rely less on official financing, and to seek to maintain or restore access to private borrowing. Specifically, the IMF has shortened the maturity of its loans, and introduced escalation of charges so that countries have a stronger incentive to use private financing if available or to repay IMF loans as soon as possible.

Third, in response to financial crises, the IMF began an intensive campaign for increased transparency by member countries. Increased transparency and data availability has several benefits, including better ability by market participants to assess the creditworthiness of a borrower and thus more efficient allocation of capital. This may not directly address the problem of moral hazard, but permits private agents to make better-informed investment decisions.

While all these steps are certainly useful in mitigating the moral hazard problem, they may not go far enough. Most importantly, changes in conditionality and stricter terms of IMF lending address the risk of moral hazard more from the borrowing country side, and less from the private creditor side.[8] Despite the recognition that balance of payments problems may now arise from the behavior of private agents, IMF conditionality still applies to public sector agents (central banks, ministries of finance, etc.). However, as private creditors' behavior became a more important factor affecting international capital flows and thus the probability that a country would have to request IMF financial assistance, many in the public sector saw a potential dangerous asymmetry developing. IMF lending to countries in crisis was providing a potentially important benefit to market participants, but they may not have carried the costs of these benefits fully enough. This asymmetry provides a solid economic argument for public policy that would seek to tie the provision of official financial assistance more directly to conditions applied to private agents' behavior. This is the policy of private sector involvement of private sector bail-in.

5. Private Sector Involvement

We will not go into the details of the rather complicated issue of private sector involvement, which has already been discussed quite thoroughly in the literature.[9] We should only highlight some general problems that arise in connection with private sector involvement and different avenues that are currently being explored.

Private sector involvement is a rather broad concept, and there are many different ways in which it may be pursued, depending on the specific situation of a country, on the size of its external debt (whether it suffers a liquidity problem or insolvency problem), on the structure of its creditors, etc. Depending on the specific circumstances, the objectives of private sector involvement are also different.

If there is a pure liquidity crisis, it means that the country is basically solvent, it can service its external debt, but does not have at a given moment sufficient liquidity (foreign reserves) to allow a large number of investors to liquidate their investments and leave. In order to ensure sufficient foreign reserves, it could be forced to liquidate its foreign assets. There is a risk, however, that a fire sale of assets at a low price will result in a large loss. One possible solution in a such case would be

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8) One can argue that for moral hazard risk to be present, two sides of financial transactions must behave in a certain way. If we reduce the risk of moral hazard on the borrowers' side, this should also reduce the risk of moral hazard on the creditors' side. In reality, the problem is more complicated. IMF conditionality may reduce the risk of irresponsible behavior of governments. At the same time, IMF conditionality may be less effective in preventing undesirable behavior of the private sector for which the government may have to bear the ultimate responsibility.

9) See, for example, Roubini (2000) or documents and publications on the IMF (www.imf.org.).

to provide, on a temporary basis, sufficiently large IMF financial assistance.[10] If the IMF lending were sufficiently large, investors' confidence would be restored, and there would be no need for private sector involvement in this situation. In practice though, the solution of a country liquidity crisis is more complicated than the solution of a bank liquidity crisis, and the IMF cannot easily replicate the domestic lenders of the last resort function.

First, unlike central banks, the IMF cannot freely print money used to provide liquidity support. Articles of Agreement allow the IMF to allocate a special liquidity, SDR's, but there is presently not enough political support for such a step. Second, it is hard to find pure liquidity crises in practice. Usually, some structural and/or macroeconomic problems exist that contribute to liquidity pressure. The IMF does not want to provide unlimited financial assistance to countries that suffer problems, and thus allow them to delay the necessary but frequently unpopular adjustments.[11]

An alternative argument has been also made, namely that a complete bail-in of the private sector could be the best defense against liquidity panic. According to this view, if investors know ahead that they will be bailed-in in a situation of pure liquidity crisis, there would be no run and thus no liquidity crisis in the first place. This would also address the problem of moral hazard. One alternative of private sector involvement in a liquidity crisis would be to impose capital controls or standstills on servicing external debt (a variant of the bank holiday at times of bank run). This argument has been made eloquently by Krugman (1998), who argued that temporary capital controls could be less onerous solution than a sharp increase in interest rates or a sharp depreciation of currency which could devastate banks' and firms' balance sheets. A second alternative would be to introduce a temporary standstill on servicing external liabilities which would prevent a damaging rush by investors to liquidate their holdings. A rapid exit of investors caused by panic could cause a damaging fall in asset prices and economic disruptions that could harm the country's economic performance and thus also its ability to service its external obligations. The main theoretical justification for such measures is the self-fulfilling nature of investors' panic and the presence of multiple equilibria, which means that a bad outcome could materialize solely as a result of investors' expectations of that outcome.

These solutions may appear theoretically attractive, but in practice, they could create more problems that they solve. It is difficult to foresee how the private sector would respond to establishing firm rules governing the imposition of temporary standstills or capital controls by countries suffering liquidity problems. There is a serious risk that officially sanctioning such rules would only accelerate the flight of investors as they try to avoid being locked in. Clearly, there is presently not enough support to give the IMF or other international organizations power to officially sanction such temporary standstills. Similarly, imposing controls on capital outflows – even temporarily – does not seem to be a very popular solution, and with the exception of Malaysia was not practically used to deal with sudden capital outflow.

Some suggest that the private sector could provide liquidity insurance to countries against a liquidity crisis, by such means as selling for a fee credit lines that could be activated by countries in times of need. However, thus far the experience

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10) For the discussion of IMF as international lender of the last resort see Fischer (2000).

11) To avoid this problem, the Meltzer Report suggests that the IMF should serve as international lender of the last resort to countries that meet certain criteria, including a strong financial sector. However, such ex ante restriction on liquidity assistance may not be fully credible. If a systematically important country that does not prequalify finds itself in trouble, there may be a strong incentive for the IMF to provide financial assistance anyway.

with these credit lines is not very encouraging. When a country wishes to activate such a credit line, it is usually when its situation has worsened, and when the private institution providing these lines does not want to extend its exposure to such a country. Countries can also protect themselves against liquidity panics by keeping high foreign reserves. Some Asian countries like Korea are following this route, but as is the case with commercial banks keeping high reserves with central banks, this is not a costless protection.[12)]

Because of the lack of strong political support for widespread use of standstills or capital controls in times of liquidity panics, and because of the limited usefulness of private-based insurance against liquidity problems, we are likely to see a combination of official financing, adjustment and some form of private sector involvement to help countries overcome liquidity problems. One possible promising protection against pure contagion-provoked liquidity crises could be offered by the recently established new IMF facility – contingent credit line. But this tool remains to be tested in practice.

Somewhat different problems for private sector involvement arise in cases of insolvency. Situations when countries become insolvent are generally rare, but could nevertheless happen. Insolvency means that a country is not able to service its debt burden because it is too large. There are two basic approaches to dealing with a country that suffers from insolvency, or from a problem of debt overhang: debt swap and debt restructuring.

Debt swap means that a country exchanges one set of debt instruments for a set of instruments with different characteristics. The main purpose of debt swap is usually to deal with a situation where a country faces large debt repayments in the near future which it would be difficult/impossible to serve, and thus needs to extend debt maturity more into the future.[13)] The main benefit of debt swap is that it is a market-friendly solution of the debt overhang problem, and that it does not carry the stigma of debt restructuring. It provides a country breathing space which it can use to improve its economic performance and improve its capacity to serve external debt in the future. The main problem with debt swap is that it may not actually reduce the debt burden to a sustainable level. It only postpones debt service, and if the country does not in the meantime improve its economic performance and its capacity to service external debt, the problem of excessive debt burden will appear again in the future.[14)]

Debt restructuring (default) is a more radical approach to the resolution of excessive debt burden. When a country resorts to debt restructuring, it reduces the value of its external debt, because it is unable to service it fully.[15)] A sovereign borrower could restructure its external debt, or it could introduce exchange controls that would prevent the private sector from servicing its external debt. Typically, a country would use debt restructuring as a measure of the last resort, because it carries large costs. Most importantly, it could cut the country off from future access to international borrowing. And if such a country was able to resume external borrowing,

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12) Furthermore, if a large number of countries seek simultaneously to accumulate large foreign reserves by running current account surpluses, this would result in a deflationary bias in overall economic policy stance, with damaging effect on global economic growth.

13) It could be argued that this is more a problem of liquidity than insolvency.

14) Argentina provides a recent example of large debt swap. Argentina swapped debt instruments maturing in 2001 – 2005 for debt instruments with longer maturity, to reduce debt payments in the near future. The benefit is that debt payments in 2001 – 2005 are less onerous, reducing the risk of rollover problems and defaults. But debt service will increase sharply after 2005.

15) This could apply to domestic debt as well, but here we focus mainly on external debt.

it is likely that it would have to pay high price, reflecting increased risk premium as a result of the default.

Debt restructuring requires addressing many sensitive issues. For example, what debt instruments are to be restructured? How should a country approach debt restructuring? Should it announce debt restructuring unilaterally, or should it try to negotiate debt restructuring with its creditors? How can debt restructuring be facilitated? Should there be ex ante rules on when debt restructuring would be required, for example, when official financial assistance exceeds a certain threshold?

There is a broad consensus that reaching an agreement on voluntary debt restructuring is strongly preferable to unilateral action. Private sector representatives do not deny that a situation may arise where a debtor country is not able to service its external debt fully, and when some debt relief is required. If such situation arises, however, they want to have a say in the way in which such debt restructuring proceeds so that their interests are represented. A voluntary debt restructuring is likely to have less lasting and less damaging effects on a defaulting country.

An intensive discussion is going on as to how to facilitate the process of debt restructuring. Some point to the institutional arrangement of the bankruptcy process in countries such as the United States as a possible way to organize debt restructuring in the international context. The purpose of an orderly debt restructuring would be to avoid undue economic hardship, for example, by cutting the country completely from external financing that could bring the economy to a halt. The IMF has recently modified its policy of lending, which allows it to provide financial assistance to a country in default that meets certain criteria, including a good faith negotiation with its creditors. There are even more far-reaching proposals, among them the proposal to give the IMF the right to officially sanction a standstill on payments of external debt, in order to provide the debtor country time to renegotiate debt payments with its creditors, without running a risk that some creditors would initiate legal actions against the debtor and try to seize its assets. Another problem with debt restructuring that is being currently discussed is how to facilitate debt restructuring when there is a widely-dispersed investor base. Today, a significant part of emerging countries' external debt is in the form of bonds. The problem is that there are many dispersed bond holders, which makes it more difficult to reach agreement on debt restructuring. This led some analysts to propose collective representation and voting procedures of bondholders that would facilitate a coordinated action. Not surprisingly, any proposal aimed at facilitating debt restructuring is being viewed with suspicion by the private sector, which fears that making debt restructuring easier would make it more likely.[16)]

There is a lot of disagreement about whether there should be firmly established ex ante rules for arranging debt restructuring, or whether private sector involvement should be done flexibly, case by case. Some suggest that whether or not to have private sector involvement could depend on the size of official financial assistance provided to a country, either in the form of new lending or Paris Club debt reduction. For example, if the IMF provided financial assistance to a country in excess of 300 per cent of its IMF quota, private sector involvement would be automatically sought. But there are serious objections to such a policy. Introducing rules that are too rigid may affect private sector behavior in an undesirable way. It may scare off

16) Cline (2000) argues that because private lenders cannot easily seize the collateral of sovereign borrowers, they use the default pain as a kind of quasi-collateral. Making default easier would undermine the value of this quasi-collateral and reduce access of emerging market sovereign borrowers to international capital market.

investors, and prompt debtor countries to behave in an irresponsible way. For this reason, "creative ambiguity" in applying private sector involvement may seem preferable. It should be noted that for similar reasons, national authorities would hesitate to publish ex ante a firm commitment regarding which banks are too large to fail and would thus always receive financial support.

Looking into future, it is likely that the policy of private sector involvement in dealing both with liquidity and solvency crises will evolve gradually. More radical changes to the present relatively flexible (some would say ambiguous) approach to private sector involvement do not presently have sufficient support. It is possible that in time, as more experience with individual cases of private sector involvement accumulates, some general principles on how to have the private sector constructively involved may gradually become accepted and perhaps even codified. However, attempts to accelerate this process are likely to be counterproductive.

6. Conclusion

During the previous decade, rapidly proceeding integration of emerging markets into global financial system and increased international capital flows have increased the frequency and costs of financial crises. Initially, the IMF has responded to these crises by providing extensive financial assistance. However, large IMF bailouts were criticized for creating a moral hazard problem. The challenging task is how to ensure that IMF lending to countries in need does not lead to excessive moral hazard problems, while at the same time maintaining the benefits of vibrant private international capital flows and access of creditworthy borrowers to financing.

By increasing financial assistance to countries experiencing large capital outflows, the IMF is extending its safety net to private investors. This creates risk that these investors will not take sufficiently into account the potential risks of their investments, which could increase the probability of new crises. Central banks regulate the activities of banks that benefit from its safety net. Likewise, the IMF has to regulate the behavior of private agents that could benefit from its lending to member countries. This is the strategy of private sector involvement, today perhaps the most difficult, most controversial but also one of the most important issues of reform of the international monetary system.

We have discussed briefly the main approaches to private sector involvement in times of liquidity crises and solvency crises. Temporary official financing, combined with policy adjustment and voluntary private sector involvement seems to be a preferable solution when a country suffers from a liquidity problem that originates from external developments. More radical solutions like temporary IMF-sanctioned standstills or capital controls may seem to be theoretically attractive, but do not presently have strong political support, and in practice, are not favored by many countries. When a country experiences a problem of excessive debt burden, large new financing is not a preferable option. Usually, this would only postpone the solution of the problem. When the problem is more with the profile of debt service, a debt swap that extends the maturity of existing debt could provide time to strengthen the economy's fundamentals and its capacity to service external debt. However, a country facing an excessive debt burden would have to resort to debt restructuring. It is in the interest of both the debtor country and it creditors to make the restructuring voluntary and orderly, to prevent unnecessary disruptions and worsening of access to external financing in the future.

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