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Must Financial Crises Be This Frequent and This Painful?

McKay Lecture

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The Evidence that Crises are Frequent and Painful

The title of my talk today is "Must Financial Crises Be This Frequent and This Painful?" Before discussing some of the considerations that go into answering this question, I first want to document my claim that they are frequent and painful. Clearly anyone watching the world over the past 14 months would be left with little doubt that the financial crises *can* be very severe. But the East Asian crisis is only the latest in a series of spectacular economic catastrophes in developing countries. In the last 20 years there have been at least 10 countries that have suffered from the *simultaneous* onset of a currency crisis and a banking crisis. The result has been full-blown economic crises causing, in many of the cases, GDP contractions of 5 to 12 percent in the first year of the crisis, and negative or only slightly positive growth for several years after. Many other countries have witnessed contractions of similar magnitude following currency or banking crises.

Financial crises are not strictly exogenous and in many cases the slowdown itself, or the same factors that led to it, also helped cause the financial crisis. But there is no doubt that the overshooting of exchange rates, the withdrawal of foreign capital, the non-rollover of short-term debts, the internal credit crunches, the process of disintermediation, and many of the other characteristics of external and internal crises played a large role in these collapses.

Crises are also becoming increasingly frequent, at least relative to the Post-World War II period. We have had, in Gerard Caprio Jr.'s memorable phrase, "a boom in bust[s]" (Caprio 1997, p. 80). Caprio and Daniela Klingebiel (1996) identify banking crises, defined as episodes when the entire banking system has zero or negative net worth, in 69 countries since the late 1970s. The U.S. Savings and Loan debacle, whose resolution cost, in real terms, was several

times larger than the cost of resolving the U.S. banking crisis of the 1930s, does not even make their list of the top 25 international banking crises since the early 1980s. With a less stringent definition, Carl-Johan Lindgren, Gillian Garcia, and Matthew Saal (1996) estimate that three-quarters of IMF member countries experienced "significant bank sector problems" at some time between 1980 and 1995. Currency crises have also been similarly pervasive, affecting at least 87 countries since 1975. A time series of crisis episodes is shown in Figure 1.

The banking-cum-currency crises in East Asia have clearly exacted a large toll. The East Asian economies continued to deteriorate following the agreement of the initial and revised policy packages. Every month since the initial devaluations has brought new downward revisions of the consensus forecasts for growth (see Figure 2). Many observers now expect GDP in Korea, Malaysia, and Thailand to contract by 5 to 10 percent in 1998. The depth of the collapse in Indonesia, a 17 percent GDP contraction in 1998 according to the latest consensus forecast, if not unparalleled, is among the largest peacetime contractions since at least 1960 (excluding the experience of the Transition economies).

Although more severe than average, the experience of East Asia is not a historical aberration. The most systematic evidence, compiled by the International Monetary Fund (1998), demonstrates that banking and currency crises can exact a large toll, especially when they occur simultaneously. Figure 3 shows the cumulative output loss relative to trend in the years following a currency crash, a banking crisis, and their simultaneous onset. It shows that not only are currency crashes and banking crises on average very costly, but that they are especially costly for developing countries.

Should We Do Something About Economic Crises?

This relatively brief presentation of the evidence establishes that the current system is far from desirable. Similarly, when John Maynard Keynes wrote the *General Theory* he was motivated by the very far from desirable conditions of the leading industrial economies. The fact that U.S. GDP contracted by more than 25 percent in just three years and the unemployment rate rose to 25 percent was, by itself, *prima facie*
remedy the undesirable outcomes of the economy. Nearly 50 years after Keynes, however, a school of thought emerged, real business cycle theory, which argued that all fluctuations in output are efficient movements to new equilibria given by the ever changing technology and tastes of the economy. In this view the Great Depression was the optimal outcome of a collective desire to take vacations pending the higher wages expected in the future. Furthermore, together with new classical macroeconomics, it endevoured to convince us that even if we did not like the current state of the economy, there was virtually nothing, at least nothing systematic, that policymakers could do about it.

In general the theorems under which the decentralized economic outcome is optimal are highly restrictive, and include perfect information and complete markets, including markets for every period and every contingency, and are not even remotely satisfied in practice. It is worthwhile, however, to go through some of the economic motivation for public action, at the national and international level, in preventing and responding to economic crises. The point of this discussion is not just to put the motivation for government action on more solid footing, but also to help guide those actions. I will discuss the rationale for government actions in two areas, the financial system and the response to capital flows.

Government and the financial system
In introductory economics courses we teach our students to use demand and supply diagrams to

analyze markets for apples and bananas. We are also teach that, provided there are no externalities, the competitive price is efficient. Some go on to apply this theory to financial markets, looking at the supply of funds, the demand for funds, and the market clearing interest rate. This simplistic theory is the basis for the belief that financial markets need to be fully liberalized from the "interference" of governments. Unfortunately, this framework makes little sense in approaching finance, which is concerned with the exchange of money today for the *promise* of repayment. Given the existence of uncertainty and the lack of complete futures markets, this intertemporal transaction entails risks, especially the risk of bankruptcy. Information about these risks – both about the type of borrower and the actions he or she undertakes after borrowing the money – is essential.

The fundamental theorems of welfare economics, which assert that every competitive equilibrium is Pareto efficient, provide no guidance with respect to the question of whether financial markets, which are essentially concerned with the production, processing, dissemination, and utilization of information, are efficient (Greenwald and Stiglitz 1986). On the contrary, economies with imperfect information or incomplete markets are, in general, not Pareto efficient; there are feasible government interventions that can make all individuals better off.

These are not just academic details. Governments play a large role in all of the most successful financial markets. Wall Street, the international emblem of free markets, is one of the most highly regulated markets in the United States. But let me also be clear: this observation should not be the basis for the government to take over the financial system. History does not offer many examples of highly successful economies that did not accord the market a central role in the allocation and monitoring of capital. Theoretically, the case for a government-run economy rests on the same highly restrictive assumptions as the case for a purely free-market economy, notably the assumption that there is perfect information (see Stiglitz 1994).

Public action and international capital flows

Next I would like to turn to issues in the regulation of international capital flows. Capital flows are at the heart of the international crises that I am discussing today. The withdrawal of capital or the refusal to roll over short-term loans are at the center of most severe developing country balance of payments crises. It is not just foreign money that matters, both the 1994-95 Mexican crisis and the 1997-98 Indonesian crisis involved substantial capital outflows. Overall, in East Asia, there was a $109 billion reversal of net private capital flows (more than 10 percent of GDP) to the region between 1996 and 1997 – with most of the adjustment taking place during the last half of the year (Institute for International Finance, 1998). It is also noteworthy that foreign direct investment to the 5 East Asian economies is estimated to have been essentially unchanged.

Some have made the case that the free movement of capital ensures that it finds its most productive use, maximizing global welfare. For developing countries in particular, it allows them to invest more than they save and diversify away some of the very large risks they face. If there were all there was to the story, then any government "interference" in the global capital market would be distortionary and would reduce welfare. Too many people continue to argue *a priori* grounds. At best, this is a highly consistent but totally misleading point of view. In practice, however, some of these same people also support IMF-led bailouts, which are themselves very large interventions in the free workings of the market. One cannot simultaneously hold that these bailouts are legitimate and that there should always be completely unfettered flows of capital.

There are two possible economic justifications for rescue packages, which will also motivate my discussion of other interventions. The first is that the social risk is not equal to the private risk so that, left to themselves, markets will accumulate more risk than is socially efficient. This is analogous to pollution, which imposes greater costs on society than are borne by the polluter alone. In this case, we typically tax or regulate the pollution. The same logic would suggest some type of tax or regulation on international capital flows. We should recognize that most countries have various forms of taxes or regulation on the domestic financial system, including measures like reserve requirements or deposit insurance. These are justified by the contagion and systemic risk to which financial decisions give rise and by the interventions (e.g., bailouts) which so frequently arise. Although these may or may not be feasible or desirable at the international level, I do not think it would be consistent with our other policies to rule these steps out on *a priori* grounds.

Another possible economic justification for intervening in the market with the rescue package is that the market is not even pricing private risk efficiently, that is, that the market is irrational. One form of irrationality that is sometimes discussed is the claim that market participants can be overly focused on the immediate term, particularly in figuring out what other market participants are going to do. This is what Keynes referred to as a "beauty contest" in which contestants are trying to guess who the other judges think is most beautiful, not who actually is the most beautiful. As a result, markets can diverge from long-run fundamentals which, according to this view, are more stable than the actual market outcomes.

There is an extensive economics literature documenting what is called the market's "excess volatility." If it is correct, then some measure like a Tobin tax (a tax on certain transactions) could increase the cost of short-term speculation by raising the cost of round-tripping, while still allowing markets to respond to changes in the long-run fundamentals. Again, I am just raising the Tobin tax as an illustration; in practice, there are serious questions about its feasibility, especially in a world of rapid financial innovation, where it could be easy to circumvent.

(The argument sometimes put forward that the bailouts do not cost anybody anything can, similarly, be looked at in two different ways. If markets are "rational" then the fact that the interest rate charged is below the market interest rate for these loans is evidence that there is, in an *ex ante* sense, a real subsidy to the borrower, even if *ex post* we have been repaid for the loans made in previous bailouts. Alternatively, markets may be "irrational," charging an excessively high risk premium – one that cannot be justified by the real risk. Then the intervention in the market may be costless; but this argument certainly undermines confidence that markets by themselves are likely to yield efficient outcomes.)

Are There Feasible Interventions To Prevent Crises?

I have argued that there is a very serious problem that we are facing. I have also argued that there is an economic rationale for addressing this problem. I would now like to ask if there are feasible government interventions that can help prevent crises. In the next section I discuss the issue of responding to crises when they do occur.

We cannot expect to eliminate all fluctuations or all crises. Even if we could eliminate all of the "problems" and "mistakes" in economic policy, it is unlikely that we could fully insulate economies against shocks, including events such as the OPEC oil price increases in the 1970s or changes in market sentiment, such as occurred in the current East Asian crisis. Furthermore,

although there is much more scope for policy reforms in developing countries, we should not delude ourselves into thinking that this can take place overnight. Building robust financial systems is a long and difficult process. In the meantime, we need to be realistic and recognize that developing countries have less capacity for financial regulation and greater vulnerability to shocks. We need to take this into account in policy recommendations in all areas, especially in the timing and sequencing of opening up capital markets to the outside world and in the liberalization of the financial sector.

We must bear in mind too in designing policy regimes (such as opening up capital markets) that we cannot assume that other aspects of economic policy, such as macroeconomic policy or exchange rates, will be flawlessly carried out. The policy regimes we adopt must be robust against at least a modicum of human fallibility. Airplanes are not designed to be flown just by ace pilots, and nuclear power plants have built into them a huge margin of safety for human error.

The Importance and Limitations of Better Information

One of the international reforms to have come out of the Mexican crisis was the almost universal call for better information, both in terms of accuracy, scope, and timeliness. The East Asian crisis has reinvigorated the calls for better information, as foreign investors have blamed the East Asian governments for not giving them enough information. Much of this has just been blame-shifting. Just as Mahatirs blame Soroses for their problems, so too do international investors blame the countries they invest in for not providing them with full information: if only they had been told the truth, they would not have gotten into the problems they did. But most of the supposed problems in East Asia, including the "lack of transparency," were not news. They were widely known prior to the crisis. Indeed, there is a serious question about whether or not all of the available information was even being used. There is no systematic evidence linking lack of transparency to economic crises. The last major banking-cum-currency crises were in Scandinavia – models of transparency. Even if there were, there is no evidence that corruption or transparency were significant problems in *all* of the East Asian countries affected by the crisis. According to a number of ratings of transparency and corruption, Indonesia was one of the worst middle-income countries. But Thailand and the Philippines were about average (and substantially above average compared to developing countries as a whole). And Korea and Malaysia were consistently rated among the least corrupt and most transparent of any developing country.

There is no doubt, however, that more information is usually better. In the case of East Asia, it is likely that the general lack of information made it difficult for investors to distinguish between firms and financial institutions that are healthy and those that are not. In response, investors shied away from all. With more credible information systems, firms that remain healthy would be able to retain access to credit.

The standard macroeconomic data would not have been very helpful in predicting the East Asian crisis, which had to do with the composition and allocation of private-to-private capital flows. Unfortunately, getting information about private-sector spending and borrowing is much more difficult than obtaining comparable information about public finances. This is especially the case when transparency is limited. In a world where private-to-private capital flows are increasingly important, we will need to recognize that monitoring and surveillance are going to be especially challenging. The growing use of derivatives is increasingly making the full disclosure of relevant information, or at least the full interpretation of the disclosed information, even more difficult.

We should remember, too, that the great merit of a market economy is that dispersed information is aggregated through prices and the incentives they create for behavior, without the need for any centralized collection of information or planning. There is a certain irony about praising a market economy for this decentralization of information, and at the same time complaining about the lack of aggregate data necessary to assess systemic risks.

Moreover, we should not be under the illusion that having improved data is sufficient for financial markets to function well. In East Asia much of the important information was available, but it had not been integrated into the assessment of the market. Furthermore, it is impossible to eliminate all uncertainty and asymmetries of information. Entrepreneurs will always know more about their investments than will the banks that lend to them, and managers will always know more about their actions than shareholders will. Without the correct incentives, even perfect aggregate information would not be sufficient for the efficient, or stable, functioning of markets.

Although our information about private capital flows is imperfect, and although even with vastly improved information I am not sanguine that we – or the market – would be able to predict or forestall all crises, I do think that the returns from improving our statistical bases are significant. My caution is only that we should not be misled into thinking that this will solve our problems. Better information – seemingly the most important improvement in the international financial architecture to come out of the last crisis – should not lull us into complacency.

Financial Regulation and Financial Restraint

The second set of widely endorsed policies is better financial regulation. Again, there is no doubt that better financial regulation would be a good thing; after all, how could anyone object to "better"? The more important question is, how much do we expect better financial regulation to accomplish, and what form should this regulation take? This is a huge topic that I have addressed in several other papers. In this context, however, I would like to focus on the role of financial regulation in crisis prevention and the contrast between Basle-style financial regulation with mild financial restraints.

We can examine the effects of financial regulation on crisis prevention by conducting a thought experiment about whether better financial regulation, along the lines of the Basle accord, would have prevented East Asia's crisis. Although better financial regulation is clearly desirable – both for growth and stability – we should not overestimate the ability of financial regulation to overcome the macroeconomic incentives.

What would have happened if the government had maintained the same misguided foreign exchange policy, but had had a better-regulated financial sector? In this case, regulators would have limited banks' ability to borrow short in foreign currency and lend long to buy non-tradable assets. But the expected constancy of the exchange rate and the differential between foreign and domestic interest rates, which was increased by the attempts to sterilize the capital inflows, driving up the domestic rate, would still have created the same incentives to borrow short-term money from abroad. The result could have been that instead of banks, corporations or non-bank financial institutions would have accessed international markets directly. This is, of course, what happened in Indonesia where roughly two-thirds of the external debt was incurred by the non-bank private sector, among the highest fraction of any country in the world. No country can, does, or probably should regulate individual corporations at the level of detail that would be required to prevent the foreign exchange and maturity mismatches that arose.

Furthermore, in contrast to its neighbors, Malaysia's central bank adopted much more prudent policies vis-à-vis short-term borrowing, and as a result its ratio of short-term debt to reserves in end-December 1996 was 0.54 compared to 1.74 for Thailand. (Other aspects of Malaysia's situation were comparable to that elsewhere in East Asia – for instance, their level of non-performing loans. But even this may be misleading, since Malaysia required larger reserves against losses, so that their banks were in better financial positions.) As a result, Malaysia did not suffer as much from the failure of foreign creditors to roll over short-term loans, and thus it did not face the imminent threat of a default that brought Korea and Indonesia to the brink. Despite this fact, Malaysia's crisis, measured by the depreciation of its exchange rate or its expected growth in 1998, has been just as severe of that of Korea or Thailand. Taiwan (China) had strong financial institutions, sound macroeconomic policies, and an exchange rate that was widely believed to be reasonable. As a result, it *only* saw its exchange rate gradually depreciate by 20 percent, which represented an almost equally substantial depreciation of its real exchange rate.

Well-designed bank regulations – such as risk-adjusted capital adequacy standards and risk adjusted deposit premia – might have gone some way toward reducing financial market vulnerabilities. For instance, when lending to borrowers who have large uncovered foreign exchange exposures and very high debt-equity ratios, banks would have charged higher interest rates to reflect this greater risk; and the threat of higher interest rates would have provided a disincentive for firms to have risky financial positions.

To the degree that better financial regulation would have been helpful, three observations are in order:

First, countries with more advanced institutions have found it difficult to develop a regulatory framework that insulates them from financial crises. Even banks in the supposedly well-regulated advanced countries made loans not just to Korean banks, but also directly to its *chaebol*, with their high debt-equity ratios. As a practical matter, however, no government has imposed good systems of capital adequacy. One important lacuna is that although credit risk is typically recognized (though gauged imperfectly), market value risk associated with changes in interest rates or risk premia are not. Furthermore, regulations do not examine total portfolio risk, including the correlations among market risks and between market risk and credit risk. Even countries such as the United States have deliberately shied away from fully transparent risk adequacy standards based on modern risk analysis. Accordingly, it is unreasonable to expect such indirect control devices to work effectively in developing countries.

Second, given these limitations there are arguments for a whole variety of lending restrictions – not only sectoral limits, but also speed limits, as well as restrictions on the liability structures of the firms to which the banks lend. Greater financial sector restraints, rather than the weaker restraints that were adopted in practice, might have gone some way toward changing the composition of capital inflows (by raising the cost of short-term borrowing) and their use (by restricting investment in non-tradables). Further restraints on international capital flows, justified by the externality imposed by international capital flows, could potentially have complemented these policies, further lengthening the duration, and reducing the risk, of capital inflows.

Thirdly, the problems of designing an appropriate regulatory structure are becoming more difficult with derivatives and off-balance sheet items, and are more difficult for developing countries, both because they are likely to face a shortage of good regulators, and because they

face greater risks. These problems are highlighted by the fact that both in Indonesia and Korea, some firms and banks thought they had covered positions, but bankruptcy of the party providing the hedge left them in an exposed position (Dooley 1998). For a regulator to ferret out these problems would require it to assess the credit risk of innumerable firms. That is why regulators in more developed countries are switching to an evaluation of the risk management systems, rather than monitoring individual transactions or even portfolio positions. It is likely to be some time before developing country financial institutions can put into place risk management systems that evaluate accurately portfolio risks, taking into account both credit and market risks, and the correlations within and between these risk categories. There is some concern that the Basle standards, by setting up a regulatory framework that does not deal adequately with these broader (and more relevant) aspects of risk may give banks (and their depositors and investors) comfort when they should not, and may actually lead to excessive risk in the relevant sense.

The thrust of the Basle standards – setting up a "level playing field" so that banks throughout the world faced similar standards – has itself come into question, as the differences in circumstances may in fact necessitate different standards for countries in different positions. Even when adopting the Basle standards is understood as a minimal recommendation, the more prudent policies are measured by, for instance, higher capital-adequacy requirements, not changes in the regulatory objectives or structure. Similarly, the thrust of financial market liberalization has been to replace quantitative and other *ad hoc* constraints (e.g. on lending to real estate) with broad-based capital adequacy and risk management standards. But given the deficiencies in those, which may have particularly severe consequences for developing countries, this strategy clearly has its problems. Indeed, I have argued that this misguided strategy shares a considerable part of the blame for the problems in Thailand, which prior to financial market liberalization actually had a relatively sound financial system.

Controlling Capital Flows

A consensus is beginning to form that governments, and possibly the international system, need to do more to restrain the movements of capital, especially of short-term "hot money." Although better information and better regulation are important first steps they are, as I have argued, far from sufficient. Instead, I have argued that there is a theoretical rationale for policies that bring private risks into line with the social risks.

Specifically, these policies aim to influence both the *pattern* of capital flows and the *timing* of capital flows. Currently, 75 percent of private capital flows to only a dozen countries, and most low-income countries have little access to private capital relative to the size of their economies. Procyclicality is another undesirable feature of the international capital flows. Countries seem to get the most private capital when they are growing strongly and need it least, and they have a relatively hard time accessing capital in hard times when they need it most. As a result capital flows do relatively little to smooth the business cycle and may even amplify it. Accomplishing this objective, however, may be very difficult.

Another objective concerns the *composition of capital flows*. There is now broad agreement about the value of foreign direct investment, which brings not just capital but also technology and training. Preliminary evidence from East Asia also shows that consistent with past experience, foreign direct investment is relatively stable, and certainly far more stable than other forms of capital flows.

Unlike foreign direct investment, short-term capital does not bring with it ancillary benefits. In the form of trade credits it provides an important, and relatively inexpensive, source of

international liquidity without which no economy, especially an export-oriented economy, could run. In addition to providing liquidity, short-term capital, along with other forms of flows, allows a country to invest more than it saves. When this money is invested productively, the benefits to the economy are large. But when the saving rate is already high, and when the money is misallocated, the additional capital flows just increase the vulnerability of the economy. Moreover, given their volatility, what well-managed economy would risk basing long-term investments on short-term flows? More generally, it is not considered prudent to hold international reserves equal to or greater than short-term foreign debt, a policy that amounts to developing countries borrowing from industrial country banks at high interest rates only to relend the money to industrial country Treasuries at low interest rates.

Perhaps for these reasons, several systematic empirical studies have failed to find any relationship between capital account liberalization and growth or investment (see Rodrik 1998).

The large benefits of foreign direct investment, and the costs and benefits of short-term capital flows, have led many people to investigate ways to encourage long-term investments while discouraging rapid round trips of short-term money. There are many components of such a strategy.

First, we need to eliminate the tax, regulatory, and policy distortions that may, in the past, have stimulated short-term capital flows. Examples of such distortions are evident in the case of Thailand where the tax advantages for the Bangkok International Banking Facilities encouraged short-term external borrowing, but subtle examples exist almost everywhere. Without risk-based capital requirements for banks, for instance, incentives for holding certain assets and liabilities will be distorted. Second, several countries have imposed prudential bank regulations to limit the currency exposure of their institutions.

Third, these measures may not go far enough, especially once it is recalled that corporate exposure may itself give rise to vulnerabilities. And the systemic risks to which such exposure can give rise provide ample justification for taking further measures. Among the ideas currently under discussion are inhibitions on capital inflows. In thinking about how to accomplish this, we should look to the lessons of the Chilean experience. Chile has imposed a reserve requirement on all short-term capital inflows – essentially a tax on short-maturity loans. The overall efficacy of these controls is the subject of much discussion, but even most critics of the Chilean system acknowledge that the reserve requirement has significantly lengthened the maturity composition of capital inflows to Chile without having adverse effects on valuable long-term capital.

Still other measures employ tax policies – for example, limiting the extent of tax deductibility for interest in debt denominated or linked to foreign currencies. The problems of implementing these policies may in fact be less than those associated with the Chilean system.

In evaluating these proposals, we must be clear what the objectives of the interventions are. Two seem uncontroversial: reducing (though not eliminating) the volatility of flows and reducing (though not eliminating) the discrepancy between private and social returns.

Summary

The prevention of crises has important domestic and international dimensions. I have argued that we should not overestimate the ability of purely domestic policies, like greater transparency and better financial regulation, in averting crises. Although these are important,

they must be supplemented by additional policies to restrain overly volatile short-term capital flows.

This raises another question: who will implement these policies? The most important and feasible (especially in the near term) actions toward international capital flows are all at the national level – carried out either by developed countries or developing countries. But there is a currently a very active dialogue at the international level also. At a minimum, international groups and institutions can play an important role in encouraging the adoption of sound policies; and especially by persuading investors that the adoption of some restraints on capital flows is not necessarily a sign that a country is unfriendly to investment, but simply that it wants to insulate itself against some risk.

Are There Feasible Interventions to Improve Responses to Crises?

Some crises are inevitable. The most important policy responses to economic crises are all at the domestic level, including the proper stance of macroeconomic policy, structural responses, and the establishment and strengthening of social safety net programs. I have discussed these policy responses elsewhere. Here I would like to continue to focus on the international dimension of responding to crises. When crises occur, they unleash a wave of capital outflows and increased uncertainty in international transactions. Mitigating these reversals, or at least dealing with them in an orderly way, would greatly speed up the resolution of crises and the resumption of economic growth.

A keystone in the development of modern capitalism has been limited liability and bankruptcy laws. Modern bankruptcy laws attempt to balance two sometimes conflicting considerations: promoting orderly workouts so that business values can be retained and production losses can be kept to a minimum, and providing appropriate incentives so that those engaged in risky behavior bear the consequences of their actions. In the international context, the flight of capital or withdrawal of short-term debt does not remove any of the actual factories. The goal is to ensure that they continue to produce and that the assets are not stripped.

In the absence of orderly workout procedures, countries may worry that unless they issue guarantees or assume private debts, the disruption to the economy will be unbearable.

Similarly, the international community has long complained about the problem of moral hazard, the fact that lenders have been at least partially bailed out. To be sure, in many cases the bailout has been far from complete and lenders have lost money. Still, to the extent that there is any bailout, they have not been forced to bear the full risks associated with their investment, and the belief that in the future this pattern will continue can give rise to the moral hazard. Again, the international community faces a dilemma: it often sees no alternative to a bailout – the risks of not undertaking an action seem unacceptable. After each crisis, we bemoan the extent of the bailout and make strong speeches saying that never again will lenders be let off the hook to the same extent. But, if anything, the "moral hazard problem" has increased, not decreased, with each successive crisis.

While the experiences of the last twenty years suggest that lenders can be forced to bear more of the costs than they have in at least some of the more recent crises, the middle of the crisis may not be the right time to deal with these issues. We can, however, prepare for the next crisis. There is more that we can do to facilitate orderly workouts, to reduce moral hazard, to make those investors who are most likely to reap the benefits of a bailout pay part of the costs, and more broadly, to reduce the discrepancy between social and private returns to certain forms of

risky international lending. One aspect of this may be a greater willingness to accept standstills that temporarily stop the outflow of money and create the time necessary to negotiate orderly workouts. Another may be recognizing that proper burden sharing, including possibly "haircuts" for international creditors, is necessary both for equity and efficiency. Ultimately the goal of these policies is to create space for the very difficult job of a workout in the context of private-to-private capital flows with many lenders and borrowers. Imposing standstills and worrying about appropriate burden sharing prior to bailouts, rather than the recent practice of waiting until after the fact, may be a key to designing equitable and efficient workouts.

Concluding Remarks

In this talk I have presented three overarching points. The first is that the frequency and severe consequences of economic crises is intolerable. Crises appear to be getting ever more frequent and ever more severe. The search for something to remedy this situation is one of the biggest challenges facing much of the developing world. Second, I argued that the economic theory of imperfect information provides an economic rationale for public action, at the national and international levels, to mitigate some of the major international economic problems. Third, I argued that this economic rationale can be used as the basis for designing feasible policies to help prevent crises and respond to them better when they do occur.

Several threads have run through this talk. One is that we cannot understand crises, or the policies to address them, without integrating macroeconomics on a sound microeconomic footing, with especial attention to the financial system. Another is that we should design

We have been approaching global integration piecemeal, with the integration of the private sector far outpacing the development of complementary international economic institutions to monitor, regulate, and adjudicate international economic relations. Today, we stand on the edge of a new world economy. But we do not have international institutions to play the role that the nation-states did in promoting and regulating trade and finance, competition and bankruptcy, corporate governance and accounting practices, taxation and standards, within their borders. Navigating these uncharted shoals will be a great challenge. But just as much of the prosperity of the past hundred and fifty years can be related to the expansion of markets that those transformations afforded, so too the prosperity of the next century will depend in no small measure on our seizing the opportunities afforded by globalization.

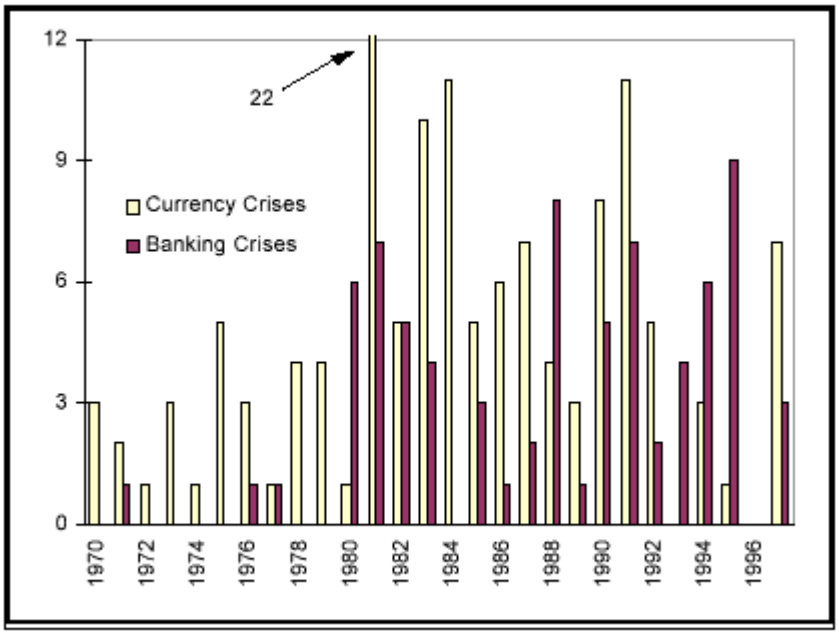
In approaching the challenges of globalization, we must eschew ideology and over-simplified models. Today, with the continuing decline in economic activity in East Asia, with the new crisis in Russia, with the contagion threatening economies elsewhere, faith in the market economy is eroding in many parts of the world. It is now clear that the emphasis on privatization, liberalization, and macroeconomic stability that dominated thinking about developing economies, represented neither fully captured the essentials of a market economy, nor provided a recipe for growth and stability, let alone for the broader goals of democratic, sustainable, and equitable development.

Our challenge today is to prevent the pendulum from swinging too far to the other side. A sound market economy integrated into the global system is the key to economic success. But this requires sound institutional infrastructure, which in turn requires an effective and efficient government focusing on the essential functions of the public sector. We have a huge task in redesigning the international architecture. But if we set our sights high, if we keep our

objectives broad, if we keep our instruments wide, if we eschew ideology but use all of the limited knowledge that we have effectively, we can make progress.

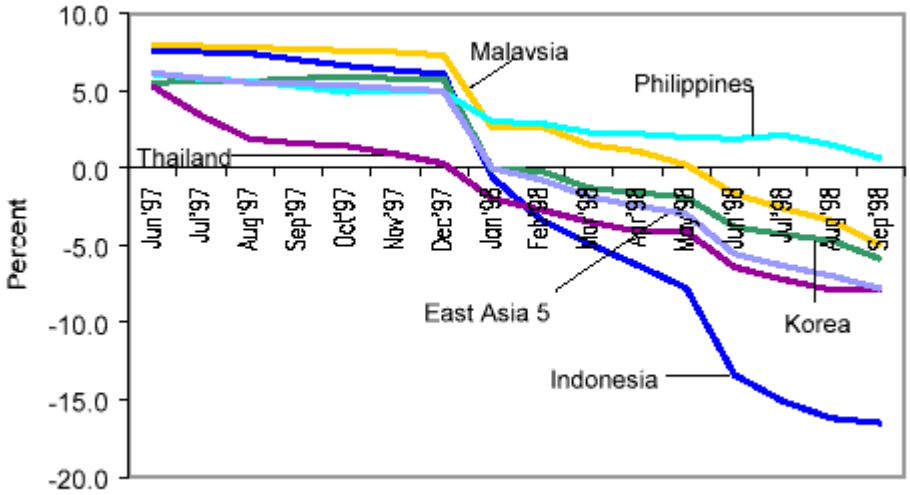
We must not let the perfect be the enemy of the good. In a downpour, it is better to have a leaky umbrella than no umbrella at all. There are reforms to the international economic architecture that can bring the advantages of globalization, including global capital markets, while mitigating their risks. We are beginning to see a new consensus forming around ways to restrain the risk of "hot money" and the goal of developing procedures for orderly workouts. Hopefully the continuing international dialogue on these and other issues will continue to make progress in these and other areas.

Figure 1: Incidence of Financial Crises Worldwide, 1970-97



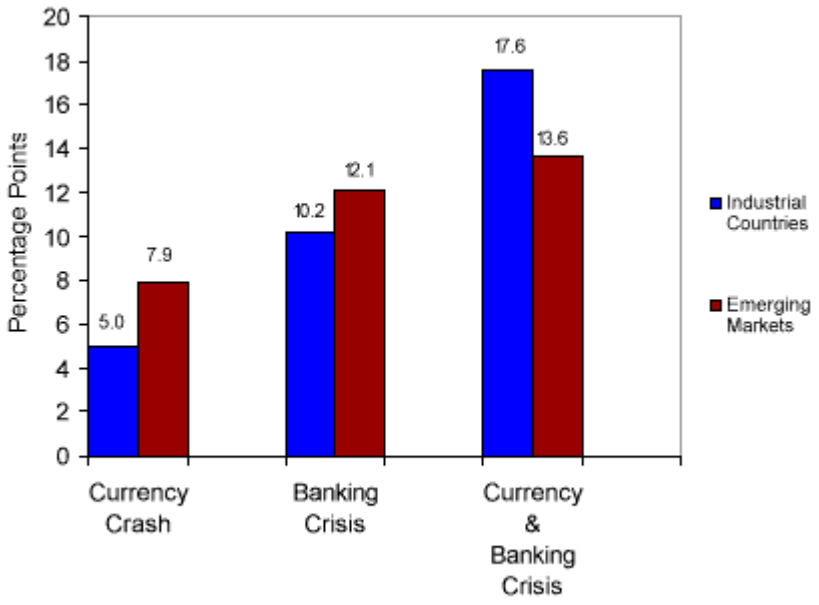
Sources: Caprio and Klingebiel 1996; Frankel and Rose 1996; Kaminsky and Reinhart 1997.

Figure 2: 1998 GDP Consensus Forecasts



Source: Consensus Forecast

Figure 3: Cumulative Lost Output Relative to Trend



Source: IMF *World Economic Outlook*, May 1998

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