The G-7 and the rest of the international financial policymaking community have, over the past eight months, undertaken a variety of modest reforms to try to reduce the frequency and severity of international financial crises such as those of 1997–98 (East Asia), 1994–95 (Mexico), and 1992–93 (European Exchange Rate Mechanism). The reforms include steps to improve transparency, strengthen financial systems, and involve the private sector more fully in rescue packages. Some critics have pronounced these measures too small to merit the title “New Financial Architecture” and have said they are more like remodeling the house, or at most redoing the wiring and plumbing. Whether or not this characterization is right, I consider these steps to have been useful.

In several areas, however, the proposed reforms would be so fundamental as to merit unquestionably the appellation “financial architecture.” One is the question of further liberalization of international capital flows, and how rapid it should be. Another is the question of exchange rate regimes, and how flexible they should be. A third, the subject of this session, is the question of a global lender of last resort, and how big it should be.

**The IMF as International Lender of Last Resort**

My comments will focus on the International Monetary Fund (IMF). The Fund does not meet the narrow definition of a lender of last resort (LLR) because it does not print money. Nor does it follow the classic
Bagehot rules for a LLR response to a banking crisis: “Lend freely, quickly, usually at punitive rates, and usually against good collateral” (Little and Olivei, this volume). In theory the IMF can create special drawing rights (SDRs), but this is done infrequently, and never on short notice or to help specific problem debtors. Even in the case of the supra-normal financing packages that we have seen in some IMF country rescues in recent years, there is seldom same-day response, and never true collateral.

The principle of penalty interest rates was introduced with the U.S. loan to Mexico in February 1995 and subsequently the Fund’s Supplementary Reserve Facility. The creation of the new Contingent Credit Line could be viewed as another step in the direction of an LLR function for the Fund. But a massive quantitative expansion of IMF resources (as would be necessary to play LLR in today’s global capital markets) is unlikely even under current rules, and a qualitative expansion of the IMF’s role into a true LLR is even less likely politically. The world is not ready for it. Nevertheless, the big issues surrounding the role of the Fund—its existence, scale of financing, policies on which loans are conditional—are similar to the big issues concerning a LLR narrowly defined. Of particular interest is the trade-off between cushioning the effects of any given crisis and the dangers of moral hazard in the longer run.

Critics of the Fund’s role in recent crises are legion. Their criticisms are not limited to observations about where the institution could have done a bit better; some blame the entire crisis on the Fund. But they differ widely among themselves on the nature of the offense. I have proclaimed the theorem that “for every critique of the Fund, there exists an equal and opposite critique coming from the other direction.” Many of them fit into the framework of charging that the Fund is either too generous (provoking moral hazard) or too severe (inflicting needless recessions).

First, a preliminary characterization of the moral hazard argument. It is true that cushioning the blow does, on the margin, encourage borrowers and lenders to be a little less careful in the future. But as has been explained by numerous authors and analogies (especially those concerning cars, boats, and planes), moral hazard is not necessarily a reason to refrain altogether from ameliorating the effects of a given crash, to the extent that you can do so. As Ricardo Hausmann said earlier in this

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1 David Lipton (1999) has recently proposed a two-step innovation: (1) a new round of SDRs are issued, and (2) major industrialized countries pool their SDRs into a crisis-defense fund. The fund is to be used only for systemic threats, as Lipton (somewhat confusingly) also urges returning the genie of supra-normal financing back into the bottle. “The Financial Role of the IMF,” in Key Issues in Reform of the International Monetary System, Conference at the International Monetary Fund, Washington, D.C., May 28–29, 1999; forthcoming, edited by Peter Kenen and Alexander Swoboda.
conference, moral hazard cannot be the fundamental market failure. Current international differences in capital/labor ratios and rates of return suggest that the efficient neoclassical solution is larger private-sector capital flows than currently, not smaller.

Among those who see discipline under the current system that is too harsh, one plausible version is that the root market failure is the absence of international bankruptcy proceedings, which might otherwise give troubled debtors a stay against the onslaught of demanding creditors. But it is hard to believe that all would be right with the world if only it were not for this lacuna, or if it were it not for the other shortcomings of our system of cross-border investment. Countries can get into severe domestic banking crashes, for example, even without any international help.

**Critiques of the Management of the Crisis**

Critiques of the strategy that the G-7 and the IMF pursued after the crisis began in July 1997 can be classified into three areas: those concerning the efficiency of financial markets, those concerning the amount of financing, and those concerning policy conditionality. As noted, many of the critiques contradict each other. One cannot claim that they necessarily cancel each other out. But when a member of the public reads so many attacks on the Fund, he or she might be tempted to conclude that where there is smoke, there is fire. Thus, it is important to realize that the critiques come from different directions, and to consider carefully the specifics of each one.

**Regarding the Efficiency of Financial Markets**

**Critique:** Financial markets work best with no government interference. There is no need for government action in this crisis.

This is the view of the “no bailout” crowd. But I disagree that governments and the IMF have no role to play in a crisis such as this. There were three reasons why we needed to be involved and should not have simply allowed the market to try to solve the problem on its own.

- First was the risk of financial contagion, and not solely affecting countries that deserved it.
- Second was the large negative effect on U.S. net exports to East Asia. I would not say, from the vantage point of the U.S. Council of Economic Advisers, that this was a tremendous concern as regards impacts on aggregate U.S. growth or employment. Our economy had so much momentum going into the crisis that we could withstand the loss of net exports, without necessarily losing output and employment relative to what otherwise would have happened. But there was the danger that the fall in the trade balance, particularly the bilateral balances vis-à-vis East Asia,
would lead to an isolationist or protectionist political backlash within the United States, which would in itself be harmful.

- Third was the geopolitics. We have a stake in East Asian economic success, both as a source of stability and progress in the region itself (Korea and Thailand have been and are U.S. military allies, and Indonesia is a site of potentially great social instability) and as an example to other developing countries (as developing countries around the world have opted for capitalism over state planning, they have been inspired by the example of East Asian success).

So we could not walk away from East Asia.

**Critique:** This crisis shows that financial markets work badly; the countries should not have opened up to international investors in the first place, and we should not press them to continue to do so now.

This critique takes the diametrically opposed view of the efficiency of financial markets from the first one. I would not claim that modern financial markets work perfectly. Even though some of the contagion in this case can be explained by cycles of competitive devaluation, it is true that it is hard to explain all the contagion in this way. Investors appear to have had excessive optimism up to last year, and to suffer from excessive pessimism now. But we are better off with modern financial markets than without them.

Robert Merton has given us a useful analogy, which I will embellish. Today’s financial markets are like superhighways. They get you where you want to go, fast. By this I mean that they are useful: They help countries finance investment and therefore growth, and they smooth and diversify away real fluctuations. But accidents do occur, and they tend to be big ones—bigger than they used to be when people were not able to drive so fast. The lesson is not that superhighways are bad. But drivers need to drive carefully, society needs speed limits or speed bumps, and cars need air bags.

**Regarding Financing**

**Critiques:** Too much public financing in response to the crisis, versus not enough.

The complaint that too much money was channeled to the crisis countries has two versions. The first is the question “Why should we bail out countries that are such tough competitors for our own firms on world markets?” The second variety of the critique has to do with moral hazard. Both raise important questions. But both have answers.

In the years prior to 1996, U.S. exports to East Asia grew very rapidly. We would like to return to that path. The crisis strategy ultimately helps our firms sell to East Asia in three ways, short-term, medium-term, and long-term:
• providing finance, so that the countries can continue to buy our
goods this year (even if at reduced levels),
• helping to restore growth, so that they can buy more next year, and
• pursuing fundamental market-opening, so that they can buy still
more in the long term.

Everyone has now learned about moral hazard, the principle that
bailing out investors and borrowers reduces their incentive to be more
careful next time. The moral hazard point is a correct one, and it enters
into the East Asia developments in a number of ways. But there is a
danger of exaggerating it. It is a standard principle of economics that
actions in one area can generate partly offsetting reactions in another.
That is not in itself a reason not to take action. In our highway example,
research has demonstrated that drivers react to seat belts and airbags by
driving faster and less safely than they used to. But that is not a reason to
dispense with air bags. If it were, that logic would say that to discourage
dangerous driving, we should put a spike in the steering wheel (as
Michael Mussa of the IMF says).

The crisis countries already pay large penalties under the current
system. Standards of living were severely reduced in Latin America after
the 1982 crisis and in Mexico after the 1994 crisis; incomes were also
sharply depressed in East Asian countries as a consequence of the
1997–98 crisis. The countries would not willingly choose to repeat the
experience.

Beyond that, as we consider what, if anything, should be done to
modify the international financial system so as to reduce the frequency
and severity of accidents in the future, perhaps we should consider that
bank loans appear to be one of the more danger-prone modes of
international capital flows. Foreign direct investment has the advantage
of greater stability. Equity investment has the advantage that risk is
efficiently shared; in the event of trouble, market prices automatically
depreciate. Statistical tests show that the percentage of capital inflows that
are bank loans, especially short-term or floating-rate loans denominated
in foreign currency, has a statistically significant (positive) effect on the
probability of a currency crisis, while FDI has a significant beneficial
(negative) effect.

Regarding Policy Conditionality

Critiques: Too much exchange rate flexibility, versus not enough.

The exchange rate policy debate in the current context has some of
the flavor of the similar debate after the Mexican peso crisis. At that time
you could read in any newspaper that a foolish mistake had been made
regarding the currency; you had to read more carefully to figure out that
half the commentators were saying that the mistake was not to have
devalued the peso earlier, and the other half that the mistake was to have
devalued at all.

In the East Asian episode, there is justice in the statement that
Thailand should have allowed its currency to depreciate earlier. But here,
as elsewhere, is the danger of exaggerating in hindsight how obvious this
was. Most of the East Asians had long been described as successfully
preventing their currencies from becoming overvalued in the way that
Latin Americans historically have done. Many westerners in fact had
urged them to *appreciate* their currencies, in response to balance-of-
payments surpluses and consistent with the Balassa–Samuelson argu-
ment that rapidly growing countries should experience increases in the
relative price of non-traded goods, and therefore real appreciation of their
currencies. The main point I wish to make with regard to exchange rate
policy is that neither a currency board on the one hand nor pure floating
on the other is appropriate under all circumstances. Following good
policies is a complicated matter, with lots of pieces to the puzzle; one
cannot solve all problems with a single wave of the currency wand. And
it is important to realize that a fervent belief in the virtue of free markets
does not help settle the debate. Free-market monetarists are just as
passionate in their belief that currencies should float, on the grounds that
central banks have no business buying and selling foreign exchange, as
are free-market supply-siders in their belief that exchange rates should be
fixed, on the grounds that central banks have no business exercising
independent monetary policy.

*Critiques: Too much macro austerity, versus not enough.*

Macroeconomic retrenchment was not the central aspect of the IMF’s
programs for the borrowing countries. The austerity and hardship that
the countries underwent in these programs is the consequence of the
crisis and the loss of investor confidence, not of the IMF’s response to the
crisis. It is probably inevitable, in circumstances where the priority is to
reverse capital flight and attract wary investors, that interest rates be
raised. The thinking was that if the programs were successful, the interest
rates could soon be brought back down before they did lasting damage to
the real economy. Initial targets may indeed have been too contrac-
tionary. As regards fiscal austerity, it is true that the initial agreements with
the IMF were predicated on hopes regarding economic growth and
corresponding budget surpluses that soon proved overoptimistic. The
targets were soon modified.

*Critiques: Too much required structural reform, versus not enough.*

The IMF is not simply applying the same cookie-cutter to East Asia
that it applied in the past to Latin America or other problem debtors. The
new country programs do emphasize structural reform more than
macroeconomic austerity. This is entirely appropriate, in that these
countries have historically followed good monetary and fiscal policies. The Fund has evolved during its history—shifting from the balance-of-payments problems of industrialized countries in the 1950s and 1960s, to the currency problems of developing countries post 1973 and their debt problems post 1982, and then adding the broader problems of the transition economies post 1989. Better that it continue to evolve post 1997, to address the financial and other structural problems in East Asia, than that (like some institutions) it fail to change with the times.

Regarding Moral Hazard and Bailouts

The most important source of moral hazard is between the Asian governments and their financial institutions and large corporations. Thus, the IMF and G-7 did the right thing in pushing them to increase transparency and supervision, improve governance, open their financial markets, and loosen banking relationships (directed lending and connected lending). It was a historic opportunity to get them to undertake important structural reforms they would not otherwise have carried out.

International financial markets certainly have their own failings. But I believe that the primary market failure is moral hazard at the national level, not at the international level. I have in mind such practices as directed lending, and implicit government guarantees for domestic banks and corporations, which we now call “crony capitalism.” It has quickly become conventional wisdom that the Anglo-American market system works better, with financial institutions operating on an arm’s-length basis, and the government role limited to enforcement of rules and strong prudential supervision of banks. One must acknowledge the dangers of American triumphalism. As Jeffrey Sachs has paraphrased Nehru, “Financial history is written by the creditors.” Still, there is a lot of truth in this conventional wisdom.

What is the role of the international financial community? It can make this market failure either worse, if it gives emerging markets more rope with which to hang themselves, or better, if it provides discipline by withholding money from countries that do not have the rule of law, functioning bankruptcy systems, and so on. The key to whether the international financial community makes things better or worse may be the policy of the IMF. If financing lacks appropriate conditionality, it will exacerbate the moral hazard problem. With appropriate conditionality, including financial structural reform, the entire impact of multilateral rescues would be to discipline the domestic market failure.

At the domestic level, we are accustomed to working backward from the constraint of knowing ex ante that the authorities will protect individual bank depositors ex post. Public statements to the contrary would be futile. So we require of banks capital adequacy, minimum
reserves, and deposit insurance. Similarly at the international level: We (the G-7) are always going to do something to help countries that encounter serious financial problems with systemic implications, provided they are following decent policies and make credible promises to improve their policies where they are lacking.

The alternative to having the IMF do the job would be highly politicized bilateral rescues with less extensive and less appropriate conditionality. Decisions regarding such rescues might be guided by such considerations as U.S. ethnic ties, CNN film clips, and partisan political scandalmongering. In short, the process would be a lot worse without a professional IMF to carry it out.

Currently an ambiguity or indeterminacy surrounds the availability of bailout finance. In the aftermath of the Mexico package of January 1995, a reasonable interpretation of U.S. policy and politics was “no more large bailouts.” The claim that investors in East Asia had a crash in mind, but were counting on being bailed out in light of Mexico, does not fit what people were saying, as Sachs and Radelet have noted. (The exception, all agree, is that investors treated Russia as something of a “moral hazard” play, thinking that the West would never allow a country so important from a national security standpoint to fail.) The Mexican bailout had elicited great congressional opposition, and East Asia is not as close or as clearly relevant to direct U.S. interests as Mexico. Indeed, a legislative amendment introduced by Senator Alfonse d’Amato effectively precluded Treasury use of its Exchange Stabilization Fund at the time of the Thai crisis in July 1997. Subsequently this legislation expired, so that the ESF could be used for second-line-of-defense financing for Korea. Even then, the Senate refused to authorize the New Arrangements to Borrow and the IMF quota increase. The leading explanation for the contagion that spread from Russia in August 1998—hitting far-removed and unrelated countries like Brazil—was the revelation that the G-7/IMF either were willing to let important countries fail, or had to do so (because the cupboard was bare). Only after the Russian default and contagion did the U.S. Senate finally get scared enough to vote through the New Arrangements to Borrow and the quota increase.

The year added up to a good lesson in signal-extraction for investors, albeit an expensive one. The combination of (i) the Thai and Korean bailouts in 1997, (ii) the decision not to throw good money after bad in Russia in August 1998, and (iii) the approved increase in IMF resources in the fall of 1998, together sent the correct signal to investors: The international community could and would help countries that made good efforts to help themselves in their policy choices. In the past nine months we have seen the strategy work, with some help from easier monetary policy, in the United States and around the world.

Things could have gone differently. The ambiguity of not knowing
the bailout rules seems dangerous. But the advantage to keeping investors guessing is that it limits moral hazard. Just as the Federal Reserve seeks to preserve a shred of ambiguity regarding the “too big to fail” doctrine domestically, so has the international community succeeded in preserving genuine ambiguity about its bailout policies. The international version is truly credible, because nobody knows for sure what the political process will produce, until it happens.