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FINANCIAL GLOBALIZATION: CAN NATIONAL CURRENCIES SURVIVE?

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## **KEYNOTE ADDRESS**

### **Financial Globalization: Can National Currencies Survive?**

James Tobin\*

#### **Abstract**

Fixed exchange rate, pegs to hard currencies that can be adjusted, are fragile, the more so the more mobile are capital funds across currencies and national markets. Once market participants doubt, for whatever reason, the ability of a developing or emerging economy's central bank to meet its commitment to redeem its currency in hard currency at the promised rate, they will race to claim the country's external reserves. Vulnerability to crises becomes greater as financial markets become less regulated and more internationally open. To escape currency crises, a country may lock its money to that of a reserve-currency country, as by a "currency board." This may, if and only if reserves are ample and all other economic objectives are subordinated, maintain the peg and hold down inflation. But it sacrifices monetary autonomy and seignorage, leading in effect and perhaps literally to substitution of the reserve currency for the local currency as unit of account and means of payment.

When crises hit, the IMF and other lenders give highest priority to restoration of credibility and confidence in the currency under attack. They require the victim country to take drastic restrictive monetary and fiscal measures, whether or not irresponsible in these policies brought on the crisis. Since these measures damage the economy, businesses, and banks, they may not restore confidence. Lenders of last resort are essential and should concentrate above all on replenishing liquidity.

The adjustable-peg system has outlived its usefulness. For most countries it is better to let exchange rates float in markets, like those of the big three currencies, dollar, yen, and deutsche mark (or euro). Even so, unimpeded inflows and outflows of liquid funds result in unwelcome exchange rate movements. Protection against them, by taxes or special reserve requirements, are desirable, and need not curtail useful capital flows. Banks and businesses need to be prevented from incurring net short term debt positions in hard currency. Equity and direct fixed capital are the desirable vehicles for developmental capital movements.

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The major private bank in a small country fails. Frightened depositors and creditors desert this country, its banks, and its currency, and the central bank's plea for foreign help gets little response. Affected creditors in neighboring countries, banks and central banks alike, scramble for internationally liquid assets. Interest rates zoom up everywhere, loans are called or not renewed, economic activity sinks, and unemployment rises rapidly to politically hazardous rates. The managers of the world monetary system, central bankers individually and collectively, strive above all to maintain the credibility of the system and confidence in existing currency rates. But the effects of their deflationary policies on business conditions destroy confidence instead. In the end country after country has to abandon its commitments to redeem its currency at the promised price. In country after country, then and only then did economic recovery begin, and it took many years.

The place was not Asia but Europe and North America. The year was 1931. The bank was the Credit Anstalt in Vienna. The monetary system was the gold standard, as revived after the hiatus of World War I. Central bankers, finance ministers, prime ministers, and presidents put defense of the gold values of their currencies above all else. Weimar Germany maintained the gold content of the mark but rationed its gold reserves. Its deflationary policies in 1931–32 — high interest rates, tax increases, no relief or work for the jobless — paved the way for Hitler's accession to power in January 1933. In September 1931 Britain was at long last forced off gold, after suffering from hard times ever since 1925, when Chancellor Churchill overvalued sterling by returning to gold at the 1914 gold and dollar value of the pound. In the United States, as the recession of 1929–30 became the Great Depression and the banking system collapsed, the Federal Reserve and President Hoover stubbornly defended the gold value of the dollar. (Hoover actually had some commonsense Keynesian instincts for fiscal and monetary activism until his Treasury warned him that the dollar's gold standard was threatened.) Roosevelt devalued in 1933, and recovery began.

I concur with the views of younger scholars that policymakers' *auri sacra fames* (Keynes's term) was responsible for turning a recession into a Great Depression. The international monetary system — the interconnection of national currencies with one another — was then and is now a crucial factor in world economic stability and prosperity. The presumption that currency crises are just the fault of the victims is still all too prevalent among the statesmen of world finance and, of course, among media pundits. The view is that good policies and proper institutions will enable a prudent government to keep its currency convertible at an announced parity in gold or in other currencies. The vulnerability of any economy, especially a small country caught in the commodity and financial markets of a big world, is insufficiently appreciated. So is the intrinsic fragility of any fixed exchange rate.

## **The End of the Bretton Woods Gold-Dollar Standard**

It's a quarter-century since the United States ditched the Bretton Woods system and adjustable pegs were abandoned in favor of floating rates — not always clean floating to be sure — among the major currencies — dollar, yen, and deutsche mark (to which other major Western European currencies have been tied most of the time). Floating among the big three presumably will continue as the euro succeeds the deutsche mark.

A fixed-rate system had failed again. One reason was that the United States could not devalue the rate of exchange of the key currency with other currencies without the concurrence of the other governments. The United States wanted Japan and Germany, in particular, to appreciate (by lowering the price of gold in their currencies), and they thought that adjustment was the responsibility of the United States. A second reason, which complicated the currency rate conflict, was the peculiar role of gold in the system. Dollars held by foreign governments were convertible into gold at a fixed price. Private dollars were not supposed to be convertible, but they became so de facto as the United States and the United Kingdom, until 1968, fed the private gold market to keep the free-market gold price from getting out of line. U.S. balance of payments deficits increased dollar debt in official hands and depleted the U.S. gold reserves available to redeem those dollars. In the ultimate impasse in 1971–73 the United States abandoned its commitment to pay gold for dollars. Unlike Herbert Hoover, Richard Nixon was not willing to sacrifice American prosperity for the gold standard or for fixed currency exchange rates.

I think he was right. I know that among many wise and experienced observers, there is nostalgic longing for a return to fixed rates and talk of a “new Bretton Woods.” The grass is always greener! Floating nominal rates are blamed for excessive variability in real exchange rates. The unanticipated appreciation of the dollar against the yen in the early 1980s looms large in the memories of American businesses affected. I suspect, however, that the shocks that have moved exchange rates significantly since 1973 would have brought irresistible pressures on fixed rates and reserve crises like those of the 1960s and early 1970s.

Instead of being blamed for volatility of nominal and real exchange rates, floating rates should perhaps be credited for accomplishing economically desirable revaluations without currency crises. A recent example is the 40 percent decline of the yen against the dollar over two years, never a problem serious enough to be reported on the front pages of American newspapers.

At the opposite extreme, the way to escape currency crises is to adopt a permanently and exclusively a common international currency, as is about to occur within the European

Union. This, of course, has its own problems. Perhaps a worldwide common currency will be adopted worldwide some time in the next century, but not soon.

## **A Voice from the Past**

Given my lack of experience and expertise in the World Bank's world, I am unqualified to speak at this conference, but my old friend and once colleague Joe Stiglitz insisted that I do so anyway. To show that I have at least thought about international monetary problems before and to show that today's issues are not altogether new, I am going to read you something written in 1972, shortly after the Smithsonian Agreement was concluded, hailed by President Nixon as the greatest monetary agreement in history but dead in less than a year. The passage occurs in a short book on domestic macroeconomic policy called *The New Economics One Decade Older*:

The most important barrier to flexible monetary policy is the ever-increasing international mobility of liquid capital. The Eurodollar market is unifying the short-term money markets of the major countries on both sides of the Atlantic. European countries have felt keenly, and complained bitterly, that they have lost autonomy in monetary policy. Even the autonomy of the United States Federal Reserve has been diminished . . . . The interest sensitivity of short-term funds can be expected to continue to increase and to pose even greater problems for the international monetary system and for national monetary policies. . . . [A]s substitution elasticities increase . . . the boundless resources of private arbitrageurs will just erase any rate differentials the national monetary authorities try to create and sustain.

There is no more important item on the agenda of the coming negotiations for international monetary reform. On the one hand, some agreed central coordination of national monetary policies is essential. Otherwise the common international interest rate level, from which feasible national deviations are limited, will be left to anarchy and tug-of-war. On the other hand, there is nowhere near enough economic and political unity among Europe, North America, and Japan to support a single international monetary policy for the whole group. The new international arrangements must protect some national autonomy in monetary policy.

Unless the . . . world acquiesces permanently in [a] fixed-exchange-rate dollar standard . . . we cannot count on a system in which the Federal Reserve makes world monetary policy. Moreover, the Common Market countries will undoubtedly seek greater monetary coordination among themselves, so that Europe will have more muscle in contest with the Federal Reserve.

. . . [It] is clearly desirable to preserve some possibilities of autonomy in national or continental monetary policies and to defend them against the growing internationalization of money markets. Our economies and governments are not sufficiently unified in other

respects — goods, labor, and capital markets, taxes and fiscal policies — to live with a single . . . monetary policy. That is where the analogy with the centralization of Federal Reserve policy [in the United States] breaks down. The same forces that unified short-term securities markets throughout the U.S. also produced . . . national markets in goods, labor, and capital . . . [that] can handle regional differences in . . . circumstances in a way that is not possible in today's international economy. And a national government can carry out compensatory fiscal redistributions between regions; there is no comparable international mechanism in prospect.

How can some international monetary autonomy be preserved? Some sand has to be thrown into the well-greased channels of the Eurodollar market.

I went on to advocate increasing exchange risk by more flexible exchange rates, either outright floating or widened bands around frequently adjusted parities. Then comes for the first time a proposal of “an internationally agreed uniform tax, say 1%, on all spot conversions of one currency into another,” in order to “drive a wedge between short-term interest rates in different national markets.”

My propositions today are similar, but applied to a wider universe. Let me summarize them. First, for most countries fixed exchange rates in their usual form, adjustable pegs, are a bad idea. Developing countries would be well advised to follow the example of the major capitalist countries and let their currencies float like the dollar, yen, and deutsche mark. It is hard to understand why this had not become normal practice long ago. It would have avoided the worst consequences of recent adjustments of exchange rates. Is the reason that it would relax discipline for “sound” policies exerted by fixed rates?

Second, while globalization of financial markets — the liberalization and deregulation of international financial transactions — has contributed importantly to the economic progress of developing and emerging economies and can continue to do so, these trends also threaten the monetary sovereignty of those countries. This is especially true for a country committed to a fixed exchange rate, an adjustable peg that it is committed not to adjust. The logic of financial globalization is to increase the elasticities of substitution between risk-adjusted rates of return on local assets and debts and those in dollar markets, until the local central bank has no margin within which it is free to determine domestic interest rates.

Third, once the central bank cannot make monetary policy, a logical next step is “dollarization” — or “yennization” or “euroization” — allowing one of the hard currencies to become the smaller country's means of payment and unit of account. This does have some advantages. The trouble, obviously, is that the big central bank has no reason to consider a satellite's conditions and interests. The same problems will arise in the European monetary union, but in that case the central bank has responsibility to all the members of the union.

Fourth, to preserve a local currency with residual monetary sovereignty, some friction in international financial institutions and markets needs to be retained. This is true also in a regime of floating rates, though floating itself is some protection. The new global financial system should be able to contribute to development without rendering central banks impotent or whole currencies obsolete. The governments, banks, and businesses of developing countries should eschew short-term demand debt or short-term debt in hard currencies. Flows of capital to developing countries should preferably take the form of direct fixed investment or equity.

Fifth, developing countries need to build institutions of financial reform and regulation supportive of modern national financial systems and of independent currencies. The International Monetary Fund (IMF) should concentrate on its intended function as lender of last resort for its members. The resources of the IMF and of its members are pitifully small and should be augmented.

## **Adjustable Pegs and Bank Runs**

The trouble with adjustable pegs is that they can be adjusted and therefore invite speculation that they will be. They are no less a potential invitation for speculation than are floating rates. Indeed, a discrete change in an official parity is much more traumatic. It is a loss of face and a blow to pride. It is an administrative decision, that is to say a decision of policy and politics. It necessarily requires responsible officials — finance ministers, chancellors, central bank chairmen — to go back on their solemn word. Moreover, they or their successors have the unenviable task of choosing a new rate in a climate poisoned by distrust, clouded by uncertainties about the fundamentals, and dominated by unpredictable psychology. It's easy to get it wrong, prolonging and aggravating the crisis. For all these reasons, there is great temptation to stick with an overvalued parity too long.

A central bank managing and defending a currency pegged to an external hard currency, or to a basket of hard currencies, is like a conventional commercial bank. The bank's deposit liabilities are fixed in nominal value and payable on demand or quite soon. They are "backed" largely by illiquid or imperfectly liquid assets of uncertain ultimate value. The bank's cash reserves — of currency and coin and deposits in the central bank — are only a fraction of its cash liabilities. The bank is nevertheless solvent if patient, informed valuations of these assets equal or exceed the liabilities with high probability. "Patient" means that the valuations allow time for the assets to yield their expected values. Premature liquidations by use or sale are costly or impossible, the more so the greater the proportion of its assets the bank must liquidate.

The discrepancy is the basis for the distinction between insolvency and illiquidity, for

the belief that “marking to market” may underrate the eventual value of the bank, and for the function assigned to a “lender of last resort,” namely to allow the bank time to attract deposits or liquidate assets. The distinction is not absolute. The bank’s world is changed by a bout of illiquidity, and by the events that bring it about, in ways that increase the likelihood of insolvency. Help from a lender of last resort may rescue a bank on the brink of insolvency. On the other hand, the lender may find itself keeping alive a crippled bank that will never survive on its own.

Clearly the expectations and risk assessments of depositors and participants in asset markets are crucial. In a benign equilibrium of the bank these estimates are rational and generate patterns of behavior and valuations that keep a basically sound bank liquid. The “last resort” does not arise, and its lender stays on the sidelines, while its existence supports the equilibrium. The benign equilibrium is, however, fragile. Each depositor is continuously deciding whether to withdraw cash or not, and her decision depends mainly on what she thinks others are deciding. Adverse events or rumors may tip the scale to runs and panics. Contagion from failing banks nearby can doom intrinsically solvent banks.

Why should a depositor keep funds in a bank if she gains nothing and may lose everything? Bank services are one reason, and nowadays some interest is generally credited. But governmental deposit insurance, explicit or implicit, is usually essential to keep depositors content. To offset the moral hazard incentive to banks and depositors to seek risky gains while the insurer absorbs the losses, it is necessary to regulate and oversee the balance sheets of insured banks, as the debacle that followed deregulation of the U.S. savings and loan industry in the 1980s dramatically confirmed.

Besides the benign equilibrium, supported by deposit insurance and balance sheet surveillance or not, there is a second, malign equilibrium in which the bank has failed and closed. The depositors have withdrawn all the bank’s reserves in cash. Other assets have been sold at losses, in a desperate quest for liquidity. Or better, a regulator has closed the bank promptly enough to conserve some assets for eventual settlements with depositors, insurers, and other creditors.

The analogy of a national currency to a bank is pretty clear. The central bank has promised to buy back its own currency with external currency at an announced price, and for that purpose holds reserves of hard currency. In this benign equilibrium expectations in currency markets around the world support behaviors that validate the expectations and sustain the pegged exchange rate. In the second, pessimistic, equilibrium the central bank defaults on its commitment. Like bank depositors worried about what other depositors will do, holders of a pegged currency fear that they will act too late to save their assets. Potential claims on central bank reserves include not only the external liabilities of the central bank and the government but also those of private banks, businesses, and households, domestic



and foreign. All the liquid local currency assets they hold can potentially be tendered to the central bank and government to buy up their holdings of hard currency. If they are then spent or exchanged for nonliquid assets, they can again fall into hands that will convert them into hard currency.

The good equilibrium is fragile, because estimates of its viability at home and abroad are interdependent, and panicky rushes to convert local into external currency can force the central bank to abandon its commitment and let the currency fall — even though the economic fundamentals indicate that the currency is worth, even if not its original pegged value, much more than its crisis price.

The analogy between the bank deposit-versus-local currency choice and the domestic-versus-foreign currency choice is imperfect in one respect. Whereas an uninsured bank deposit will not appreciate above its contracted cash value, the local currency's exchange value can rise as well as fall. In practice, however, the exchange rates of developing country currencies often gravitate to the high ends of their bands or of traders' confidence intervals. When currency speculators see only downside risk, they sell — just as depositors run with their cash if they see no chances that their bank's condition will improve.

Advocates of fixed rates regard the good equilibrium as normal and sustainable and the runs as anomalous and avoidable. It is just a matter of adopting and maintaining policies that engender confidence. In the design of so-called bailout packages to reverse attacks on the currency's exchange rate in times of incipient crisis, the first priority is to promise measures that the “market” will regard as sound. But they have to overcome the adverse momentum of *sauve qui peut* panic.

Moreover, a suspect currency typically is thought to be overvalued. Perhaps the inflation rate has exceeded those of competitors and trading partners. Perhaps export markets are slumping. Perhaps the current account is turning into deficit, reflecting borrowing for domestic consumption rather than productive investment. There may be no credible package of measures that can save the exchange rate or reverse its decline.

An extraordinarily high interest rate is the usual emergency therapy. The idea is to devalue the currency against its own future value, inducing people to hold onto it despite the expected decline in its foreign exchange value. If this works, it raises both the current and the expected market exchange rate. But tomorrow, if the adverse expectation is fulfilled, the rate is again lower. Only when (and if) favorable changes in the markets occur can the currency be stabilized without keeping the interest rate extraordinarily high. Meanwhile, the economic damage of that interest rate may be dragging down the exchange rate's prospects.

## **Currency Board, Money Board?**

A currency board requires 100 percent reserves in hard currency against the local-currency monetary base. If reserve assets can be bought from the central bank by bank checks, this requirement is no guarantee that the central bank will not run out of reserves. If local currency is a ration coupon for external reserves, bank depositors could obtain these tickets by withdrawing cash from their deposits. Distrust of the currency would then be accompanied by a bank panic. After all, the purpose of the currency board device is to freeze the central bank into a permanent commitment to an exchange rate fixed at a particular value, if necessary forcing draconian tactics (most likely astronomical interest rates) to avert defaults on its currency exchange commitment.

Combining a currency board with fractional reserve banking is awkward. If the size of the monetary base is limited to the central bank's holdings of international reserves, the central bank has no way to compensate for increases in the public's demand for local currency at the expense of its willingness to hold local bank deposits. This could come about for various reasons: some random and innocuous, such as increases in income and consumption spending, some reflecting public concern over the soundness of banks. However caused, the result of shifting a dollar of high-powered money from bank reserves to publicly circulating currency is to substitute one dollar of low-powered money in currency form for, say, five dollars of low-powered money in bank-deposit form (assuming a reserve ratio of one-fifth).

Those of us with long memories recall the bank runs in the United States in the early 1930s, triggered by bank failures and in turn the cause of further failures. The unwillingness or inability of the Federal Reserve to respond by open market purchases to expand the total monetary base was disastrous, dooming both the economy and the banking system. At the time Federal Reserve monetary-base liabilities were not constrained by a currency-board-type 100 percent gold reserve requirement, although they were supposed to be backed by some combination of gold, Treasury bonds, and commercial paper eligible for rediscount.

The point here is that the currency board makes it impossible for the central bank to perform its normal domestic functions, either that of macroeconomic stabilizer or that of lender of last resort.

A 100 percent reserve requirement on bank deposits is a logical extension of the currency board idea to a "money board" system. It would allow the system, originally used for British colonies dependent mainly on paper money, to catch up with the rise of bank deposits as the main medium of exchange.

A hundred-percent-reserve banking system would tighten the country's commitment to its exchange parity, but at heavy cost. It would deprive the economy of the intermediary

functions performed by fractional reserve banks. Presumably some nonbank intermediaries would take their place. They would seek liabilities to the public as close to bank deposits as the authorities permit. These would require some regulation, although the availability of fully backed deposits in narrow banks would relieve the government of moral compulsion to guarantee the liabilities of other intermediaries.

A currency board, or a more comprehensive money board, sacrifices real macroeconomic performance in all its significant dimensions — production, income, growth, trade, saving, and investment — to the strength of the currency and indirectly to the prevention of inflation. When the successes of the device are touted, it is in these narrow terms. The currency board is an extreme form of the fixed exchange rate as a “real anchor,” a tactic of national self-discipline popular in recent years. However, the true test of successful policy is not conquering inflation by an open-ended sacrifice of prosperity but conquering inflation while achieving full employment and reasonable growth in economic well-being. Argentina stabilized its price level by tying its currency to the dollar, but its unemployment rate is stuck in double digits.

In any case, it is by no means sure that a currency board or any similar fixed-exchange-rate commitment will work. Once again, there is a bad outcome as well as a good equilibrium. If the initial stock of external reserves is small, the cost in economic activity of cutting the stock of local currency as required may be devastating, and set off a scramble for hard currency. Those who get their hands on local currency will buy up the central bank’s hard currency and force further deflation on the banks and the economy. These unstable dynamics will force the country to cut itself loose from the currency board.

A successful commitment to a fixed exchange rate requires an ample initial stock of unborrowed reserves, as well as policies that reinforce the virtuous circle of the “good equilibrium,” as in Hong Kong (China) and Taiwan (China). In less auspicious circumstances the “real anchor” strategy has contributed to overvaluation of the currency. This can happen when the small country’s inflation exceeds expectations or when the anchor country’s inflation declines.

## **Why Not the Dollar?**

The currency board arrangement is a way, albeit somewhat technically flawed, surrendering independent monetary policy and acknowledging vassaldom. At that point, why not go all the way, drop the local money, and adopt the hard currency as a medium of exchange and unit of account? Argentina is well on its way to doing this. Unfortunately Federal Reserve policy-makers are not going to weigh macroeconomic problems in Patagonia even as much as those in Idaho. But this is the destination to which financial globalization is taking

developing countries, whether the IMF, the U.S. Treasury, and the other lords of international finance acknowledge it or not.

In a dollarized regime some of the functions central banks play now might be taken over by private banks. They would accept deposits in dollars, as many do already. The acceptance in New York of checks in dollars on Korean or Indonesian banks might be subject to a discount reflecting the reputation of the bank and its assets, like the discounts on banknotes issued by wildcat banks in the American West in the 19th century. Those discounts could take the place of an exchange rate. Of course, in a worldwide integrated financial system U.S.-chartered banks would be competing in the Republic of Korea and Indonesia for deposits and loans.

The informal use everywhere of dollar bills as hand-to-hand currency and mattress hoards is one thing. Adoption of the dollar as legal tender, in place of or in addition to a country's national currency, is quite another. This would best be negotiated between governments, so that the handling of checks between banks in the smaller country and the United States could be systematized. Similar problems have been painstakingly resolved in the European Union. Effective internationalization is not unmitigated *laissez faire*.

Dollarization deprives the government of the small country not only of monetary sovereignty but also of seignorage. Given the costs of borrowing in dollars, inclusive of country risk premium, this could be a substantial fiscal loss.

## **In Praise of Dirty Floating**

Surely the most important lesson of the currency crises is the most obvious. Don't peg your exchange rate. Let it float. Don't even confine it to a broad band, with or without a moving central parity. If it hits the bottom of the band, it is pegged and invites speculative attack. Just let it float. I am not a purist. I think dirty floating is quite all right. Interventions are sometimes called for, and need not be transparent. For occasional dirty floating, defensive or offensive, hard currency reserves are needed. The central bank must husband them in the national interest, whether the exchange rate is fixed or floating. In either case, the government needs to limit those private external financial transactions that may force the country to lose reserves or to suffer unwelcome currency depreciation.

## **Globalization and Financial Reform**

Developing countries, especially the emerging Asian tigers, have made great strides in liberalizing and "globalizing" their financial systems, markets, and institutions. Local nonfinancial businesses borrow, lend, and sell shares in major international markets. The

balance sheets of banks and other financial institutions contain assets and liabilities in various currencies. The gross volumes of currency transactions involving these economies have multiplied, and the net flows of private capital into these economies have greatly increased. No doubt these developments reflect liberalizations that have opened these economies to foreign investments and made them increasingly attractive.

At the same time, some aspects of financial globalization are perilous to the health of central banks and economies, as recent currency crises show. This is especially clear in fixed exchange rate or adjustable peg regimes. When private banks and businesses can borrow in whatever amounts, maturities, and currencies they choose, they create future claims on their country's reserves. This may force on the central bank and government monetary and fiscal policies that sacrifice the country's prosperity and growth in order to protect the reserves on which these debts are potential claims. They might indeed threaten to exhaust the nation's reserves.

Integration and perfection of financial markets will bring money market interest rates in different financial centers closer and closer together. Last year American, Japanese, and European banks saw loans to Korean banks as great opportunities because the interest rates were higher than those they could earn at home. At the same time, Korean banks seized the chance to borrow at what they regarded as low rates. Arbitrage was chipping away at the risk premium implicit in the rate differentials. The longer the peg of the Korean won survived, the closer the Korean short rate, whether on won or on dollar liabilities, would come to New York or Tokyo rates. As net demands across markets become more elastic with respect to interest rate differentials, the less autonomy the central bank of the smaller country will have over its interest rates and monetary policies. The smaller country loses monetary sovereignty and becomes in effect a monetary province of the large country to whose currency its own was pegged.

Short-term private bank debts in hard currencies were fatal to the Korean and Indonesian currencies in the last months of 1997. These debts, though they seemed to the foreign lenders and domestic borrowers directly involved to be straightforward business deals, visited severe negative externalities on their fellow citizens, bringing about currency crises devastating to whole economies.

The central bank, committed to honor the peg and to maintain the country's terms of trade, has to protect its reserves. It cannot be indifferent to the claims on those reserves negotiated by private parties, domestic and foreign, who ignore the social risks. An obvious precaution is to limit even to zero the net indebtedness (particularly the short-term debt) in hard currency allowed any private bank. The device used in Chile and Colombia, an extra reserve requirement, is evidently successful. It is more important to slow down incoming

funds than outgoing money, and to install such hurdles permanently than just in emergencies.

These grains of sand in the wheels are, to be sure, departures from the goal of complete integration, with universally free asset markets blind to currency denominations, geographical locations, political jurisdictions, and nationalities of transactors. But it is hard to see how governments outside the major industrial capitalist democracies can maintain monetary sovereignty without some regulations to protect their international reserves.

In the recent “bailout” packages of the Asian economies, further cross-border financial liberalization was one of the conditions the IMF and the U.S. Treasury imposed for official loans, despite the evident facts that excessive private external short-term debt was, if not a cause of the crisis, a serious aggravation of it, and that banking and financial institutions seemed to need more regulations in several respects as well as fewer in other respects.

U.S. experience suggests the importance of distinguishing among several kinds of public regulations of financial institutions and markets. First are requirements designed to make markets work better, by outlawing fraud and self-dealing and by requiring depositories, investment banks, and sellers of financial instruments to inform the public clearly and completely what exactly it is they are selling. Second are limitations on balance sheets of intermediaries, in cases where the public cannot be sufficiently protected by information alone or where the state has an implicit or explicit responsibility to compensate losers. Third are protections of competition against concentration and collusion in restraint of trade. Fourth are regulations, like reserve requirements and capital ratios, essential to make government policies workable. Fifth are orderly legal procedures for handling bankruptcies and defaults. (A useful precedent for handling the rash of insolvencies now afflicting some Asian economies is the U.S. depression-era Reconstruction Finance Corporation. For example, the RFC put public money into defunct companies by investing in their preferred stock. Preferred stock was also offered to depositors in failed banks up to the amount of their lost deposits.)

On the other hand, U.S. history also is full of insalubrious regulations designed to protect various vested interests against competition — forbidding entry into particular markets, setting prices and interest rates, distorting market outcomes by taxes and subsidies. Presumably we would like developing countries to follow our good examples and not our bad. Let us encourage them to build good national financial systems, not just to open their doors ever wider.

Some critics of the victims of the currency crises and of the “bailouts” themselves assert that if governments and international agencies would just get out of the way, free markets would reach ideal solutions to all the problems. We economists should be cautious in applying Invisible Hand propositions — the theorems of optimality of competitive

equilibrium that we love so much — to money and finance, especially international money and finance. Those theorems apply strictly to a single closed real economy, without money, presumably one where incredibly efficient multilateral barter determines relative prices and allocates resources over future times and states of nature. Fiat money does not figure in production or utility functions, so why it has any particular value or any value at all is one of those puzzles economic theorists pose for themselves. Even more mysterious are the relative values (exchange rates) of various fiat moneys, none of which has intrinsic value. Since these are creatures of governments, it is not surprising that some government regulations are necessary to make them work. I certainly am not saying that we can dispense with governments or money. Quite the opposite. We don't in fact have moneyless efficient multilateral barter. I am simply warning against relying on a priori ideological shortcuts instead of pragmatic architecture.

## **We Need Lenders of Last Resort**

Moral hazard has become almost as fashionable an expression as transparency. Many pundits have discovered that moral hazard is intrinsic in “bailouts,” the prejudicial word for lender-of-last-resort operations, and they are generally quite indignant about it. Among economists and financiers looking for better ways of handling debt crises in future, minimization of moral hazard seems to be the prime goal. I think this is a misplaced priority. In liquidity crises that necessitate emergency loans, lenders and borrowers may be spared losses of principal, but they hardly escape wholly unscathed. They are not likely to find the experience one they would wish to repeat. More important, the social costs of unmitigated currency collapse extend far beyond the parties to financial deals, to ordinary people who lose jobs, savings, and income. Limiting these third-party effects is worth putting up with some moral hazard.

The IMF needs to take its lender-of-last-resort responsibility more seriously. It was founded to tide members over during temporary liquidity crises, not to shape the permanent economic structures of economies and guide their long-run development strategies. For its fire-department function, the IMF needs more money, not less, and more than is currently under debate. Aggregate quotas of \$150 billion? That's peanuts! Within larger quotas, members should have bigger unconditional drawing rights.

## **A Plea for Humility**

A final remark: One of the more unseemly byproducts of the recent Asian crises is the triumphalism of American commentaries on the events. The currency troubles were

interpreted as demonstrating the hollowness of the “Asian model” of capitalism. Not many years ago, many Americans admired and feared the performance of Japan and then the smaller Asian economies. We wondered if their model of capitalism, in particular of corporate governance and employment, was better than ours, and hated to face that fact. Some silly popular economics books exploited these worries. Then the Japanese slump of the 1990s and now the comeuppance of the miraculous emerging Asian tigers, in contrast to American and British prosperity, have given us new confidence in the “Anglo-American model.” Some spokesmen for our kind of capitalism have not resisted the temptations of triumphalism, even though the overzealous reach of our practitioners of global finance might bear some responsibility for the crises.