# The International Monetary Fund in the Wake of the Asian Crisis<sup>1</sup>

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The economic and financial crisis that erupted in Asia in 1997 and that had by the end of 1998 engulfed virtually the whole of the developing world has not embellished the reputation of the International Monetary Fund. The Fund has been chastened, challenged, and castigated for its response to the crisis. In practice, many of the criticisms to which it is subjected are contradictory and incompatible. Some observers have criticized it for pushing currency devaluation on its developing-country members, with generally disastrous consequences, and for resisting the idea of currency boards. Others, meanwhile, have denounced it for demanding that crisis countries hike interest rates to defend their currencies on the grounds that this only precipitated deeper recessions and more serious financial problems and have argued that the Fund should insist that its developing-country members adopt more flexible exchange rates. Some criticize the Fund for lending too freely, thereby weakening market discipline and increasing the likelihood of future crises, while others conclude that the prompter provision of larger loans, perhaps under the aegis of a new "precautionary" facility, is needed to head off "self-fulfilling" crises. Some criticize the microeconomic and structural conditions that the IMF includes in its programs as meddling in the

<sup>&</sup>lt;sup>1</sup>This is a revised version of a paper prepared for the Monash University/Australian National University Conference on Responses to the Asian Crisis, Melbourne, 17-18 December 1998. I am grateful to conference participants, especially Steven Grenville and Benjamin Cohen, for helpful comments, and to the conference organizers for guidance regarding revisions. Financial support was provided by the Ford Foundation through the Berkeley Project on International Financial Architecture. This manuscript draws in part on my book, *Toward a New International Financial Architecture: A Practical Post-Asia Agenda* (Washington, D.C.: Institute for International Economics, 1999).

internal affairs of countries — meddling which undermines political support for necessary reforms and therefore has the perverse effect of undermining investor confidence — while others insist that the Fund has no choice but to press for institutional reform because this is essential both for the restoration of confidence and for stability in a financially-integrated world.

This paper sorts through the controversies surrounding the Fund's response to the crisis and offers suggestions for how it might go about its business differently in the future.

### **Exchange Rate Policy**

The Asian crisis raised obvious questions about the wisdom of the IMF's advice regarding the management of exchange rates. *The Wall Street Journal* view, that only pegged exchange rates are compatible with monetary and financial stability, is vulnerable to the criticism that pegged rates are strongly associated with crises. Pegged rates create one-way bets for speculators, making sitting ducks of central banks and governments. At the same time, the prevailing academic view that high capital mobility should and will lead most countries to float their currencies must confront the fact that floating was a disaster in Asia, where currencies, rather than adjusting smoothly, collapsed abruptly, bankrupting financial and nonfinancial firms with foreign-currency-denominated debts.

Why did the Asian devaluations have such devastatingly negative effects? If there is one explanation for this disaster, it is that governments failed to prepare the markets for the change in the exchange rate. The currency peg having been the centerpiece of their economic policy strategy, jettisoning it was a heavy blow to their policy credibility. Giving in to market pressures raised doubts about their competence and commitment to their stated policy goals. Their stated

commitment to the currency peg lulled banks and firms into the mistaken belief that there was no need for costly insurance against exchange rate fluctuations. Debtors saw no need to use forward and futures markets to hedge against exchange rate fluctuations. Hence, when the inevitable adjustment came, it was devastating not just to confidence but to the solvency of banks and corporates with unhedged foreign exposures. Investors, having been lulled into complacency by official assurances that the exchange rate was fixed, scrambled for the exits once they realized that those promises were empty. Banks and corporates with unhedged foreign liabilities scrambled for cover, purchasing the additional foreign exchange needed to service their debts and hedge against further currency fluctuations. Both responses pushed the exchange rate down still further, which pushed yet additional banks and firms into bankruptcy. This fed investor fears, further weakening the exchange rate and thereby further aggravating the difficulty of servicing private-sector debts.

To recommend that countries operating exchange rate pegs avoid these land mines by warning the markets that the pegged rate can be changed, thereby encouraging banks and corporates to hedge their exposures, is disingenuous. Any government operating a peg which sends the message that it is prepared to change the rate invites a speculative attack. The first priority of any government seeking to peg the currency is to convince the markets that it is committed to maintaining that peg. To protect its reserves it will be forced to deny that it is contemplating a change in the level of the exchange rate or a change in the regime. Inevitably, the effects of its statements will be to discourage banks and corporates with foreign-currency-denominated liabilities from undertaking transactions in currency forward and futures markets to hedge that foreign exposure. Consequently, when a change in the exchange rate comes, its effects will be devastating.

It follows that in a world of high capital mobility there are only two feasible approaches to exchange rate policy: currency boards and more flexible rates.

The Currency Board Option. The first option is not just to peg the exchange rate but to lock it in — the Argentine strategy, if you will. In this case it matters not a whit whether banks and firms hedge against exchange rate fluctuations because there is no prospect that the exchange rate will change.

Credibly locking in the exchange rate is easier said than done. Doing so requires abolishing the central bank and its discretionary powers and making that change irreversible. Currency boards have a long and distinguished lineage. One source book lists more than 100 instances in which this monetary arrangement has been applied.<sup>2</sup> To some this makes currency boards the natural solution to the exchange-rate problem for countries whose financial markets are too shallow and whose policymaking institutions are too fragile for them to cohabit comfortably with exchange rate volatility.

In fact, currency boards are economically feasible only as part of a broader set of policy reforms, and they are politically viable only for countries prepared to deploy that entire panoply of policies. Most obviously, adopting a currency board means that the country must conform to the monetary and financial conditions prevailing in the rest of the world. Rising international capital mobility sharpens the implications. Once upon a time, transaction costs provided countries maintaining firmly fixed exchange rates and open capital accounts with limited insulation from

<sup>&</sup>lt;sup>2</sup>See Hanke, Jonung and Schuler (1993).

financial conditions abroad, but this is no longer the case.<sup>3</sup> In today's world of high capital mobility, the scope for discretionary monetary policy by such countries is nil.

Second, countries which adopt currency boards effectively eliminate all scope for the domestic authorities to act as lender of last resort to the domestic financial system. This makes it essential to develop alternative arrangements for backstopping the banks. Typically, this means internationalizing the banking system. Internationalizing the banking system diversifies the banks' asset base. It is a way of importing state-of-the-art asset and liability management techniques. Perhaps most importantly, it provides domestic banks with a proprietary lender of last resort in the form of the foreign head office, which is essential for financial stability when the hands of the government and central bank are tied. It is no coincidence that the vast majority of currency-board countries have been actual or former colonial dependencies of the major financial powers, where foreign bank presence is considerable.

Foreign bank presence is similarly prominent in all of today's successful currency-board countries. The Argentine banking system is now one-half foreign owned. Estonia's banking system is roughly 70 per cent foreign owned. Bulgaria seems prepared move in the same direction as the privatization of its banking system proceeds. Given the fragility of small, localized, poorly regulated banking systems, selling off domestic financial institutions to foreign buyers is essential if a currency board arrangement is to work.

But selling off domestic financial institutions is sensitive politically. Governments accustomed to using banks as instruments of development policy are loath to turn over the reins

<sup>&</sup>lt;sup>3</sup>Two analyses of how much monetary autonomy countries with firmly fixed exchange rates enjoyed in the past are Giovannini (1993) and Eichengreen and Flandreau (1996).

to foreign owners. Industrialists accustomed to receiving preferential credits will be similarly resistant. There may be sound arguments for moving away from these arrangements in favor of a more market-driven approach to the allocation of financial resources, but the political reality remains that many governments and societies are reluctant to cede control of domestic financial markets to foreign banks.

In addition, having forsworn the exchange rate as an instrument of adjustment, a currency-board country must put in place alternative mechanisms for adjusting to macroeconomic disturbances, notably flexible labor-market arrangements. This is relatively straightforward for Hong Kong, given the porousness of its border with Mainland China, and for Estonia, given the absence of Western European-style labor market institutions in the aftermath of its transition from central planning. But in Argentina, which is hardly a paragon of labor-market flexibility, maintaining its currency-board peg in the face of the Tequila Crisis and the Asian Flu has meant persistent high unemployment, at rates sometimes exceeding 20 per cent.

This is a level of pain that few countries are prepared to endure. By implication, countries should start down the currency-board path only when there exists broad and deep support for putting monetary policy on autopilot, rendering it a low-probability event that a super-majority of the disaffected unemployed and other special interests can be marshaled to reverse the policy. Otherwise, when times are tough, currency speculators will anticipate mounting public opposition to monetary austerity, perhaps leading to abandonment of the currency board and the exchange rate peg and giving rise the generic pegged-rate problem of self-fulfilling speculative attacks.

Thus, only countries in which investors harbor exceptional distrust of discretionary monetary policy, where the domestic economy is sufficiently flexible and resilient to adapt to

whatever monetary and financial conditions are implied by a fixed exchange rate, and where there exists deep-seated public support for the policy, however painful its consequences, can sustain the currency board alternative. Argentina can, given the deep distrust of discretionary policy inherited from the country's repeated bouts with hyperinflation, which provides broad-based public backing for its "convertibility law." Hong Kong can, given investor fears that a managed Hong Kong dollar would actually be managed from Beijing, and the Hong Kong Monetary Authority's insulation from political pressures (given that Hong Kong is neither a sovereign country nor a true democracy). But in few other places is support for putting monetary policy on autopilot realistically as deep and broad.

In particular, that level of support was not obviously present in Indonesia in 1998, when some advisors recommended the adoption of a currency board. Fear of inflation and distrust of the monetary authorities there were, but few of the other preconditions were in place. For one thing, the banking system was weak, and if investors tested the authorities' commitment to the peg, the government might not be able to sustain the higher interest rates needed to defend it at the price of further bank failures and financial distress. For another, there was the question of whether the public would support these official efforts, especially if exchange-rate stabilization was seen as a temporary expedient to support the rate only until the ruling elite had succeeded in removing their assets from the country. Indonesia's flexible exchange rate was a disaster, to be sure, but even with benefit of 20-20 hindsight, there is reason to doubt that a currency board was a viable alternative.

More Flexible Exchange Rates. Given the demanding preconditions for establishing currency boards, the vast majority of countries will have no choice but to follow the other route

of allowing the exchange rate to fluctuate. For them, the advantages of greater exchange rate flexible can be considerable. In particular, if the rate is allowed to move regularly, banks and firms will have an incentive to hedge their foreign exposures and will acquire insurance against the negative financial effects of unexpected large currency fluctuations if and when they come.

This does not mean that countries which reject the currency board option will have to allow their exchange rates to float freely; they can still intervene to damp temporary fluctuations and limit the volatility that a freely-floating exchange rate entails. What they should not do is commit to an explicit exchange rate target which would force them to issue misleadingly reassuring statements likely to lull banks and firms into a false sense of complacency and set the stage for an ugly crisis. Floating, even dirty floating, is uncomfortable because of the volatility that it tends to entail; witness the case of Mexico, whose currency declined against the U.S. dollar by more than 20 per cent in the final quarter of 1998. But the Mexican depreciation has not precipitated a crisis. Surely most countries, given a choice between Mexico's situation and the desperate straits of the Brazilian authorities seeking to defend their currency peg at the end of 1998, would prefer the former with good reason.

Some otherwise strong proponents of greater flexibility, both in and out of the IMF, still concede a temporary role for pegged rates in countries that are trying to bring down high inflation.<sup>4</sup> A stabilization plan that entails pegging the exchange rate can bring down a high inflation at a lower cost in terms of output and employment foregone.<sup>5</sup> But the problem is the same as with using heroin or morphine to treat a patient in agonizing pain; after the source of the

<sup>&</sup>lt;sup>4</sup>See for example Fischer (1997) and Sachs (1998b).

<sup>&</sup>lt;sup>5</sup>See Bruno and Fischer (1990).

suffering subsides, the patient will still be hooked. Open markets offer no padded cell into which to place the patient to who the pegged rates have been administered until he kicks the habit.

However attractive it is as an expedient, it is better to avoid this addictive medicine in the first place.

Implications for IMF exchange rate advice. This means that the IMF should push more of its members to adopt policies of greater exchange rate flexibility before they are forced to do so in a crisis. In the context of Article IV consultations and program negotiations, it should pressure them to abandon simple pegs, crawling pegs, narrow bands and other mechanisms for limiting exchange rate flexibility before they are forced to do so by the markets. Even if this evolution is inevitable, it will be associated with financial distress, as in Asia, if it is forced on reluctant governments which fail to prepare banks, firms and households for the eventuality. On the other hand, if the authorities move gradually toward greater exchange rate flexibility while capital is still flowing in, banks and firms will hedge their exposures and not suffer catastrophic losses if the exchange rate moves by an unexpectedly large amount. If the government does not link its entire economic policy strategy to the maintenance of a fixed currency peg but develops a more diversified portfolio of intermediate targets and anchors, it will not lose all credibility when it bows to the inevitable.

Not only should the Fund push more of its members to adopt more flexible exchange rates, but it should press them to harmonize prudential regulation with exchange rate policy. Countries seeking to limit exchange rate flexibility must subject their financial systems to exceptionally strict prudential standards. Central banks and governments operating a currency peg have little capacity to conduct lender-of-last-resort operations, as already noted, while

internationalization of the banking system is a gradual process. Hence, such countries need to limit the need for last-resort lending by holding their banks to higher prudential standards. This means imposing higher reserve, capital and liquidity requirements despite the negative implications of those measures for the competitiveness of the banking system. Argentina illustrates the point. Following the Tequila shock, it adopted a 15 per cent across-the-board liquidity requirement for all deposits of less than 90 days. It adopted risk-adjusted capital asset requirements nearly half again as high as the Basle standards. It announced a program of limited, privately-financed deposit insurance to reduce the risk of bank runs due to a contagious loss of depositor confidence. While both self-financed deposit insurance and exceptional liquidity and capital requirements reduce the international competitiveness of the banking system, this was a necessary price to pay for a country whose entire economic policy strategy was organized around a rigid currency-board peg.

Argentina's experience is not alone in suggesting that the Basle capital standards may not be an adequate basis for managing banking risk in emerging markets. The relevant distinction, however, is not just between mature and emerging markets but also between countries operating more and less flexible exchange rate regimes.

### **Monetary and Fiscal Policies**

The IMF came under fire for asking Thailand, Indonesia and South Korea to hike interest rates and tighten fiscal policies following the onset of their crises. It was accused of blindly taking a page from its Latin American debt crisis cookbook, where the setting was one of budget deficits and inflation, making monetary and fiscal retrenchment necessary parts of the solution. It was

said to have neglected the fact that Asian countries entered their crises with high savings, low inflation, and government budgets in balance or surplus, hardly suggesting that excessively expansionary policies were at the root of the problem and that monetary and fiscal austerity were needed for its solution. In fact, the critics argue, the IMF should have encouraged Asian governments to employ all of their available macroeconomic policy instruments to prevent the onset of recession or to minimize its severity.

Fiscal policy. There is no question that absorption had to be reduced once capital stopped flowing in and it became necessary to eliminate the current account deficit. It being undesirable for the entire burden of adjustment to fall on the private sector, there was a presumption in favor of fiscal cuts. In addition, there was the need to recapitalize the banking system. Bonds might be issued to spread those costs over time, but additional tax revenues would still be needed to service the additional obligations. Business-cycle considerations notwithstanding, this pointed to the need for a tightening of fiscal policy.

The problem was with the qualifier in the last sentence — "business-cycle considerations notwithstanding." As capital stopped flowing in and started flowing out, the Asian economies were plunged into acute recessions. There may have been an argument for balancing the budget over the cycle, but not in a recession. The IMF's failure to anticipate the severity of the recession and the fiscal conditions it consequently applied made that downturn significantly worse. The Fund erred, in other words, by interfering with the operation of countries' fiscal stabilizers.

Eventually this realization dawned, and the IMF modified its advice. Adjustments to its programs acknowledged the need for governments to use fiscal policy to provide countercyclical stimulus to neutralize the deepening recession and to provide a social safety net for the poor. In

Indonesia, for example, the second program of January 1998 revised the target for fiscal policy from a one-percent-of-GDP surplus to a one-percent-of-GDP deficit; the second revision widened it to 3 per cent of GDP, the third to 8.5 per cent. The March 4<sup>th</sup> 1998 revision of the Thai program excluded the 3-per-cent-of-GDP interest costs of the financial sector cleanup. Successive revisions of the Korean program adjusted the deficit target from essentially zero to two per cent of GDP. There is reason to hope, in other words, that the Fund has drawn the appropriate lessons regarding fiscal policy.

In its package for Brazil at the end of 1998, the IMF again insisted on fiscal cuts, despite forecasting that the country would succumb to recession in 1999. Does this mean that the Fund has still failed to take on board the fiscal lessons of the Asian crisis? In fact, the Brazilian and Asian situations are different. Brazil entered its crisis with large budget deficits (on the order of seven per cent of GDP), in contrast to Asian governments, whose budgets were broadly balanced. Brazil's history of fiscal excesses was very much on the mind of investors, in contrast to admirable fiscal reputation of most Asian countries. Thus, it can be plausibly argued that fiscal cuts were needed in Brazil to restore investor confidence. Indeed, there was a scenario in which reductions in public spending (and less so increases in taxes) will in fact stimulate consumption and investment by heading off the otherwise inevitable fiscal crisis. The situation in Asia was different, since there was no reason to anticipate a looming fiscal crisis. The lesson for the IMF, then, is not to ignore fiscal policy but to avoid giving one-size-fits-all advice.

**Monetary policy.** In each country, the IMF recommended sharp increases in interest

<sup>&</sup>lt;sup>6</sup>Smooth fiscal adjustment now can be more confidence inspiring, in other words, than painful fiscal adjustment later. See Alesina, Perotti and Tavares (1998). Predictably, I prefer my formulation of their argument (Eichengreen 1998).

rates to restore investor confidence, stem capital flight, and stabilize the currency. This, it argued, was the only way for the authorities to quickly reassure investors, given the time needed to implement other reforms. Only if they signaled their resolve to defend the exchange rate by rendering short-term money market instruments more attractive could confidence be restored.

That the medicine did not work is clear; why not is less so. The IMF's own rationalization is that governments did not push up interest rates and hold them there with adequate resolve. Indonesia raised rates to 30-40 per cent in August but reduced them to 20-30 per cent in September despite the rupiah's continued decline. Korea maintained an official ceiling on interest rates as late as December 1997 despite the continued deterioration of the foreign exchange market. These half-hearted measures, it is argued, were insufficient to restore confidence.

The Fund's critics argue that interest rates were not too low but too high. High rates plunged Asia's highly geared firms into bankruptcy. As failures cascaded through the manufacturing sector and banks were rendered insolvent by the inability of their customers to service their loans, the exchange rate weakened, reflecting this further damage to the financial system. Flight capital, rather than being attracted back by higher yields, was repelled by additional defaults. Thus, higher interest rates weakened the exchange rate rather than strengthening it as the IMF had forecast.

The effect of interest rates on the exchange rate is an empirical question, but not one of which there has been much systematic analysis. Kraay (1998) analyzes 313 speculative attacks (defined as instances when the nominal exchange rate depreciated by 10 per cent and/or reserve losses exceeded 20 per cent in a month; a successful attack is one in which the first of these two conditions obtained). He fails to find any correlation between the stance of monetary policy

around the time of the attack (measured by the level of the discount rate relative to the U.S. or by the rate of growth of domestic credit). But his analysis has limitations: for one thing, devaluations and attacks are not the same, and the author fails to distinguish between them. In addition, he fails to look for the interest-rate-exchange-rate "Laffer curve" suggested by theory. While modest interest-rate increases are likely to strengthen the currency, if taken to excess they may so damage the financial condition of banks and firms that confidence deteriorates and the currency weakens. A convincing analysis would look for these nonlinear effects of interest rate increases and allow the turning point to be lower in Asia than in other less debt-dependent parts of the world.

Furman and Stiglitz (1998) conduct a similar analysis but without constructing a control group. They consider 13 episodes where high interest rates were used to defend a currency under attack. Interacting various measures of interest rates with the initial inflation rate (they could as easily interact them with a dummy variable for Latin America), they find some evidence that the interest-rate defense limits the extent of the currency crash for high-inflation countries (where the signaling effect of higher interest rates is likely to matter most) but not for low-inflation countries. This is a step in the right direction in that it allows the effectiveness of the interest rate defense to vary with initial conditions, but the critical condition (the debt or gearing ratio at the time of the attack) is not considered. In any case, it is hard to know what to make of regressions run on only 13 observations.

Many critics of IMF policy, while insisting on the need for lower interest rates for domestic reasons, acknowledge that these would not have lured back flight capital and strengthened the exchange rate — to the contrary. While the right choice may have been to

reduce interest rates in order to relieve the distress among heavily-indebted firms and to reflate the economy, there would have been a price, namely the need to restructure the external debt and impose Malaysian-style exchange controls. Lower interest rates might have been the right remedy for Korea, for example, but they would have rendered the country unable to roll over its maturing debts. Robert Wade and Frank Veneroso are explicit about this tradeoff. "Why should not Korea, for one, not just declare a debt moratorium and set about exporting it way out of trouble," they ask? "The vast increase in the servicing and repayment costs of foreign loans due to the devaluation is a national disaster, the costs of which should be borne collectively. Let belts be tightened, to the extent of refusing any new reliance on external finance."

This is the unfortunate reality: there was a choice between reducing interest rates on the one hand and maintaining capital market access on the other, and governments could not have it both ways. Lower rates might have facilitated much-needed domestic reflation, but they would have also required countries to suspend service on their external debts. And that last step was something that governments, in their wisdom, were reluctant to take. Their belief was that debts, once suspended, are difficult to restructure. In the interim, access to working capital and trade credits can be severely disrupted. Thus, calls for the IMF to amend its advice to encourage lower interest rates in crisis economies will remain impractical absent other changes in capital markets to make the process of restructuring and renegotiation more efficient.

### **Measures to Encourage Debt Restructuring**

If there will always be crises, there will always be the need to clean up after them. This is

<sup>&</sup>lt;sup>7</sup>Wade and Veneroso (1998), p.13.

where the existing international financial architecture most obviously falls short. The international community has two ways of responding to crises: running to the rescue of the crisis country with a purse full of funds or standing aside and letting nature run its course. Both have been tried and found wanting. For two years following the Mexican rescue and for a year following the outbreak of the Asian crisis, the IMF was subjected to a firestorm of criticism for bailing out governments and international investors. Its actions, in the view of the critics, only reduced the incentives for meaningful policy reform and, by shielding the private sector from losses, encouraged more reckless lending and set the stage for further crises. Then in the summer of 1998, Russia provided an alarming illustration of the alternative when it devalued and suspended debt service payments, with devastating impacts on the Russian economy and global financial markets. Confidence was destroyed; the country's access to international capital markets was curtailed; and financial markets were roiled in Asia, Eastern Europe, Latin America, and even Europe and the United States. This is not an experience anyone wishes to repeat. One cannot avoid concluding that both alternatives — bailouts on the one hand, and standing back and letting events run their course on the other — are unacceptable.

Avoiding both routine rescues and devastating defaults will require creating a more orderly way of restructuring problem debts. Radical reform -- the creation of an international bankruptcy court -- is unrealistic. Yet something must be done to create an acceptable alternative to massive international rescue packages.

In fact, a number of modest steps might be taken to make debt restructuring a viable option. Majority voting and sharing clauses could be added to loan contracts. This would prevent isolated creditors from resorting to lawsuits and other means of obstructing settlements

that improve the welfare of the debtor and the vast majority of creditors. Other desirable changes to loan contracts include collective representation clauses (making provision for an indenture trustee to represent and coordinate the creditors in the case of sovereign debts) and clauses providing that a minimum percentage of bondholders must agree in order for legal action to be taken. The addition of such clauses to bond contracts is the only practical way of creating an environment conducive to flexible restructuring negotiations. It can be done by legislators and regulators in the United States and the United Kingdom, the principal markets in which the international bonds of emerging economies are issued and traded, without ceding any jurisdiction or authority to a super-national agency. This approach is infinitely more realistic than imagining the creation of some kind of super-national bankruptcy court for sovereign debts empowered to cram down settlement terms.<sup>8</sup>

This is a task for national regulators. But IMF lending policy can also play a role. By lending at relatively favorable rates to governments that incorporate such provisions into their own loan contracts and require domestic banks and corporates to do so, the Fund can provide a financial incentive for contractual innovation. By lending after a country has suspended debt payments and before it has cleared away its arrears, the Fund can encourage recalcitrant creditors

<sup>&</sup>lt;sup>8</sup>In addition, standing committees of creditors should be created to provide better communication between lenders and borrowers, jump-starting negotiations and diminishing the information-asymmetries that encourage the two sides to fight a protracted war of attrition. The IMF could lend to countries in arrears on their external debts so long as the recipients are making a serious adjustment effort and are engaged in good-faith negotiations with their creditors, providing the equivalent of the "debtor-in-possession" finance available to U.S. corporations under Chapter 11 of the U.S. bankruptcy code. And when the problem is defaulted corporate and bank debts, the solution lies not unrealistic designs for an international bankruptcy court but in strengthening national bankruptcy statutes, reinforcing the independence of the judicial system administering them, and harmonizing those laws across countries.

to come to the bargaining table. Insofar as the large number of creditors, and rules requiring the unanimous assent of creditors to the terms of any restructuring plan, create problems of collective action that hinder negotiations, lending into arrears can jump-start the process. Lending into arrears should only be done when a government is willing to make a serious adjustment effort and to engage in good-faith negotiations with its creditors. But insofar as sovereign debtors and the international community generally see the temporary suspension of payments as too difficult and costly a route to pursue, the IMF needs to use its lending power to tip the balance, opening up restructuring negotiations as a viable alternative to regular IMF rescues designed to avert default.

# **International Standards as an Alternative to Intrusive IMF Conditionality**

Once upon a time, long, long ago in a place far, far away, currency crises were caused by recklessly expansionary monetary and fiscal policies resulting in excess demand, overvalued exchange rates, and unsustainable current account deficits. Preventing them meant restoring monetary and fiscal balance before these excesses got out of hand. For the IMF, crisis management meant providing temporary financial assistance so that macroeconomic retrenchment did not produce or aggravate recessions. It meant conditioning that assistance on the restoration of monetary and fiscal discipline. It was not necessary for those whose objectives were the maintenance of exchange rate and macroeconomic stability to concern themselves with a country's financial nuts and bolts -- with bank supervision and regulation, auditing and accounting, bankruptcy procedures, and corporate governance. One can question whether things

<sup>&</sup>lt;sup>9</sup> When these conditions do not hold, the policy will delay crisis resolution, not expedite it. This is why lending into arrears should be considered on a case-by-case basis.

were ever so simple, but there is some truth to the notion that for its first half-century the IMF rightly focused on countries' monetary and fiscal policies and was only tangentially concerned with their domestic institutional arrangements.

In Asia (and, for that matter, its other recent programs), the IMF has become more deeply enmeshed in countries' internal affairs. It has sought to encourage the authorities to improve prudential supervision, root out corruption, eliminate subsidies, break up monopolies, and strengthen competition policy. In virtually every program country, this has incited a backlash against the Fund, which is resented for its intrusiveness. Martin Feldstein and others have questioned whether such intimate involvement in the internal affairs of sovereign states is really required for the restoration of currency stability. What business is it of the Fund, Feldstein asks, to demand that Indonesia scale back its national car program or break up its clove monopoly? The IMF, in his view, should focus on the monetary and fiscal imbalances that are at the root of balance-of-payments problems. Not only does the Fund lack a secret formula for how every country should organize its internal affairs, but its advice is more likely to receive domestic backing and to be sustainable politically if it avoids infringing on the sovereignty of its members.

This view sits uneasily with the fact, widely acknowledged, not least by Feldstein himself, that monetary and fiscal profligacy was not endemic in Asia in the period leading up to its crisis. Since monetary and fiscal excesses were not at the root of the crisis, how then can it make sense to recommend focusing on monetary and fiscal variables when devising a response? The problem and the solution must lie elsewhere.

A hint to its location follows from the observation that high international capital mobility

<sup>&</sup>lt;sup>10</sup>See Feldstein (1998).

has all but erased the line between the domestic and international financial systems. This makes it impossible to "fix" the international balance of payments without also "fixing" the domestic financial system. So long as the domestic and international financial systems were strongly segmented by capital controls, balance of payments deficits arose out of current account deficits that were financed with international reserves. Restoring balance of payments equilibrium meant restoring balance to the current account, which implied the need to restrict monetary and fiscal policies. But now that capital is so mobile internationally, stabilizing the balance of payments means stabilizing the capital account, which requires restoring investor confidence. And restoring investor confidence means restoring confidence in the stability of the domestic financial system.

Inevitably this draws those seeking to prevent and limit the severity of crises into involvement in the supervision and regulation of banks and corporates issuing publicly-traded securities. It directs attention to auditing and accounting, the disclosure of financial information, and corporate governance. Recent models point to banking system weaknesses, the opacity of balance sheets, and moral hazard from government guarantees as the causes of currency and financial crises. Guarantees encourage excessive foreign short-term funding of the banking system, while directed lending leads banks to invest in low-return projects that ultimately damage their balance sheets. The fragility of the financial system then prevents the authorities from mounting a concerted defense of the currency. Inadequate auditing and accounting prevent

<sup>&</sup>lt;sup>11</sup>For example, Dooley (1997) and Krugman (1998). The point applies not just to the Asian crisis. Post-mortems on the 1992 EMS and 1995 Mexican crises, while focusing on other factors as the proximate source of financial difficulties, also point to the weakness of banking systems as one important reason why governments were unable or unwilling to defend their currencies when these came under attack. See for example Goldstein and Calvo (1996).

investors from distinguishing good banks from bad and set the stage for economy-wide banking crises, while poorly designed or enforced insolvency procedures precipitate creditor grab races and cascading debt defaults. The implication is that macroeconomic policy adjustments will not suffice to restore economic and financial stability; rather, far-reaching institutional reforms are needed to root out the causes of financial crises.

The problem is that neither the IMF nor other international financial institutions have sufficient staff and expertise to proffer advice in all these areas. The Fund cannot realistically master the regulatory particulars of banking systems in all 182 member countries. The problem grows more severe when one turns from bank regulation to auditing and accounting, insolvency codes, and corporate governance, issues in which macroeconomists have little formal training or experience. And yet, problems in these areas are too pressing to do nothing. If the Asian crisis has taught us one thing, it is that countries cannot restore exchange-rate and balance-of-payments stability without rectifying deficiencies in their domestic financial systems.

The only feasible approach to this problem is for national governments and international financial institutions to encourage the public and private sectors to identify and adopt international standards for minimally acceptable practice. National practices may differ, but all national arrangements must meet minimal standards if greater financial stability is to be attained. All countries must have adequate bank supervision and regulation. All must require financial market participants to use adequate accounting and auditing practices. All must have transparent and efficient insolvency codes. The particulars of these arrangements can differ—countries can reach these goals by different routes—but any country active on international financial markets must meet internationally accepted standards.

An advantage of this approach, along with its ability to accommodate variations in national traditions and economic cultures, is that the burden of setting these standards need not fall primarily on the IMF, multilateral institutions in general, or even national governments. In most cases, the relevant standards can be identified or defined by private sector bodies. Although those entities can be aided in their work by officials, the role for international institutions should be limited mainly to recognizing those standards, urging adoption by their members, monitoring compliance, and — in the case of the IMF — conditioning its assistance on a commitment to meeting them.

Fortunately, the relevant private-sector bodies already exist. In accounting there is the International Accounting Standards Committee, consisting of representatives of the accounting profession from 103 countries at last count, which promulgates international accounting standards. There is the International Federation of Accountants, with parallel membership, which has gone some way toward formulating international auditing standards. The International Organization of Supreme Audit Institutions similarly issues auditing guidelines and standards. Committee J of the International Bar Association is developing a model insolvency code to guide countries seeking to reform and update their bankruptcy laws. For corporate governance there is the International Corporate Governance Network, which seeks to improve standards of business management and accountability worldwide.

In other areas, responsibility for setting standards has been taken on by international committees of regulators. For securities-market regulation there is the International Organization of Securities Commissions, which serves as a forum for securities regulators and has established working groups to set standards and coordinate regulatory initiatives. For bank regulation there

is the Basle Committee on Banking Supervision, made up of supervisors from the leading industrial countries, whose Core Principles for Effective Banking Supervision codify Morris Goldstein's argument for an international banking standard. But even in these areas where regulators have taken the lead, there is a role for the private sector -- for example, for the world's largest financial institutions develop standards for monitoring and managing financial risks and that the Basle Committee utilize these when setting international standards for risk-management practices. <sup>13</sup>

Multilaterals are already active in a number of these areas, helping to identify standards or coordinating the process through which others agree to them. The Organization for Economic Co-operation and Development issued a report in 1998 on global principles of corporate governance, focusing on the accountability of management, disclosure and transparency, and communication with shareholders. The United Nations Commission on International Trade Law has adopted a model law on the treatment of cross-border insolvencies. The IMF itself has established a Special Data Dissemination Standard for the provision of economic and financial information by countries seeking to access international capital markets. It has promulgated a code of fiscal transparency to be adopted as a standard of good fiscal practice by its member countries and anticipates developing an accompanying code for monetary and financial practices. In all these cases the multilaterals have solicited guidance and advice from national officials and private-sector experts.

<sup>&</sup>lt;sup>12</sup>Goldstein (1996).

<sup>&</sup>lt;sup>13</sup>Group of Thirty (1997).

<sup>&</sup>lt;sup>14</sup>OECD (1998).

The role of the IMF and other multilaterals would be more than simply to encourage the activities of these self-organizing groups. Rather, they should actively consult with these groups (as the Fund already does with IOSCO and the Basle Committee), seek status as an ex officio member, and certify the standards they identify as measures of best practice. Active involvement in the standard-setting process is necessary in order for the Fund to assume "ownership" of the standards it helps to set. To give teeth to its advice, the Fund should condition the disbursal of assistance on program countries meeting those standards. It will need to encourage countries to apprize the markets of their compliance, which it would monitor in conjunction with its Article IV surveillance. Finally, the Fund should make public its assessment of compliance as a way of strengthening market discipline.

A more active role for the IMF and the other international financial institutions in the promulgation of standards would be a departure from past practice. But there is no alternative if one acknowledges that the Bretton Woods institutions do not possess the resources to develop standards in all these areas themselves. The process will be complicated, but the alternative — inaction — is no longer viable. It being necessary to proceed, there is no alternative to proceeding by way of public-private sector collaboration.

# The IMF and the Capital Account

Over the course of its 45-year history, the IMF has repeatedly refined its role. Conceived of by its founders as the steward of a system of pegged-but-adjustable exchange rates, the Fund transformed itself in the 1970s into the coordinator of petrodollar recycling and in the 1980s into advisor and lender to Latin American countries attempting to crawl out from under an overhang

of nonperforming syndicated bank debts. But with the advent of the Brady Plan and the resumption of lending to emerging markets in 1989, and the shift by a growing number of its members to greater exchange rate flexibility, the need for these functions was again cast into doubt. Capital flooded into emerging markets in unprecedented quantities, relieving countries of the need to apply to the IMF for help with financing their budget deficits and external accounts. The rationale for IMF assistance was thus cast into doubt. With international capital markets anxious to lend to developing countries and those developing countries able and willing to borrow, in other words, what role remained for official finance?

In the mid-1990s, the Fund therefore sought to reposition itself as the advocate of international financial liberalization. In 1996 the Interim Committee requested that it analyze the costs and benefits of capital flows and consider changes to the Articles of Agreement that would give it jurisdiction over its members' policies toward the capital account. The following April the Interim Committee concluded that there would be benefits from amending the Articles to enable the Fund to encourage and promote the orderly liberalization of capital movements, a view that it reiterated at the September 1997 Bank/Fund annual meetings in Hong Kong, where it stated that capital account liberalization should be made one of the "purposes" of the Fund.<sup>15</sup>

The Asian crisis unleashed a barrage of criticism of IMF-led efforts to encourage capital account liberalization. The analogy with current account liberalization, many critics insisted, is fundamentally flawed: while the positive effects of free trade for economic growth have been extensively documented, the evidence of comparable benefits of capital account liberalization is

<sup>&</sup>lt;sup>15</sup>Camdessus (1998), p.1.

limited.<sup>16</sup> These points are controversial, but what is indisputable is that capital account liberalization is a two-edged sword. On the one hand, there are clear benefits from being able to borrow and lend internationally. Capital mobility creates valuable opportunities for portfolio diversification, risk sharing, and intertemporal trade. By holding claims on foreign countries, households and firms can protect themselves against the effects of disturbances that impinge on the home country alone. Entrepreneurs can pursue high-return domestic investment projects even when domestic finance is lacking. Capital mobility can therefore enable investors to achieve higher rates of return. And higher rates of return can encourage savings and investment, ultimately supporting faster rates of growth.<sup>17</sup>

On the other hand, international financial liberalization heightens the risk of costly financial crises. It allows problem banks gambling for redemption and intermediaries enjoying government guarantees to lever up their bets. And the crisis, when it comes, tends to be correspondingly more devastating and expensive. Whether the costs or benefits of capital account liberalization dominate thus depends on how the process is managed -- that is, on whether the benefits of portfolio diversification, risk sharing, and intertemporal trade are dominated by the costs of debilitating crises.

Acknowledging this tradeoff leads to the conclusion that an appropriate role for the IMF is not as advocate of capital account liberalization but as advisor on prudent regulation of the capital account and a guardian against avoidable financial crises. Regulation of the capital account is best understood by way of analogy with regulation of the domestic financial system. In

<sup>&</sup>lt;sup>16</sup>See Bhagwati (1998) and the contributors to Kenen (1998).

<sup>&</sup>lt;sup>17</sup>A neat theoretical exposition is Obstfeld (1994).

the domestic context it is understood that banks are fragile. This recognition prompts governments to impose prudential regulations on financial intermediaries' transactions and positions in assets whose liquidity and risk characteristics have implications for systemic stability. Such regulations are especially strict where the techniques of risk management are least well developed, where auditing and accounting practices leave most to be desired, and where financial disclosure is least adequate, weakening market discipline. The existence of systemic risk has also led governments to provide deposit insurance and lender-of-last-resort services. Stronger prudential regulations are then seen as necessary to mitigate the tendency for financial-market participants to take on additional risk in response to the provision of this safety net.

These same grounds justify the regulation of international financial transactions even more strongly than they justify the regulation of domestic transactions. Information asymmetries are more pervasive in international financial markets. The difficulties of raising liquidity in emergencies is greater, as is the scope for contagion. And insofar as the liabilities of banks and other borrowers are denominated in foreign currency, the domestic central bank (not being able to print foreign currency) has limited ability to undertake lender-of-last-resort operations.

This does not mean that international financial transactions should be prohibited but that their cost should be influenced by regulation to take into account their implications for systemic risk. Banks could be required to purchase cover in currency forward or futures markets for their open foreign positions, better aligning the private and social costs of foreign funding. They could be required to close their open positions by matching the currency composition of their assets and liabilities — when borrowing in foreign currency, making only foreign-currency-denominated loans. Capital requirements, one important determinant of that cost, could be adjusted to take

into account not just the implications for systemic risk of banks' investments but also the special risks of foreign funding. If bank capital in emerging markets is too rarely written down, differential reserve requirements might be used to require banks borrowing abroad to put up additional (perhaps non-interest-bearing) reserves with the central bank ex ante. The problem could be addressed from the lending side by requiring lending banks in the advanced industrial countries to attach higher risk weights to short-term claims on banks in emerging markets, since the additional cost would be passed on to the borrowing banks.

Finally, to the extent that measures designed to raise the cost of bank borrowing abroad encourage nonbanks to do the borrowing and onlend the proceeds to banks and other borrowers, leaving the risks to the financial system essentially unchanged, this provides an argument for taxes or nonremunerated deposit requirements on all capital inflows, not just on inflows into the banking system. These are thekind of policy recommendations to which the IMF hasand should continue to gravitate.

Importantly, there is no contradiction between recommending the use of taxes and tax-like instruments to manage international capital flows and the desideratum of capital account convertibility. Convertibility means shunning prohibitions and quantitative restrictions that prevent market participants from undertaking certain transactions at any price but is compatible with taxes designed to better align private and social costs. A blanket prohibition on foreign borrowing is more distortionary than a tax, which still permits those with especially attractive investment projects to finance them externally so long as they are willing to pay a tax intended to make them internalize the implications of their decisions for the country as a whole.

This is the same distinction the IMF has always drawn regarding the current account.

Current account convertibility is a goal of IMF policy under the Articles of Agreement. But while current account convertibility is defined under Article VIII as freedom from restrictions on payments and transfers for current international transactions, that article does not proscribe the application of import tariffs and taxes to the underlying transactions. Correspondingly, capital account convertibility, while implying the removal of controls and prohibitions, does not mean abjuring taxes and tax-like levies on the underlying transactions.

Amending the Articles of Agreement to give the IMF jurisdiction over the capital account would allow the Fund to encourage its members to implement this important distinction. It would put it in a better position to give guidance to its members on the optimal speed and sequencing of capital account liberalization. It could lend legitimacy to taxes and tax-like instruments designed to limit the level and shape the term structure of foreign debts. And it would give the Fund leverage to encourage countries utilizing taxes on inflows to accelerate financial-sector reforms.

Against this must be weighed the danger that an IMF with expanded powers might push its members to liberalize prematurely. The worry is that the Fund would oppose any and all tax and tax-like policies toward capital flows. Or it might require countries seeking to adopt Chilean-style holding-period taxes to first obtain the authorization of the Executive Board. It might authorize countries to restrict capital account transactions on prudential grounds only after it was convinced that other, more capital-account-friendly measures were not available.<sup>18</sup> If the amendment to the Articles of Agreement giving it jurisdiction over capital account policies

<sup>&</sup>lt;sup>18</sup>Thus, one could imagine the Fund withholding its approval of a capital import tax on these grounds in the case of a country that had not yet succeeded in meeting the Basle Capital Standards.

regarded taxes and controls on inflows as permissible only when adopted temporarily or for a transitional period, IMF staff might then become knee-jerk opponents of the indefinite use of such measures for prudential reasons. The Fund might engage in legal hair splitting: even if countries were permitted to limit capital flows as a form of prudential regulation, staff might argue that a measure had actually been adopted for other reasons (for example, that a differential reserve requirement was in fact being used to enhance monetary control) and was therefore not acceptable. As Jacques Polak has put it, an IMF given jurisdiction over capital account restrictions might become "the enforcer of the new code, making sure at every step that any policy it recommends or endorses can pass the test of the new Article."

Experience with Article VIII, which obliges members to establish the convertibility of their currencies for purposes of current account transactions, provides some reassurance; it does not suggest that the IMF will inevitably become the rigid enforcer of specific obligations. In enforcing Article VIII, the Fund has recognized the validity of a wide range of mitigating circumstances. Still, to reassure the skeptics, the IMF needs to articulate its strategy for capital account liberalization, explaining its approach to the problem of sequencing and its policy toward the taxation of capital inflows. It needs to make clear that amending the Articles of Agreement would not mean eliminating Article VI, Section 3, which gives members the right to apply capital controls.

<sup>&</sup>lt;sup>19</sup>Polak (1998), p.8.

#### Conclusion

The Asian crisis is not welcome by any stretch of the imagination, but it at least provides an opportunity to reassess the role of the IMF. My review of the controversy surrounding the Fund's response to the crisis has sought to shift the focus from advice and conditions regarding monetary, fiscal and exchange rate policies and toward more fundamental issues. There are already signs that the Fund has drawn some of the relevant macroeconomic lessons, namely, the need to encourage more of its members to embrace policies of greater exchange rate flexibility, the inappropriateness of insisting on fiscal austerity where fiscal profligacy is not the problem, and the fact that using high interest rates to defend the exchange rate against attack can be costly for countries with high levels of corporate debt. One can argue that the Fund needs to go still further in these directions, but clearly the light has dawned.

In contrast, the more fundamental issues remain to be addressed. For the IMF, this means encouraging changes in the international financial architecture to facilitate debt restructuring so that there will be a viable alternative to the use of high interest rates to prevent liquid assets from hemorrhaging out of a crisis economy. It means encouraging the promulgation of international standards for acceptable financial practice as an alternative to invasive conditionality. It means repositioning the Fund as advisor on prudent regulation of the capital account and guardian against avoidable financial crises and not as rigid advocate of capital account liberalization. This is a road down which the international community has barely begun.

#### Reference

Alesina, Alberto, Roberto Perotti and Jose Tavares (1998), "The Political Economy of Fiscal Adjustments," *Brookings Papers on Economic Activity* 1, pp.197-248.

Bhagwati, Jagdish (1998), "The Capital Myth: The Difference Between Trade in Widgets and Dollars," *Foreign Affairs* 77, pp.7-12.

Bruno, Michael and Stanley Fischer (1990), "Senior age, Operating Rules, and the High Inflation Trap," *Quarterly Journal of Economics* CV, pp.353-374.

Calomiris, Charles (1998), "Blueprints for a New Global Financial Architecture," unpublished manuscript, Columbia University.

Camdessus, Michel (1998), "Capital Account Liberalization and the Role of the Fund," Remarks to the IMF Seminar on Capital Account Liberalization, Washington, D.C. (March 9<sup>th</sup>).

Dooley, Michael (1997), "A Model of Crises in Emerging Markets," NBER Working Paper no. 6300 (December).

Eichengreen, Barry (1998), "Comment on Alesina, Perotti and Tavares" 'The Political Economy of Fiscal Adjustments'," *Brookings Papers on Economic Activity* 1, pp.255-262.

Eichengreen, Barry (1999), "The Baring Crisis in a Mexican Mirror," *International Political Science Review* (forthcoming).

Eichengreen, Barry and Marc Flandreau (1996), "Blocs, Zones and Bands: International Monetary History in Light of Recent Theoretical Developments" <u>Scottish Journal of Economics</u> 43, pp.398-418.

Fischer, Stanley (1997), "Closing Remarks: What Have we Learned?" in Guillermo Perry, Guillermo Calvo, W. Max Corden, Stanley Fischer, Sir Alan Walters and John Williamson, *Currency Boards and External Shocks: How Much Pain, How Much Gain?* Washington, D.C.: The World Bank.

Feldstein, Martin (1998), "Refocusing the IMF," Foreign Affairs 77, pp.20-33.

Furman, Jason and Joseph Stiglitz (1998), "Economic Crises: Evidence and Insights from Eat Asia," unpublished manuscript, The World Bank.

Giovannini, Alberto (1993), "Bretton Woods and Its Precursors: Rules Versus Discretion in the History of International Monetary Regimes," in Michael Bordo and Barry Eichengreen (eds.), A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform, Chicago: University of Chicago Press, pp.109-154.

Goldstein, Morris (1996), "The Case for an International Banking Standard," Policy Analyses in International Economics No. 47, Washington, D.C.: Institute for International Economics (April).

Goldstein, Morris and Guillermo A. Calvo (1996), "What Role for the Official Sector?" in Guillermo A. Calvo, Morris Goldstein and Eduard Hochreiter (eds), *Private Capital Flows to Emerging Markets After the Mexican Crisis*, Washington, D.C.: Institute for International Economics, pp.233-282.

Group of Thirty (1997), *Global Institutions, National Supervision and Systemic Risk*, Washington, D.C.: Group of Thirty.

Hanke, Steve H., Lars Jonung and Kurt Schuler (1993), *Russian Currency and Finance: A Currency Board Approach to Reform*, London: Routledge.

International Monetary Fund (1998), "IMF Announces an External Evaluation of its Surveillance Role," News Brief no. 98/21 (June 30), Washington, D.C.: International Monetary Fund.

Kaufman, Henry (1998a), "Preventing the Next Global Financial Crisis," *Washington Post* (January 28<sup>th</sup>), p.A17.

Kaufman, Henry (1998b), "Proposal for Improving the Structure of Financial Supervision and Regulation," Outline of remarks before the Brookings Institution Symposium on Limiting Moral Hazard in Financial Rescues (June 4th).

Kemp, Jack (1998), "IMF Austerity May Deepen Crises," New York Times (July 20), p.A18.

Kenen, Peter B. (ed.) (1998), *Should the IMF Pursue Capital Account Convertibility?* Essays in International Finance No. 207, International Finance Section, Department of Economics, Princeton University (January).

Kraay, Aart (1998), "Do High Interest Rates Defend Currencies Against Speculative Attacks?" unpublished manuscript, The World Bank.

Krugman, Paul (1998), "What Happened in Asia," unpublished manuscript, MIT.

Obstfeld, Maurice (1994), "Risk Taking, Global Diversification, and Growth," *American Economic Review* 84, pp.1310-1329.

Organization for Economic Co-operation and Development, Business Sector Advisory Group on Corporate Governance (1998), *Corporate Governance: Improving Competitiveness and Access to Capital in Global Markets*, Paris: OECD.

Polak, Jacques J. (1998), "The Articles of Agreement of the IMF and the Liberalization of Capital

Movements," unpublished manuscript, Per Jacobsen Foundation.

Sachs, Jeffrey (1998a), "The IMF and the Asian Flu," *The American Prospect* 37 (April/May), pp.16-21.

Sachs, Jeffrey (1998b), "Global Capitalism: Making it Work," *The Economist* (12-18 September), pp.23-26

Wade, Robert and Frank Veneroso (1998), "The Asian Crisis: The High Debt Model Versus the Wall Street-Treasury-IMF Complex," unpublished manuscript, Russell Sage Foundation.