



## Working Paper No. 276

Lessons from the Asian Crisis: A Central Banker's Perspective

Remarks by  
Laurence H. Meyer  
Member  
Board of Governors of the Federal Reserve System  
Washington, D.C.

Ninth Annual Hyman P. Minsky Conference on Financial Structure, Instability, and the World Economy:  
Reflections on the Economics of Hyman P. Minsky

April 1999

This paper has its origin in a request by Don Brash, Governor of the Reserve Bank of New Zealand, to present a central banker's perspective on the Asian crisis to a group of Southeast Asian central bankers. So the central banker's perspective remains an organizing theme.

Central banks have two core missions: the pursuit of monetary policy to achieve broad macroeconomic objectives and the maintenance of financial stability, including the management of financial crises. The latter mission is closely connected to regulation and supervision of the banking system, so I include this within the central banker's perspective, as well as broader issues related to systemic risk in the financial sector. Central banks also often have or share with Finance Ministries control over exchange rate policy, including the choice of an exchange rate regime and the management of that regime. So, today, I consider the role of exchange rate policy, macroeconomic policy, and bank supervision and regulation in the crises and suggest some lessons in each case.

As I was writing the paper, it became clear that my interpretation of the sources of, and appropriate policy responses to the crises among the Asian emerging economies, drew heavily upon the work of Hy Minsky.

Perhaps that should not be surprising since Hy and I were colleagues for more than two decades at Washington University. But the truth is, in many respects, Hy and I came from different worlds. My highly traditional background in economic theory was in rather stark contrast to Hy's self-proclaimed war on neoclassical economics. While it is true that I never lost my commitment to traditional models--not a surprise to those who still hear me talk about the critical importance of the NAIRU framework to understanding inflation dynamics--I have often found words coming out of my mouth that reflect the distinct and powerful influence that Hy has had on my thinking. The truth is, there are few who have influenced my thinking about economics more than Hy. Indeed, he had so much to offer that if I only accepted a small dose, it was still enough to be a powerful complement, and perhaps antidote, to my otherwise conventional upbringing.

Hy's analysis of the sources of financial crises--his "financial instability hypothesis"--is the foundation for my interpretation of the sources of the Asian crisis. In addition, his work on how policies and institutions in advanced capitalist economies have evolved over time to mitigate the risks and attenuate the effect of financial disturbances--as developed in "Can It Happen Again"--is central to my discussion of how to mitigate the risks of such serious financial and banking crises in the future.

### SOURCES

Recessions, in general, and especially when accompanied by financial crises, are the product of a coincidence

of adverse shocks on an already vulnerable economy. External shocks which would have been shrugged off by a robust economy can lead to seemingly disproportionate declines in economic activity when they fall on an economy characterized by excessive leverage, speculative excesses in asset markets, poor risk management, and inadequate regulation and supervision in the banking sector. The adverse shocks that appeared to trigger the crises included the slowdown in export revenue due to a slump in the semiconductor market; the slump in Japan in the spring of 1997, which removed a source of demand for the region; and the appreciation of the dollar relative to the yen which undermined international competitiveness in the region. These shocks--individually and collectively--did not seem large enough to account for the dimension of the crises, thus, the importance of understanding the vulnerabilities that I believe were instrumental in transforming a series of modest shocks into disproportionate effects on these economies.

Hy's work focused particularly on the endogenous nature of evolving vulnerabilities. Indeed, he often viewed his major contribution as the explanation of the upper turning point in the business cycle. I have often described his views as suggesting that "stability is destabilizing." That is, that a period of stability induces behavioral responses that erode margins of safety, reduce liquidity, raise cash flow commitments relative to income and profits, and raise the price of risky relative to safe assets--all combining to weaken the ability of the economy to withstand even modest adverse shocks. This is, at least in my interpretation, the substance of Hy's "financial instability hypothesis."

In the case of the Asian emerging economies, there was evidence of speculative excesses in financial and real estate markets in some of the countries. There was, in addition, an extraordinary taking-on of risk in the form of enormous leverage in the non-financial sector and in the financing of longer-term domestic investment projects with shorter-term foreign denominated borrowing. The failure to respect risks was not only evident in financial markets and financing practices, but also in the investment decisions themselves. These risks were compounded by poor risk management and inadequate bank supervision and regulation. It should be noted, however, that not all the countries were affected by all of these vulnerabilities or to the same degree.

Financial sector vulnerabilities often increase during a cyclical upswing, as Minsky emphasized so often, setting the stage for the subsequent downturn. But in the case of the Asian developing economies, there was also a systemic source of these vulnerabilities: weaknesses in corporate governance and moral hazard associated with implicit or explicit government guarantees. The result was incentives for excessive risk taking.

To understand the dimension and spread of the crisis among Asian developing economies, we also have to take account of the vulnerability generated by fixed exchange rates in the presence of volatile international capital flows, the role of market psychology, and the role of contagion effects.

Financial sector weaknesses, pegged exchange rate regimes and volatile capital flows combined to yield a highly combustible mixture that, with the spark of adverse shocks, resulted in the igniting of currency and debt crises, including the collapse of banking systems throughout the region. The result was both a particularly sharp economic downturn and significant obstacles to recovery, specifically the joint problem of restructuring of the banking systems and resolving the excessive debt in the nonfinancial corporate sectors.

The dramatic declines in currency and equity markets in this case were also affected by the sharp swing in market psychology. In part due to a lack of transparency, markets had a hard time sorting out what the fundamentals dictated in terms of exchange rates and equity prices. That made the markets very sensitive to factors that affected confidence in the policies followed by the countries. This meant that prompt and decisive policy action in advance of IMF programs was very important, and that a perception of government commitment to IMF programs, once in place, was imperative.

Hy's work helps us to bring a balanced perspective to the debate that still rages about the Asian crisis. Was it due to vulnerabilities in the Asian economies or was it an illustration of the inherent instabilities of global capitalism? Hy, I expect, would have concluded that the answer is both. Capitalism, in its domestic or global form, brought great potential for higher living standards, but also the potential for instability, including occasional financial and banking crises. The key was to maximize the opportunity to take advantage of the benefits, while mitigating the risks.

Still, it is important to appreciate the interplay between developments in the industrial countries and in the emerging market economies leading up to the crisis. The weakness in Japan certainly took its toll on the emerging Asian economies. The extraordinary inflow of capital into emerging Asian economies from the industrial countries contributed to possible overheating and set the stage for the abrupt and dramatic reversal of capital flows that was a defining feature of the crises. Contributing to the surge in capital inflows to the region were shortfalls in risk management by financial institutions in these countries, misperceptions about the riskiness of such investments, and attempts to diversify portfolios in these economies following a run-up in domestic equity prices.

In "Can It Happen Again?" Hy argued that advanced capitalist economies have found ways to mitigate the risks of financial and banking crises, or at least attenuate their adverse effects. Hy emphasized the evolution of the central bank's role as lender of last resort and the stabilizing role of a large government as the central features of this policy and institutional evolution. I'll take a somewhat broader view of the nature of the policy and institutional evolution of capitalist economies and, in turn, of the structural reforms that would mitigate risks of future crises in the emerging market economies. This broader view might also extend to the appropriate evolution of international financial institutions and cooperation to keep pace with the increasingly global form of capitalism.

The importance of robust institutions and sound policies in mitigating the risks associated with inherent instabilities in capitalism suggests a role for policy "sequencing" in emerging market economies. It is widely argued, for example, that capital account liberalization in emerging market economies should be preceded by improvements to the institutional infrastructure to make the economies less exposed to risks associated with the volatility of capital flows. These include both appropriate exchange rate and financial regimes.

But, in fact, we seem to only play lip service to such an optimal sequencing of policies. Some worry, perhaps with reason, that sequencing might become an excuse for not moving ahead with capital account liberalization. What we really seem to encourage is rapid liberalization, independent of the state of the banking and financial sector, hoping that financial liberalization will pressure the authorities to move more quickly with improvement in supervision and regulation. The Asian crisis is, I believe, a test of this approach. At the very least, we have to match the pace of capital account liberalization with careful consideration of exchange rate regimes and efforts to improve corporate governance and bank regulation and supervision.

The sequencing perspective also suggests that the story behind the crisis in emerging Asian economies may have less to do with the inherent instabilities of global capitalism than with a mismatch between the evolution of institutions and policies and the pace of liberalization of financial markets and the capital account, the critical entry points to global capitalism. What may be in play, therefore, are the transition costs of a rapid increase in globalization, and especially transition costs associated with entry of emerging market economies into the global economy.

A third theme in my interpretation of the Asian crises is perhaps a lesser focus in Hy's work, but he was nevertheless quite prophetic in relation to the recent crises. Hy warned that the ability of a central bank to act as a lender of last resort is limited to debts denominated in the country's own currency. When countries finance their domestic projects with foreign denominated debt, therefore, they lose the stabilizing potential of their central bank's lender of last resort power and confront a far more challenging and potentially unstable environment. In the case of the Asian crisis, the financing of domestic projects with foreign denominated debt--either directly or through the banking system--created an important vulnerability, one that was dramatically aggravated by the sharp depreciation of the currencies in the crisis countries, and one that domestic central banks had limited power to arrest.

So, what are the lessons from this framework for thinking about recessions in general and the Asian crisis in particular? It would be tempting to encourage countries to avoid adverse shocks. But of course, shocks are, by definition, unavoidable. To be sure, risks can be avoided or mitigated by limiting vulnerabilities. It is especially important not to become complacent during a period of excellent macroeconomic performance about the underlying strength of balance sheet positions, debt-income ratios, credit quality, quality of bank credit risk management, and adequacy of prudential supervision. This experience only reinforces the wisdom of the adage that "bad loans are made on good times." Normal times may also be opportunities to transition from pegged to

more flexible exchange rate regimes. But, to an important degree, there is an almost inexorable tendency for vulnerabilities to build to some degree during expansions. Therefore, another key lesson is the importance of policies and institutions that mitigate the risks that evolving vulnerabilities will trigger serious crises. This episode emphasizes the importance of robust institutions--such as exchange rate regimes, bank regulation and supervision, and corporate governance--as well as sound policies in promoting good economic performance.

## **EXCHANGE RATE POLICY**

### **Pre-crisis Policy: The Case for Flexible Exchange Rates**

Many countries have tried to run exchange rate regimes that fall somewhere between fully flexible exchange rates and "very fixed" exchange rates, meaning a well-designed currency board arrangement or even, in the extreme, dollarization. However, arrangements between the extremes are often difficult to sustain indefinitely and when such arrangements break down, the result can be very painful. Whether or not currency boards are a viable option remains controversial. Such arrangements may increase the durability of fixed exchange rate systems, but perhaps at great expense to the real economy. Therefore, I conclude that one of the lessons from the Asian crisis is that a flexible exchange rate regime is, in general, preferable to pegged exchange rate regimes as a means of minimizing vulnerability to adverse shocks.

### **Exchange Rate Policy During Currency Crises**

In principle a devaluation or float of the exchange rate, by allowing the exchange rate to reach a more sustainable level, should lead to a subsequent easing of interest rates and other financial pressures. But, during the Mexican crisis of 1994-95, and the more recent crises in Asia and Russia, devaluations have served to intensify downward pressures on financial markets: currency values plummeted, interest rates skyrocketed, capital outflows intensified, and economic activity dropped off sharply.

The adverse consequences of devaluing or floating during speculative attacks represent all the more reason for countries to exit from pegged exchange rate regimes into more flexible regimes during periods of normalcy.

If a country has failed to exit from its pegged exchange rate regime during normal times and is confronted by a speculative attack, then the key question becomes whether and when to abandon the peg. The answer depends on whether or not a successful defense is possible. If the country's position is strong enough--i.e. the financial sector is sound, output gaps are not already large, and foreign exchange reserves are large--to avoid devaluing during a financially volatile period, it probably should endeavor to do so through some combination of monetary tightening, structural reform, and foreign exchange rate intervention. Defending the peg in this way may entail costly increases in interest rates and declines in economic activity, but these costs might be substantially less than in the alternative case of an uncontrolled devaluation spiral.

Of course, this leaves the key practical problem of identifying the probability that a peg can be defended. This is an extremely difficult proposition, even for a completely objective analyst. Not-so-objective players, such as national governments, have often been excessively optimistic about their chances of defending a peg. And, it was also the case, in this episode, that the pegs were not strongly defended during the early stages of the crisis. The increases in interest rates were too timid, and the willingness to take other preemptive moves to restore investor confidence too limited.

Conversely, recent experience could suggest that, in the face of a speculative attack, an exchange rate peg should be abandoned as soon as it is clearly unsustainable. The sooner the peg is abandoned in this circumstance the better, since the government is likely to have more reserves remaining, financial institutions will have incurred fewer losses from high interest rates, the maturity structure of the debt will have had less time to shorten, and expectations are less likely to have galvanized around the exchange rate. Still, the lessons from this period are not always so clear. Indonesia and Malaysia gave up their pegs within a month after the Thai baht floated, but suffered comparable consequences to Thailand. Another lesson from this episode is that early devaluations are not a cure-all.

## **MACROECONOMIC POLICY**

## **Pre-crisis Macroeconomic Policy**

By conventional standards, the monetary and fiscal policies of the developing Asian economies prior to the crisis were largely disciplined and appropriate. In all of these countries, consumer price inflation--the prime metric for the success of monetary policy--was relatively subdued, especially by emerging market standards. By the metric of public sector deficits, fiscal policy also appears to have been disciplined prior to the crisis. Therefore, another important lesson of the Asian crisis is that sound macroeconomic policies alone do not preclude crises. This experience also suggests that sound macroeconomic policy must be complemented by sound financial practices, effective bank supervision, and effective corporate governance.

I suspect, however, that Hy might have raised a serious question about this favorable assessment of pre-crisis policy. There was, as I noted earlier, some evidence of speculative excesses in financial and real estate markets in some of the countries and, despite the relatively good inflation performance, an argument could be made that the speculative excesses were evidence of overheating and could have been remedied by macroeconomic policy. Higher interest rates, on the other hand, would have encouraged still more capital inflows and appreciation of the currencies at a time of increasing current account deficits. Fiscal restraint would have, in retrospect, been desirable, but, at least on the spending side, would have to be weighed against the substantial infrastructure and other priorities.

While the inflation performance was good by developing economy standards, it was consistently higher than inflation in the U.S., the country to which exchange rates were pegged. As a result, there was a tendency toward real appreciation, which contributed to the deteriorating current account deficit in several of the crisis countries.

## **Monetary Policy During the Speculative Attack**

While monetary policies may not have been inappropriate in the years prior to 1997, they were probably not tightened sufficiently or for long enough in the immediate pre-devaluation phase of the emerging crises in the developing Asian economies. Had monetary policy been tightened adequately in order to defend exchange rates in the first part of 1997, it is possible that the crisis might have been moderated, if not avoided.

## **Monetary Policy after Exchange Rates Were Floated**

One of the most controversial aspects of post-float policy has been the appropriate stance of monetary policy. From a theoretical standpoint, the jury is still out on the usefulness of monetary policy tightening once the exchange rate is floated after a speculative attack. Proponents of tightening point to the usefulness of keeping rates high in order to make domestic assets attractive and to help contain inflation expectations following a nominal depreciation. Detractors argue that by weakening the financial system and corporate balance sheets, and by depressing economic activity, higher rates may further reduce country creditworthiness and thereby heighten downward pressures in the currency. Both positions have merit and economic theory offers little guidance as to which deserves greater weight.

Recent experience also fails to offer decisive guidance on the most appropriate monetary policy immediately following a float forced by a speculative attack. There is little in the Asian post-float experience to convincingly support the view that higher domestic interest rates did help to support the exchange rate. Currency values, for example, fell as much in countries that raised interest rates sharply--Thailand and Korea--as in countries where interest rates were raised by less, such as Malaysia. These trends, of course, mostly reflect the endogeneity of both the exchange rate and interest rates to swings in investor confidence. Countries where investor sentiment declined most strongly both experienced sharper falls in currency values and were required to raise interest rates higher to prevent even sharper depreciation. This suggests that, during the months following devaluation, exchange rates were driven as much by broad concerns about creditworthiness as by concerns about interest rate differentials.

These considerations suggest that, once the exchange rate is floated and broader concerns about an economy's financial position emerge, there is a limited contribution that monetary policy can make to stabilize the situation. Of course, by abandoning an exchange rate peg, a reliable nominal anchor is lost at a time when the

devaluation threatens higher inflation; it is essential that monetary policy be conducted with appropriate attention to controlling inflation. Striving to keep real ex ante interest rates positive may be a reasonable benchmark for post-devaluation monetary policy. Once the exchange rate stabilizes and inflation expectations moderate and pressure on the capital account eases, it may be useful and appropriate to lower interest rates. The interest rate policies eventually followed by the Asian countries roughly followed this pattern. At present, in fact, nominal and real interest rates are below their pre-devaluation levels. At the same time, the increase in inflation has been very modest.

### **Fiscal Policy During the Financial Crisis**

In retrospect, it seems clear that the initial objectives for tightening fiscal policy set by the IMF for the affected Asian countries were inappropriate. The markets clearly recognized that fiscal profligacy was not behind the crisis and did not view fiscal austerity as a policy that was likely to resolve the crisis. Output in these countries has declined by more than anyone anticipated, and so fiscal loosening rather than fiscal tightening is required.

An important source of initially inappropriate fiscal targets may have been poor forecasts. As forecasts were adjusted, new fiscal targets had to be negotiated, because the targets themselves were set in terms of the overall rather than the structural deficit. This renegotiation took time and often appeared to put the Asian economies in the position of asking for relief from IMF conditionality, undermining investor confidence, rather than as a disciplined and appropriate response to changing conditions and more realistic forecasts. This suggests setting targets in terms of structural deficits, or at least allowing built in fiscal stabilizers to continue to operate. However, estimates of structural deficits are only now being developed for Asian countries and such estimates may not be straightforward enough to form the basis for IMF performance criteria. But the principle should be respected.

### **BANKING AND CORPORATE DEBT PROBLEMS**

Weaknesses in the financial sector and excessive leverage in the corporate sector clearly contributed to the crisis in the emerging Asian economies. Indeed, the defining character of these crises was the intersection of currency, banking, and corporate debt crises. The weakness in the financial sector, in turn, was encouraged by the moral hazard associated with perceived wide-ranging government guarantees and political interference in lending decisions by banks. As a result, banks had insufficient incentives to manage their credit risks and firms had inadequate incentives to limit their leverage and make sound investments.

There are two broad lessons that emerge from this episode and earlier experiences involving financial crises. First, to reduce the vulnerability of an economy to banking and financial crises, a high priority should be given to sound corporate governance, narrow and explicit government guarantees, and adequate prudential supervision of banks. Second, while it is of course desirable to encourage robust institutions to minimize the likelihood of such problems in the future, once the crisis has occurred, the first priority should be to repair the damage done by the crisis to banking and corporate balance sheets. Corporate balance sheets need to be de-levered and banking systems need to be restructured and recapitalized in a pro-active and timely manner, or insolvent banks and corporations will continue to be an enormous macroeconomic weight on the economy and a serious obstacle to recovery.

What do emerging market economies need to do?

Some financial sector safety net appears to be essential to avoid bank runs and promote systemic stability. But, safety nets should be narrow and explicit, as opposed to broad and implicit. As a general principle, it is constructive to have safety nets in place that protect small depositors at depository institutions and thereby protect the functioning of the payments system from bank runs in the face of severe adverse shocks. Elsewhere market discipline, supported by effective disclosures and sound corporate governance, should be relied upon to control risk taking.

Even narrow, explicit safety nets for the banking sector result in moral hazard incentives for excessive risk taking, and therefore must be complemented with adequate prudential supervision. Such supervision not only promotes the safety and soundness of the banking system, but also limits the government's contingent

liabilities associated with the safety net.

Still, there are limits to the ability of supervisors and examiners to monitor banks effectively and control their risks. Market discipline therefore has to be enhanced to support sound corporate governance and complement bank regulation and supervision.

The practices of directed lending to support government priorities and lending to well-connected firms undermined normal incentives for prudent behavior by both banks and business customers. Poor incentives on the part of both lenders and borrowers is a recipe for the insolvency of both. Therefore, improved corporate governance is an essential part of structural reform, encouraged by freeing banks from political interference in lending.

It is difficult to see how the economies can get back to sustainable growth without taking the necessary steps to strengthen their banking sectors. What needs to be done includes a familiar list: restructuring loans, taking losses, recapitalization, improving corporate governance and disclosure, and enhancing supervision. However, unlike Japan, the burden of recapitalizing the banks is likely to be a significant burden on Asian emerging market economies and they may lack the technical expertise to accomplish the steps necessary for successful banking system restructuring on their own. Foreign technical assistance, international official financial support and/or foreign bank investments will be required. The debt problems of banks are closely related to the excessive leverage and weak financial conditions of the corporate sectors in these economies. So, resolving financial sector weaknesses means both restructuring and recapitalizing banks and orderly workouts of the debt problems of their corporate sectors.

Another clear lesson from the Asian crisis is that widespread insolvencies in the nonfinancial sector can be even more difficult to remedy than banking sector problems. The absence of adequate bankruptcy laws and procedures has in many cases meant that there was an absence of established mechanisms for allocating the burden of excessive debt problems among the borrowers and the lenders.

### **What can industrial countries do?**

First, we need to continue work by expert groups to develop standards. An excellent example of an effective process and excellent execution is the Core Principles for Effective Banking Supervision produced by the Basle Committee on Bank Supervision. The process that produced this set of standards sets an important standard of its own. The experts should set and, as necessary, update standards in a cooperative effort of supervisors and regulators around the world. It is important that these efforts include emerging market economies.

Second, we need to improve monitoring of compliance with these standards. In particular, the IMF is incorporating into its country assessments compliance with international standards for banking and bank supervision.

Third, we need to have sufficient resources dedicated to technical assistance for countries that are working to converge to best-practice standards and incentives for countries to comply. Market discipline, encouraged by more limited safety nets and enhanced disclosure, could play an important role here. This could be reinforced by market access policy in developed countries; i.e., limiting access to domestic banking markets to banks from countries who meet international standards for bank supervision. Finally, proposals for pre-conditionality are intriguing, though fraught with practical problems and obstacles. There have recently been proposals for contingency funds for countries that met certain conditions, perhaps including compliance with international standards. This might be a way of enhancing incentives to comply with international standards.

However, questions that have to be resolved include: Why would emerging market economies want to participate, if doing so singles them out as in potential need of liquidity lines? This may be similar to the reluctance of banks to borrow from the Federal Reserve discount window. Would the IMF (or whoever is implementing the lines) be willing to remove access to the liquidity facility if policies and conditions deteriorated in the country in question and threaten to precipitate a crisis in the process? Do we know enough about early warnings of crises to identify countries that meet appropriate standards and therefore deserve to

qualify for such a facility?

Moral hazard incentives affect foreign as well as domestic lenders. It is, therefore, important to find ways to ensure that foreign private lenders bear the consequences of the risks they take. Imposing losses on creditors will, of course, limit their willingness to extend credit to other borrowers. Doing so in the midst of a crisis is obviously problematic. Deciding how and when to involve the private sector in responding to international financial crises remains a challenge. Progress can be made at the margins. In particular, it might be worthwhile to look for ways to encourage the inclusion of collective action clauses in sovereign bond contracts to encourage greater cooperation among creditors when financial crises occur. Another promising direction is to promote the adoption of sound bankruptcy codes in emerging market countries to handle private debts more effectively. These measures can move the process in the right direction, but they are no panacea. We must continue to struggle to find ways to contain and resolve international financial crises without offering undue protection to international investors.

Industrial countries, as well as the emerging market economies, have supervisory issues related to emerging country risk exposures. Better supervision in the industrial countries would insure better focus of lending banks on risks associated with lending to emerging market countries, reinforcing efforts to lesson moral hazard associated with such lending.

Industrial countries should continue to support international financial institutions so they have the resources to provide liquidity support and to assist in designing programs to mitigate the crisis and promote structural reform.

Finally, when appropriate, industrial countries can adjust their macro policies to offset the restraint on their growth from spillover effects from the crisis countries and thereby ensure that they remain anchors in the world economy.

---

## REFERENCES

Minsky, Hyman P., "Can 'It' Happen Again," in Dean Carson, ed., *Banking and Monetary Studies* , Homewood, Ill.: Richard D. Irwin, 1963.

—, "The Financial Instability Hypothesis: An Interpretation of Keynes and an Alternative to 'Standard' Theory," *Nebraska Journal of Economics and Business* , Winter 1977.

—, "The Potential for Financial Crises," in Tamir Agmon, Robert G. Hawkins, and Richard M. Levich, eds., *The Future of the International Monetary System* , Lexington, Mass.: Lexington Books, 1984.