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Understanding the Asian Crisis: Recommendations for Policy

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Abstract

The 1997 Asian crisis is described in order to show a plausible chain of causes and events that led to the eventual collapse of many Asian currencies. Empirical evidence is presented based upon the experiences of five Southeast Asian countries that were severely affected by the crisis. Policies are recommended in the setting of exchange rates, the monitoring and liberalisation of banks, the foreign ownership of domestic assets and the augmentation of foreign exchange reserves.

Introduction

The crisis in Asia has been tormenting the minds of economists since it started in the middle of 1997. Its defining characteristic was the wholesale collapse in as little as a few weeks of the Thai baht, the Malaysian ringgit, the Indonesian rupiah, the Philippine peso and other currencies in Southeast Asia. Numerous anecdotes suggest that domestic political corruption, perhaps through imprudent lending policies, was an important explanation for why the crisis occurred. For example, Krugman (1998) sees in the political connections of "minister's nephews" the motivating force behind the recklessness of the many failed investment projects that have occurred during the crisis. But political corruption has been in the region for as long as anyone can remember, yet never before has there been such a massive and rapid currency depreciation. While corruption may have contributed to the crisis, it can be regarded as only one among a complex host of responsible factors.

This article presents a description of those factors that are believed to have caused the crisis in Asia. Some empirical evidence in support of the description is presented by way of recent data concerning five Asian countries: South Korea, Indonesia, Malaysia, the Philippines and Thailand. Policies are recommended concerning the determination of exchange rates, the supervision and liberalisation of banks, the foreign ownership of domestic assets and the appropriate level of foreign-exchange reserves.

Plausible Causes

A cursory understanding of the crisis reveals many plausible causes (see, for example, Victorio, 1998). One of the most important may have been the policy of inflexible currency exchange rates implemented by the affected countries: Thailand, Malaysia, the Philippines and, to a lesser extent, Indonesia and South Korea. Another was the large inflow into these countries of short-term foreign funds that were mismatched to long-term investments, making the economy vulnerable to withdrawals. Quite separately and still another was an increase in progressively less-sustainable domestic investments. Finally, there were the regional shocks in currency and trade: the competitive devaluations by China, the weakening of world demand for some regionally-produced electronic products and the weakening of the Japanese yen.

How these factors interacted to cause the crisis is fodder for modellers in years to come. A tentative description of their plausible interaction is presented in Figure 1. Its main elements are explained as follows.

Providing early impetus were the trade shocks and the inflexible structure of exchange-rate policies. Exerting their influence from the early 1990s, these factors caused many of the Asian currencies to become overvalued and, therefore, susceptible to a corrective devaluation. The overvaluation did not seem to raise any concerns among the international community, for their foreign capital continued to flow into the affected countries in unprecedented large amounts. The currency overvaluation and the inflows helped to support ubiquitous current-account deficits. Additionally, they became a source for the rapid expansion of bank loans and domestic investments – some perhaps tainted by political corruption – and thus the high GDP growths that lulled the international community into the 1990s' exuberance over the Asian miracle.

The increases in bank loans and domestic investment were also the result of banking behaviour, particularly in Thailand, the country that deregulated last, in 1990. But many investors did not appear to know that many of the increases were being funnelled into the purchase of fixed assets rather than into, say, the production of tradeable goods. This made the high GDP growths unsustainable and precariously dependable upon continued confidence in a favourable return to the fixed assets. When enough people believed that the GDP growths were not sustainable – and all that was required may have been a few foreign banks questioning whether to roll over credit for one country – domestic asset prices fell, capital inflows were reversed and fixed exchange rate policies had to be abandoned because of deteriorating foreign reserves. The belief quickly spread to other countries, thereby adding contagion to the list of what caused the crisis.

The Consequences of Inflexible Exchange Rates

The evidence for such a description is only beginning to emerge, and is mainly in the form of macroeconomic indicators during the 1990s. Not yet included and worthy of further study is a systematic statistical analysis of the associations between the variables. Most of the evidence is presented in Table 1, in the form of data concerning exchange rates, currency values, current-account deficits, bank loans, property prices and sources of external financing.

By way of background, inflexible exchange-rate policies were ubiquitous to the countries that were affected. Every policy consisted of some variation around pegging the local currency to the US dollar. Malaysia, Thailand and the Philippines did not allow their currencies to fluctuate beyond a narrow band, the widest of which was 15% of a nominal exchange rate. South Korea and Indonesia were more flexible, intermittently allowing fluctuations that nominally depreciated their respective currencies by 26% over a six-year period beginning in 1990.

When the dollar sharply strengthened relative to the yen and the European currencies in the middle of 1995, it lifted with it virtually all of the Asian currencies. By 1996 most of those currencies had appreciated dramatically in real terms. From the figures in Table 1, the average appreciation was about 11% from 1990 based upon the Indonesian rupiah, the Malaysian ringgit, the Philippine peso and the Thai baht. Only the Korean won depreciated.

By encouraging imports and diminishing the competitiveness of exports, the appreciation of the currencies contributed to generating the current-account deficits that were symptomatic of an impending devaluation. Whether the deficits were sustainable would have been difficult to judge. Looking at real GDP alone might have painted a rosy picture. As shown in the table, each of the countries, with the exception of the Philippines, experienced a high average annual rate of growth exceeding 7% of its real GDP. Analysing that these current-account deficits were large, as a proportion of GDP, would have been more discerning because it would have indicated whether the debt resulting from the deficits could be repaid. While there is no general consensus

concerning what proportions are sustainable (see, for example, Ferretti et al, 1996), one obvious criterion is that the real interest rate on the foreign debt owed from the deficits must not exceed the growth rate of the GDP. An operational equivalent of this is recommended by Summers (1996) who suggests that concerns ought to be raised whenever the deficits exceed 5% of GDP. Based upon the table, such a critical limit would have been failed by Malaysia and Thailand, and only marginally satisfied by the Philippines.

Policy Recommendation I: Make Exchange Rates Flexible

The undesirable consequences of the inflexible policies imply a strong policy argument for making exchange rates more flexible. Why rates ought to be rigid is sometimes based upon the perception that fixing rates can be used to improve domestic macroeconomic outcomes. For example, a fixed exchange rate can have the effect of decreasing the natural volatility of currency fluctuations, thereby decreasing the risk premiums charged by foreign lenders and cheapening the cost of borrowing funds from abroad.

But further economic theory leads one to be naturally skeptical of such a view. Currency depreciations seem inevitable, and one of the lessons of the crisis seems to be that monetary authorities have very little power over setting exchange rates. The theory indicates that if an impending currency depreciation is to be prevented, say because of a currency attack borne out of unfavourable expectations, the monetary authority can launch a non-sterilised intervention: that of reducing the domestic money supply in order to raise domestic interest rates to a level that makes domestic assets attractive to hold by comparison with their foreign counterparts. The intervention may attract foreign capital sufficiently enough to strengthen the domestic currency but it can only be conducted by selling foreign-exchange reserves. When reserves are depleted the currency can no longer be defended. The other, sterilised intervention – that of restoring money supply to its previous level in order to prevent domestic interest rates from rising – prevents domestic assets from becoming comparatively profitable to hold, thereby creating another round of pressure for the currency to depreciate and for reserves to be used to defend the currency.

Allowing exchange rates to become more flexible may also have the counter-intuitive effect of discouraging foreign speculation. Speculative currency attacks are often conditioned upon the perception that foreign exchange reserves are limited and that fixed exchange rate policies will eventually have to be abandoned. For this reason, foreign exchange controls have the unintended effect of effectively subsidising speculative activity.

Domestic Banking and Real Estate

The evidence concerning banking points to a lack of caution on the part of lenders concerning the prudent allocation of loans. It is partly in the context of this evidence that a case could be made for political corruption having been an contributing factor to the crisis. As shown in Table 1, domestic loans grew rapidly. In the years between 1990 and 1996, all of the countries experienced an uninterrupted period of rapid growth in their respective domestic banks' lending to the private sector. Even the lowest of the recorded annual growths, used to calculate the averages shown in the table, exceeded any of the countries' recorded GDP growth: 11% for that of Malaysia in 1992. This rapid growth led to substantial increases in all of the countries' ratios of domestic bank lending to GDP.

However, with respect to where the loans were going, there ought to have been more caution. On the one hand, it did not appear that the loans were feeding domestic consumption as much as they were feeding domestic investment. Domestic investments were consistently a large proportion of GDP – over a third of GDP – for all countries except the Philippines. On the other hand, the loans appeared to be feeding investments in fixed assets rather than tradeables (see also Corsetti et al, 1998). As

shown, a large proportion of domestic bank assets was in the form of property and real estate loans: an estimated average of 27% as of 1997. There may well have been a connection between this proportion and the high proportion of loans that were eventually recorded in 1997 as non-performing, between 14% and 19%. Furthermore, during the 1990s, all of the countries experienced a boom in their respective stock and real estate markets. For Indonesia and the Philippines, residential real estate prices rose phenomenally over relatively short periods. Because loans were going into fixed assets rather than tradeables, the viability of the loans could only be sustained if asset prices continued to rise.

Policy Recommendation II: Increase Bank Supervision

Because of the above evidence, bank activities ought to be supervised more closely, and findings from the supervision should be widely disseminated. For example, a case could be made for requiring banks to demonstrate capital adequacies in excess of the minimum of 8% of reserves suggested by the Bank of International Settlements for industrialised economies. As another example, strong warnings ought to be issued whenever stock and real estate prices appreciate more rapidly than normal, for these may signal that bank loans are becoming predicated upon fragile and unsustainable asset values.

One justification for this recommendation that augurs well with the evidence is the theory that, without the warnings, investors can suffer a kind of optical illusion concerning growth (Sachs, 1997). The illusion renders investors inattentive, for they erroneously interpret asset-price increases as evidence of a boom in tradeable goods.

The greater supervision of banks is bound to be unpopular not only because it appears anti-laissez faire, but also because it may seem to impede upon the financial development that is required for continued economic growth. However, the contracts that characterise banking are not as free of potentially adverse incentives as those which characterise other goods and services (Stiglitz, 1994). For one, financial contracts are less enforceable and more information-constrained than most other goods and services. For another, public authorities are usually obliged to guarantee the repayment of loans whenever the viability of the banking system is threatened. These two encourage non-repayment and moral hazard (defined in this case as the immoral undertaking of hazardous bank-financed projects), which seems to be corroborated by the evidence.

Policy Recommendation III: Guard Against Rapid Financial Liberalisation

Yet another banking recommendation is for public authorities to address some pitfalls from rapid financial liberalisation. One pitfall is the usually increased risk of a banking crisis. Kaminsky and Reinhardt (1996) present evidence that financial liberalisation is an important contributor to banking crises, and that banking crises appear to precipitate balance-of-payment crises. In their analysis of 46 balance-of-payments incidents between 1980 and 1995, nearly half appeared to have been associated with banking crises that were preceded by private lending booms.

The increased risk might be a natural consequence of opening the country's capital account to the rest of the world. The usual inflexibility of exchange rates, and the obligation of public authorities to stand by their banks are often adequate to secure for foreign lenders an implicit insurance against any losses from either foreign exchange fluctuations or domestic loan defaults. It is therefore not surprising that for the Asian crisis, capital inflows and domestic lending both exploded at nearly the same time that real estate prices and non-performing loans grew. Another reason for the increased risk is one proposed by Montes (1997): that excessively rapid financial liberalisation can prevent banks from developing acceptable competence in judging credit-worthiness. He describes the experience of Thailand as detrimental to the development of sound banking practices because the country's banks have become accustomed to the lazy practice of lending only to the government or to blue-chip companies.

Another pitfall to rapid liberalisation is the unintentional encouragement of capital outflows which results when other parts of the economy are not liberalised. In this regard, the experience of Thailand also presents some lessons. It liberalised its banking system by decreasing bank monitoring and removing the restrictions it had earlier placed upon domestic interest rates and foreign-exchange trade. These policies promoted competition and success among banks in the bidding for foreign funds, and could well have explained a great proportion of that country's share of the large capital inflows into Asia throughout 1996 (see Table 1). However, the country did not liberalise the myriad of investment-incentive subsidies that were in place for foreign investors (see, for example, Williamson, 1993). When the restrictions on foreign exchange trade were removed, the effort would have had the effect of subsidising capital outflows, for retaining subsidies on capital inflows while removing foreign-exchange restrictions is tantamount to subsidising capital outflows. Thus, it can be argued that incomplete financial liberalisation may have added to making Thailand vulnerable to a greater volatility in capital flows and, therefore, to the currency crisis of 1997.

Policy Recommendation IV: Remove Impediments to Foreign Ownership

For sources of external financing among the affected countries, the evidence points to the preponderance of capital inflows, rather than more irreversible foreign direct investments (FDIs). The table describes the growth of private capital inflows for the five countries between 1994 and 1996, before their rapid reversal in 1997. By comparison to private capital inflows, FDIs were quite small.

One plausible reason for the heavy reliance upon capital inflows is the many legal and ethnocentric impediments that public authorities placed upon the foreign ownership of domestic assets. For example, in the Philippines, foreign individuals or corporations are legally prohibited from either owning land, or greater than 49% of the equity of a local business. To this end, impediments to foreign ownership should be reexamined or eliminated. Because they encourage capital inflows rather than FDIs, the country's foreign financing becomes more susceptible to changes in market sentiment. Additionally, they limit foreign-investor knowledge and control over the domestic allocation of foreign funds, thereby encouraging the moral hazard in domestic decisions that seemed pervasive.

Policy Recommendation V: Augment Foreign Exchange Reserves

The evidence also shows the strong influence that capital inflows exerted upon foreign exchange reserves. Between 1990 and 1996, foreign reserves grew by an average of 276% for all of the countries at a time when there were pressures upon reserves to shrink because of the current account deficits. Increases in FDIs could not fully account for the growth in reserves; according to the table, it was only in Malaysia wherein the proportion of *inward* FDIs to current account deficits was greater than 100%. In the rest of the countries, the proportion was no larger than 61%.

The implication from this evidence is that foreign exchange reserves, no matter how much they increase, are inadequate if they are not large enough to meet foreign liabilities. Countries should therefore be encouraged to build their reserves to some proportion that is acceptable. As a minimum, reserves ought to be as large as *short-term* foreign liabilities. As of 1996, only Malaysia and the Philippines would have met such a standard; South Korea, Indonesia and Thailand would all have failed. Indeed, the table shows how the size of the short-term maturities exceeded, on the average, the countries' foreign reserves: the ratio of the former to the latter was 137%. Thus, the reserves could not have comfortably financed the sudden reversal of the capital inflows that occurred in 1997, and the investors would have acted according to the belief that the reserves were indeed not large enough to make reversals unnecessary.

Concluding Remarks

Under the circumstances, none of the above recommendations can be anything but tentative. While they uncover some basic lessons for policy-makers, their generalisability to other countries, and even among the five countries themselves, is debatable. The description and the evidence ignore any country-specific factors that can account for the differences in experiences (see, for example, De Dios et al for those factors in the Philippines). As a result, they underestimate the economic flexibility of those countries that seem to have weathered the crisis well and, likewise, overestimate the strength of those that have been hit hard. Even so, the weight of the evidence seems to tilt toward a paradigmatic explanation that is eclectic but universal, especially when one's intuitions about the complexity of the crisis are thrown into the balance.

This Working Paper is accompanied by two charts **Figure 1. A Description of the 1997 Asian Crisis** and **Table 1. The 1997 Asian Crisis: Indicators for Five Asian Countries** which are available from the Asian Studies Institute on request.

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