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THE ASIAN CRISIS: CAUSES AND CONSEQUENCES

Richard Cooper, Professor of Economics
Harvard University

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Let me begin by recalling briefly the chronology of the financial crises. It has been nearly two years since Thailand unexpectedly withdrew its support from the foreign exchange market, on July 2, 1997, and the baht dropped dramatically in price relative to other currencies. Soon thereafter Malaysia made the same move. Indonesia relaxed its support for the rupiah and then decided it could not even hold the relaxed version, so it effectively withdrew from the foreign exchange market in October, before exhausting its reserves. By late November it became clear that Korea was in difficulty, and the crisis emerged fully in December.

In August 1998 Russia, in a partly expected and partly extremely unexpected move, withdrew its support for the ruble and ceased payment on some of its government obligations. Brazil came under very strong pressure in October, but the break was postponed until January 1999 by the promise of a substantial international package of financial support in exchange for strong fiscal actions by Brazil.

Those are the main events. One reason for recounting them is that in the history of this period all these events will be smudged together and will undoubtedly be talked and written about as the financial crisis of 1997-98.

Those of us who lived through the events appreciate that

in real time a month is a long time. Three months or six months is a very long period of time. I prefer to call these the "financial crises," plural, of 1997-98 because while there are important similarities among them, there are also critically important differences. I still consider the linkages among these various events an open question.

In the history of monetary affairs, these have been very dramatic events. We have never before seen changes in what economists call "real exchange rates" -- that is to say, exchange rates corrected for relative price differences -- of the magnitude that we saw in the Asian countries in 1997. Large changes in exchange rates have hitherto been associated with very high inflation rates, as in Argentina and Brazil in the 1980s. But the Asian countries all had modest rates of inflation. So if you correct for the inflation differentials, these were dramatic changes in real exchange rates.

The decline in output, particularly relative to the recent experience of the countries in question, was also dramatic. Comparisons have even been made with the Great Depression of the 1930s. Those comparisons are usually made by people who do not know the magnitude of the Great Depression in Germany and the United States. Nonetheless, in post-war experience the drop in output was dramatic -- Malaysia's first recession since 1985,

Korea's since 1980. Indonesia's last recession was 1965. And Thailand has not had a recession in the last 40 years. On the contrary, all had become accustomed to rapid economic growth.

So these were dramatic events in the experience of the people directly affected. There are few Thais that remember the last economic disaster in Thailand, which goes back to the Second World War. The declines in output were not like the Great Depression. But by post-World War II standards they were deep recessions, especially in Indonesia, at minus 14 percent.

These events are the more dramatic because the behavior of the Asian countries had been, by the standards of the so-called Washington consensus, exemplary. These countries had had rapid economic growth for many years. They were all well disciplined in fiscal terms. All had moderate inflation rates -- low, by standards of developing countries.

So these countries became the darlings of the financial community around the world. We now understand that was part of the problem. But it made the turn of events since July 1997 all the more dramatic.

Fortunately, from a global perspective these countries are small. If you add up the Southeast Asian countries altogether, they are about the size of Spain, using GDP at market prices. That is the most relevant single measure of economic significance. One

could look at exports, in which case they are smaller than Spain. South Korea alone is slightly smaller than the Southeast Asian countries altogether. Adding Korea to the Southeast Asian countries achieves roughly the size of Italy.

The financial disasters became economic disasters in the countries concerned. But fortunately from a global point of view they were like a big recession in Italy, difficult but manageable.

Japan is altogether different. Japan is a very large economy, five times the size of these countries taken together. That is why we are worried about the softness of the Japanese economy. It is a major complicating factor inhibiting recovery from the Asian financial crises.

I have been charged with indicating the causes of these crises. "Cause" is actually a complex concept when you think about it. It involves implicitly getting into hypotheticals, what economists call "counterfactuals." What the world would have been like if A, B, or C did not occur? If A had not occurred, but D would have happened anyway, we cannot very persuasively say that A had caused D.

To do that in a systematic way would take far too much time. But for concreteness let me focus on Thailand, partly because that is where the dramatic events started, to identify the problems in Thailand that gave rise to its crisis. As I have said,

important details differ from country to country. Focussing on Thailand will give some flavor of what was happening, with some similarities with other countries.

The banks of Thailand had borrowed exceptionally heavily in the world interbank market by June 1997, \$69 billion as reported by the Bank for International Settlements, mostly in US dollars and Japanese yen. Of this, \$46 billion, two-thirds, were under one year in maturity, sometimes under 30 days in maturity. This compared with reported official foreign exchange reserves of \$31 billion, of which, we now know, a substantial fraction had already been committed to the forward market. So very heavy short-term foreign currency indebtedness.

Thailand had a large inflow of capital of all kinds in 1994 and 1995. It responded the way economists predict that countries should respond to large and sustained inflows of capital, with a rise in the current account deficit, the deficit of purchases of goods and services abroad -- which rose to degree, reaching 8 percent of GDP, and should have set off alarms. In mid-1996 the IMF warned the Thai government about the vulnerability of its large current account deficit, particularly after a flattening of export growth. Export performance had been strikingly good through 1995, but took a turn for the worse in 1996. Thailand was in the process of reducing its current account deficit, but not, as

it turned out, rapidly enough.

A country with a current account deficit can manage as long as capital inflows cover the current account deficit. But if people, residents as well as non-residents, collectively decide to invest less financially in the country, a drop in the net capital inflow will put downward pressure on the country's foreign exchange rate. Foreigners do not have to withdraw their funds. They just have to cease investing at the same rate that they did before. That is what happened in Thailand.

Signs of a weakening Thai economy were already evident. Thailand had a real estate bust in early 1997. Net American equity investments in Thailand began to decline in 1996. Exposure to foreign banks did not grow after mid-1996. So there was already some downward pressure on the exchange market coming from those sources. Instead of recognizing it and accommodating it the Thais chose to continue to support the dollar value of the baht by drawing down Central Bank reserves from late 1996.

So the market effect of a change in market sentiment was obscured by the fact that the Thais were drawing down their reserves. And the Thai authorities were not exactly straightforward with the world or indeed with their own senior officials about how rapidly the reserves were being drawn down. They were being drawn down partly through commitments in the

forward market, so the full drawdown did not show up on the balance sheet. It is said that only two Thai officials actually knew the true state of affairs, that reserves were virtually exhausted by June of 1997.

The question has been asked, where was the international community during all of this? We have an answer. In its annual article IV consultations in July 1996, one full year before the crisis broke, the IMF officially warned Thailand of the magnitude and the short maturity of its external debt, of the weakness of its bank supervision, of the dangerously large magnitude of its current account deficit, and of the relative inflexibility of its exchange rate policy. All of these warnings were actually given to the Thai authorities. For whatever reason, the Thais chose to ignore the warnings. They who sow the wind may reap a whirlwind.

Most economists would agree, I think, that Thailand made several serious policy mistakes. But the international community, especially the banks, were implicit accomplices because they lent heavily without paying adequate attention to the evolving circumstances -- although total bank loans ceased to rise after mid-1996.

I will not recount the story in other countries. To repeat, the details differ in important ways. But the Asian countries all had substantial current account deficits, although

the others were not as large relative to GDP as Thailand's. (Malaysia's deficit had been larger in 1996 but was on its way down.) They shared the characteristic of large external debt, tilted heavily toward short maturities, much of it in the interbank market -- although in Indonesia much foreign bank lending was directly to Indonesian corporations.

All of these countries were supporting their exchange rates in one way or another. And all of them, with Malaysia being a partial exception, had poor banking regulation and supervision by Anglo-Saxon standards. In Thailand and Indonesia the banking supervision was poor by any standards. Korea had quite tight supervision, but with different objectives from those that govern banking regulation and supervision in the United States or in Britain and other countries which emulated British standards.

There has been a lot of talk about contagion, a metaphor drawn from infectious disease. That metaphor is perhaps apt if one thinks about Southeast Asia. The crisis broke in Thailand and spread very quickly to Malaysia, which to avoid running out of reserves as Thailand had done mistakenly announced that the central bank was withdrawing from the foreign exchange market altogether. The announcement precipitated a sharp depreciation of the currency. With slightly slower burn the financial crisis moved to both Singapore, which weathered it, and to Indonesia. But it was five

to six months before it hit Korea seriously and over a year later for Russia.

While it has become the conventional wisdom, I have serious doubts whether we can meaningfully speak of contagion in linking Korea and Russia directly to Southeast Asia. There are linkages, of course, but none are compelling. Korea had its own problems. Russia had its own problems. And Brazil had its own problems. Russia's behavior strongly affected Brazil, through frightened market reaction, but these remarks focus on Asia.

The forces of contagion can be divided into two categories. One is what I call the organic or economic effects, what the IMF is calling spill-over effects, the other concerns the response of financial markets. Organic effects arise from direct trade linkages -- as a country's imports fall, the exports of its trading partners fall --, and the fact that country A may be in direct competition in third markets with country B, so that when its exchange rate depreciates that weakens demand for the exports of country B.

If we leave aside Malaysia and Singapore, there is very little direct trade among these countries. Most of them are oriented towards the major markets of Japan, USA, and Europe. There is some competition among them, to be sure. But not a lot of direct competition. Malaysia and Thailand are in somewhat closer

competition than, say, those two and Indonesia or those three and Korea. It is difficult to explain what happened by looking at these organic economic linkages.

With respect to financial effects, Morris Goldstein has correctly observed that the Thai events were a wake-up call for investment managers around the world. Here was an exemplary country, Thailand, and all of a sudden things went badly wrong. Investors around the world, in London, New York, Zurich, Hong Kong, asked "If Thailand can go wrong, what about Korea, Indonesia, et cetera, et cetera?" So equity and bank portfolios in all emerging markets were probably re-examined.

Some people have made something of a possible liquidity squeeze. If some stocks in a mutual fund go bad but they become illiquid, the fund will have to sell its good stocks to meet redemptions, e.g. a seizing up of Russian equities lead to sales of Chilean equities. That is a fertile field for research; I do not know how important it has been.

As time goes on more data become available. They are still incomplete, so the full story cannot yet be told. But what we discover is a little surprising. In spite of all of the talk about reversals of capital flows into the Asian countries, the figures suggest that the actual runoff of bank loans was not consequential in the second half of 1997. True, and significantly,

bank loans stopped flowing in. Banks loans to Thailand dropped \$8.7 billion in the second half of 1997, significant but easily covered if reserves had been adequate. Korea also experienced a run-off, no doubt contributing to the crisis. But the declines in bank loans to Malaysia and Indonesia were negligibly small; that is a big surprise.

We do not yet have comprehensive figures on equity funds. But net purchases or sales of equities by Americans again tells a surprising story. A sell-off already started in Thailand and Malaysia in late 1996/early 1997. But in the second half of 1997 there were actually net purchases in Thailand; the picture for Malaysia was more mixed, but no great rush to the door. Net purchases of Korean equities occurred throughout the crisis, although the rate diminished in the fourth quarter. Perhaps Europeans, for which data are not yet available, were selling. And as I have said, even a drop in the rate of inflow can be important if for a country with a current account deficit.

Foreign direct investment, FDI, continued in all of these countries during this period, albeit at a somewhat reduced rate.

These preliminary figures are somewhat surprising. What was happening? Partly on anecdotal evidence, I believe the main pressure on foreign exchange rates in these countries, especially Southeast Asia, came from resident capital. It was not the

withdrawal of foreign capital so much as the purchases of foreign exchange by residents that put such strong pressure on foreign exchange rates. Residents had directly or indirectly borrowed very heavily in foreign currencies -- directly in the case of Indonesian corporations, indirectly in the case of Korea and Thailand through the banking system -- on the implicit assumption that exchange rate policy would continue in the future as it had in the past.

That assumption turned out to be incorrect, and resident debtors had exposures directly proportional to the extent of currency depreciation. So residents rushed to the door, not to speculate in the sense in which that term is used loosely in journalistic conversation, but to protect their asset positions, by trying to cover their foreign currency liabilities.

Since the central banks were now out of the market, there was no strength on the other side. So currency values dropped precipitously, which in turn threw heavy foreign currency debtors into insolvency.

In his latest book George Soros offers a fascinating account both of the Russian events in summer 1998 and of Southeast Asia. Soros was personally taken to task by Prime Minister Mahathir of Malaysia for providing the ominous squeeze behind this whole crisis, not just trying to make money, which everyone takes for granted, but trying to bring down the mixed but successful

economic system of Malaysia -- an allegation of politically-motivated short-selling of Malaysia's currency, the ringgit.

Soros tells us in his book, and I see no reason to disbelieve him, that his fund was short on Indonesian rupiah in late 1996 and early 1997. But during the crisis in the fall of 1997 he covered his short positions, so he was a net purchaser of rupiah during the fourth quarter of 1997, thus providing some support to the market. He avers that the rupiah was the only Southeast Asian currency he was in.

The whole dynamic of the situation suggests that most of the pressure was resident money responding to the revelation that a key assumption, namely that tomorrow's exchange rate would be approximately the same as today's, turned out to be wrong.

Since generalizations from these episodes will be made for a long time to come, it is worth noting where the contagion did not hit. Singapore felt some pressure but held. Hong Kong felt some acute pressure from time to time, as France did in the 1992-93 European crisis, but held. China felt a diminution in foreign capital inflow and a flattening of export growth, leading to some decline in the growth rate, but held. Taiwan held. India and other countries in South Asia held.

These countries have structural characteristics that are rather different from the countries that were subject to the

crisis. Singapore, Taiwan, and China had current account surpluses; Hong Kong had a relatively small deficit; all four had very large foreign exchange reserves.

China, India, and Taiwan had relatively little short-term external debt. Hong Kong and Singapore had huge short-term interbank debt but as international banking centers they also had huge short-term external claims, so there are large gross figures on both sides of the balance sheet. And unlike the other borrowers the funds were not generally used for domestic loans.

China and India had gone much less far in liberalizing international capital movements.

I said earlier that cause is a complex concept. I have described the symptoms and some proximate causes. But of course the deeper question is why did the Thais, the Indonesians, and the Koreans do something so stupid as to borrow at 30 days in dollars in order to make 10- or 15- or 30-year investments in local currency? Why did bank regulation and supervision not prevent the tremendous transformations of both currency and maturity? Why were the ultimate borrowers willing to take such risks, if they were formally passed to them (as at least the currency risk often was)? Why did the regulators not step in and prevent that? A whole series of whys come to mind. I have given only a superficial explanation for the Thai crisis.

The usual response to the deeper questions typically turns to things like, pejoratively, the pervasiveness of crony capitalism or more favorably, at least in some views of the world, the presence of active industrial policy. Banks made loans with the people's money under political guidance to firms whose owners supported the political elite. The Korean government for many years pursued an active role in steering the economy in certain directions, making decisions designed to achieve modernity, a path that was largely determined by emulation of Japan, driven by envy and resentment as much as by a desire to raise the living standards of Koreans. Corporations were encouraged to move into petro-chemicals, into autos, into semi-conductors, despite low rates of return in prospect as well as in practice. Banks were encouraged to make loans to targeted industries, and favored firms took on exceptionally high leverage. High domestic savings were augmented from abroad to make these heavy investments.

So uncritical lending was part of a pattern which was not merely tolerated but encouraged. And despite some rough edges here and there it had been fabulously successful not only in generating rapid growth but also higher standards of living for ordinary people. But its fundamental weaknesses were revealed by the events of 1997.

What lessons can we draw? The first is aimed mainly at

economists: the financial system is part of the "fundamentals" of any modern economy. Economists have an analytically useful construct of distinguishing between the real economy and the monetary economy. The real economy is the productive apparatus, the labor force, the plant and equipment, and the land used for producing goods and services that contribute to our standard of living. Money and the elaborate financial system play no direct role. This is a powerful analytical device. But economists fall too easily into the habit of thinking that the first is important and the second is not. It is a big mistake. Every modern economy requires a sophisticated financial system to support the real side of economy. When things go badly wrong on the financial side they necessarily spill over adversely into the real side of the economy. That is lesson number one.

The second lesson -- really a reminder -- is that financial systems are intrinsically unstable. It would take us too far afield to develop that thought in detail. Most ultimate lenders want liquid assets. They want something they can mobilize quickly if they have to. That is true of many purchasers of stocks and bonds as well as depositors; hence the importance of secondary markets in securities. Savers like their claims to be relatively liquid.

Most borrowers, in contrast, want to tie the funds up for

some period of time. Apart from self-liquidating trade finance, they need at least three years if they are starting a new firm before there is likely to be positive cash flow and more or if they are building a plant with a life of 15 or 30 years. So there is a maturity discrepancy between the preferences of lenders and the preferences of borrowers in every modern economy. The financial system bridges that by giving lenders the illusion, which is largely correct most of the time, preferably all of the time, that their assets are liquid, and giving the borrowers the illusion that they can use the money for 15 years, say, subject to the conditions of the bond contract. That is what financial systems do.

The financial system relies on something like the law of large numbers in order to play that juggling act successfully. It relies on the fact that not all of the lenders will want their money at the same time -- that bank depositors will not run on the bank. In financial markets experience a tremendous loss of liquidity if everyone wants to sell their bonds or equities at the same time.

So we rely on a certain independence of decision-making among the lenders and the fact that their needs come at different times. The financial intermediaries can play on that. It usually works. But as in sailing, every once in a while we run into really rough weather. And if the weather is too rough it can end in

disaster. It can sink the boat. So we have built up regulatory systems and a support apparatus officially in order to cover those rough periods. They are called the "regulatory system" for banks or securities markets, on the one hand, and a "lender of last resort" on the other. The lender of last resort's function is to liquify good but illiquid assets in these rough periods.

Advanced economies over the years have built up elaborate regulatory, supervisory, and support systems for the financial sector. Since the financial system is intrinsically unstable, it needs that kind of support system to keep it going through rough periods.

The third lesson, which is especially important for developing countries, is that a well-functioning economy requires a high degree of public trust to mobilize private savings for public good. Southeast Asians have long been high savers. But traditionally the savings went into gold leaf, silver coins, jewelry on wives or daughters. This form of savings may be privately valuable, but it is not socially useful. It can be liquidated in a year of a bad crop or in other unfortunate circumstance. But it cannot be mobilized for productive investment.

The social contribution of modern financial systems is to mobilize the precautionary savings of households for uses that

increase productivity in a way that gold jewelry does not. But such mobilization involves a great amount of trust on the part of the saving public. Instead of buying bracelets for their wives, they put their savings into an institution with a door, a teller-counter, and (presumably) a vault, in exchange for a written or oral promise to pay on demand. They rely on the fact that they have been told that any time they want their money, they can get it back.

That trust has been grossly violated in the experiences recently revealed. Public savings have been taken into financial institutions and lent in egregiously bad ways, in monuments to industrial modernity Korea, in urban real estate in Thailand, in subsidies to the president's children in Indonesia, in operating subsidies to state-owned enterprises in China. China faces a huge potential problem if the public were to discover how its savings have been squandered. Fortunately, unlike the Japanese five years ago, Chinese leaders are not in denial about it. They know they must re-structure the financial system.

Fourth, we discovered in 1997 not perhaps a clash of civilizations, but a clash of cultures played out in the financial world. Foreign lenders, based in London, New York, and other major financial centers, expect to be kept well informed about what is happening in the economies to which they lend and especially what

is happening to the borrowers. If, unexpectedly, borrowers are unable to repay on schedule, they expect orderly procedures for working out the situation, preferably procedures that maximize the likelihood they will be paid without loss. In short, they expect transparency and well-defined processes.

Asian borrowers have a different tradition, one that emphasizes personal connections and loyalties among the relevant parties, including political connections and loyalties. They operate on the assumption that problems can be worked out satisfactorily behind closed doors and that what foreign lenders or domestic depositors do not know will not hurt them. Indeed, timely and accurate information may unduly harm them.

It should be noted here that the Asian tradition -- or something resembling it -- was common in many European countries not long ago with discernable remnants even today.

It is difficult to pass definitive judgment on the respective merits of these two quite different traditions. One can find circumstances in which either is superior, but my main point is that they do not mix well.

If foreign lenders in the first tradition suspect that serious problems are likely to arise with their borrowers, they do not expect to be told how serious the problems may be and what the likely solutions will be. They will simply withdraw their funds as

rapidly as they can, thus turning a financial problem or even a suspected financial problem into a financial rout.

Let me close by suggesting that we project ourselves forward to, say, the year 2005. Korea and Thailand and perhaps Malaysia will look back on this financial crisis of 1997, which resulted in a very painful recession in 1998, as adolescent growing pains. In each case the real side of the economy got out front of the financial system, and the resulting disconnect generated a financial crisis. But these countries will learn from this unpleasant experience more of what is needed in the way of a support system for the financial system. The United States had a financial crisis roughly once a decade from the 1830s to the 1930s, the last being a complete calamity. It took Americans a century -- we're slow learners -- to put in place the highly articulated and largely effective regulatory system which many within the financial system chafe under today. I do not mean to suggest that everything is exactly right. But such a system, put aside the details, is necessary. Even that did not save us from the savings and loan crisis.

It is a sad commentary on human society that we find great difficulty learning from the mistakes of others. We read about them with interest, even with curiosity. But we seem to have to make our own mistakes in order to really learn from them.

Korea and Thailand made some serious mistakes. There is no doubt in my mind that they will learn from those mistakes, and that in 2005 both economies will be the stronger for this episode.

Indonesia is much more complicated because this crisis has been confounded with the legitimacy of the government itself. Resolution of the crisis has become tied up with constitution-making. Thus the final outcome is less predictable, although it is conceivable that the gains to Indonesians will ultimately exceed those of others affected by the crises.

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