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9

Panel Presentation
The Asian Model, the Miracle, the Crisis, and the Fund

Jeffrey A. Frankel

Until recently, there were essentially two schools of thought regarding East Asian economic success. According to the first school, the Asian miracle illustrated the virtues of the capitalist system. According to the second, East Asian capitalism is different from Western capitalism, and its *differences* are the key to its success. Now, after a continent-full of disappointments, we are led to a third hypothesis. While it may be too strong to say that Asia's differences are the key to its recent failures, we have learned that the rules of economics after all apply to East Asia just like elsewhere, for better or worse.

I will address the policy response to the East Asian crisis on the part of the International Monetary Fund (IMF) and G-7 governments, including a number of criticisms of that response. But I begin by reviewing the origins of the crisis.

9.1 Origins of the Crisis

Macroeconomics played some role in the crisis, but not the lead role. Some mistakes of macropolicy were made in 1997 in Thailand, for ex-

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ample. When current account deficit turned to overall balance-of-payments deficit, the government was too slow to follow the IMF's advice of allowing more exchange rate flexibility. As a result, much of Thailand's reserves were lost, and the crash that followed was worse than it otherwise would have been, once it occurred. In this respect, the episode resembled the Mexican peso crisis of 1994. It appears that current account deficits in excess of 4 percent of GDP are a sign of possible trouble ahead.

But large-scale borrowing by itself need not lead to a crisis. Statistical evidence suggests that a large current account deficit or high level of debt is not a highly significant predictor of crisis. More important than the magnitude of the current account deficit is *how it is financed* and *how the funds are used.* The composition of the capital inflow matters. East Asian countries in 1997 relied too much on short-term foreign-currency-denominated debt (again as in Mexico in 1994). Although securities were supposed to have achieved a new importance in these countries in the 1990s—indeed this was the origin of the phrase "emerging markets"—the banking sector turned out to be central. There was a mismatch between the banks' liabilities and their assets, with much of the money going to speculative real estate deals.[1]

The main problem in East Asia was not macroeconomics but structural. Deep flaws afflicted the financial system. They include excessive leverage and a banking system based excessively on directed lending, connected lending, and other collusive personal relations. Ten years ago finance experts called it "relationship banking" and thought it might help to minimize "problems of asymmetric information and incentive incompatibility"; today we call it "crony capitalism."

The U.S. financial model—shared with the United Kingdom and so sometimes called the "Anglo-American model"—is different. It emphasizes arm's-length market relations. For example, firms rely heavily on securities markets to finance investment. To be sure, banks play an important role. But even bank loans tend to be made on arm's-length terms. Certainly the government has little to say about where bank credit is allocated. One lesson now widely drawn from the crisis—and I believe correctly so—is that after all, the Anglo-American-style financial structure apparently works better than the Japanese-Asian model (at the risk of overgeneralizing across a heterogeneous set of countries).

The much-vaunted Japanese financial system is looking tarnished. Precisely the attribute of the system that previously appeared to be a virtue, the willingness of banks to go on lending to firms in distress (because the

1. In Frankel and Rose (1996), high short-term bank debt is shown to be a statistically significant positive predictor of the probability of currency crash, while high reserves and foreign direct investment (FDI) have the opposite effect. This is research I undertook before coming to the Council of Economic Advisers.

banks had "longer horizons" than impatient American investors), now turns out to have led to serious problems. Borrowers who should have been cut off were not, with the result that further billions were lost.

The Asian style of corporate governance tends in the direction of empire building, that is, maximizing capacity, sales, or market share, rather than what neoclassical economic theory says firms should maximize, namely, profitability or the price of the company's stock. As a result, shareholders and consumers have lost out. For a while it looked like this was an arcane theoretical point, of interest to economists but not to real-world firm owners or workers. How could there ever be too much investment or too much growth? Now we see that Asian firms made precisely this mistake. They developed excess capacity in such sectors as steel and electronics and are now paying the price. This is what I had in mind when I said that the rules of economics turn out to apply to East Asia just like elsewhere.

9.2 Dangers of "Analysis by Hindsight"

In pronouncing this verdict, one must acknowledge the dangers of analysis by hindsight, dangers of American triumphalism, and dangers of excessive swings of the pendulum known as "conventional wisdom." The dangers of 20/20 hindsight are clear. Until recently everyone thought that these countries had good fundamentals—as indeed they did, relatively speaking. Many of us warned of the drawbacks of the financial system,[2] but few thought it would lead to a very sharp slowdown, and nobody thought the crisis would be this big.

Financial crises are inherently hard to predict, and one should not after the fact perform contortions to explain why this one should have been obvious ahead of time. Statistical results produce warning factors that are significant, but they still do not tell us that the probability of a crisis is greater than 50 percent. Indeed, if there existed techniques that could predict financial crises with high reliability, the market would quickly invalidate them: the clever people on Wall Street would adopt the techniques, would sell the assets of any country that was entering the danger zone, and would thereby prevent the crisis situation from developing in the first place.

What are the dangers of excessive swings of pendulum and (now) of American triumphalism? Not everything about the East Asian economies was wonderful before 1997, contrary to much that was said in the 1980s; and conversely not everything about them is bad now.

On the negative side, I have already mentioned the structure of the fi-

2. My own record can be checked: Frankel (1995, 1997). In my view, the only commentator who can be truly proud of what he wrote about Asia beforehand is Krugman (1994, 1995).

nancial system. One should include on the list of Asian economic flaws industrial policy, as well as other excessive government interference in the economy, and corruption.[3] I will even venture to cross over from economics to politics, at the risk of trespassing (whether on the sovereignty of the countries or the turf of political scientists—I am not sure which is the greater danger). We were told in the past that Asian values placed less weight than Western values on democracy, free speech, and other civil freedoms. I think many Asians may have concluded recently—even leaving aside the noneconomic benefits of such rights—that there are *financial* advantages to the rule of law, transparency, freedom of expression, and clearly established procedures for government succession.

Just as not everything about the East Asians was in fact admirable before 1997, so not everything about them is bad now. There was indeed an Asian economic miracle. Thirty years ago it seemed that industrialization was a privilege reserved de facto for the European-settled regions of the world, with the sole exception of Japan. The East Asians disproved this in a few short decades. In the original Industrial Revolution, it took the United Kingdom fifty-eight years to double its income (starting from 1780). It took the United States almost as long (forty-seven years, starting from 1839) and Japan thirty-five years (from 1885). Korea accomplished the feat in eleven years (from 1966) and then China just ten years (counting from 1977). Among the factors behind the East Asian accomplishment were high saving rates, hard work, a strong emphasis on basic education, and outward orientation (participation in international trade and investment). These are all important determinants of growth that work in other countries as well.

A full acknowledgment of the dangers of analysis by hindsight leaves a simple question: If the origins of the crisis lie in the structural flaws of the Asian financial system, why did it occur when it did? What in the economic structure or fundamentals changed between the Miracle and the Crisis?

Perhaps there exist natural stages of development, and the financial system associated with relationship banking was not poorly suited to countries at early stages of development. After all, when the alternative for a firm is financing all investments out of family savings or retained earnings from earlier investments, financial intermediation by banks is a tremendously important innovation. And as long as growth is rapid, high leverage (i.e., a high ratio of debt to equity) is sustainable, maybe even desirable. But when growth slows, the financial system needs to adapt. Firms need to reduce leverage.

Some slowdown in East Asian growth was inevitable after the break-

3. Economists do not have as much to be embarrassed about, in their 1980s writings on the Japanese financial system, as many political scientists and journalists do, in their writings on Japan's industrial policy.

neck pace of the preceding three decades. But the slowdown interacted badly with the highly leveraged financial system. The result was crisis.

Why do I say that a slowdown was inevitable? On the list of causes of rapid East Asian growth was a simple principle that economists call "convergence." (This is in addition to such standard fundamentals as the accumulation of physical and human capital and the outward orientation of the economies.) A country that starts out behind the leaders in per capita income will tend to close part of the gap over time by growing more rapidly, conditional on those good fundamentals. The reasons are the high rate of return on capital and the opportunity to emulate frontier technology and management practices of the leader countries. But to the extent that the gap has been closed after a few decades, this source of growth is no longer there. Countries run into diminishing return to capital and constraints on infrastructure (including roads, water, and air). As they draw closer to the frontier, they no longer have more to learn from those that have gone before than vice versa. Japan achieved convergence by the 1980s, and Hong Kong and Singapore by the 1990s. Korea and the others still had a ways to go—a very long way in some cases. Nevertheless, the basic principle remains, that the smaller the remaining gap, the smaller this particular source of growth.

There were other reasons for the initial slowdown in output growth in East Asia, besides the inevitable convergence. One was the bursting of Japan's pre-1990 asset market bubble.[4] Another was the 1996 slowdown in the world electronics market, which sharply reduced the rate of growth of exports in these countries before any signs of financial crisis.

Whatever its origins, the slowdown that had already begun collided in mid-1997 with the long-standing limitations of the financial system.

9.3 Our Strategy for Dealing with the Crisis

I will now turn to the strategy that we—the U.S. administration—have used to deal with the crisis. It has three parts: supporting reform programs in individual afflicted countries; providing temporary financing where needed, conditional on those reforms; and encouraging action by our major trading partners, especially Japan, to promote global growth. The second of these measures requires a bit of elaboration. Public funds are not a substitute for private funds, only a catalyst or complement to private funds. Another way of saying this is that we are "bailing investors in," not bailing them out. The aim is to restore investor confidence. This seems to

4. The bubble and its collapse were exogenous from the viewpoint of the rest of East Asia, but they were in themselves an example of the interaction that I am identifying. I might even go so far as to venture the hypothesis that asset market bubbles are a rite of passage marking the arrival of a new economic power on the global stage: Holland in the seventeenth century (Dutch tulip mania), England in the eighteenth (South Seas bubble), America in the 1920s (stock market and Florida real estate), and Japan in the late 1980s (stock and land markets).

be working: for example, Korea has recently been very successful at securing longer term private finance, returning to the private markets in just four months. By way of comparison, it took Mexico seven months in 1995, and seven years in the 1980s.

The central provider of public funds in crises, and monitor of conditionality, is the International Monetary Fund, with secondary roles for the World Bank and Asian Development Bank. The international financial institutions allow us to internationalize the financial burden, which the United States and other major countries would otherwise have to bear individually. Conditionality is better administered multilaterally as well. (Conditionality is the part of the program that spells out and then enforces requirements regarding country policies on which the financing is conditioned.) The IMF is the right institution for the job. It was originally established at U.S. initiative, it has the requisite technical expertise, and it allows us to exercise our influence in a highly leveraged way. I believe it is critical that the Congress approve the administration's requests for IMF funding, both the New Arrangements to Borrow ($3.5 billion) and the regular capital increase ($14.5 billion). These are not budget expenditures. They are more akin to investments, which will not—and historically have not—cost taxpayers one dime.

9.4 Critiques of the Management of the Crisis

I have heard a number of critiques of the strategy that we and the IMF are following. They fall into three areas: those concerning the efficiency of financial markets, those concerning the amount of financing, and those concerning policy conditionality. Many of the critiques contradict each other. One might say that for every critique, there is an equal and opposite critique. One cannot claim that they necessarily cancel each other out. But when a member of the public reads so many attacks on the Fund, he or she might be tempted to conclude that where there's smoke there's fire. Thus it is important to realize that the critiques come from different directions, and to consider carefully the specifics of each one.

9.4.1 Regarding Efficiency of Financial Markets

Critique 1. Financial markets work best with no government interference. There is no need for government action in this crisis. This is the view of the "no bailout" crowd. But I disagree that governments and the IMF have no role to play in a crisis such as this. There are three reasons why we need to be involved and should not simply try to allow the market to solve the problem on its own. First is the risk of financial contagion. Much as the crisis spread from Thailand to other East Asian developing countries, it could spread further, and not always to countries that deserve it.

Second is the large negative effect on our net exports to East Asia in 1998. I would not say that this is a tremendous concern as regards impacts on aggregate U.S. growth or employment. Our economy had so much momentum going into this crisis—and still has—that we can withstand the loss of net exports, without losing much output and employment relative to what otherwise would have happened. But there is a danger that the fall in the trade balance, particularly the bilateral balances vis-à-vis East Asia, will lead to an isolationist or protectionist political backlash within the United States, which would in itself be harmful.

Third is the geopolitics. We have a stake in East Asian economic success. This success is a source of stability and progress in the region itself. Korea and Thailand have been and are our military allies, and Indonesia is a potential site of social instability. This success is also an example to other developing countries. As developing countries around the world have opted for capitalism over state planning, they have been inspired by the example of East Asia.

So we cannot walk away from East Asia.

Critique 2. This crisis shows that financial markets work badly; the countries should not have opened up to international investors in the first place, and we should not press them to continue to do so now. This critique takes the diametrically opposed view of the efficiency of financial markets from critique 1.

I would not claim that modern financial markets work perfectly. Even though some of the contagion in this case can be explained by cycles of competitive devaluation, it is true that it is hard to explain all the contagion in this way. Investors appear to have had excessive optimism up to last year and to suffer from excessive pessimism now. But we are better off with modern financial markets than without them.

There is a useful analogy from Robert Merton, recent Nobel Prize winner, which I will embellish. Today's financial markets are like superhighways. They get you where you want to go fast. By this I mean that they are useful: they help countries finance investment and therefore growth, and they smooth and diversify away fluctuations. But accidents do occur, and they tend to be big ones—bigger than they used to be when people were not able to drive so fast. The lesson is not that superhighways are bad. But drivers need to drive carefully, society needs speed limits, and cars need airbags.

9.4.2 Regarding Financing

Critique 3. Too much public finance is being used to respond to the crisis (vs. Critique 4. Not enough). There are two versions of the complaint that too much money is being channeled to the crisis countries. The first is the question, Why should we bail out countries that are such tough competitors for our own firms on world markets? The second variety of the critique has to do with moral hazard. Both raise important questions. But both have answers.

In the years prior to 1996, U.S. exports to East Asia grew very rapidly.

We would like to return to that path. The crisis strategy ultimately helps our firms sell to East Asia in three ways: short term, medium term, and long term: providing finance, so that the countries can continue to buy our goods this year (even if at reduced levels); helping to restore growth, so that they can buy more next year; and pursuing fundamental market opening, so that they can buy still more in the long term.

Everyone has now learned about moral hazard, the principle that bailing out investors and borrowers reduces their incentive to be more careful next time. The moral hazard point is a correct one, and it enters into the East Asian developments in a number of ways. But there is a danger of exaggerating it. It is a standard principle of economics that actions in one area can generate partly offsetting reactions in another. That is not in itself a reason not to take action. In our highway example, research demonstrates that drivers react to seatbelts and airbags by driving faster and less safely than they used to. But that is not a reason to dispense with airbags. If it were, that logic would also say that to discourage dangerous driving, we should put a spike in the steering wheel (as Michael Mussa of the IMF says).

Crisis countries already pay large penalties under the current system. Standards of living were severely reduced in Latin America after the 1982 crisis and in Mexico after the 1994 crisis; and incomes will also be sharply depressed in East Asian countries as a consequence of the 1997 crisis. These countries would not willingly repeat the experience.

On the creditor side, securities investors are suffering large losses as well (declines in prices of currencies, bonds, and stocks).

There has been a lot of concern that banks in creditor countries are not taking enough of a hit. First, many banks *are* taking hits. J. P. Morgan, Chase, and Citibank have reported adverse effects on profits. Second, it may not be altogether inappropriate that banks make out better than securities investors when times are bad—this is compensation for the fact that they do not make out as well when times are good.[5] This is not to deny that the effort to contain the crisis has an element of moral hazard vis-à-vis the banks. If anyone can suggest how to make the banks (who are in a strong bargaining position, because they do not have as much to lose as in the 1980s) take a larger loss, without unraveling the whole package that is holding the line against default, I think Secretary Rubin would like to hear about it.

Beyond that, as we consider what if anything should be done to modify the international financial system so as to reduce the frequency and sever-

5. Spreads earned by banks were quite low before the crisis (Cline and Barnes 1997). The usual interpretation is that this was entirely a supply phenomenon: evidence that bankers did not sufficiently incorporate the risks of crisis into their behavior. But it is conceivable that there was also a demand aspect to it: that developing countries, observing the effects of earlier crises in Latin America, had become somewhat more reluctant to borrow than in the past.

ity of accidents in the future, perhaps we should consider that bank loans appear to be one of the more danger-prone modes of international capital flows. FDI has the advantage of greater stability. Equities investment has the advantage that risk is efficiently shared: in the event of trouble, market prices automatically decline. (Perhaps securities investors are less prone to panic in an attack than are bankers. They have an illusion of control—they can form a mental picture of themselves selling just before a crash—much like people seem to be more afraid of plane crashes than car crashes, because as drivers they have the illusion of control.) Statistical tests show that the percentage of capital inflows that is composed of bank loans, especially short-term or floating rate loans denominated in foreign currency, has a statistically significant effect on the probability of a currency crisis, while FDI has a significant beneficial effect.

9.4.3 Regarding Policy Conditionality

The reforms allow too much exchange rate flexibility (vs. not enough). The exchange rate policy debate in the current context has some of the flavor of the debate after the Mexican peso crisis. At that time you could read in any newspaper that a foolish mistake had been made regarding the currency; you had to read more carefully to figure out that half the commentators were saying that the mistake was not to have devalued the peso earlier and the other half that the mistake was to have devalued at all.

In the East Asian episode, there is justice in the statement that Thailand should have allowed its currency to depreciate earlier. But here as elsewhere, there is danger of exaggerating in hindsight how obvious this was. Most of the East Asians had long been described as successfully preventing their currencies from becoming overvalued in the way that Latin Americans have historically done. Many Westerners in fact had urged them to *appreciate* their currencies, in response to balance-of-payments surpluses and consistent with the Balassa-Samuelson argument that rapidly growing countries should experience increases in the relative price of nontraded goods and therefore real appreciation of their currencies. The main point I wish to make with regard to exchange rate policy is that neither currency boards on the one hand nor pure floating rates on the other is a panacea. Following good policies is a complicated matter, with lots of pieces to the puzzle; one cannot solve all problems with a single wave of the currency wand. And it is important to realize that a fervent belief in the virtue of free markets does not help settle the debate. Free market monetarists are just as passionate in their belief that currencies should float, on the grounds that central banks have no business buying and selling foreign exchange, as are free market supply-siders in their belief that exchange rates should be fixed, on the grounds that central banks have no business exercising independent monetary policy. The right answer, fix versus float, depends on the circumstances of the country in question.

To elaborate on the currency board: a number of countries have found it useful. Indonesia does not currently have all the attributes of a country best suited to a currency board. It does have one: desperate circumstances, which make it worthwhile to give up some policy independence for monetary stability. But it lacks others: a small highly open economy, a strong desire for economic integration with a major currency country or set of countries, the rule of law, and enough reserves or a strong enough banking system to avoid converting what would otherwise be a currency crisis into a banking crisis. Perhaps the most important element in those countries where currency boards have worked is an explicit willingness to give up that policy independence, as well as to open the economy and to be ruled by the market.

But it is true that the combination of an overvalued currency and a lot of debt denominated in foreign currency (particularly short-term debt) was a major contributing factor, perhaps the major precipitating factor, to the crisis in Thailand, much as it was in Mexico three years earlier.

The reforms require too much macroeconomic austerity (vs. not enough). Macroeconomic retrenchment is not the central aspect of the country programs. The austerity and hardship that the countries are undergoing in these programs is the consequence of the crisis and the loss of investor confidence, not of the IMF's response to the crisis. It is probably inevitable, in circumstances where the priority is to reverse capital flight and attract wary investors, that interest rates be raised. If the programs are successful, interest rates can soon be brought back down before they do lasting damage to the real economy. As regards fiscal austerity, it is true that the initial agreements with the IMF were predicated on hopes regarding economic growth and corresponding budget surpluses that soon proved a bit overoptimistic; these targets have since been modified.

The reforms require too much structural change. The IMF is not simply applying the same cookie-cutter to East Asia that it applied in the past to Latin America or other problem debtors. The new country programs emphasize structural reform more than macroeconomic austerity. This is entirely appropriate, in that these countries have historically followed good monetary and fiscal policies. The Fund has evolved during its history—shifting from the balance-of-payments problems of industrialized countries in the 1950s and 1960s to the currency problems of developing countries after 1973 and their debt problems after 1982, and then adding the broader problems of the transition economies after 1989. Better that it continue to evolve after 1997, to address the financial and other structural problems in East Asia, than that (like some institutions) it fail to change with the times.

The most important source of moral hazard is between the Asian governments and their financial institutions and large corporations. Thus we are doing the right thing in pushing them to increase transparency and supervision, improve governance, open their financial markets, and loosen banking relations (directed lending and connected lending). It is a historic opportunity to get them to undertake important structural reforms that they would not otherwise have done.[6]

This is not to say that a country with a primitive domestic financial system should necessarily be opened to the full force of international capital flows before the appropriate domestic market reforms and prudential financial regulations have been put into place. To conclude with a last application of the automobile analogy, if the planned route for a superhighway draws near to a primitive village, it is not a good idea to design an off-ramp that dumps high-speed traffic into the center of town before its streets are paved, intersections are regulated, and pedestrians learn the dangers of walking in the road. But neither is it practical or desirable to try to insulate the village from the modern world indefinitely. Emerging market countries should proceed with *both* domestic reforms and opening to the outside world. They need to accelerate the former so as to keep pace with the latter.

References

Cline, William, and Kevin Barnes. 1997. Spreads and risk in emerging markets lending. Institute of International Finance Research Paper no. 97-1. Washington, D.C.: Institute of International Finance, November.

Frankel, Jeffrey. 1995. Recent changes in the financial systems of Asian and Pacific countries. In *Financial stability in a changing environment,* ed. K. Sawamoto, Z. Nakajima, and H. Taguchi, 161–200. Sixth International Conference of the Institute for Monetary and Economic Studies, Bank of Japan. London: Macmillan.

———. 1997. Preventing bank crises: Lessons from recent global bank failures. Keynote speech to conference sponsored by the Federal Reserve Bank of Chicago, Lake Bluff, Ill., 11 June. In *Preventing bank crises,* ed. George Kaufman and William Hunter. Washington, D.C.: World Bank.

Frankel, Jeffrey, and Andrew Rose. 1996. Currency crashes in emerging markets: An empirical treatment. *Journal of International Economics* 41 (3/4): 351–66.

Krugman, Paul. 1994. The myth of Asia's miracle. *Foreign Affairs* 73, no. 6 (November/December): 62–78.

———. 1995. Dutch tulips and emerging markets. *Foreign Affairs* 74, no. 4 (July/August): 28–44.

6. The same applies to opening their economies to trade.

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