Financial Markets and Business Cycles: Lessons from Around the World. A Panel Discussion

After Asia: New Directions for the International Financial System

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In Mexico's massive earthquake, some years back, many of the splendid new buildings collapsed, burying and killing a large number of people in the debris. Without the earthquake they surely would not have crashed; in fact they had graced the skyline for years, monuments to their proud owners and builders. But examination revealed that the concrete had far too much sand and too little of the real stuff. Not surprisingly, under stress they gave way. That surely was not an accident—the building codes were there, and the inspectors stood by, collecting the payoffs for overlooking unsound construction. Just the same has been happening in cross-border finance. Emerging market balance sheets stand up in fair weather, but under stress they collapse. *Vulnerability* is the key word; *risk* is another way of looking at it. No two crises are quite alike, but they all have in common that without significant vulnerability, currency and financial collapse is very unlikely.

In the aftermath of every crisis, whether war or currency collapse, a soul-searching effort is made to build a better world. Just such an effort, short-lived and without leaving a trace, got under way after the Mexican debacle. Another is being conducted just now. Asia's collapse and Japan's implosion are the obvious triggers. This is a great occasion for bad ideas, or just impractical ones, to draw attention and gain respectability. Let us set out here where the crises come from and what is the most effective way of dealing with them, before we rush headlong down the wrong path.

In the past, balance-of-payments crises were predominantly current

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account crises and the story would go somewhat like this. A country had a large trade deficit from overvaluation or overexpansion or both. There was some debt service and not enough money around. Reserves would already have run off, new loans were not to be gotten. Sooner or later a devaluation and/or recession would rectify the situation, and as for habitual offenders, they would soon be back in the same situation. More often than not, the external deficit was just the counterpart of a budget deficit, happy twins of overspending. Invariably they would be supplemented with fixed rates to contain inflation and thus give the public a boon, too, by raising real wages in dollars. Social peace means high wages in dollars, big government, and full employment, while external balance means just that—you can pay your way. Obviously the two goals can come in conflict and reality, meaning the external constraint, always wins out, sooner or later. When it comes to the showdown, spending needs to be cut and wages in dollars have to fall, with austerity the answer.

More recent crises, starting with the early 1980s in Latin America, Mexico in 1994-95, and now Asia and Russia, are fundamentally different in that balance-sheet issues are entirely central to the fact and surely the propagation of the crisis. Moreover, they increasingly involve the private sector and not just public sector external debt, as in the 1980s debt crisis or in the case of Mexico. These crises have to do with an inability to roll over an existing debt, a liquidation scramble, and a resulting currency collapse.[1] Balance-sheet crises by their nature have far more leverage both in collapsing a country's financial structure and hence its economy and in spreading contamination. They are capital market crises. Capital market crises have more oomph once they happen; meltdown is the best description. Their resolution is also more complicated and certainly more costly.

Designing an international system that is less crisis-prone must address the central issue of capital market crises—unsound finance, which translates into national balance sheet vulnerability. It is naïve to believe that we can abolish crises altogether, but surely we must be able to do far better in limiting the fallout, once crises happen.

Interpreting the Asian Crisis

The Asian crisis is easily interpreted as a capital market crisis—not a crisis of capitalism, as Japanese officials like to argue. Central to that interpretation are several ingredients:

- In the balance sheets of the financial system and large corporations there was systematic mismatching of *maturities*. Emerging market

[1] The term liquidation scramble comes from the 1930s, when it was used in the context of the liquidity of the national balance sheet at a time of financial crisis.

banks and firms borrowed short, either because it was cheaper or because nobody was willing to lend to them at long maturities. On the asset side they used loans to fund long-term investments such as real estate development, corporate capital formation, or even infrastructure: not a good idea, to fund highways with overnight money! In referring to "loans," already we make the point implicitly that equity might have been a much better vehicle. The resulting vulnerability takes the form of liquidity risk—the sudden inability to roll over debts that moves companies and countries from sunny skies into the midst of a funding crisis.

- The second source of vulnerability was mismatching of *denominations*. Asia borrowed in dollars or yen to fund investments with payoffs in local currency. As a result, balance sheets were exposed to the risk of currency movements. A major currency depreciation would carry the risk of bankrupting a large part of the financial system or their loan customers. Mismatched denominations are like driving without car insurance: Every day there is no accident, it is money saved. But when an accident occurs, the absence of a currency hedge becomes disastrously expensive.
- The third source of vulnerability was *market risk*—borrowing to carry assets that are exposed to large fluctuations in their capital value: stocks, commodities, foreign exchange, or high-risk instruments such as Brady bonds. Korean financial institutions, for example, had taken a large position in Russian bonds and Brazilian Brady bonds. When their prices fell sharply, the balance sheets of the Koreans instantly had a huge hole.
- The next source of vulnerability was *national credit risk*. Because the various banks and companies collectively had assumed a large risk position, the national credit rating had been put at risk, with spillover effects to anyone in case of a liquidation scramble, both in terms of the capital value of their assets and their access to alternative sources of credit.

In a well-supervised financial system—say the United States or the United Kingdom today—all this could not have happened. But, of course, it is routine in Japan, Russia, or anywhere in Latin America. The negligent or deliberate lack of regulation, supervision, and transparency then comes in as an explanation for the fragile financial structure. This is further complicated by a key mistake on the part of central banks: gambling away the reserves. Central banks in both Thailand and Korea went out of their way to take gambles in forward markets until their reserves were gone; they went out of their way to cheat on the numbers. Any sense of sleaze or lack of transparency was certainly reinforced by the active cooperation of bureaucrats who have worked untiringly taking bribes, overlooking flagrant risk-taking, and adding to the vulnerability by misrepresenting central bank assets. All this would not be possible without active help from politicians. In this last sense, the Asian crisis is also a crisis of corrupt governments.

Of course, vulnerability alone is not enough to cause an accident. Something has to happen to bring the fragility into play. Here external factors play a role. It would be wrong to place the entire blame on mismanagement in the Asian economies themselves. Two critical complications came from the outside. But that is by way of explanation—vulnerability has to do with just such possibilities! First, Japan went into the tank, and the resulting deterioration in Asian economies' trade environment accounts for some of the problem. The shadow following over Asian investment opportunities added to the problem.

Second, and perhaps more important, the dollar/yen rate moved sharply, thereby leaving the dollar peggers high and dry. That, too, is only by way of explanation. The yen had been as strong as 80 ¥/$ only as recently as 1995 and as weak as 200 ¥/$ in the mid 1980s. The idea that the yen could depreciate was not a brand-new concept that risk-takers could be excused for overlooking. Those who enjoyed the stark yen overvaluation, with its resulting export competitiveness for dollar peggers, surely must have understood that the pendulum swings wide *both* ways.

The summary of factors can be customized to country experiences. How, for example, did the Philippines avoid meltdown? They came late to the game, took little of the external money, and hence had less of a balance-sheet problem and less of a meltdown—more nearly the old style of crisis. Or Malaysia, banking problems, yes, but much less of an external debt problem because financing took the form of direct investment. Or Korea, where the aggravation of circumstances lies in the dysfunctional corporate structure—debt-equity ratios of 500 percent plus for the chaebols, which control 50 percent of GDP.

If so much is made of vulnerability now, how come nothing had gone wrong in the past? The answer is that the vulnerability was of very recent vintage—three or four years and not more. Financial opening, and hence the very possibility of taking on big risks rather than just bad loans on balance sheets, is a matter of the past handful of years.

The typical scenario, following financial liberalization, is a lending boom funded by offshore borrowing under the cover of a fixed or at least very stable exchange rate. Then, once positions are in place, a disturbance comes on the horizon: Domestic investment, notably overdone, goes sour, and soon there is a conflict between keeping up the financing by high interest rates and keeping up the domestic institutions, banks and companies, by low interest rates. If the interest rates are cut, the currency crashes, and if they are raised, the banks and companies crash. In the end, both crash because individual foreign lenders understand that the situation is not viable; returns do not cover the risk, the herd is leaving, and they certainly do not want to be left holding an empty bag.

Vulnerability is in part an objective fact but, just as in the case of bank runs, in part it is in the eyes of the beholder. *Contamination* therefore is very much part of the play. If the unsustainability of banks or debts is obvious in one place, hard questions will immediately be asked of the next—Why not earlier? is an interesting question, but not relevant at this point. Safety first is the motto of investors when they smell a rat. Thus, one vulnerable economy tumbles after another. They did not have to, in some immutable statistical sense; it was just that they came under suspicion, and the rest is history. Countries that are not vulnerable will also be tested, but they can raise rates and defend their currency and that quickly becomes a losing game for investors, so that they call off the siege, at least until further notice.[2]

Note that neither current account deficits nor budget deficits nor even misaligned exchange rates were part of the balance-sheet-crisis story. In fact, the budget situation in most Asian economies was quite strong and while exchange rates collapsed, they certainly had not been crassly overvalued as measured by PPP comparisons. (At least that was the case in Asia, though not, of course, in Mexico.) If there was a sign of something amiss it was in the boom atmosphere that had gotten to construction, consumption, and luxury imports. It had all the experience of what in the late 1970s Argentines called *plata dulce.*

Good Answers

The right answer for crisis avoidance is controlling risk. That is done routinely in the domestic financial system of the United Kingdom or the United States, where the supervisory authorities set and enforce capital standards as well as sophisticated risk measurement. The London authorities go further in imposing differentiated capital requirements for cross-border loans to regions where regulatory or supervisory standards are classified as lax. That is being serious about risk.

How could this be done at the international level? A modest ambition is to create a new culture that focuses on dissemination of the right thinking, learning from the present crisis to put in place more responsible balance sheets. A more ambitious scheme would make support in the case of "honest" accidents conditional on compliance with a tightly written and audited scheme.

The starting point of any discussion is that regulators and supervisors in most countries even today have no clue, nor for that purpose do

[2] What is said here of Asia is not the case, however, for Russia or Brazil, where budgets are unabashedly large.

rating agencies. The appropriate conceptual framework is *value at risk*—a model-driven estimate of the maximum risk for a particular balance sheet situation over a specified horizon. There are genuine issues of modeling, but no issue whatsoever in recognizing that this approach is the right one. Measures such as debt-to-exports never appear in it, but the ratio of foreign liabilities as a share of total liabilities, or the share that is short-dated, would be just as important as the variability of asset prices or the likelihood of an external shock that triggers contamination.

If authorities everywhere enforced a culture of risk-oriented evaluation of balance sheets, extreme situations such as those of Asia would just disappear or, at the worst, become a rare species. Perhaps it took a bad experience to understand that the issue is risk. And it is latent in a balance sheet rather than falling from heaven.

A more ambitious step, with an appropriate transition period, would be to actually use the regular International Monetary Fund (IMF) consultations as the inspection opportunity for the national balance sheet. Countries that want to have IMF support when in trouble would qualify only if they have, in fact, in the recent past been in compliance with an agreed risk control strategy. This procedure has three advantages. First and foremost, it institutionalizes risk analysis as part of the local supervisory process and as such creates the right culture. Second, it directly lowers risk levels worldwide, because countries will be eager to qualify for IMF support in case of honest accidents, which are still possible though less likely. Third, anyone who opts out and wants to run a national gambling house can do so. But it would be clear to financial markets that value at risk exceeds internationally acceptable thresholds and, as a result, financing will be hard to get and will be expensive. Hence the incentive for rogue countries to join the club.

There is nothing wild-eyed about this proposal, particularly if it includes a transition period in which countries can implement what each and every one of them should want to do with the greatest urgency. But that does not mean it will happen at the IMF. The IMF is owned and operated by its board, that is, by representatives of countries like Japan who have no concept of sound finance and no willingness to get there soon. The IMF and its board actively enjoy crisis situations, since they give bureaucrats the opportunity to wield power and expand the scope and mandate of their institution. The notion that anything preemptive is impractical is far too easily accepted. Accordingly, the immediate interest of what to do with a Russia commands the only attention, and how to get a less risky system some four or five years from now gets none.

IMF Programs

Another area of contention is what exactly the IMF should ask of countries on the operating table. In the course of the Asian crisis the IMF got a bad name, just as it already had in Latin America in the 1970s. In the past, the IMF had been demonized, and it is a bit surprising how it recovered its reputation or at least lost the stigma. Perhaps it was the success of Mexico with ultra-IMF policies.

Many, but most surprisingly World Bank chief economist Joseph Stiglitz, have been preaching liberation theology. Their message is simply this: The IMF is wrong, high interest rates in the process of stabilization are destructive of sound credit, and fiscal restraint is inappropriate since it adds to the recessionary forces. It is not quite clear what the stabilization is all about, if it is not tighter money and sounder public finances, however.

A key point is to separate debt restructuring, which is unpopular but maybe inevitable, from high interest rates. To restore financial stability, the first point is to put a floor under the currency. If everybody wants to get out because the risk-reward trade-off is too unfavorable, high interest rates are the way to change the equation. A successful stabilization without a hike in rates is like Hamlet without the Prince of Denmark. But that may well leave the issue of bad debts in banks and companies and, as a result, bankruptcy risks. The answer is twofold. First, you cannot make omelets without breaking some eggs. Second, debt write-offs may be inevitable; not raising rates is just a bad idea, not a solution.

Mexico, for example, fully implemented a stark U.S.-IMF program of tight money to stabilize the currency and restore confidence. It implemented a tight fiscal policy to restore public credit. Starting off in a near-meltdown situation, confidence returned and within a year the country was on the second leg of a V-shaped recovery. The high interest rate policy was far from easy, economically and politically, and partial debt relief was provided, at public expense, to various sectors. That pragmatic way of dealing with the high interest rate issue ought to be the example of separating debt issues (dead money) from the problem of reversing capital flight and stabilizing exchange rates. The IMF is unqualifiedly right in its insistence on high interest rates as the front end of stabilization.

The fiscal issue is in principle more complicated. If a country runs into a currency crisis but actually has no fiscal or debt problem to speak of, should the budget be tightened? The answer is surely no, that there is no reason to take extra pain. Of course, in practice that is not the case. In Asia the financial distress of banks and companies moved a very substantial liability into the budget. The result was a major prospective fiscal deterioration and a resulting need to make provision. Taking a 30-percent-of-GDP hit in public credit needs an offset in the budget to restore the confidence of investors. In fact, the less is done on the budget, the more will have to be done with interest rates. Thus, while in some cases the IMF may have been overzealous, it is doubtful that much of a mistake was made. Public finance has deteriorated massively; calling back mega projects at such a time is totally correct.

It must be confusing to finance ministers and central bankers around the world to see the World Bank shoot them in the back just as they try and stabilize their currencies. The World Bank's liberation theology is a very bad idea, one that makes everybody's task of stabilization even harder than it already is. If somewhere in the Washington institutions malpractice is to be found, it surely is at the World Bank.

But there is a more critical issue, one of prevention versus remedy. Part of crisis management is to change the way the game is played. Intelligent leadership uses the crisis situation not just to make the country function better. Surely, the IMF should go a step further than just shifting hundreds of billion dollars to the bailout front. Even more so in a systemic crisis, as is claimed for the Asian situation, improvements ought to be made in the way the system is run. Let the IMF's bailout function be supplemented by rigorous reporting and auditing of national balance sheets, so that the bailouts are more in line with acceptable moral hazard rather than, as in the case of Russia today, a flagrant in-your-face assertion of "too large to fail" by the client.

If IMF stabilization programs are right in basic design, an issue of calibration is always present, and so far the IMF has felt safe to err on the side of amputation without sedation—but there is no excuse for the IMF's long-standing disregard for risk management. The IMF, unlike the Bank for International Settlements in Basle, has paid no attention to balance sheets and their risks; it has been plain asleep at the wheel. It has indulged in lecturing about budget deficits and lack of commitment to low inflation, disregarding the far more explosive issue of mismanaged balance sheets. The Mexican crisis was not one of inflation or budget deficits, nor was the Asian crisis. There is no excuse for the disregard of risk management, the more so if the IMF is eagerly calling for more resources to enhance its role as a lender of last resort. To have a fiscal affairs department that explores the nooks and crannies of budgets but not to have a balance sheet department is stark mad. The U.S. Congress should refuse further IMF monies until an entire floor of the IMF building is devoted to balance sheet and risk management supervision, even if that means closing the cafeteria.

Exchange Rate Regimes[3]

Exchange rates played a crucial role in leveraging the Asian crisis. Accordingly, it stands to reason that we should reevaluate the lessons for

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[3] For a further discussion , see R. Dornbusch and F. Giavazzi, "Hard Money and Sound Credit," on the author's website at http://www.mit.edu/~rudi.

exchange rate policy that come out of the experience of Mexico and Asia. For many countries in Eastern Europe and in Latin America, the answer is obvious: Forget about nationally managed monies, adopt the euro in Europe or the dollar in Latin America as the national money. The notion that central banks can successfully maintain fixed exchange rates, until further notice, is not supported by any evidence. The scheme just leads to mega bets on the currency and, in the end, the country sides with the loser and picks up the losses. Having no national currency (just like giving up the "national" airline) becomes totally plausible once we recognize that capital markets rather than current accounts dominate exchange rate issues.

If giving up the national money outright is not an acceptable answer, a currency board goes far in the same direction. It abolishes largely, though not fully, the question of credibility of the exchange rate. Such a system has functioned well in Argentina and Hong Kong. It cannot, of course, avoid the spillover of regional economic crises, but it can perfectly well avoid a collapse of the currency, which makes everything much worse. The counterargument, that currency boards or full dollarization sacrifice the lender of last resort function, is deeply misguided. National central banks can print money, and that is rarely the right answer to a banking crisis provoked by a loss of confidence in the country. Lender of last resort support can readily be rented, along with bank supervision, by requiring financial institutions to carry offshore guarantees. That is a system in line with modern capital markets; nationally managed currencies that are highly politicized are the stark opposite.

Denouncing Some Bad Answers

Among the bad ideas, we should single out some as particularly inadequate. If Goldman goes to the capital market to get more firepower, should not the IMF and the World Bank also get more ammunition? The first impulse is, of course, to provide more money. True, the world financial system today has far more firepower than ever before. Investors have deep pockets and countries cannot be expected to have the resources that can conceivably match what 100 short sellers (including central banks that join the attack, as indeed happens) can put on the table. But making available more rescue money, without anything else, is much the same as answering the plea for bigger and better arms for the police—it raises the quality of the shootouts.[4]

It is already the case that the resources used since Mexico exceed anything one might have imagined at the beginning of the 1990s, when

[4] See "Capital Controls: An Idea Whose Time Is Gone," on the author's website at http://www.mit.edu./~rudi.

the last debt default was still being worked off. As we come to the hard core "too large to fail" countries, Russia and Brazil—flagrant offenders both in fiscal probity and in risk management—the numbers become staggering and the violence done in terms of moral hazard unbounded. Would it not be a good idea to have a country like Russia do a forced restructuring of maturities, to make the point that what seems totally liquid to the lender in fact never is, in a crunch? That ought to help mismatching of maturities.

Another terrible idea is capital controls as an alternative to risk management. One might have sympathy with Chilean-style management of inflows, but one has to doubt that countries where inefficient or dishonest administration is the rule (unlike in sweet Chile!) can run a sensible system. More likely, it will be a festival of corruption.

An even worse idea, or a non-idea, is an Asian IMF. In the heat of the Thailand crisis, possibly as a very cynical move to push the U.S. Treasury and the IMF into lending and thus avoid a key contributing role for itself, Japan offered the idea of an Asian IMF, and it has kept that idea alive to this day. The Asian IMF would pool resources and do mutual surveillance in the region. Who can take this seriously? The lead country, Japan, is the most in need of a serious financial cleanup and the least able to exercise leadership, since it is totally stymied by its own problems. Who can see a Korean official telling an Indonesian that they need to pull their socks up and cannot be quite so corrupt? If this proposal had gone anywhere, it would have meant a festival of restrictions and circumvention and priorities for Japanese banks to get paid off ahead of the rest. Fortunately and rightly, China stayed away from the whole exercise and it flopped.[5]

[5] Flop it did, but it is not quite dead. The Japanese Ministry of Finance just released a report which, among many bad ideas, proposes once again regional IMFs and, of course, massive injection of financial support. See Ministry of Finance, "Lessons from the Asian Currency Crises—Risks Related to Short-Term Capital Movement and the '21st Century-Type' Currency Crisis." Tokyo, May 1998.