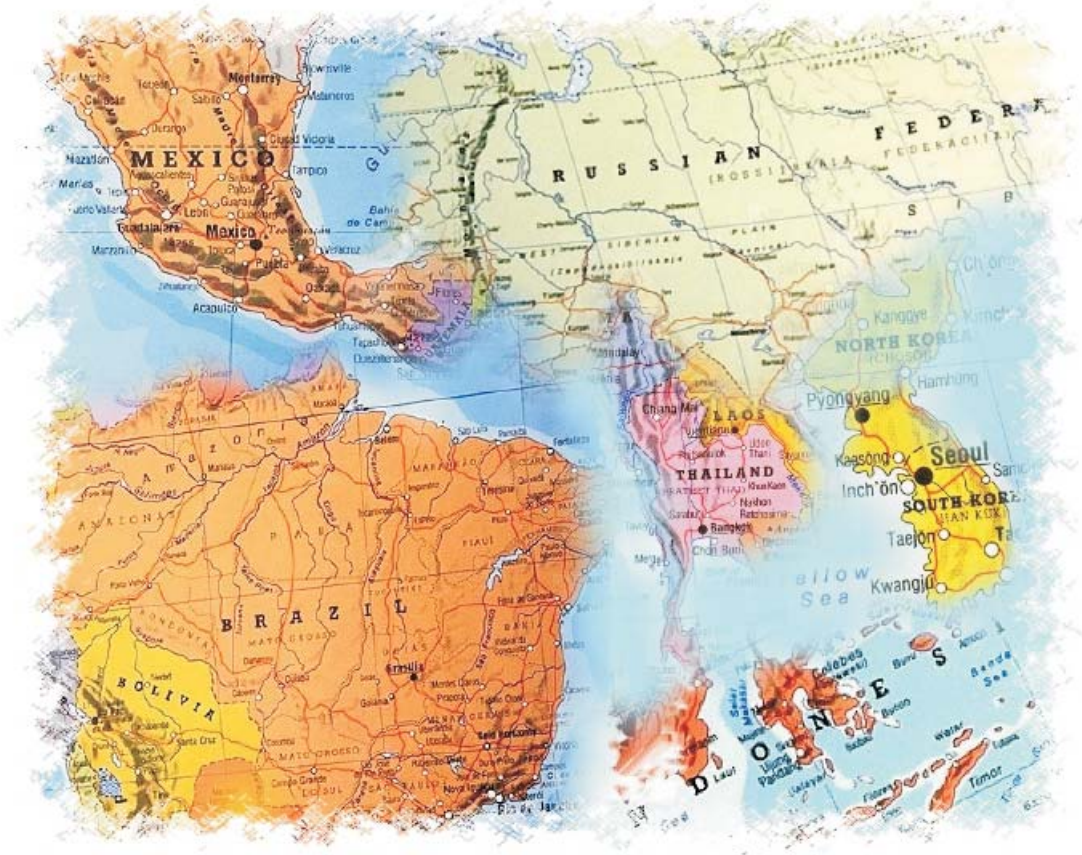


# Yesterday's Crisis Countries: Where Are They Now?

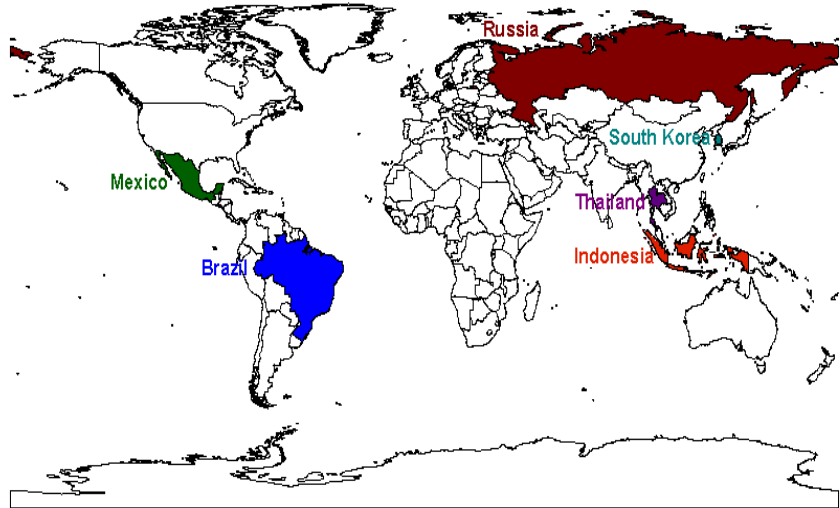


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January 2001

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Since the mid-1990s, the world's emerging market economies have gone through waves of exchange rate crises. In December 1994 and early 1995, Mexico went through its so-called Tequila Crisis—a crisis that also put pressures on Argentina, Brazil, the Philippines and even Poland. In June 1997, the Asian crisis began with a hard devaluation in Thailand, which was followed by a serious currency crisis in Indonesia, and devaluations also in Malaysia and the Philippines.



In October 1997, Korea went through a profound exchange rate and financial crisis. In August 1998, Russia declared a debt moratorium and the nation's currency fell. In January 1999, Brazil suffered an exchange rate crisis.

In this discussion, I focus on the six principal exchange rate crisis countries of the middle and late 1990s and address what has happened to them in the wake of these crises. Again these are (in order of time of their crises): Mexico, Thailand, Indonesia, Korea, Russia and Brazil.

## Similarities

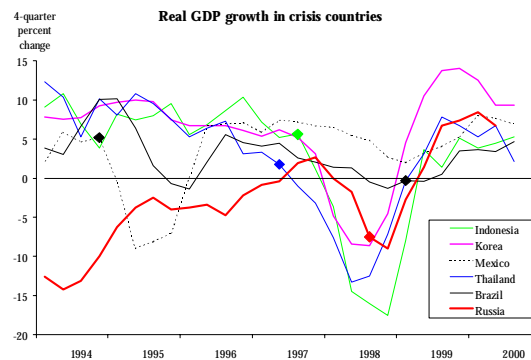
It should be noted that, despite their differences, these countries had some common experiences just before and well after their exchange rate crashes. First, before their devaluations, their capital inflows suddenly stopped. Investors who had thought the payoff for investing in these countries was consistent with the risk, suddenly decided that it was not. All of these countries had pegged exchange rates that they tried to defend by using their dollar reserves to buy their own currency back at some official price. To make the adjustments to the reduced amount of available capital, output declines typically took place. But eventually these countries all began to grow.

## Differences

Nevertheless, there are also big differences among these countries. Since their devaluations, different countries have followed very different monetary policies. Some have followed monetary policies that are probably not in their best long-term interest. Second, although all six countries maintained somewhat similar pegged exchange rate regimes before their crises, there are great differences between their exchange rate regimes now. Third, the post-devaluation banking and financial policies and experiences of these countries have been quite different. Some of the countries have worked aggressively to turn their domestic financing capabilities around, while others have not. Finally, different countries have very different growth prospects.

The most interesting detail of all of these countries' post-devaluation experiences is probably that they are all growing now. Figure 1 shows year-over-year growth rates of quarterly GDP for each crisis country and obviously in 1999 and 2000 all of them have seen some growth. The colored square on each line marks the calendar quarter when the country in question devalued its currency. Some countries' recoveries seem to have been matters more of very good luck than very good policy. In others the long-term growth perspectives seem more fully characterized by good policy in a stable political scenario. I am sure that this is the case in Mexico and there are reasons to believe it may also be in Korea and Brazil.

**Figure 1**



To understand what has happened in these countries after their crises, it's useful to begin by noting some pre-crisis economic details. Many factors have been reasonably argued to determine these crises. Such factors include investor panics that were more connected to what investors thought other investors would do than to anything intrinsically problematic about each country. Even so every country had at least one of two characteristics going into its crisis.

**Figure 2**

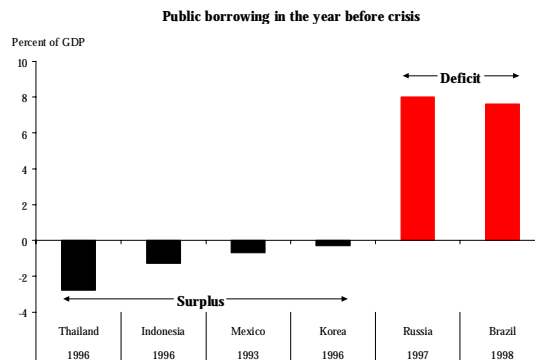


Figure 2 depicts one problem characteristic, a characteristic shared obviously by Russia and Brazil, but not by the other crisis countries. The characteristic is debt problems that concerned investors. The predispositions of Brazil and Russia to spend more than they taxed were not only fretted over before the crisis, but the crisis in each country was triggered by an official announcement of debt default. In Russia's case, the default was a moratorium declared on its GKO bonds. In Brazil, the governor of the state of Minas Gerais announced that his state would not be servicing its debt to Brazil's federal government. Other state governors quickly chimed in that they were thinking about doing the same thing. Investors had been concerned about Brazil's creditworthiness and this event made them much more concerned. But there were obviously crisis countries that did not follow this pattern. Mexico was certainly one. Later crisis countries including Korea, Thailand and Indonesia also were not engaging in suspect borrowing behavior. This figure says Indonesia, Korea, Thailand and Mexico were not adding to their debt, but were reducing it. That is, they were running surpluses, not deficits. However, these countries were faced with banking and other types of financial problems.

**Figure 3**

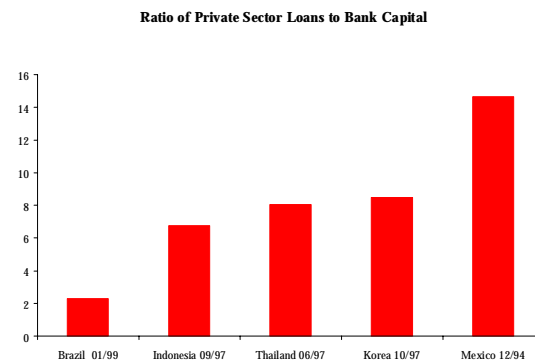
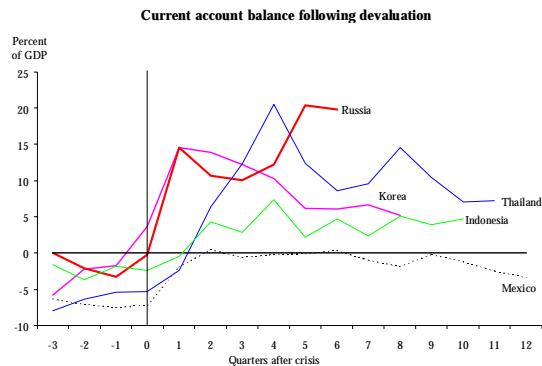


Figure 3 offers evidence of another possible exchange rate-crisis-triggering device, relatively high risk in the private financial sector—at least for an emerging market. The figure shows the ratio of private

loans to bank capital for each country just before its crisis. The higher the private loan to capital ratio, the less capital there is to cover for bad loans when the banking system is in hard times. We saw the potential debt problems of Brazil and Russia on the previous figure. Here we see another type of potential problem: the prospect of the potential fiscal deficits implied by large and expensive government bailouts of bad banks in the other five countries seem to have frightened investors in much the same way that existing fiscal deficits had frightened them in the debt story. I should note that even in Russia, where the old-time fiscal deficit story was important for the crash, banking problems spiced up the crisis stew but you cannot see those problems in the leverage numbers. The reason is this figure shows the ratio of credit to the private sector to capital. Russian banks weren't lending much to the private sector but they were buying Russian bonds, which defaulted.

In either type of crisis, capital inflows suddenly stop. Investors suddenly want their pesos or rubles or baht converted into dollars. Before the crisis, the typical country in this story runs a negative current account balance. That is, the country runs an excess of spending on foreign products over what the country earns from abroad. The excess is then papered over by inflows of capital from foreign countries. Indeed, instead of calling these crises *exchange rate crises*, some analysts call them *current account crises*. Figure 4 depicts current account balances in the crisis countries. Note that the crisis happened at different times for different countries. However, this figure shows the current account for each country just before its devaluation, at its devaluation (the point marked "0" on the horizontal axis of Figure 4), and thereafter—whenever the devaluation happened to be. In the story I am telling, investors suddenly become frightened for one reason or another that the government is going to do something that will lower the return on their investments and there is a scramble to get out. Here, typically, a country has been holding up its exchange rate by purchasing its own currency with foreign currency reserves. When everyone wants out, there are often not enough foreign currency reserves to go around—at least not enough to go around at the old exchange rate. Finally a current account adjustment is made by devaluation. On this figure you can see the current account go from negative before the devaluation to positive afterwards.

**Figure 4**



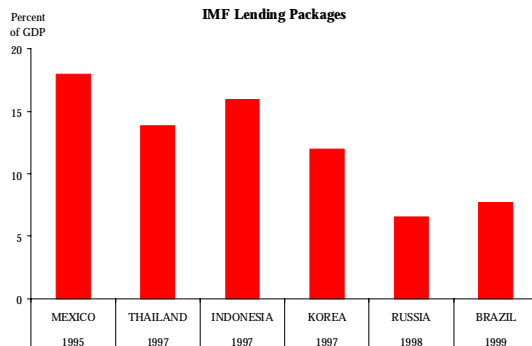
## Devaluations

Devaluation forces adjustment in domestic currency prices. These adjustments are important because they bring the current account balance from negative before the crisis to positive afterwards. The readjustment of prices includes a relative decline in the domestic currency prices of nontradeables such as real estate and many services, and a relative increase in the domestic currency prices of tradeables including both imports and exports. When much of the problem to begin with was loans that resulted in capacity overexpansion—office buildings in Thailand and plant and equipment in Korea—what may have been banking problems before the crisis become even more serious banking problems after the crisis.

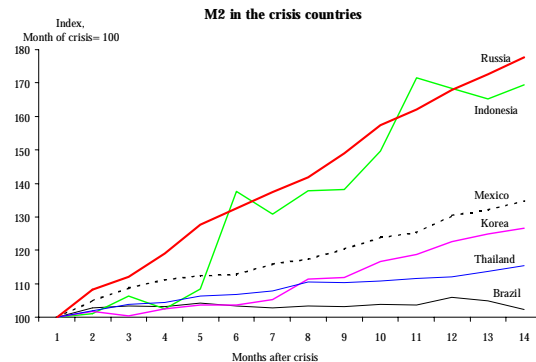
Exchange rate crises typically result in serious economic disruptions and crisis countries now typically turn to international agencies for aid. A speedy recovery from a financial crisis in emerging markets is likely to require foreign assistance because the liquidity provided from foreign sources does not lead to any of the undesirable consequences that occur when the domestic authorities try to provide liquidity. I am especially referring here to the problem that domestic authorities may be tempted to

print a lot of money to make this crisis go away. The principal organizer of such liquidity injections is the International Monetary Fund. However, the IMF does not simply hand out the money. The IMF brings together groups of institutions, so that the IMF itself is only one of the lenders. Figure 5 depicts overall lending packages as a percentage of GDP. A second aspect of these lending packages—and a very important aspect to the other participants in the bailout—is that the IMF imposes conditions on borrowers.

**Figure 5**



**Figure 6**



## IMF Conditions

When the IMF worked out its bailout programs with these countries, it offered conditions that differed from country to country, but varied around a standard. First, debt rollovers and workout programs were supposed to calm investors' fears of another round of uncovered loan defaults. These steps were supposed to stop capital outflows. Also, the financial system was supposed to be reorganized. Sick banks were closed or shut down. But sometimes these closures took place with so little information about what would happen next that it seemed to panic capital and exchange markets even more, rather than stabilizing them. Efforts to balance the government's budget were organized so as to ease the private sector's burden of adjustment. Some critics argued that, with countries whose budgets had been close to balanced before their crises, these fiscal policies were sometimes more than what was needed. Monetary policy was assigned the role of countering downward pressure on exchange rates to contain the exchange-rate-overshooting countries typically get in a crisis. In addition, new foreign currency reserves were financed. Finally, countries were counseled to permit their exchange rates to continue to float, in order to make sure that another really sudden exchange rate crash would be less likely, since the rate could fluctuate every day.

One of the big differences between countries after their crises has been monetary policy. Despite the good intentions of the IMF in pursuing these various policies, many of them had their downsides on the one hand and were ignored by the borrowing countries in some cases on the other. Figure 6 shows M2 growth in each of the six crisis countries starting at each country's respective point of crisis. Slow growth in M2 here is interpreted as tight monetary policy while I take rapid expansion of M2 to signify loose monetary policy, sometimes too loose. As can be seen in the case of Russia, the Russians by and large looked upon problems of monetary expansionism with relative indifference. Fourteen months from the crisis, Russian M2 had expanded 80 percent. Indonesia wavered. At first the country followed the IMF's tight monetary policies, as can be seen by the low rates of growth from month one through five. But political unrest tied in part to major banking problems in the country—problems which were only aggravated when tight monetary policy and high interest rates encouraged more loan defaults—then motivated stop and go policies. Between month five and six, for

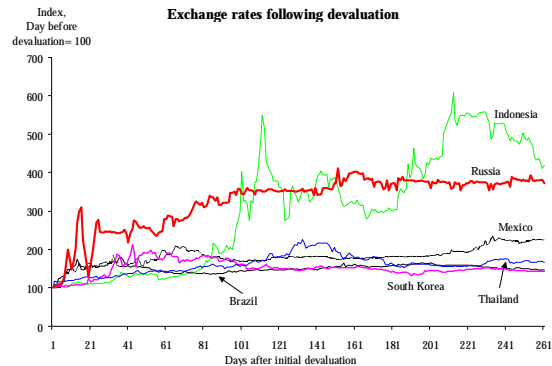
example, a huge increase in M2 took place. In month seven, M2 actually fell and it didn't do much in months eight or nine. Thereafter, monetary policy turned tail and ran. In contrast, Brazil's strong banking system and very low pre-crisis levels of loans meant the Banco Central do Brasil could easily follow a tight monetary policy to contain the exchange rate overshooting that countries typically get in a crisis. In terms of stabilizing their exchange rates and avoiding overshooting in the early growing, the two strongest countries are Brazil and Korea. Note that for the first seven months after their crises, these countries had the lowest levels of monetary growth. However, even the IMF agreed that the tight monetary policy it had convinced Korea to follow was impeding its turnaround, not helping it. Korean growth targets were loosened.

Figure 7 offers a second perspective on the same issue of exchange rate stability and the problem of overshooting. Like the last figure, this one depicts each country's exchange rate experience from its particular point of crisis, except that the data here are in terms of trading days rather than monthly. Brazil, Thailand and South Korea offer the greatest currency stability in the first hundred days. It is important here to realize which exchange rate regimes are behind what we see in this figure, however, inasmuch as the IMF's counsel to let exchange rates fluctuate freely was not honored by all countries. While Brazil did not much intervene directly with the use of foreign currency reserves, and Mexico did not either, South Korea soon established a pegged exchange rate system much like the one that had crashed in October 1997. After letting its currency rate run up significantly in the early going, Russia began imposing one control after another on its foreign currency regime and probably overall operates the most restricted of all exchange systems. Thailand intervenes strongly in its foreign currency markets. Indonesia intervenes when it has the reserves to do it but when political pressures become too strong, Indonesia steps aside and lets things go where they will. That is why the Indonesian exchange rate fluctuations are characterized by so many more stops and starts than the other currencies.

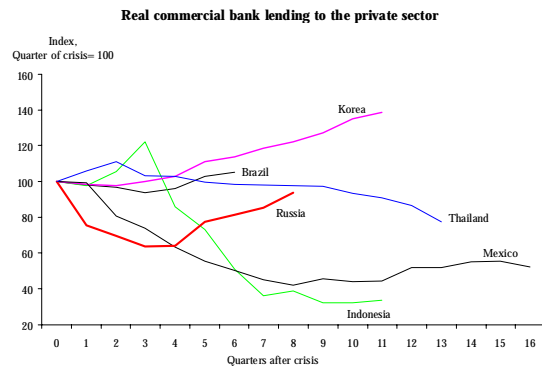
Again despite the good intentions of the International Monetary Fund, the restructuring associated with its conditionalities typically did not seem to do a great deal for allowing the crisis countries to recover through the use of domestic credit.

Figure 8 presents commercial bank lending, after adjustment for inflation, in the wake of each country's devaluation. Only Korea shows a really rapid turnaround, and an increase well past its level at the point of the crisis. In contrast, Brazil took five quarters to surpass even the very low lending levels of its crisis of the first-quarter of 1999. The remaining countries have never re-achieved their pre-crisis lending although, after two years, Russia is coming close. The other three countries, Indonesia, Mexico and Thailand, remain markedly below their pre-crisis lending levels even though the most recent of their crises was 1997.

**Figure 7**



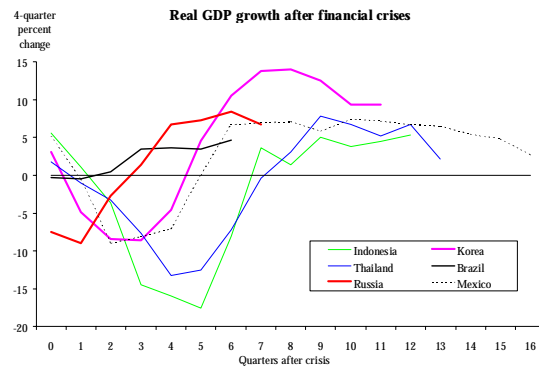
**Figure 8**



We would expect a reduction in lending, personal consumption and output as a country makes the post-crisis adjustments I have already discussed, but certainly Mexico, Thailand and Indonesia go far below normal expectations. Korea's domestic loan portfolio has recovered, in large part because Korea's government informed the banking system that loan growth would recover despite possible credit problems. Indeed, Korea's government informed its banks that they would lower their interest rates to small- and middle-sized borrowers. I should also note that Korean financial intermediation has also recovered greatly for reasons that do not turn up on this figure. Korean government liberalizations have greatly facilitated the issuance of corporate debt on bond and commercial paper markets. Moreover, other liberalizations have greatly increased the purchase of equities, creating a funding avenue to take the place of the banks to the extent that such replacement was necessary.

One of the most striking aspects of the turnarounds that followed the crises was how fast some of them took place. Figure 9 depicts real GDP growth one, two, three and up to sixteen quarters after the crises. Note that Brazil, Mexico, and Korea had all started out of their declines no more than two quarters after their crisis. Some analysts took this to mean that investor panics rather than real fundamental problems may have played big parts in these countries' crises, but it is also clear that there were actual or potential either financial or fiscal problems even in these countries.

**Figure 9**



I have presented this GDP growth figure before, but it has an important detail that I have not discussed. As I did note before, this GDP growth figure shows that, despite exchange rate difficulties in some countries, monetary policy difficulties in others, and ongoing credit shortages in most, all six crisis countries are clearly on the road to recovery or have already recovered. An important reason for many of these countries is of course that they devalued and ultimately were able to sell more products abroad. Indeed, in 1999 I asked the head of the central bank of Brazil to offer some reasons why his country was growing strongly and Argentina was not. "We had a devaluation and they didn't," he said. This response could be applied to all of the countries in this sample. However, in the cases of Indonesia and Russia, where attention to the standard policy approaches to recovery have been less focused than in the other countries in this group, the increase in oil prices over the last two years has played a very, very important role. But an important detail that also deserves attention is that, however weak domestic credit may be, the injections of credit by the IMF and the restructuring of credit by other international financial institutions turned out to have stabilized these countries sufficiently to allow them to grow. Indeed, Korea and Mexico both began their recoveries in a matter of months, far too soon to allow the industrial or overall banking reorganizations to be able to explain this growth, but long enough so that financial restructuring could.

**Figure 10**

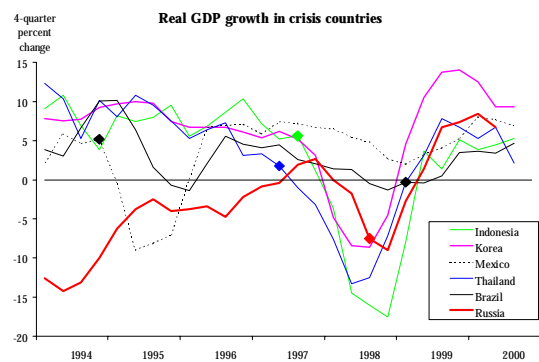


Figure 10 shows something else important. That is, along with much of the rest of the world, the rates of expansion of these crisis countries has generally slowed. If the rest of the world goes into a hard landing, the virtuous behavior of some of these countries are unlikely to save them from landing in the same way.

## **Summary**

Summarizing, recall that different countries have had very different post-devaluation monetary policies. Obviously the most expansionary have been Russian and Indonesian policies and these countries have also had the shakiest recoveries. Different nations have had very different exchange rate policies even though all of them had rather similar policies before their crises. Different nations have had quite different financial policies. Obviously, Korea's policies of offering larger opportunities for financial intermediation through commercial paper and equities as well as through increased bank loans was an important part of its recovery, whereas Mexico's domestic financial intermediation has not been much of a factor in that nation's recovery. And finally, all crisis countries are growing, but there is much to be concerned about. High oil prices are a very important part of the Russian and Indonesian turnarounds and the sustainability of high oil prices is questionable. Meanwhile as the United States economy decelerates, Europe shows evidence of slow expansion and Japan remains weak, the opportunities for the other crisis countries' continued expansion become more limited.

## **Lessons Learned**

Finally, it is useful to note some lessons learned. First, fast recoveries are possible. Obviously it is not necessary to repair all of the structural problems that were perceived by some as contributing to these crises before starting what is not only an upturn, but—in the case of Brazil, Korea, and Mexico—a major upturn. That is, repair of what were perceived by some as the root causes of the crises are not necessarily preconditions for a turnaround. Failure to make these repairs, however, raises questions about the long-term growth prospects of any of these countries. Finally, there are many ways out of a crisis. Mexico's turnaround was in manufacturing exports, regardless of domestic funding problems. Korea's turnaround was also a manufacturing export turnaround, but a smaller one than Mexico's. Moreover, Korea's turnaround involved not only more exports but significantly fewer imports. In the cases of Indonesia and Russia, they were fortunate to have oil price increases, but some other aspects of the economy are problematic.