Sudden Stops After 2000:
Anything Different and What are the Prospects?

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Since 2000, developing countries have suffered few major crises, compared to the “boom in busts” between 1994 and 1997. The two main examples are Turkey, where a crisis started in 1999 and reappeared in late 2000, and Argentina, where the crisis became open in 2001.1 The first section of this paper suggests that the development of these two crises was not much different than crises in the 1990s; the second section discusses the swiftness of the recovery, albeit from lengthy earlier periods of slow growth, and the role of the international economy and offers some explanation why crises were fewer after 2000. The last two sections discuss the likelihood of “sudden stops” in capital inflows and crises in the near future, and what countries have done to protect themselves.

I. Crises After 2000

The lead-up to the last two recent major crises—Argentina and Turkey—had much in common with Mexico’s Tequila crisis and the East Asian crisis. Both countries suffered “sudden stops”—a sudden shift from capital inflows to massive negative capital outflows between 2000 and 2001, partly reflecting runs on the currency by residents. Both countries were using variants of fixed exchange rates—Argentina, a currency board with a one-to-one peg to the dollar; Turkey, a crawling peg—and both suffered substantial reserve losses defending the exchange rate. Both countries had been following IMF programs but had significant fiscal deficits and large public sector debts.2 Turkey had a weak banking system—a number of banks had already failed in 1999—while Argentina’s banking system had been strengthened significantly after threats to stability during the Tequila crisis. As Argentina’s crisis intensified, the government made a last ditch effort to save the currency board by imposing a nearly complete freeze on bank deposits for some time beginning at the end of 2001. This policy contributed to a run by Argentine depositors on Uruguayan banks and a currency and banking crisis in that country.

In response to the crisis, Argentina off its currency board and devalued the peso sharply in 2002 (from 1 peso to the US dollar to over three pesos to the US dollar). Turkey allowed a sharp devaluation of the currency in 2001 (from about 670,000 per US dollar at end-2000 to 1,450,000 per US dollar at end 2001) as part of a movement to a freer currency float. Argentina also defaulted massively on its public sector debt, obtaining an agreement from 76 percent of its commercial creditors for a discount of 66

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1 Argentina’s crisis triggered a secondary crisis in Uruguay, which is discussed briefly below.
2 Argentina had been under IMF programs for some time, but the increase in its debt had been much larger than the deficits, because of recognition of past credits from suppliers, the creation of a new pension system, and the judicial recognition of pensions that had been cut by decree. The relations between the IMF and Argentina have been widely discussed, see, for example, Mussa, 2002 and IMF, Independent Evaluation Office, 2004.
percent on its public sector debt (in net present value terms) in March 2005. From the last quarter of 2001 onward, Argentina received no net new lending from the IMF, although it did receive what are regarded as automatic extensions of its obligations; in 2006 it prepaid its remaining debt to the IMF. Turkey continued to service its public sector debt and the IMF has continued to support its post-crisis recovery, most recently in May 2005 with a three year, SDR 6.6 billion Stand-by Arrangement. Argentine banks were significantly decapitalized by the government’s asymmetrical conversion of dollar deposits and loans into pesos. Turkey suffered additional banking problems in 2001, resulting in the closure of numerous private banks and the clean-up and recapitalization of three state banks.

As noted, Argentina’s crisis spilled over into Uruguay, which experienced both a currency crisis and a significant banking crisis, reflecting a massive currency mismatch in the state-owned housing bank and the large NPLs and other problems in the locally owned banks and the state-owned commercial bank. Unlike Argentina, Uruguay did not default on its external debt but agreed with its external creditors to lengthen maturities. Uruguay entered into an IMF program after it was hit by the spillover from Argentina and received substantial support relative to its size.
II. Post-Crisis Recoveries Since 2000—A New Paradigm or Different Conditions

Recovery of GDP in both Argentina and Turkey GDP seems to have been much sharper than in recoveries after crises in the 1990s, for example than the East Asian countries, as shown in Figure 1.

![Figure 1](image)

Growth Pre and Post Crisis
Argentina, Turkey and East Asia

In the three years after 2002, Argentina’s GDP growth has averaged 8.7% p.a. (compound rate) and Turkey’s growth averaged 7.5% p.a. in the four years after 2001. Uruguay also experienced a sharp recovery beginning in 2004. By contrast, the average growth in the East Asian crisis countries (Indonesia, Korea, Malaysia, and Thailand) was 4.9% p.a. in the four years after the GDP trough in 1998 that followed the crisis that began in mid-1997. This was well below the previous trend in these East Asian countries.

Two factors may explain much of the differences between the experience of the post 2000 crisis countries, Argentina and Turkey, and the four East Asian crisis countries: their pre-crisis experience and, more importantly, the differences in the external
conditions post-crisis. In addition, some country specific factors explain some of the difference.

Prior to its crisis, East Asia’s growth was extremely fast—on average, nearly 7 percent per year up to the trough year of 1998 (even including the slow-down in 1997, when the crisis struck in mid-year). Though investment had been strong in East Asia, the economies were running close to capacity. By contrast, Argentina’s GDP had been falling about 3 percent per year before its crisis became full blown in 2001-2002. And Turkey’s GDP had basically been moving horizontally since 1999 and averaged only 2 percent per annum growth before its prior, major crisis struck in 2000 (See Figure 1). Thus, one explanation for the strong recovery of Argentina and Turkey, relative to East Asia, may be that Argentina and Turkey had more excess capacity to bring into use after their crises than East Asian countries.

More importantly, external conditions were much more favorable to Argentina and Turkey post crisis, than they were to East Asia. East Asia faced a difficult external environment after its 1997-1998 crisis. Regarding financial markets, over 1999 and early 2000, the United States Federal Reserve, raised interest rates 6 times. Moreover, the East Asian crisis had led to a sharp shift of investor interest, toward safer havens, generating cuts in credit lines to banks in developing countries and sharp rises in spreads on developing country debt. This meant a continuation of the cuts in funding that had allowed the East Asian countries to run large current account deficits before 1997.

In goods markets, US growth hesitated in early 1998 and slowed sharply in 2000-2002. The dot-com bubble burst in early 2000, and even before demand had slowed for IT related products, which had been important in East Asia’s pre-crisis export growth. Japan’s growth slowed sharply in 1998-1999. Its growth had been interlinked with the growth of East Asia, both as supplier of investment funds and FDI (which were cut off in 1999) and a buyer of imported inputs from East Asia. EU imports also grew slowly in 1998-1999. While China’s growth was strong during the period, it had not yet reached the bottlenecks that led to large imports, and in any case, it was not a large importer from the East Asian crisis countries.

In addition, there were some country specific issues in East Asia. Korea, and later Thailand, opted for recovery based on internal demand, as they were unable to rely on the export/foreign investment-led growth model of the pre-1997 years. However, this strategy was limited by the difficult external environment, which precluded rapid import growth, as well as the countries’ desire to repay the IMF quickly and build up large international reserves as a bulwark against future crises (See Section IV). Korea was initially successful in stimulating consumption through a policy of widespread expansion of credit cards, but the over-expansion led to non-performing loans and a subsequent

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3 This explanation also applies to Uruguay’s rapid recovery.
slow-down. Indonesia faced an enormous country specific issue—the massive challenge of political and economic adjustment to the end of the 30-year Suharto regime.\(^4\)

In contrast, Argentina and Turkey enjoyed relatively benign international conditions soon after their crises. First, demand for primary products and other developing country exports of goods and services began to grow in 2002. Moreover, the large devaluations in Argentina and Turkey made exporting of goods and services even more attractive to producers and fed back into a large internal stimulus to domestic demand. Argentina’s exports rose nearly 17% in dollar terms in 2003 and another 15% in 2004. Turkish exports rose 17% in 2002 and another 28 percent in 2003; in addition, tourism grew sharply. Second, U. S. interest rates were lowered sharply. In what some observers called unprecedented cuts, rates were reduced by 4 percentage points in early 2001 and rates remained low through 2003. Afterwards, spreads on developing country debt narrowed as investors sought higher yields and became less risk averse, even as US interest rates rose. While the impact of low interest rates was not so great for Argentina, since it had defaulted on much of its large public sector debt, it did help reduce the cost of Turkey’s external debt and allowed Turkey to finance a large current account deficit and begin to build up reserves by 2003.

There were also some country specific elements that contribute to Argentina and Turkey’s rapid recovery. In the case of Argentina, the policy of freezing bank deposits in 2001 cut the payments chain and contributed to the sharp fall in GDP as businesses had a difficult time paying or receiving payment from each other and paying their higher paid workers. When bank deposits were unfrozen (withdrawals of time deposits were limited for a time), this unused capacity quickly came in to use with the restoration of the payments chain and output was able to rebound quickly. Argentina’s debt default also eased pressures on government finances. Finally, Argentina’s pampas provided an abundant reserve to increase agricultural production when prices were favorable, as often occurred in the past. In the case of Turkey, the new IMF program provided resources and gave investors more confidence. Falling international interest rates eased pressure on government finances, as noted. Then, possibilities of Turkey’s accession to the European Union led to a flow of foreign direct investment.

In sum, it appears that it was better to have had a crisis after 2001 than before. Favorable external conditions, discussed in more detail below, explain much of the differences in performance of the East Asian countries after the 1997-98 crisis and Argentina and Turkey after their crises post-2000. Of course, there were also country specific differences, but these do not seem to represent a paradigm shift in dealing with crises.\(^5\) The benign international conditions are also probably much of the reason for the lack of crises after 2002.

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\(^4\) Indonesia’s official GDP growth may be understated actual growth because of the rise in illegal logging exports. The rise occurred as a result of the end of the monopoly-control of logging that Suharto cronies had enjoyed.

\(^5\) The same conclusion appears to hold for Uruguay.
III. Crises in the Near Future?

“You never had it so good,” was a one sentence summary of the April 2006 World Economic Outlook by Raghu Rajan, the IMF’s Economic Counsellor and Director of Research. Developing countries are benefiting from favorable conditions in 3 areas:

1. In financial markets, average spreads for emerging markets are less than 200 basis points, compared to 1000 basis points in 2002. The continued “search for yield” allowed Argentina to borrow $500 million recently, and Uruguay to increase its issue of 30 year bonds from $300 to $500 million because of high demand and despite its B rating. Moreover, non-residents have increasingly entered developing domestic bond markets to buy local-currency debt.

2. In commodity markets, prices are strong.

3. In goods markets more generally, non-commodity exports by some developing countries are being stimulated by rapid growth in the US and China and a pick-up in Japanese growth (Chinese exports have of course benefited from strong growth in the open US economy). Partly the growth in exports has been matched by an accumulation of international reserves by China, India, and other exporting countries and a widening current account deficit in the US.

These favorable conditions in the world economy have prevailed for the last two years, as noted above. Reflecting these conditions, Latin American growth exceeded 4 percent for the second year in a row. However, Latin America’s growth rate, and its basis in primary commodity exports, remains lower than needed to make a significant dent in poverty and unemployment.

Of course, not all developing countries have benefited from the conditions in goods and financial markets. Some countries competing in export markets with China, for example in textiles and garments, have faced declines in export profitability and faced the need for adjustment, in some cases substantial. Reductions in trade preferences have also reduced export profitability in the traditional exports of some countries, such as the Caribbean. Rises in oil prices have hit some countries, slowdowns in tourism have hurt some others. Brazil and Mexico, two of the largest countries in Latin America grew only 2.3 and 3 percent respectively in 2005. Nonetheless, the general external environment has been beneficial.

The question is, how long will these benign external conditions will prevail.

Three areas of concern exist. First, there are concerns related to financial markets, which are most relevant to the issue of “sudden stops”. Investors’ search for yield and the related reduction in their risk aversion has pushed down spreads and kept conditions benign for developing countries in international financial markets. Moreover, Japan’s low interest rate policy (and possibilities of appreciating currencies in developing countries) contributed to the so-called “carry trade”—borrowing at low interest rates in Japan to invest in developing country markets. In addition, rates recently have probably
reflected a downward pressure from the rising demand for financial assets from oil-producing countries.

In the background, the US has gradually raised the Federal Funds rate from 1 percent in 2004 to 4.75 percent in 2006. This rise in US interest rates has nullified some of the impact of the fall in spreads on interest rates paid by developing country borrowers. Moreover, Japan recently announced the end of its low interest rate policy, which has raised concern among “carry” traders, who may be beginning to liquidate positions. Thus far, however, the change in average spreads on emerging market debt in response to tightening industrial country monetary policy seems to be much less than in the past, partly because the US yield curve seems to be flat.\(^6\)

The question is whether and when rising interest rates in the US market—the most recent Federal Reserve Board meeting did hint at an end to rising rates but inflation is also picking up as a result of oil price increases—and in the Japanese market will make industrial country markets more attractive to international investors. This would mean a rise in spreads and a withdrawal of funds from developing countries—gradually or in sudden stops. Since the end of 2005, international financial markets seem to have been jittery, particularly in March 2006, when concerns about the longer run direction of international interest rates and the unwinding of some of the carry trade led to pressures on some developing country currencies and problems in Iceland, and to a lesser extent New Zealand. But, so far, average spreads on emerging market debt have remained roughly constant and a number of new debt issues of by emerging market economies (such as Uruguay and Turkey) have met a favorable response.

Second, there are concerns related to the resolution of the US current account deficit and its impact on financial markets. Large US current account deficits have long been signaled as a risk in the international economy. They have led to an offsetting build-up of US obligations in foreign countries. There is general agreement that this process is unlikely to continue; at some point, foreign countries will at least slow their build-up of assets in the US.\(^7\) Whether the change is disorderly or gradual, it would probably lead to a depreciation of the US dollar, and to higher US interest rates, because of slower growing official demand for US treasuries.

The question of how the US dollar might depreciate is also relevant, since the US follows a floating exchange rate regime. Thus, the depreciation of the US dollar could well occur by other countries allowing their currencies to appreciate, and correspondingly buying less foreign exchange to avoid appreciations and reducing the increase in their reserve holding of US dollars. Such an appreciation would occur at different rates in different countries. Moreover, some of the current reserve growth outside the US reflects capital flows to various countries in expectations of appreciation. Once the appreciation

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\(^6\) Arora and Cerisola (2001) show an elasticity of .78 between the spreads on existing debt and the US 10 year rate and an elasticity of 0.82 for the federal funds rate. Previous studies, discussed in Arora and Cerisola, show a more tenuous relationship between US rates and spreads, but this may reflect differences in the periods covered, liquidity issues and use of new issues, rather than spreads on existing debt.

\(^7\) Note that the rise in oil exporters’ surpluses has probably led to an increase in demand for reserve assets.
in these currencies actually occurs, then these countries might experience outflows. Such movements would mitigate the ultimate appreciation in these countries vis-à-vis the dollar and, to the extent the funds returned to the US, the initial rise in US interest rates.

Thus, the ultimate impact on developing country debtors of a US depreciation is not clear. Obviously, higher US dollar rates would raise the rates on existing floating rate debt. Uncertainty in international markets typically leads to a withdrawal of lenders from developing countries to a safer haven. At the same time, outflows developing countries as their currencies appreciated would be seeking a haven. But, in this case there would be uncertainty about the usual haven. Some of the funds flowing out of the developing countries would seek new markets, outside the US. Yet, it is not clear how much non-US markets could absorb. The US remains by far the largest, most open financial market. Ultimately, the new equilibrium for the US dollar is likely to entail higher long-term interest rates in the US than currently, and this may limit future flows to developing countries and raise the rates on them.

Third, there is a question of whether China will slow its current high growth and how its impact on developing country exports. In the past, the Chinese government has tended to slow the economy when growth rates and investment rates reached these levels, to limit inflation. Slowing Chinese demand means slower exports for a number of countries, and more competition from China in some traded commodities. A narrowing US current account deficit would also reduce export growth for a number of countries. Thus, the export stimulus that many countries currently enjoy would slow.

Fourth, there are some other risks. Commentators usually mention the worsening of the avian flu problems and increased terrorist activity. Both these problems would tend to slow tourism, on which many countries depend, and reduce GDP growth generally. This in turn might lead to capital outflows.

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8 See M. Goldstein, 2005 for a discussion.
IV. Reducing the Impact of Sudden Stops.

How well have countries taken advantage of the benign international environment to prepare for new sudden stops and other capital account problems? Two key areas where changes have occurred that will reduce the impact of sudden stops are the changes in size and composition of external debt and the exchange rate/reserve nexus.

Regarding external debt, Latin American and East Asian countries took somewhat different approaches after their crises but since 2003 the average external debt to GNI ratio has fallen in both regions (Figure 3). Between 1997 and 2003, East Asian countries reduced their measured debt ratios on average, while Latin American debt ratios increased. To some extent the rises in Latin American debt ratios reflected the impact of the crises in Argentina, Dominican Republic and Uruguay, while the East Asian countries pursued a policy of reducing external debt, including Korea’s prepayment of its obligations to the IMF. However, pattern remains the same even excluding the three Latin American crisis countries from the Latin American average and Korea from the Asian average. However, since 2003, total external debt in most countries seems to have fallen somewhat or risen only slightly. Hence, the ratio of external debt to GNI has fallen in many countries because of economic growth and exchange rate appreciation. Moreover, in 2006, Argentina and Brazil made direct reductions in their external debt by paying off their obligations to the IMF and Uruguay prepaid all its IMF obligations up to end-2006.

Countries have also taken a number of complementary measures to reduce the actual and potential burden of external debt. First, many emerging market countries have rolled-over external debt at longer maturities and fixed rates, taking advantage of the greater appetite for their debt in international markets. Thus, within the context of a roughly constant external debt, maturities have been lengthened and more of debt is at fixed rates. These policies reduce the potential impact of sudden stops, because they reduce amortization payments and avoid the rises in interest payments that might occur with variable interest rate debt.

Second, developing countries have developed internal government debt markets and are meeting more of their government borrowing requirements domestically, in local currency. They are also attempting to lengthen debt maturities in these markets. The increased capacity to borrow (and roll-over debt) domestically reduces the impact of “sudden stops”. In addition, with more government debt being denominated in domestic currency, the fiscal impact of a depreciation is much less.

The development of local debt markets and the strengthening of macroeconomic policy in developing countries have led to foreign lenders’ lending in local currencies. To some extent, this lending also reflects their search of higher returns and their greater tolerance for risk. And, there is also the attraction of a potential appreciation relative to the US dollar mentioned above. Local currency lending is still small in international markets but some international investors’ participation in developing countries internal

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9 See IMF, 2006, Chapter 3 for some evidence on this point.
debt markets is growing. These investor’s participation in local markets also eases the potential risks of “sudden stops”, since their exit would require them to not only accept a loss in the price of the bonds (if sold before maturity) but a loss in the conversion of the proceeds into dollars in the foreign exchange market.

Third, banks in developing countries have reduced their net exposure to foreign exchange. They often hold more assets in industrial countries than liabilities, the reverse of the situation before the crises of the 1990s. Moreover, there has been some de-dollarization in some developing countries—bank deposits and loans have remained roughly constant in dollar terms while local currency deposits and loans have grown. The ratio has changed even more as a result of appreciations against the dollar. Finally, some governments have tried to discourage dollar lending by imposing additional general provisions and capital charges.

Turning to the exchange rate/reserve nexus, countries have also adopted more flexible exchange rate policies since the crises of the 1990s and while not a panacea, this does tend to promote adjustment. Looking only at the adjustment to sudden stops, floating rates generate large depreciations, which move the current account in the appropriate direction. However, experience suggests exports tend to grow slowly, so most of the impact is on imports and GDP initially. Moreover, the depreciation increases the domestic currency cost of public and private sector borrowing sharply, and this can cause financial sector problems in “dollarized” economies. Looking at the issue in a more generalized way, floating rates may to reduce the variability of inflows and outflows, by making lenders and borrowers become more aware of the possible costs of exchange rate movements. Correspondingly they would limit their own, and the country’s, exposure to foreign exchange risk (either market risk or credit risk associated with foreign currency loans to borrowers without a stable source of foreign exchange earnings). Moreover, floating rates increase the costs of those who run on the currency, by making foreign exchange more expensive. Of course, exactly how this all plays out, given the possibility of dollarization is not clear and financial sector problems, is not clear.  

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10 See IMF, 2006, Chapter 3.
11 For example, borrowers and lenders may try to avoid the risks and costs of floating rates by lending in foreign exchange. As noted earlier, that interpretation may be one of the explanations of “original sin”. Similarly, deposit holders may insist on dollar deposits to protect themselves against foreign exchange risk. The issue is complicated even more by the country’s response in the event of a crisis—how much it defends the exchange rate, how much liquidity it creates for weak banks, how it deals with bank closure and possibility of conversion of foreign currency deposits into local currency.
these recent changes in patterns of investment raise the question of the degree to which “original sin” (the term used for the difficulties emerging markets faced in issuing debt denominated in local currency) was due to unstable macroeconomic policy and not structural problems.

Of course, the benefits of this strategy are not costless. Domestic currency debt issues typically carry higher rates than debt issues in international currencies such as the dollar and the euro, even when an emerging market economy is following stable macroeconomic policies. Avoiding these costs and the short effective maturities they implied was one reason why the developing countries issued debt in foreign currency. If a crisis develops, and foreign investors begin to withdraw their funds in the local markets, then the interest rates in the local markets can rise dramatically, as they did in Turkey from time to time between 1999 and 2001.

In addition to these changes in policies, emerging markets have built up protection against “sudden stops” in capital inflows through increases in reserves. Sales of international reserves are a traditional way to avoid depreciation in the face of capital outflows. The IMF was created to provide additional, international support for countries.

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12 Borrowing in foreign currencies meant lower rates and longer effective maturities, particularly when expectations of devaluation created a “peso problem”. Moreover if a devaluation actually came, then the cost was paid over time in the higher domestic currency costs of amortization, not up front in higher interest rates. See Hanson, 2003 for a discussion.
Efforts to support their exchange rates with sales of reserves. Of course, the ability of countries to use reserves to stem capital outflows depend upon the complementary use of tight monetary policy that may be politically difficult; IMF support programs typically entail conditions on monetary policy.\textsuperscript{13}

Emerging market economies have built up massive international reserves since the crises of the mid-1990s as shown in Figure 4. Korea, for example, has built up reserves of US$210 billion, roughly equivalent to the amount of hard currency resources that the IMF can call upon. Mexico and Malaysia have built up reserves of over US$70 billion, Brazil and Thailand about US$50 billion. China, which is not included in the figure, has over US$800 billion of reserves. India, also not shown, has accumulated over US$125 billion and Turkey $50 billion.

Figure 4

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\includegraphics[width=\textwidth]{figure4}
\caption{International Reserve Indices: East Asia and South America Crisis Countries, 1996-2005}
\end{figure}

The build-up of international reserves to some degree may reflect countries’ desires to manage their response to external shocks without need to resort to IMF supported programs. An indication of this policy is that in addition to building up reserves, Korea had prepaid its IMF debt in 2001 while Brazil and

\textsuperscript{13} Loose monetary policy will contribute to capital outflows and the pressure on the exchange rate. Of course, the problem is that capital outflows are likely to cause banking problems and lead to pressure for liquidity support and bail-outs of depositors, which loosen monetary policy.
Argentina also prepaid their IMF debts in 2006. One should not attribute the build-up of reserves solely to the countries’ objective of managing their own response to international shocks; countries have also built-reserves as part of the process of limiting the appreciation of their currencies and thereby maintain international competitiveness. Moreover, speculation that an appreciation will eventually occur has added to capital inflows and reserve build-up. To some extent these “hot money” flows can just as easily flow out again when appreciation occurs—a sudden stop. Finally, as noted above, even the use of the large reserve build-ups to avoid a depreciation may be insufficient, without complementary monetary policy.

Nonetheless, the build up of international reserves, compared to the levels of the mid-1990s, as well as the changes in debt policy, probably mean that many countries are better equipped to face sudden stops than in the 1990s.
**Bibliography**


