Sovereign Analytics

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Sovereign Defaults and Interference: Perspectives on Government Risks

Executive Summary

In this report, Moody's surveys the post-1960 history of sovereign bond defaults and the extent to which sovereign defaults have been accompanied by government interference with domiciled borrower's foreign currency debt service – particularly in the form of restrictions on deposit withdrawals and moratoria on external private sector debt payments. This study constitutes Moody's first comprehensive attempt at cataloguing and studying episodes of deposit freezes and private sector debt payments moratoria, as well as documenting local currency bond defaults.

This research combines the construction of a novel historical database with extensive case studies of past sovereign crises in order to gain a better insight into the motivation behind the use of deposit freezes and debt moratoria as tools of government interference. As the global economy has become more integrated, the nature of government interference has changed. We find that the use of deposit freezes and debt moratoria – two quintessential forms of transfer and convertibility risk – has become less frequent in recent years.

The findings of this research² are broadly consistent with the key thinking behind Moody's approach to sovereign bond ratings and country ceilings but may also call over time for marginal adjustments – something which we will study further.

These findings should be seen in the context of the small sample size of sovereign defaults in this study.



¹ This study surveys the period since 1960, but the availability of data covering the period since 1980 is more complete.

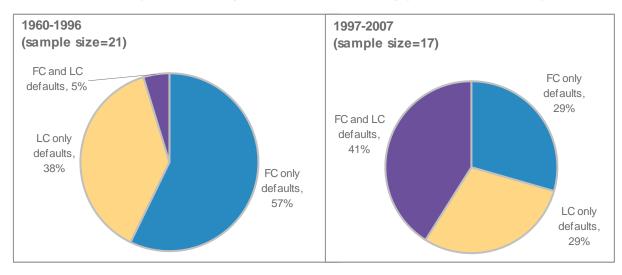
Sovereign Bond Defaults and Restructurings

Our survey uncovered 38 cases of sovereign bond defaults since 1960, relatively equally distributed throughout time. From 1980 onwards, almost 80% of sovereign bond defaults have occurred in peaceful times.

Over the whole period of study, 45% of defaults have been on foreign currency bonds only, 34% on local currency bonds only, and 21% have been a joint default on both foreign currency and local currency obligations. This overall historical record of sovereigns defaulting more frequently on foreign currency bonds than on local currency bonds has traditionally lent support to Moody's practice of distinguishing sovereign bond ratings by currency of denomination and, where appropriate, of assigning foreign currency bonds lower ratings.

However, our survey reveals that since the mid-1990s there has been a dramatic increase in foreign and local currency bond defaults occurring jointly and a correspondingly sharp reduction in foreign currency bond defaults relative to local currency defaults. While joint foreign and local currency events represented a very small share of pre-1997 Asian crisis defaults, they account for 41% of post-1997 defaults, a larger share than that of either foreign currency only or local currency only defaults.

Joint Government Defaults on Both Foreign and Local Currency Bonds Have Risen Dramatically as Sovereigns Borrow Increasingly in Local Currency



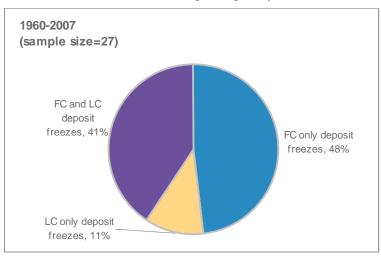
Moody's rating practice in recent years has reflected these evolving trends by narrowing the gaps between foreign and local currency ratings where such gaps occur, and by reducing the number of countries for which there is a gap between the foreign currency and the local currency government bond rating.

This study's findings also accord well with the thrust of Moody's approach to foreign currency country ceilings. These ceilings generally set the highest rating possible in a given country by denoting the risk that a government would interfere with a domiciled debtor's repayment of its foreign currency-denominated bonds (the Foreign Currency Bond Ceiling, or FCBC) and deposits (the Foreign Currency Deposit Ceiling, or FCDC).

Deposit Freezes

Over the period studied, about 40% of sovereign bond defaults have been accompanied by deposit freezes. In turn, all but two – Korea 1998 and Ukraine 2004 – of the 27 cases of deposit freeze events that we uncover have been accompanied by a sovereign bond or loan default. Deposit freeze-type events have been relatively less frequent in the 2000s compared to the 1980s and 1990s periods. Additionally, deposit restrictions affecting only local currency deposits have been much less frequent than deposit restrictions affecting only foreign currency deposits or affecting both foreign and local currency deposits.

Foreign Currency Only and Joint Foreign and Local Currency Deposit Freezes Far Outnumber Local Currency Only Deposit Freezes



In this study, we find that deposit freezes occurred outside of government defaults, and in addition there were instances where government defaults were not accompanied by deposit freezes. Thus, the association of deposit controls with sovereign defaults is not perfect and therefore argues for a conservative approach to assigning deposit ceilings. Moody's general approach is to set the FCDC at or below the sovereign's foreign currency bond rating. This approach follows the logic that governments have often used bank deposit freezes to contain capital flight during a crisis, and that in the past sovereigns have often viewed the consequences of defaulting on deposits as less severe than those of defaulting on bonds.

In addition, the compelling evidence that governments restrict local currency deposits much less frequently than they do foreign currency deposits and/or jointly local and foreign currency deposits fits well with Moody's assignment of normally much higher local currency deposit ceilings than foreign currency deposit ceilings.

In addition to being correlated with sovereign debt crises, the majority of the deposit freezes, 63%, have occurred within the context of a severe systemic banking crisis, while 26% have occurred in relation to a military event, 7% in relation to a political event, and 4% in the context of a hyperinflation. The most frequent deposit interference measure employed has been the imposition of prolonged deposit freezes, with several freezes lasting one year or longer, followed by outright deposit expropriations, forced deposit conversions into bonds, and forced deposit conversions into local currency. Several of the most disruptive deposit controls events have occurred in Latin America.

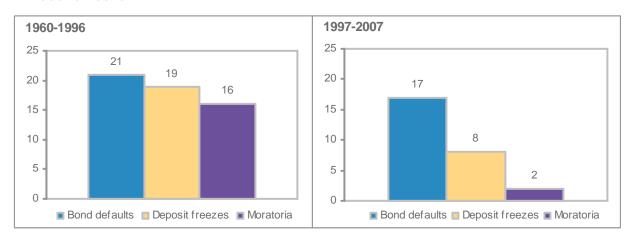
Deposit freezes on foreign currency deposits have generally been motivated by an attempt to stop foreign currency outflows, in a context of depleted foreign exchange reserves (Mexico 1982, Peru 1985, Korea 1998, Pakistan 1998). Local currency deposit freezes have been motivated by attempts to control inflation (Argentina 1989, Brazil 1990). Joint deposit freezes on both foreign and local currency deposits have been imposed as a response to bank runs in the context of systemic banking crises (Venezuela 1994, Russia 1998, Ecuador 1999, Argentina 2001). The losses imposed on depositors have been severe – haircuts on deposits have frequently reached 70%.

Moratoria on Private Sector Debt Service Payments

Since 1960, only about 26% of bond defaults have been accompanied by controls on private sector debt service payments. In addition, all but one of the debt servicing control measures have been imposed concurrently with deposit freezes. As expected, all but two cases of private sector payments controls have occurred concurrently with a default on *foreign currency* bonds and/or loans.

In addition, private sector payments moratoria have been imposed much less frequently in more recent crises. Since 1997 there have been very few moratorium events despite almost half of the default events having occurred during this period: 45% of sovereign bond defaults have occurred post-1997, while only 11% of moratorium events have occurred post-1997. Similarly, the joint occurrence of bond defaults, deposit freezes, and moratoria was 78% pre-1997 versus 22% post-1997.

Defaulting Governments Have Resorted Less to Deposit Freezes and Moratoria in Recent Years



These key observations strongly support Moody's approach to setting foreign currency bond ceilings. Prior to 2006, the FCBC had almost always been set at the government bond rating based on the assumption that a government would always impose a foreign currency payments moratorium should it default. However, in 2001 Moody's began allowing securities to "pierce" the sovereign ceiling in select instances. Then in 2006 Moody's separated the FCBC from the government bond rating for most countries: the FCBC is now an assessment of the *probability* that a defaulting government would adopt a moratorium – thereby permitting the FCBC to exceed the government's foreign currency bond rating for the vast majority of countries, where the probability of a moratorium is deemed to be less than fully certain.

Moody's continues to evaluate its approach to assessing moratorium risk given the ongoing process of financial market deepening, globalization, and strengthened domestic economic management that is demonstrably altering governments' assessment of the desirability of debt moratorium as a policy option.

In more detail, our survey also revealed that 44% of payments moratorium events have included a full moratorium on external private sector payments where either all external private sector payments have been explicitly banned or purchases of foreign currency have been frozen (Peru 1985, Venezuela 1994, Russia 1998). Additionally, another 28% of events have included a selective moratorium where foreign payments have been severely restricted either by limiting external payments to favored sectors or companies, or by requiring a case-by-case authorization by the central bank and/or the ministry of finance (Costa Rica 1981, the Philippines 1983, Brazil 1990, Argentina 2001). Finally, the other 28% of events have included the imposition of exchange controls or regulations that have severely affected external private sector payments and that have encouraged, implicitly or explicitly, the rescheduling of private foreign debt payments (Mexico 1982, Argentina 1982).

The length of payments moratoria has varied significantly – the Russian full moratorium of 1998 was enforced for 90 days, while the Philippines' 1983 and the Argentinean 2001 selective moratoria lasted for about one year. Both comprehensive moratoria and selective moratoria can be extremely costly and disruptive for the private sector: both the 90-day comprehensive Russian 1998 moratorium and the one-year selective Argentinean 2001 moratorium have been perceived as extremely damaging and contributed to corporate defaults on foreign obligations.

Sovereign Risk and Country Risk

This study's focus on how frequently governments default and interfere with others' debt service puts a spotlight on the commonly misunderstood relationship between sovereign and country credit risk. Though clearly related, sovereign and country risk are quite distinct.

Sovereign risk is the risk that a national government will default on its debt obligations. Sovereign government bond ratings speak directly to sovereign risk.

But country risk refers to a far broader universe of risks. It refers to all risks associated with cross-border lending to a country due to factors particular to that country but outside the control of the private sector. Country risk includes such risks in a given country as domestic economic and financial risks that arise from political and economic factors, as well as sovereign risk and the risk that governments will interfere with the ability of a domiciled borrower to repay its cross-border debt; the latter is often referred to as transfer and convertibility (T&C) risk.

Note that Moody's foreign-currency country ceilings – which reflect the risk of government interference with domiciled borrowers' foreign-currency debt service – are based on the two key country risks that are most directly tied to the government: sovereign risk and T&C risk.

T&C risk refers to two separate risks. Transfer risk refers to the risk that a domiciled borrower would be unable to transfer foreign exchange abroad to service debt because the government imposes restrictions on moving foreign exchange offshore. (See the next text box for a detailed description of the various types of external capital and exchange controls that governments use.) Convertibility risk refers to the risk that government prevents the borrower from freely converting local currency to foreign currency to pay foreign-currency debt. In practice, transfer and convertibility restrictions typically occur together.

This study focuses on deposit freezes and debt moratoria as tools of government interference with domiciled borrowers' foreign-currency debt service, as these are quintessential forms of T&C risk.

Introduction

In this study, we survey the history of sovereign bond defaults from 1960 to the present day and explore whether these default events have been accompanied by government interference measures that have severely affected the private sector. As the taxonomy of capital and exchange controls briefly reviewed in the text box below shows, government interference measures can take many forms and have been applied for various purposes. In this survey, we focus on temporary controls on capital outflows that have been imposed during financial and sovereign debt crises as a crisis stabilization tool.

In particular, we focus on two types of government policies – the imposition of restrictions on deposit withdrawals and the imposition of moratoria on private sector external debt payments. Deposit freezes and private sector debt payments moratoria are arguably the two most disruptive measures taken by governments during past sovereign debt crises and have generally imposed large costs on the private sector. In the sovereign ratings architecture, these government interference risks are captured by the country ceilings described in the second text box below. Our study comprises Moody's first attempt at systematically cataloguing and studying episodes of deposit freezes and private sector debt payments moratoria, as well as cataloguing local currency bond defaults.

Why Capital Controls? Taxonomy of Restrictions on Capital Movement

Government interference measures constituting restrictions on capital flows are broadly divided into *capital controls* – which focus on capital account transactions – and *exchange controls* – which focus on foreign currency transactions. (1)

Capital controls constrain one or more elements of the capital account in the balance of payments and can include restrictions on:

- Foreign direct investment (FDI): direct restrictions on FDI by residents abroad or non-residents domestically, restrictions on the repatriation of profits and initial capital, and on the structure of ownership;
- Portfolio investment: regulations on the issuance or acquisition of securities by residents overseas or by non-residents domestically, limitations on the repatriation of dividends and capital gains, restrictions on transfer of funds between residents and non-residents, and market-based tax measures;
- Borrowing and lending by residents and non-residents: regulations on external debt transactions usually
 ceilings or taxes on external debt accumulation by residents and firms (financial and non-financial), with
 special exemptions often provided to trade enterprises or on a case-by-case basis;
- Transactions making use of deposit accounts: restrictions on foreign currency deposits held locally by residents and non-residents, restrictions on local currency deposits held by residents abroad or held by non-residents locally or abroad;
- Other transactions: restrictions on real estate, emigration allowances, and other forms of capital transfer.

Exchange controls are various forms of controls imposed on:

- The purchase/sale of foreign currencies by residents;
- Resident holdings of offshore or domestic foreign currency deposits;
- The purchase/sale of local currency by non-residents;
- The right of non-residents to hold local currency deposits domestically;
- Taxes on currency transactions and multiple exchange rate practices, influencing the volume and composition of foreign currency transactions.

Additionally, capital and exchange controls could be classified as *market-based controls* or as *administrative controls*. Market-based or indirect controls function as a tax and discourage transactions by making them more costly. They would include dual or multiple exchange rate systems, explicit taxation of cross-border financial flows, indirect taxation of cross-border flows, and other indirect regulatory controls. Administrative or direct controls represent outright prohibitions on capital transactions and associated payments and transfer of funds. These controls directly affect the volume of cross-border financial transactions, and typically impose administrative obligations on the banking system to control the flows of capital. Market-based and administrative controls could be applied separately during times of heavy capital flows; however, they are often applied in tandem.

Finally, restrictions can be imposed *on capital inflows* and/or *on capital outflows*. Typically, countries have imposed controls on inflows in response to the macroeconomic implications of the increasing size and volatility of capital inflows. Controls on outflows have typically been used to limit the downward pressure on the currency; they have been applied to short-term capital transactions to counter speculative flows undermining the stability of the exchange rate and depleting foreign exchange reserves.

Capital controls were gradually phased out in developed countries during the 1970s and 1980s. By the 1990s, many developing countries had also liberalized their capital accounts. The resumption of large capital flows to developing countries during the late 1980s and early 1990s, and the string of financial crises during the 1990s (the European Monetary System crisis of 1992-1993, the Mexican crisis of 1994, and the Asian financial crisis of 1997-1998) refocused attention on the capital movements that precipitated the crises and on the desirability of capital and exchange controls.

(1) Exchange controls could be used to control capital account transactions or current account transactions. The distinction between exchange controls and capital controls is often blurred in the literature, with "capital controls" used as a common denominator. See Ariyoshi, A, Habermeier, K.F., Laurens, B, Otker-Robe, I., Canales-Kriljenko, J.I., Kirilenko, A., "Capital Controls: Country Experiences with Their Use and Liberalization", IMF Occasional Paper 190, 2000; Bird, G. and Rajan, S., "Restraining International Capital Movements: What Does It Mean?", CIES Policy Discussion Paper 14, March 2000; Neely, C., "An Introduction to Capital Controls", Federal Reserve Bank of St. Louis Review, November 1999.

This study is organized into three main sections. The first section surveys the history of sovereign bond defaults since 1960. We review the frequency of sovereign bond defaults and then analyze sovereign bond restructurings in the pre-1997 period, developments in restructurings post-1997, the new legal provisions in recent restructurings, and how recent restructurings have been influenced by the inclusion of Collective Action Clauses (CACs) in bond contracts. We also note the recent trend of countries simultaneously defaulting on both foreign currency-denominated and local currency-denominated bonds.

The second section of the study explores how often sovereign defaults have been accompanied by the imposition of restrictions on deposit withdrawals. We review the frequency and type of deposit withdrawal restrictions imposed by governments since 1960, and the correlation between sovereign defaults, banking crises, and deposit withdrawal restrictions. We then review in detail selected country crises and experiences with deposit freezes, which allow us to draw conclusions about the motivation behind the imposition of deposit freezes, their length, and the losses imposed on depositors. Finally, we analyze decisions to impose a deposit freeze within the context of a banking crisis resolution strategy.

The third section of the study reviews the evidence on private sector debt payments moratoria. Debt payments moratoria are imposed as a strategy of strengthening exchange and capital controls during a debt crisis, in order to prevent capital outflows. We review the frequency of debt payments moratoria since 1960, and the types and lengths of imposed moratoria. Finally, we study specific country experiences with using capital controls during recent debt and financial crises.

Case studies of ten of the most severe sovereign debt and/or financial crises are presented in Appendix I. These crisis episodes, in chronological order, are: Mexico 1982, Peru 1985, Argentina 1989, Brazil 1990, Venezuela 1994, Korea 1998, Russia 1998, Pakistan 1998, Ecuador 1999, and Argentina 2001.

Foreign-Currency Country Ceilings in Moody's Ratings Architecture

Moody's foreign-currency country ceilings indicate the risk that a sovereign government would deliberately interfere with the ability of domiciled borrowers to pay their foreign-currency debt obligations. As such, these ceilings cap the foreign-currency rating of any obligation or transaction subject to the sovereign's jurisdiction (in all but exceptional circumstances that permit "pierced" ratings), regardless of how creditworthy the instrument or deal might be on a stand-alone basis.

As reviewed in this study, such government interference would stereotypically occur during a foreign-exchange crisis that threatened the country's foreign-exchange holdings; a government blocks others' access to scarce foreign exchange in order to protect its own debt service capacity, or perhaps to shield the country's debtors from their foreign creditors and thereby "socialize" the cost of the crisis.

Moody's defines two separate foreign-currency ceilings – for bonds and for bank deposits – to capture the distinct interference risks facing these two types of financial instruments. This study's documentation of governments' historical use of debt payments moratoria and deposit freezes as policy tools provides good empirical justification for Moody's approach to setting foreign-currency ceilings for bonds and deposits, respectively. For example:

- The relatively moderate and declining frequency in the past decade of governments both defaulting and imposing debt moratoria strongly supports Moody's approach of recent years of separating the foreign currency bond ceiling from the foreign currency sovereign bond rating and raising most foreign currency bond ceilings, as well as allowing select securities to "pierce" the foreign currency ceiling.
- The observation that sovereign defaults are frequently accompanied by foreign-currency deposit controls, as well as the fact that deposit freezes occur outside of sovereign defaults, argues for a conservative approach to assigning deposit ceilings. Moody's approach is to set the foreign-currency deposit ceiling at or below the sovereign's foreign-currency rating. Governments have often used bank deposit freezes to contain capital flight during a crisis, and they have often seen less severe consequences for the country defaulting on deposits than on bond contracts.

I. Sovereign Bond Defaults and Restructurings

In this section, we summarize the experience with sovereign bond defaults since 1960. We surveyed the cases of defaults and restructurings of government securities and central bank notes/securities, including outright defaults, voluntary pre-emptive bond restructurings that were clearly aimed at avoiding default, and also cases of government actions that have led to implicit defaults. Any sequential defaults that were part of the same crisis event were counted as a single event. Even though a few earlier cases are included, the survey focuses on the period from the late 1970s to today.

Our survey uncovered 38 cases of bond defaults since 1960, which are listed chronologically by default date in Appendix II. (The table in Appendix II also includes a few cases of debt/financial crises that led to government interference, but not to bond defaults. These cases will be discussed later in sections II and III.) It is interesting to note that bond defaults have been relatively equally distributed throughout time: after the 5 defaults recorded in the 1960-1970s, there were 12 bond defaults during the 1980s, 11 defaults in the 1990s, and 10 defaults so far in the current decade.

Although we note in Appendix II whether each bond default was accompanied by a default on foreign currency commercial bank loans, our focus in this survey is on bond defaults. Defaults on commercial bank loans have been far more frequent than bond defaults - more than 80 countries have defaulted on commercial bank loans over the last three decades, with about a quarter of them defaulting more than once. Similarly, we do not include defaults on multilateral or bilateral official debt.

Bond Defaults and Military Conflicts

All of the five recorded bond default events before 1980 were cases of debt repudiation – typically a new political regime had come to power and had refused responsibility for the debts incurred by the previous regimes. Four of the five cases - the outright debt repudiations of Cuba in 1960 and Rhodesia in 1965, and the currency confiscations of Zaire in 1979 and Ghana in 1979 and 1982 - were connected to a political and/or military event. North Korea in 1976 represents the only debt repudiation in this period that happened during a peaceful-time economic crisis.

Almost 80% of sovereign bond defaults since 1980 have occurred in peaceful times. In the 1980s, only two out of the 12 recorded bond default events were during periods of war – Guatemala and Liberia both defaulting in 1989; and one default was the result of the imposition of a martial law - Poland in 1981. In the 1990s, Kuwait's default was a result of the Iraqi invasion in 1991, the Solomon Islands default in 1996 was during a period of internal ethnic conflict, and the Former Yugoslavia's default was as a result of the country's dissolution in 1992. Since then, the only default associated with a military conflict has been the Ivory Coast's default in 2000.

Recent Increase in Joint Foreign and Local Currency Bond **Defaults**

Over the whole period of study, 45% of defaults have been on foreign currency (FC) bonds, 34% on local currency (LC) bonds and notes³, and 21% of defaults have been a joint default event on both foreign currency and local currency obligations.4

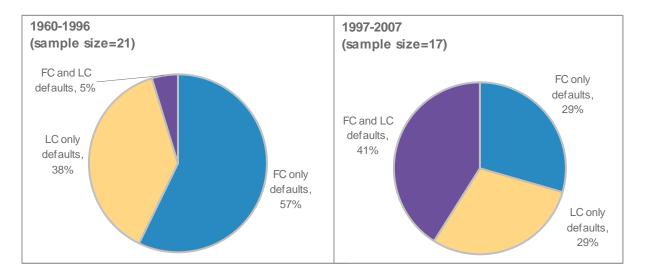
However, the frequency of joint foreign and local currency bond defaults has increased dramatically in recent years. As Exhibit 1 illustrates, while joint foreign and local currency events represented a very small share of

Approximately half of the local currency only defaults have been accompanied by a simultaneous default on foreign currency commercial bank loans. We note here that domestic local currency defaults are more difficult to detect than defaults on international debt.

pre-1997 Asian crisis defaults, they represent 41% of post-1997 defaults, a higher share than that of both foreign currency only defaults and local currency only defaults.⁵

Exhibit 1: Joint Government Defaults on Both FC and LC Bonds Have Risen Dramatically as Sovereigns Borrow Increasingly in LC

		Default Eve	nts (number)	Default Events (% of total)			
	FC only	LC only	FC and LC	Total	FC only	LC only	FC and LC
Whole period	17	13	8	38	44.7	34.2	21.1
Pre-1997	12	8	1	21	57.1	38.1	4.8
Post-1997	5	5	7	17	29.4	29.4	41.2



This recent increase in the joint occurrence of defaults on both foreign and local currency-denominated bonds is likely driven by the general switch in sovereign financing from predominantly foreign currency-denominated bank loan financing in the 1970s and 1980s to foreign and local currency bond financing in the 1990s and the current decade. Local currency bond financing in emerging market countries has risen markedly over the past decade. This growth has been spurred by the development of domestic capital markets since the 1990s – in terms of both increased volume and liquidity and increased transparency – and by improved quality of economic policies. Increased central bank independence has been accompanied by more stable monetary policy, shifting towards inflation targeting in many emerging market countries. For example, a 2007 IADB report found that the average share of domestic bonds in total public debt for a sample of 60 advanced, emerging market, and developing countries increased from 26% in 1990-1994 to 36% in 2000-2004. Mirroring this development, Moody's data shows that the average share of gross general government debt denominated in foreign currency for emerging market and developing countries declined from 56% in 1997 to 48% in 2007.

Given this recent tendency of sovereigns to default on both foreign and local currency obligations during a crisis, which default tends to happen first? A careful look at the sequencing of past defaults, summarized in Exhibit 2, reveals that there is no clear pattern in terms of default sequencing. When there has been a default on both foreign and local currency obligations, the defaults have generally occurred either at the same time, or very close in time: foreign currency bond defaults have occurred first in 2 cases, local currency bond defaults have occurred first in another 2 cases, and both have occurred together in the other 4 cases.

We choose to divide the sample in 1997 as there is a natural break in the defaults frequency in the middle of the 1990s and as the Asian crisis was deemed to usher in the "new type" of investor-confidence capital-movement driven financial crises. The conclusions will not change if a different mid-1990s cut-off point is used.

Inter American Development Bank, "Living with Debt", 2007.

Exhibit 2: No Clear Pattern of Precedence during Joint FC and LC Defaults

Crisis	Default Timing
1989 Argentina	Both defaults at end-1989.
1998 Russia	LC bond default in August 1998, then FC bond default (MIN FIN III) in May 1999.
1998, 2000 Ukraine	LC bond default in August 1998, FC bonds default in September 1998. Followed by another FC default in January 2000.
1999 Ecuador	Default on both FC and LC bonds in August 1999.
2001 Argentina	Intention to restructure both domestic and external debt announced in November 2001; then default on domestic debt in November 2001 and restructuring in December 2001, followed at end-December 2001 by attempts to restructure both FC and LC external debt.
2003 Uruguay	Default on both FC and LC bonds in April 2003.
2004 Paraguay	In 2004 restructured domestically issued dollar-denominated bonds defaulted on in 2003, and restructured domestic LC bonds.
2004 Grenada	FC bond default in December 2004, LC bond default in January 2005.

Finally, did countries that defaulted on foreign currency obligations have a larger share of foreign currency debt than countries that defaulted on local currency obligations? As Exhibit 3 illustrates, for recent defaults, there does not seem to be a significant difference in the share of foreign currency debt among FC only defaulters, LC only defaulters, and joint FC and LC defaulters. There appears to be, however, a much larger difference between countries with respect to deposit dollarization ratios and debt servicing capacity. In particular, countries that were joint FC and LC defaulters had a much larger share of FC deposits in total deposits, higher dollarization vulnerability ratios (the ratio of FC deposits to official foreign exchange reserves and foreign assets of domestic banks), and somewhat higher debt service to revenue ratios (indicating a lower short-term debt servicing capacity).

Exhibit 3: FC Only Defaulters Did Not Have a Larger Share of FC Debt

Year	Country	FC or LC bond default	Share of FC debt 1/	Share of FC deposits 2/	Dollarization vulnerability ratio 3/	Debt service to GG revenue
1997	Mongolia	LC	92.7	23.6	7.1	15.3
1998	Venezuela*	LC	85.0	0.0	0.0	52.5
1998	Russia*	FC and LC	81.4	43.6	48.7	13.6
1998	Ukraine*	FC and LC	52.5	39.1	64.1	8.6
1999	Pakistan*	FC	48.5	12.3	0.2	30.2
1999	Ecuador*	FC and LC	78.4			201.8
1999	Turkey	LC	49.5	47.5	86.6	40.4
2001	Argentina*	FC and LC	96.9	72.5	213.2	58.6
2002	Moldova*	FC	89.6	47.2	189.7	25.5
2003	Uruguay*	FC and LC	93.2	95.0	136.3	43.7
2004	Paraguay	FC and LC	89.2	56.6	62.9	25.7
2005	Dominican Republic*	FC	82.1	27.3	69.9	21.5
2006	Belize*	FC	82.5	5.3	20.4	38.4
Average All			78.6	39.2	74.9	44.3
Average (FC only)			75.7	23.0	70.1	28.9
Average (LC only)			75.7	23.7	31.2	36.0
Average (FC and LC)			81.9	61.4	105.0	58.7
Median All			82.5	41.4	63.5	30.2
Median (FC only)			82.3	19.8	45.2	27.9
Median (LC only)			85.0	23.6	7.1	40.4
Median (FC and LC)			85.3	56.6	64.1	34.7

^{*} Moody's-rated

Pre-1997 Sovereign Bond Defaults and Restructurings

In the 1960s and 1970s, many developing countries, including large Latin American countries which had soaring economies at the time, borrowed heavily from international creditors to finance industrialization and infrastructure programs. After the oil price increase of 1973, petroleum exporting countries' cash was invested with international banks and provided a ready source of funds for loans to Latin American governments. After the second oil price shock and the recession in the world economy in the late 1970s and the early 1980s, many developing countries found themselves unable to repay their debts. Moreover, as interest rates increased in the United States and in Europe after 1981 (a Federal Reserve effort to fight inflation in the US), debt payments due also increased.

^{1/} General government (GG) FC and FC-indexed debt to GG debt

^{2/} FC deposits to total deposits

^{3/} FC deposits to (official FX reserves + foreign assets of domestic banks)

Even though Costa Rica was the first Latin American country to default on its bank loans in 1981, the "debt crisis decade" began in August 1982. When Mexico announced that it could no longer service its debt, the international capital markets became aware that Latin America would not be able to pay back its loans. In the wake of Mexico's default, most commercial banks significantly reduced or halted new lending to Latin America, precipitating a liquidity crunch in an environment where most of the loans were short-term.

Although the debt crisis decade of the 1980s saw over 40 countries restructuring their commercial bank loans (and many serial restructurings), there were only four cases of successful sovereign bond restructurings between 1980 and 1997: Costa Rica in 1985, Nigeria in 1988, Guatemala in 1989, and Panama in 1994. It was generally believed at that time that a restructuring of sovereign bonds could be a complicated and drawnout process, as had been the case with bond finance in the 1800s and early 1900s when countries could spend up to a decade in unresolved defaults. The four voluntary bond exchanges in the 1980s proved that a sovereign bond restructuring could be concluded successfully. In all four cases, reviewed in Exhibit 4, voluntary agreements were reached within six months to a year after consultation with major creditors, with creditor participation rates of 90% to 97%.

Costa Rica and Guatemala had remained current on their bonds and were successful in reaching agreements to roll over the bonds before they matured. Nigeria and Panama, on the other hand, restructured their bonds after a prolonged default. The success of the exchange offers had depended critically on creditors believing that the exchange provided them with a higher and more certain payout on their claims than alternative legal remedies. The exchanges primarily extended bond maturities and did not involve a reduction in principal (or a reduction in interest rates), with the exception of Costa Rica. Also, in the case of Costa Rica, higher interest rates on new obligations were used as a sweetener. Settlements required up-front cash payments on interest arrears. A distinctive feature of these restructurings was the fact that no official bondholder committees were involved in the settlements. Rather, the terms of the exchange were formulated based on contacts with the main groups holding the securities. All settlements included negative pledge clauses, providing for the bondholders to receive any advantage granted to new or outstanding obligations. Also, some settlements included early redemption options and allowed for debt conversions into equity.

Output

Description:

Post-1997 Sovereign Bond Defaults and Restructurings

The new wave of sovereign bond defaults and restructurings came after the Asian crisis in 1997. Even though the countries directly affected by the Asian crisis – Thailand, Malaysia, the Philippines, Indonesia, and Korea – did not default on sovereign debt (with the exception of Indonesia, which defaulted on commercial bank loans in 1998), the Asian crisis affected market sentiment unfavorably. After the Asian crisis, international investors were reluctant to lend to developing countries, contributing to an economic slowdown in many parts of the world.

The negative investor confidence, along with the sharply reduced price of oil, contributed to the Russian financial crisis of 1998. Russia defaulted on an unprecedented scale on \$73 billion of debt in 1998, with contagion from the crisis affecting Ecuador and Ukraine. Pakistan's debt crisis was precipitated by sanctions imposed by bilateral official creditors following Pakistan's nuclear tests in May 1998. Pakistan's experience reversed the sequence followed in Russia and Ecuador in that a Paris Club rescheduling preceded the bond exchange offer – the exchange of Eurobonds was launched in order to fulfill the comparability of treatment clauses included in the Paris Club agreement.

The scale of the Russian default was surpassed by Argentina in 2001, when more than \$82 billion of debt went into default. The Argentinean crisis spread to Uruguay, which in turn restructured its debt in 2003.

Corporate bond restructurings were far more common. In a sample of 102 junk bond issuers in financial distress during the 1970s and 1980s, Asquith et al. (1991) found that 34 companies successfully completed 93 bond exchanges (Asquith, P, Gertner, R. and Scharfstein, G., "Anatomy of Financial Distress: An Examination of Junk-Bond Issuers", NBER Working Paper 3942, December 1991).

This section draws on Pinon-Farah, M., "Private Bond Restructurings: Lessons for the Case of Sovereign Debtors", IMF Working Paper 96/11, February 1996.

In a debt-equity swap, external debt of a developing country is converted into local currency funding for equity investment into that country. In the context of privatization programs, debtor governments offer to exchange debt for public assets.

Exhibit 4: There Were Four Successful Pre-1997 Bond Restructurings

Year of Restructuring and Country	Amount of Restructured Bonds	Terms of Restructuring	Arrears before the Restructuring?	Creditor Participation
1985 Costa Rica	\$90m of bonds falling due in 1985	Maturing obligations exchanged for new US dollar notes with 3-year grace period and average maturity of 5.5 years, carrying a floating rate of LIBOR+1 1/4, compared to a rate of LIBOR+7/8 on the original obligations. Banks and financial institutions were given the option to tender maturing bonds for conversion to debt with terms: 3-year grace period, average maturity 7.5 years, interest rate LIBOR+1 5/8.	Interest arrears totaling \$22m that accrued in 1984 were cleared prior to the exchange.	More than 90% of creditors accepted the offer within a year.
1988 Nigeria	\$4.9bn of government- guaranteed promissory notes (incl. capitalized interest)	The notes had been originally issued to refinance trade arrears with uninsured suppliers after the country ran into financial difficulties in 1982-1983. The notes had a 6-year maturity, including a 2.5-year grace period and interest rate of LIBOR+1%. The notes were restructured over 16 years, including a 2-year grace period at a 5% interest rate.	Failed to meet the first amortization payment due in 1986 and interest payments due in 1987.	A settlement was reached at a large bondholders meeting in January 1988.
1989 Guatemala	\$500m of bonds maturing in 1989-1990	Old obligations maturing in 1989-1990 had interest rates from 11% to 12.5%. Existing bonds could be replaced by either dollar bonds with a fixed interest rate of 10% and 10.5-year maturity with a 4.5-year grace period or local currency bonds with fixed interest rate of 16% and 7.5-year maturity. The principal amount of the new bonds was issued at a premium to compensate bondholders for any reduction in interest rates compared with the old bonds.	Current on servicing the obligations, but had a bunching of maturities.	The offer was accepted by about 95% of bondholders within a year.
1993-1994 Panama	\$450m (incl. past-due interest) of bonds that had not been serviced since 1987	Old bonds consisted of US dollar floating rate bonds with maturities of 5 to 12 years and interest rates ranging from LIBOR+5/8 to LIBOR+1 3/4, ECU bonds with 5-year maturities and a fixed interest rate of 8 1/4%, and yen-denominated bonds with 5-year maturities and fixed interest rate of 7.6%. Exchange offer included 25% downpayment on past-due interest and the exchange of principal and remaining interest arrears at par. New notes were US dollar or yen-denominated with 8-year maturity, 1.5-year grace period, and interest of LIBOR+1 on US dollar bonds and a fixed rate of 3 3/4% on yen bonds. Efforts had been particularly intense on reaching an agreement on yen bonds, because there had not been a precedent for a bond default and restructuring in the Samurai market.	Bonds not serviced since 1987.	Discussions with major creditors began in 1993. Offer was made on 31 January 1994. By 1 May 1994, the exchange was complete with more than 97% creditor participation.

Source: Pinon-Farah, M., "Private Bond Restructurings: Lessons for the Case of Sovereign Debtors", IMF Working Paper 96/11, February 1996

The most recent wave of sovereign defaults was in the Caribbean countries in the middle of the current decade – Dominica in 2003, Grenada in 2004, Dominican Republic in 2005, and Belize in 2006 – and was in part caused by a decline in tourism after 2001 and severe hurricane damage in these countries.

Exhibit 5 reviews the experiences with international bond restructurings post-1997. Of the 10 restructurings reviewed, 6 took place after a default, while the other 4 were pre-emptive restructurings. Generally, the restructurings were closed in 1-4 months after the exchange offer, except in Dominica where the exchange took 8 months to close. In the events involving default, the restructurings took between 11 and 38 months from the time of default, except Ukraine and Belize whose restructurings were closed within 3 and 7 months respectively of the time of default. Required thresholds for creditor participation were set between 66% and 85%, while actual creditor participation rates were between 72% and 100 % – Dominica and Argentina were on the lower side of this range, while all other countries had participation rates above 93%.

The bond exchanges have generally aimed to consolidate the number of outstanding instruments. There are two sides to such consolidation: on the one hand, it improves the instruments' trading liquidity; on the other hand, it means that bonds with originally very different contractual features might be treated similarly in the restructuring. Presenting investors with two or more options at the exchange has been one way of circumventing this problem. In this regard, the complexity of the Argentinean exchange stands out as 152 original instruments were exchanged for 3 new instruments.

The notional amount was exchanged at par in the smaller debt restructurings, and took a reduction in the larger restructurings, with the largest haircuts taken in Argentina – up to 66%, in Russia – up to 38%, and in Ecuador – up to 35%. Past interest due was exchanged at par, except in Argentina where it took an unprecedented 85% reduction. All restructurings involved extension of maturities, and all but one involved a change in coupon payments. The average duration extension was 4.6 years; the largest duration extension was in Argentina, 8.2 years, followed by Dominica with 7.6 years and Ecuador and Belize with 6.7 and 6.8 years respectively. Collective Action Clauses (CACs) were included in all new instruments, except for Ecuador and Russia.

Countries have dealt differently with holdout investors. Pakistan had remained current on all original obligations in order to avoid litigation, and Uruguay had stated from the beginning that debt service on the old claims would be continued. In Moldova and Ukraine, a holdout minority was bound into the agreement through majority voting clauses. Ecuador faced down threats of holdouts by either settling the accelerated claims or continuing the debt service. Finally, Argentina faced many lawsuits.

New Legal Provisions in Recent Restructurings

Several new legal features have been recently introduced in sovereign bond restructurings and are likely to influence future default and restructuring events. First, the most favored investor clause, stating that the same conditions have to be granted to all investors and designed to ensure that all participants benefit from any settlement under improved conditions, was used for the first time in Argentina's restructuring in 2005.

Second, the use of trust indentures has become more popular as it prevents future payments from being attached in litigation against the sovereign, in the manner of *Elliott vs. Peru* case.

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¹⁰ This section draws on Andritzky, J., "Sovereign Default Risk Valuation", Springer Berlin 2006.

Sources for this section include Moody's reports; IMF country reports; Andritzky, J., "Sovereign Default Risk Valuation", Springer Berlin 2006; Verdier, P.H., "Credit Derivatives and the Sovereign Debt Restructuring Process", Harvard Law School Working Paper 2004; Sturzenegger, F., "Default Episodes in the 90s: Factbook and Preliminary Lessons", Universidad Torcuato Di Tella Working Paper 2002.

As described in Verdier (2004): Elliott Associates, a hedge fund specializing in distressed debt, had purchased working capital debt of Banco de la Nacion, guaranteed by the Republic of Peru. Elliott refused to participate in Peru's Brady Plan restructuring in 1996 and filed suit against the debtors. Elliott obtained judgment for the full principal amount of the debt in July 2000, but in order to collect any payment it had to be able to seize some of the sovereign's funds abroad. Elliott came up with the creative solution to attach the payments about to be made to Peru's other creditors under the Brady Plan restructuring. After failing to attach funds transferred to Chase Manhattan Bank, which was acting as a fiscal agent for Peru, Elliott succeeded in attaching funds transferred through Euroclear. At this point, Peru opted to settle with Elliott for \$56.3 million rather than defaulting on the Brady bonds, whose grace period was running out

Exhibit 5: A New Wave of Sovereign Restructurings Came Post the 1997 Asian Crisis

	Total Defaulted	ln		per of ments		ge Ratios Bradies)	Cha	inge in Bond Fe (excl. Bradie	eatures s)		Collective A	ction Clauses					
Year of Restructuring and Country (1)	Debt (\$ million, bonds and loans)	Default During the Bond Exchange ?	Eligible Original Instru- ments	New Instru- ments	Notional (incl. cash payouts)	Past Due Interest	Change in Coupon?	Duration Extension (years)	Average Life Extension (years)	Included in Original Bonds?	Used in Exchange?	Included in New Bonds?	Exit Consents used?	Time to Closing of Exchange (months)	Bond- holder Consul- tation	Part- icipation Rate	Settle- ment with Holdouts?
1999 Pakistan	\$1,627	no	3	1	1.00- 1.057	1.00	yes	3.4	4.2	yes	no	yes	no	1 from offer	informal	99% realized	yes, offer re-opened
1999 Ecuador	\$6,604	yes	6	2	0.65-1.00	1.00	yes	6.7	17.0	no	no	no	yes	11 from credit event, 2 from offer	informal	85% threshold, 97% realized	yes
2000 Russia	\$72,709	yes	6	2	0.625- 0.67	1.00	yes	2.7	8.1	yes	no	no	no	22 from credit event, 2 from offer	formal	86% threshold, 95% realized	no
2000 Ukraine	\$1,064	yes	4	2	1.00	1.00 (exc. Gazprom bonds)	yes	3.0	3.9	partly	yes	yes	no	3 from credit event, 2 from offer	informal	85% threshold, 99% realized	n.a., offer re- opened
2002 Moldova	\$145	(no), grace period interest arrears	1	1	1.00	n.a.	yes	3.6	4.4	yes	yes	yes	n.a.	4 from offer	formal	75% threshold, 100% realized	n.a.
2003 Uruguay	\$5,744	no	18	18	0.85-1.08	1.00	partly	2.3	8.4	partly	yes	yes	yes	3 from offer	informal	80% threshold, 93% realized	yes, offer re-opened
2005 Argentina	\$82,268	yes	152	3	0.337- 1.00	0.15	yes	8.2	16.4	partly	no	yes	yes	38 from credit event, 2 from offer	informal	76% realized	no
2005 Dominica	***	(yes), 2 bonds in legal dispute	2	3	0.70-1.00	1.00	yes	7.6	9.9	no	no	yes	no	14 from credit event, 8 from offer	formal	66% threshold, 72% realized	offer re- opened
2005 Dominican Republic	\$1,622	(no), grace period interest arrears	2	2	1.00	n.a.	no	2.0	2.8	no	no	yes	yes	1 from offer	informal	85% threshold, 94% realized	yes
2007 Belize	\$242	(yes), missed payment to trust reserve		1	1.00		yes	6.8	10.9	partly	yes	yes		7 from credit event, 3 from offer		98% realized	n.a., offer extended 1 month

⁽¹⁾ Details on selected restructurings of international bonds.

Sources: Andritzky, J., "Sovereign Default Risk Valuation", Springer Berlin 2006; and Moody's.

Third, legal provisions have also offered insurance against repeated defaults: reversing the haircut by issuing "contingent recovery rights" as in Ecuador's restructuring, or making the new bonds putable as in the Russian restructuring, giving the holder the right to sell, or put, the bond to the issuer prior to the bond's maturity date. Fourth, debt management clauses prescribing buybacks that are mandatory or contingent on the country's payment capacity (Argentina is an example of the latter) are also gaining popularity.

Fifth, exit consents have been used in the restructurings to give an incentive to all creditors to participate in the exchange; otherwise they would be left with largely worthless securities. Exit consents involve having investors consent, as part of the exchange agreement, to amendments to the non-financial terms of the old debt instruments that make them unattractive to holdout creditors. While amendments to financial terms may require unanimity, other terms may normally be amended by a majority or supermajority of creditors. The most common exit consents remove the cross-default and cross-acceleration clauses from the old bonds and lift the listing requirement.

Sixth, Collective Action Clauses (CACs) have become increasingly popular. CACs allow a supermajority of creditors to amend the instrument's payment terms and other essential provisions. The CACs were invoked in the restructuring in four countries – Ukraine, Moldova, Uruguay, and Belize. Moldova used the CACs to amend the terms of payment according to the restructuring offer after an agreement was reached with its major bondholder – who held 78% of the outstanding bonds, while the CACs required 75% majority vote. Uruguay used the CACs contained in its Samurai bonds, the first use of CACs in Japan. Ukraine applied a hybrid approach: first, it invited the investors – mainly investment banks and hedge funds – to tender their bonds by granting an irrevocable proxy vote for the restructuring offer; second, it called a bondholder meeting where the proxy votes were automatically cast in favor of modifying the terms of the old bonds. Finally, Belize's government used the CAC embodied in one of its bonds to force 1.3% of non-complying or non-responding creditors to accept the terms of the exchange, increasing the acceptance rate to 98%.

Finally, the more prevalent use of CACs could also alleviate potential litigation problems with sovereign credit default swaps in voluntary debt restructurings. The case of *Eternity vs. Morgan* ¹⁴ has raised concerns that uncertainty in the interpretation of the definition of the Restructuring Credit Event could diminish incentives for bondholders/protection buyers to participate in voluntary debt exchanges, thus jeopardizing the success of the exchange. Subsequently, in 2003 the International Swaps and Derivatives Association (ISDA) removed the requirement that the exchange be "mandatory" from the definition of the Restructuring Credit Event. Moreover, the inclusion of CACs in recent bond issuances could strengthen the protection buyer's argument that the exchange is in fact involuntary.

Contrary to sovereign bonds issued in London, bonds issued under New York law do not allow a majority of creditors to amend the payment terms. While amendments to most non-financial terms require a majority vote, amendments that would affect the debtor's obligation to make timely payments require unanimity.

Eternity Global Master Fund vs. Morgan Guaranty Trust Co., as described in Verdier (2004): Eternity, which had invested in Argentine debt, had entered into three credit default swaps with Morgan (the protection seller). The swaps included both Repudiation/Moratorium and Restructuring among the applicable Credit Events. When Argentina's decree announced the voluntary debt exchange offer on 1 November 2001, Eternity repeatedly requested Morgan to settle the swap. In response, Morgan took the position that the voluntary debt exchange did not constitute a credit event. Morgan declared that a credit event had occurred only following Argentina's suspension of payments on 27 December. Eternity sued Morgan for breach of contract, fraud, and misrepresentation. The court held in favor of Morgan: first, since the exchange was not "mandatory", it could not be an Obligation Exchange; second, even though Eternity had tendered its debt in exchange for lower-interest, longer-maturity Argentine bonds, this did not mean that a change in the obligations had been agreed between Argentina and the holder. Under the terms of the exchange, the obligations held in trust for the holders remained unchanged, so there was no postponement, deferral or delay in payments or reduction in interest on them.

II. Sovereign Bond Defaults and Deposit Freezes

Generally, sovereign debt crises tend to be accompanied by banking and/or currency crises. In their efforts to fight the crises and preserve foreign exchange, numerous governments have resorted to measures of government interference with private sector payments – the two most detrimental measures employed being the imposition of prolonged deposit freezes and moratoria on external private sector debt payments. This section surveys cases of deposit freezes, while the next section addresses the cases of private sector payments moratoria.

We explore whether sovereign bond credit events have coincided with government interference with bank deposits. We use the term "deposit freezes" to signify cases of government-imposed restrictions on bank deposits, which include: cases of prolonged deposit freezes, forced deposit conversions into local currency or into bonds, deposit withdrawal restrictions, or other deposit controls that have led to significant erosion in the value of deposits. We do not include cases of bank holidays, which typically last only a few days and do not impose a significant loss on depositors – in contrast, we do include cases of deposit freezes, which represent bank holidays that last for several weeks, several months, or longer, and which impose significant losses on depositors.

Frequency of Deposit Freeze Events

As detailed in Appendix III, out of the 38 bond default events that we surveyed in the previous section, 15 bond defaults (about 40%) were accompanied by deposit freezes. Additionally, we record another 12 cases of deposit freezes that were not accompanied by a sovereign bond default; however, all except two cases – Korea in 1998 and Ukraine in 2004 – were accompanied by a sovereign default on foreign currency commercial bank loans or a local currency debt default (South Vietnam in 1975 and Venezuela in 1995).

Exhibit 6: Deposit Freeze Events Have Been Correlated with Sovereign Defaults

	Deposit F	reeze	No Deposit Freeze
Sovereign Default (Bond or Loan)	1960 Cuba 1965 Rhodesia 1975 South Vietnam (1) 1981 Costa Rica 1981 Ecuador 1982 Mexico 1982 Argentina 1983 Philippines 1985 Peru 1985 South Africa 1987 Panama 1989 Argentina 1989 Liberia 1990 Kuwait 1990 Brazil 1991 Former Soviet Union 1992 Former Yugoslavia	1994 Venezuela (2) 1997 Mongolia 1998 Russia 1999 Pakistan 1999 Ecuador 2001 Argentina 2003 Uruguay	1979 Ghana 1983 Uruguay 1986 Brazil 1986 Nigeria 1989 Bolivia 1989 Guatemala 1996 Solomon Islands 1998 Venezuela 1998 Ukraine 1999 Turkey 2000 Ivory Coast 2002 Moldova 2003 Dominica 2004 Paraguay 2004 Cameroon 2004 Grenada 2005 Dominican Republic 2006 Belize
No Sovereign Default	1998 Korea 2004 Ukraine		N/A

⁽¹⁾ Repudiation of domestic non-bonded debt in 1975.

⁽²⁾ Domestic arrears to suppliers in 1995. Capital and exchange controls imposed in 1994.

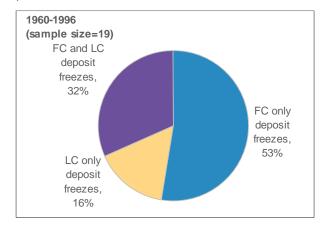
In other words, as summarized in Exhibit 6, all but two of the 27 recorded cases of deposit freezes occurred along with a sovereign default event (on bonds and/or loans). The two exceptions of Korea 1998 and Ukraine 2004 were related to the spreading of the Asian financial crisis to Korea in 1997-1998, and to a political near-crisis in Ukraine in November 2004. Korea's experience is reviewed in detail in Appendix I.

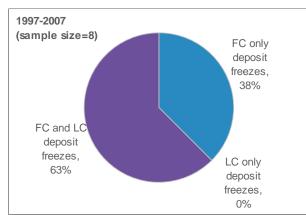
Have deposit freezes become less common in recent years? Indeed, as illustrated in Exhibit 7, deposit freeze-type events have been relatively less frequent since 1997 than before 1997. This has been primarily due to fewer cases of deposit restrictions in the 2000s – we record 3 deposit freeze events in the 1960s-1970s, 11 events in the 1980s, 9 events in the 1990s, and only 3 events so far this decade. The observed lower frequency of deposit freezes since 2000 could partly be explained by the lower frequency of systemic banking crises during this period and by the nature of the sovereign debt crises of the current decade – several defaults in smaller Caribbean countries were primarily due to external shocks in the form of a decline in tourism after September 11, 2001 and hurricane damage, as well as past government over-borrowing, rather than major financial crises as in the 1990s (except the Dominican Republic).

Additionally, deposit restrictions affecting only local currency deposits have been much less frequent than deposit restrictions affecting only foreign currency deposits or affecting both foreign and local currency deposits. The motivation behind the imposition of local currency only deposit freezes could explain this trend – as reviewed in more detail below, the primary motivation behind local currency only deposit freezes has been an attempt to control high inflation.

Exhibit 7: LC Only Deposit Freezes Have Been Less Frequent

	D	eposit Free	ezes (number	Deposit Freezes (% of total)			
	FC only	LC only	FC and LC	Total	FC only	LC only	FC and LC
Whole period	13	3	11	27	48.1	11.1	40.7
Pre-1997	10	3	6	19	52.6	15.8	31.6
Post-1997	3	0	5	8	37.5	0.0	62.5





Correlation of Sovereign Defaults, Banking Crises, and Deposit **Freezes**

Appendix III also indicates whether the sovereign debt crises have been accompanied by a systemic banking crisis. A systemic banking crisis is defined as a banking crisis event where much or all of bank capital is being exhausted and as such signifies a highly disruptive event. We note here that historically banking crises have been more frequent than sovereign debt crises as there have been more than 120 systemic banking crises in more than 90 countries since the late 1970s; additionally, there have been more than 50 non-systemic banking crises in at least 45 countries, and many countries have suffered repeated banking crises. 15

Eighteen sovereign bond defaults (representing about 60% of bond defaults outside of military events) have been correlated with systemic banking crises. The banking crisis has preceded the default event by at least a year in eight cases (44% of the total), had started in the same year as the default event in five cases (28% of the total), while the bond default event had preceded and contributed to the banking crisis in the other five cases (28% of the total).

Exhibit 8: Deposit Freeze Events Have Been Correlated with Systemic Banking Crises

	Sovereign Default	t (Bond or Loan)	No Sovere	ign Default
	Systemic Banking Crisis	No Systemic Banking Crisis	Systemic Banking Crisis	No Systemic Banking Crisis
Deposit Freeze	1981 Costa Rica 1981 Ecuador 1982 Mexico 1982 Argentina 1983 Philippines 1985 Peru 1987 Panama 1989 Argentina 1989 Liberia 1992 Former Yugoslavia 1994 Venezuela (2) 1997 Mongolia 1998 Russia 1999 Ecuador 2001 Argentina 2003 Uruguay	1960 Cuba 1965 Rhodesia 1975 South Vietnam (1) 1982 Bolivia 1985 South Africa 1990 Kuwait 1990 Brazil 1991 Former Soviet Union 1999 Pakistan	1998 Korea	2004 Ukraine
No Deposit Freeze	1979 Ghana 1983 Uruguay 1989 Bolivia 1998 Ukraine 1999 Turkey 2004 Paraguay	1986 Brazil 1986 Nigeria 1989 Guatemala 1996 Solomon Islands 1998 Venezuela 2000 Ivory Coast 2002 Moldova 2003 Dominica 2004 Cameroon 2004 Grenada 2005 Dominican Republic 2006 Belize	N/A	N/A

⁽¹⁾ Repudiation of domestic non-bonded debt in 1975.

⁽²⁾ Domestic arrears to suppliers in 1995. Capital and exchange controls imposed in 1994.

¹⁵ Caprio, G. and Klingebiel, D., "Episodes of Systemic and Borderline Financial Crises", World Bank Database 2003.

Exhibit 8 shows that, in addition to being correlated with sovereign debt crises, the majority of the deposit freezes (17) have occurred within the context of a severe systemic banking crisis, while seven have occurred in relation to a military event (see Appendix I), two in relation to a political event (Pakistan 1998-1999 and Ukraine 2004), and Brazil's 1990 deposit freeze was also a response to fight hyperinflation.

Types of Deposit Interference Measures

The 27 surveyed cases of government interference with private deposits comprised the following policy measures (Exhibit 9):

- 33% represented cases of prolonged deposit freezes (Argentina 2001 is classified as a deposit freeze here);
- 22% represented deposit expropriation or outright default;
- 15% represented forced deposit conversion into bonds (short deposit freezes followed by deposit conversion were classified as deposit conversions);
- Another 11% represented forced deposit conversion into local currency;
- And the last 19% represented other types of deposit controls, including maturity extension.

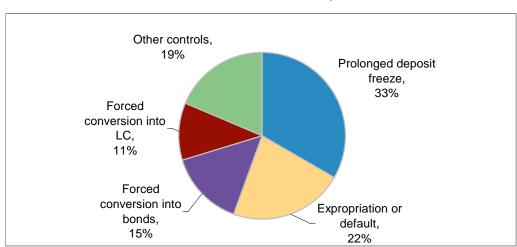


Exhibit 9: Government Interference with Deposits Has Been of Several Types

It is interesting to note the changing nature of the deposit measures over time: the cases of outright expropriations were concentrated in the 1960s-1970s; all but one (Argentina 2001) case of forced foreign currency deposit conversions into local currency occurred within the first half of the 1980s; then the first half of the 1990s saw a concentration of deposit conversions into bonds. Finally, post-1997, 6 out of the 8 deposit interference events have been cases of prolonged deposit freezes (the other two cases comprised Korea's rescheduling of interbank deposits in 1998 and Uruguay's extension of maturity on time deposits in 2002, which was de facto a deposit freeze).

The 1960s-1970s deposit expropriations were related to the military events of the time. The contrast of the pre-1997 deposit conversions into local currency or into bonds versus the post-1997 prolonged deposit freezes is in part related to the fact that foreign currency only deposit events dominated pre-1997 (Exhibit 7 above) and they were motivated by attempts to stop foreign currency outflows in the context of depleted foreign exchange reserves. In contrast, joint foreign and local currency deposit events have dominated in the post-1997 period and were generally imposed in order to stop bank runs within the context of a systemic banking crisis.

The most frequent deposit interference measure overall has been the imposition of prolonged deposit freezes, with several freezes lasting one year or longer. Several of the most disruptive deposit controls events have occurred in Latin America. The motivation behind the imposition of deposit restrictions is reviewed in more detail in the next section.

Selected Country Experiences with Deposit Freezes

Ten of the most infamous and ultimately most disruptive cases of government interference with private deposits, unrelated to military events, are described in Appendix I. We review in detail the crisis context and the deposits freeze event itself, and take a look at indications of the loss imposed on depositors. A summary of the experience of these ten countries is presented in Exhibit 10.

Exhibit 10: Depositors Have Suffered Severe Losses in the Past

	•			
Year and country	Type of deposit event	Length of deposit freeze	Motivation	Loss to depositors
1982 Mexico	FC deposit freeze and forced conversion into LC	very short freeze	debt crisis: to stop foreign exchange outflow	severe: haircut on dollar deposits between 30% and 70%
1985 Peru	FC deposit freeze and forced conversion into LC	3-month full and 6- month partial freeze	high inflation, debt crisis: to control inflation and to stop foreign exchange outflow	severe
1989 Argentina	LC deposit freeze and conversion into bonds	very short freeze	hyperinflation, banking crisis, debt crisis: to control inflation and to solve the domestic debt problem	severe: 70% haircut for term deposits
1990 Brazil	LC deposit freeze	18-month freeze	hyperinflation, debt crisis: to control inflation	high: implicit haircut up to 65%
1994 Venezuela	FC and LC deposit freeze. Large deposits converted into bonds.	2.5-month freeze	banking crisis: to stop bank runs	high
1998 Korea	FC interbank deposits forced roll-over	n.a.	contagion liquidity crisis: foreign exchange outflow	low
1998 Russia	FC and LC partial deposit freeze	3-month unofficial freeze	debt crisis, banking crisis: to stop bank runs	low
1998-1999 Pakistan	FC deposit freeze	8-month full and 32- month partial	debt crisis: to stop foreign exchange outflow	moderate
1999 Ecuador	FC and LC deposit freeze	12-month freeze	banking crisis: to stop bank runs	severe: 80% haircut on sucre deposits, 12% on dollar deposits
2001 Argentina	FC and LC deposit freeze and FC deposits forced conversion to LC	12-month full, 24- month partial	banking crisis, debt crisis: to stop bank runs, to stop foreign exchange outflow	severe: implicit haircut up to 70%

Deposit freezes on foreign currency deposits have generally been motivated by an attempt to stop foreign currency outflows, in a context of depleted foreign exchange reserves. The foreign currency deposit freezes of Mexico 1982, Peru 1985, and Pakistan 1998 (as well as the foreign currency deposit conversion in Argentina 2001) were all imposed in the context of a debt crisis. The exit strategy from the deposit freeze in Mexico and Peru was to convert foreign currency deposits into local currency, while Pakistan resorted to a prolonged deposit freeze, with a partial freeze lasting more than 2.5 years. The losses imposed on depositors as a consequence of foreign currency deposit conversions into local currency have typically been severe.

Korea's interbank deposit roll-over in 1998 was also in the context of depleting foreign exchange reserves. The large short-term bank debts proved unsustainable in the context of falling investor confidence. The central bank provided large amounts of foreign exchange for Korean banks to honor their obligations abroad, but as official reserves were quickly depleted, Korea negotiated a voluntary short-term debt rescheduling with private banks. The debt rescheduling, along with re-phasing of the IMF arrangement to allow for an advancement of drawings, succeeded in restoring confidence.

Local currency deposit freezes have been motivated by attempts to control inflation – the most prominent examples include Argentina 1989 and Brazil 1990 (Peru's 1985 foreign currency deposit freeze had also been partially motivated as a measure to control inflation as Peru had been heavily dollarized prior to the crisis). Both Argentina's and Brazil's deposit freezes had been imposed within the context of hyperinflations and debt crises, with the complication of a concurrent banking crisis in Argentina as well. While Argentina's BONEX plan converted local currency deposits into bonds after only a short freeze, Brazil's Collor plan involved a radical freezing and gradual unfreezing of deposits over more than one and a half years. The BONEX plan's partial expropriation of deposits, along with Argentina's default on domestic debt, had the double effect of reducing the money supply and resolving the public sector's solvency problem. This prepared the ground for the introduction of the currency board in 1991, which eventually succeeded in controlling inflation. On the other hand, the failure of the Collor plan to control inflation in Brazil is attributed to the exit strategy from the deposit freeze – the authorities granted multiple and frequently changing exceptions to the deposit freeze which were fully exploited by the private sector and, as the government failed to control the fiscal situation, it ultimately failed to control the re-monetization of the economy. Both Argentina's and Brazil's plans led to very high losses to depositors – haircuts were up to 65-70%, and were widely unpopular.

Joint deposit freezes on both foreign and local currency deposits have generally been imposed in the context of a systemic banking crisis. The joint foreign and local currency deposit freezes in Venezuela 1994, Russia 1998, Ecuador 1999, and Argentina 2001¹⁶ were all a response to bank runs. The cases of Venezuela 1994 and Ecuador 1999 were examples of a pure banking crisis – in Ecuador the banking crisis preceded and precipitated the government default, as the costly bank restructuring increased the government's debt burden. Russia 1998 and Argentina 2001 suffered both banking and debt crises.

The duration of the deposit freeze events was relatively short in Venezuela and Russia, 2-3 months; while it lasted 1-2 years in Ecuador and Argentina. The losses imposed on depositors were relatively lower for the shorter duration events, but more severe for the longer deposit freezes. Depositor losses were relatively low in Russia as the government extended a blanket guarantee on all household deposits and quickly moved deposits from weaker small banks into the largest public bank. Depositor losses were more substantial in Venezuela as initial deposit transfers from intervened to healthy institutions were slow, and as large deposits were ultimately converted into bonds at below market rates. Finally, some of the most severe deposit losses were imposed by the long-duration measures in Ecuador and Argentina – estimates of the haircuts imposed on depositors in Ecuador range from a 12% haircut on dollar deposits to an 80% haircut on local currency deposits.

We should note that Argentina had also gone through a banking crisis in 1995, which was successfully resolved without the imposition of administrative measures.

Deposit Freezes in the Context of a Banking Crisis

As the majority of recent deposit freezes have happened in the context of banking crises, we should note that deposit freezes and other administrative measures are typically a last-resort measure in the sequence of crisis containment policies.

While during a systemic crisis the most immediate component of managing the crisis is the stabilization of bank liabilities and stopping depositor and creditor runs, the typical sequence of crisis containment policies follows these steps:¹⁷

- 1. The central bank, as the lender of last resort (LOLR), provides emergency liquidity assistance to protect the payments system. In the face of sharp increases in liquidity, the central bank would use its monetary instruments to sterilize any resulting increase in the money supply.
- 2. The authorities provide a blanket guarantee on deposits. If credible, a blanket guarantee can restore investor confidence and stabilize banks' liabilities.
- 3. Clearly insolvent banks are closed early.
- 4. If market-oriented stabilization measures do not contain the crisis, the authorities may have to resort to administrative measures to avoid losing monetary control. Administrative measures impose restrictions on the depositors' ability to withdraw their funds and include securitization of deposits, forced extension of maturities, or a deposit freeze. Administrative measures can cause major economic disruption and as such are viewed as a last-resort measure to stop a run on banks if all other measures fail.

Exhibit 11 shows the crisis containment policies employed in selected recent banking crises. Several crises have required large amounts of liquidity support to be extended: up to 22% of GDP in Thailand, 16% of GDP in Indonesia and 13% of GDP in Malaysia and Ecuador. When a credible blanket guarantee was in place, the authorities did not have to resort to administrative measures. On the contrary, when a credible blanket guarantee could not be extended, the policy-makers resorted to deposit freezes in order to control bank runs.

A central bank's ability to provide emergency liquidity support depends on the funds it has available, in the form of: required reserves, foreign exchange reserves, stabilization funds, contingent credit lines, credit lines with international organizations, or public resources; and on both its ability to use open market operations/new issues of domestic currency and its capacity to sterilize open market operations in the foreign exchange market. Official or informal dollarization, the existence of a currency board, the existence of a fixed exchange rate regime, or the risk of inflation could limit the scope for open market operations.

The credibility of the blanket deposit guarantee depends on the strength of the government's fiscal position, the size of the government balance sheet relative to the banking system balance sheet, and on its ability to access international capital markets.

As the Asian countries had entered the 1997 crisis with relatively solid fiscal positions and little public debt, the issued blanket guarantees were perceived as credible and played a central role in banking crisis resolutions. On the other hand, the situation had been outright unsustainable in Ecuador 1999 and Argentina 2001, where a blanket guarantee was not credible and the authorities had to rely on administrative measures. Ecuador is a particularly prominent example as the initial blanket guarantee announced in December 1998 was not perceived as credible. As political pressures led to the easing of the deposit freeze in the second half of 1999, deposit runs reemerged. A second currency and banking crisis emerged at end-1999, prompted by the government debt default in September 1999. The implied burden-sharing is different between the two policies. In the case of a blanket guarantee, the government – and thereby taxpayers – assume the losses of depositors and other creditors. Under administrative measures, depositors and other creditors typically have to take a share of the losses.

¹⁷ See Hoelscher, D. and Quintyn, M., "Managing Systemic Banking Crises", Occasional Paper 224, IMF 2003.

Additionally, experience from recent systemic crises has shown that strong leadership and political support are important for successful crisis management. Public disagreements or expressions of doubt among prominent government participants can undermine confidence in the crisis containment and restructuring process. The speed of the intervention has been essential, as has having a coherent and comprehensive package of measures, including both crisis containment measure and credible macroeconomic adjustments. As Exhibit 11 illustrates, the fiscal costs of a systemic banking crisis can be heavy – costs are recorded as reaching over 50% of GDP in Indonesia, over 30% of GDP in Thailand and Turkey, and over 20% of GDP in Korea and Ecuador.

Exhibit 11: Deposit Freezes Are Typically a Last Resort Measure in the Containment of Banking Crises

banking C	711303			
Crisis Year and Country	Emergency Liquidity Support (At Peak)	Blanket Guarantee	Deposit Freezes or Haircuts	Net Cost to the Public Sector (% of GDP)
1994 Venezuela	The central bank provided liquidity both directly and through the Deposit Guarantee Fund. Banco Latino alone owed the central bank Bs23 billion (US\$220 million) at the time of the intervention (it was the first and largest bank to fail).	No blanket guarantee extended. The ceiling under the existing partial guarantee raised from Bs1 to Bs10 million. Liabilities in off-balance sheet companies related to commercial banks (e.g. offshore subsidiaries) were eventually included in the guarantee in July 1995.	FC and LC deposit freeze and large deposits conversion to bonds	12.4
1994 Mexico	2+1.3% of GDP (MEX\$38 billion + US\$3.9 billion) in April 1995. Loans and capital injection from Banking Fund for the Protection of Savings (FOBAPROA) borrowed from the Bank of Mexico. All outstanding foreign currency loans repaid by early September 1995. Capital support and resolution of intervened institutions continued for several years.	Yes, extended in April 1995- phased out by 2004 by FOBAPROA, Bank Savings Institute (IPAB) and Temporary Capitalization Program.	No	19.3
1997 Thailand	Large amounts. 22% of GDP (B1,037 billion) in early 1999. Support was provided through loans, most of which were later converted into capital support, from the Financial Institutions Development Fund (FIDF), a sub-entity of the Bank of Thailand. Most liquidity support provided in mid-1997 through mid-1998. FIDF claim on financial institutions declined to B227 billion by end-1999. Liquidity support sterilized, largely effectively. Sterilization enabled the central bank to recycle liquidity from banks gaining deposits to those losing deposits and credit lines.	Yes, extended in August 1997 by Financial Institutions Development Fund (an entity within the central bank). Fiscal resources US\$34 billion. Deposits, and contingent and foreign liabilities were all covered.	No	34.8
1997 Malaysia	13% of GDP (RM35 billion) at end-January 1998 from Bank Negara (central bank) deposits to banks. Most liqudity support in early through mid-1998. Most loans repaid by end-1998. Non-performing loan-purchase program closed in 2000. In Malaysia, sterilization was partial, because of concerns about the effect of high interest rates on economic activity.	Yes, in January 1998 guarantee covering only deposits announced by Danamodal. Fiscal resources US\$7.1 billion.	No	4.0
1997 Philippines	0.8% of GDP (18.6 billion pesos) in May 1998 from emergency loans and overdrafts. Provided in late 1997 to mid-1998. 5.6 billion pesos repaid by April 1999.	No. The authorities did not see a need for a blanket guarantee. The country had a well-established limited deposit insurance scheme that had been tested in the pre-crisis period.	No	

Crisis Year and Country	Emergency Liquidity Support (At Peak)	Blanket Guarantee	Deposit Freezes or Haircuts	Net Cost to the Public Sector (% of GDP)
1997 Indonesia	Large amounts. 16% of GDP (Rp156 trillion) in August 1998 from Bank of Indonesia overdrafts. Stock of liquidity support increased from 60 to 170 trillion rupiah between November 1997 and June 1999. 10 trillion rupiah repaid by April 1999. Liquidity support sterilization was largely ineffective. For several months, protracted political and macroeconomic uncertainties resulted in continued deposit withdrawals and capital outflows from the system as a whole, making it impossible for the central bank to recycle liquidity. The resultant highly expansionary monetary policy led to a continued flight from the currency and to the collapse of the rupiah. Since July 1998, when overall conditions stabilized, monetary policy exercised through market-based auctions became more effective.	Yes, extended on 27 January 1998 by Bank of Indonesia. Fiscal resources US\$40 billion.	No	52.3 (end-2001)
1997 Korea	Yes, also in FC. Peak stock of support was US\$23.3 billion (5% of GDP) + won 11.3 trillion (2.5% of GDP) from Bank of Korea deposits and loans. Most of the liquidity support provided in November and December 1997. All loans repaid by April 1999. External liquidity enabled the domestic monetary authorities to operate a dollar discount window for banks. Liquidity support sterilized, largely effectively.	Yes. In August 1997 external liabilities of banks were guaranteed, and a deposit guarantee was extended in November 1997-December 2000 by Korea Deposit Insurance Corporation. Fiscal resources US\$22 billion.	FC interbank deposits voluntary rescheduling	23.1
1998 Russia	The central bank injected liquidity by lowering reserve requirements and extending special stabilization credits to some of the larger banks. 4% of GDP (Rub 105-120 billion) in August-October 1998. Central Bank of Russia loans to 13 banks for a term of up to 1 year. Only Rub9.3 billion repaid by end-1998.	Blanket guarantee not extended officially. However, within three months after the debt rescheduling, authorities transferred household deposits from a large number of private banks (which had frozen deposits) to Sverbank (a state-owned savings bank), where deposits were guaranteed by the government.	FC and LC unofficial deposit freeze	Costs were not fiscalized.
1998 Ecuador	13% of GDP in 1998-1999 from Central Bank of Ecuador loans (using banks' loan portfolio as collateral) and rediscounts of recapitalization bonds issued by the Deposit Guarantee Agency (AGD). Most loans not repaid; the central bank foreclosed on some fixed assets used as collateral.	Yes, blanket guarantee approved in December 1999, and lifted in 2001. Due to the weak fiscal position, the guarantee announced in December 1998 did not succeed in stemming deposit outflows.	FC and LC deposit freeze	21.7
2000 Turkey	3.3% of GDP (TL6 quadrillion) in September 2001. One-week repos by Savings Deposit Insurance Fund (SDIF) and state banks with the Central Bank of Turkey. One-week repos rolled over into longer-term instruments.	Unofficial guarantee in place since 1997. Officially confirmed in December 2000. All liabilities and deposit taking banks were guaranteed by the Savings Deposit insurance Fund.	No	30.5
2001 Argentina	Significant liquidity support began July 2001. Stock outstanding was 5% of GDP (Arg\$5.2 billion) at end-April 2002. The funding constraint was particularly severe because the default on external obligations implied a total exclusion of Argentina from international capital markets; the government was unable to collect sufficient revenues to allocate to the resolution of the banking crisis.	Not provided. A limited guarantee of up to Arg.30,000 per depositor existed.	FC and LC deposit freeze and FC deposits conversion into local currency	

Sources: Hoelscher, D. and Quintyn, M., "Managing Systemic Banking Crises", Occasional Paper 224, IMF 2003.

III. Bond Defaults and Moratoria on External Private Sector Debt Payments

In this paper, we survey examples of two of the most disruptive administrative measures that a country could impose during a debt crisis in order to control capital outflows: freezing resident and non-resident bank accounts and preventing firms from meeting their contracted debt service payments abroad. In the previous section we reviewed the experience with deposit freezes since 1960; we now turn to country experiences with private debt service moratoria.

Frequency of Capital Controls

We survey whether sovereign bond defaults and restructurings have been accompanied by capital and exchange controls that would have significantly affected the ability of the private sector to service its external debts. Appendix IV presents the chronology of the debt crises and the corresponding imposition of capital and exchange controls.

We find that since 1960 about 26% of bond defaults have been accompanied by controls on private sector debt service payments – 10 out of 38 bond default events. In addition, we find that all but one of the debt servicing control measures have been imposed concurrently with deposit freezes (see Exhibit 12). Therefore, 24% of bond defaults have been accompanied both by restrictions on deposit withdrawals and by controls on private debt service payments. On the other hand, about 63% of deposit freezes have been accompanied by debt servicing controls (17 out of 27 deposit freeze cases).

Since the primary economic motivation for the imposition of private sector payments moratoria is to preserve foreign currency in the context of severe capital outflows and depleting foreign exchange reserves, we would expect that controls on private sector payments would be imposed during *foreign currency* debt crises. Indeed, we observe that all but two cases of private sector payments controls have occurred concurrently with a default on *foreign currency* bonds and/or loans (the two exceptions are the military conflict in Kuwait 1990 and the banking crisis in Venezuela 1994).

Private sector payments moratoria have been imposed far less frequently recently. Exhibit 13 shows the frequency of moratoria events pre- and post-1997. There have been very few moratorium events since 1997, even though almost half of the default events have happened during this period: 45% of sovereign bond defaults have occurred post-1997, while only 11% of moratorium events have occurred post-1997. Similarly, crises during which bond defaults have been accompanied by deposit freezes and moratoria have been far less frequent recently – the joint occurrence of bond defaults, deposit freezes, and moratoria was 78% pre-1997 versus 22% post-1997.

Unlike deposit freezes, whose frequency has decreased only since 2000, moratoria have occurred less frequently both in the 1990s and in the current decade compared to the 1980s: there were 2 moratorium events in the 1960s-1970s, 10 in the 1980s, 5 in the 1990s, and only one event so far since 2000 (Argentina 2001). Two trends might account for the observed lower frequency of moratoria on private sector international debt payments – financial development and globalization on the one hand, and improved quality of economic policies on the other hand. Together, these two trends have made moratoria less desirable as a policy instrument, more difficult to enforce, and perhaps less necessary.

The internationalization of business activity and the integration of financial markets have fueled the internationalization of corporate finance in emerging market countries in the 1990s and the current decade. For example, global corporate bond issuance from emerging economies has risen from \$2.3 billion in 1990 to \$87.7 billion in 2006, and has greatly exceeded sovereign bond issuance over the last couple of years. Euro-denominated international bond issuance by emerging-market firms, which took off in 1998, grew from \$720 million in 1998 to \$15.3 billion in 2006. Moreover, foreign company listings on the New York exchanges, which remained around 350 companies during the 1980s, increased rapidly during the 1990s reaching a level of

about 780 companies at end-2006. The market for corporate Credit Default Swaps (CDS) today covers an estimated 3,000 firms worldwide and has expanded exponentially in recent years with the notional value of traded CDSs increasing from \$2.2 trillion in 2002 to \$26 trillion in 2006. ¹⁸

Exhibit 12: Deposit Freezes Have Often Been Accompanied by Moratoria on External Private Debt Servicing

	Sovereign Defaul	No Sovereign Default		
	Deposit Freeze	No Deposit Freeze	Deposit Freeze	No Deposit Freeze
Payments Moratorium	1960 Cuba 1965 Rhodesia 1981 Costa Rica 1981 Ecuador 1982 Mexico 1982 Argentina 1983 Philippines 1985 Peru 1985 South Africa 1987 Panama 1989 Liberia 1990 Kuwait 1990 Brazil 1994 Venezuela (2) 1998 Russia 2001 Argentina	1996 Solomon Islands		N/A
No Payments Moratorium	1975 South Vietnam (1) 1989 Argentina 1991 Former Soviet Union 1992 Former Yugoslavia 1997 Mongolia 1999 Pakistan 1999 Ecuador 2003 Uruguay	1979 Ghana 1983 Uruguay 1986 Brazil 1986 Nigeria 1989 Bolivia 1989 Guatemala 1998 Venezuela 1998 Ukraine 1999 Turkey 2000 Ivory Coast 2002 Moldova 2003 Dominica 2004 Paraguay 2004 Cameroon 2004 Grenada 2005 Dominican Republic 2006 Belize	1998 Korea 2004 Ukraine	N/A

⁽¹⁾ Repudiation of domestic non-bonded debt in 1975.

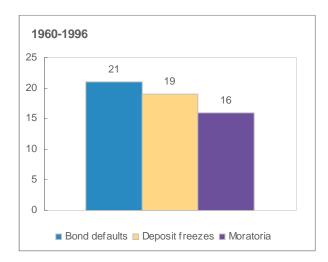
Globalization and the liberalization of trade and foreign investment flows, along with the falling cost of transportation and communication, have also spurred the growth of developing countries' multinational corporations. Developing countries now boast 15,000 multinational corporations, including a number of major global players. Cross-border M&A purchases by developing-country multinationals have increased from \$400 million in 1987 (less than 1% of global M&A transactions) to almost \$100 billion in 2006 (almost 9% of global M&A transactions). Multinational companies based in developing countries had made more than 700 cross-border M&A purchases in 2006, up from just 11 such deals in 1987.

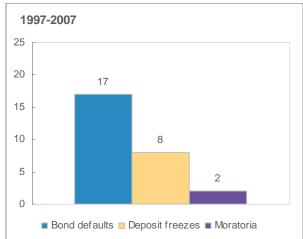
⁽²⁾ Domestic arrears to suppliers in 1995. Capital and exchange controls imposed in 1994.

Unless noted otherwise, data in this and next paragraph is from World Bank, "Global Development Finance ", 2007, Ch.3: "The Globalization of Corporate Finance in Developing Countries".

Exhibit 13: Defaulting Governments Have Resorted Less to Deposit Freezes and Moratoria in Recent Years

	Bond Defaults	Deposit Freezes	Moratoria	Bond Default + Deposit Freeze	Bond Default + Deposit Freeze + Moratorium	Bond/Loan Default + Deposit Freeze	Bond/Loan Default + Deposit Freeze + Moratorium
Whole period	38	27	18	15	9	25	17
Pre-1997	21	19	16	9	7	19	15
Post-1997	17	8	2	6	2	6	2
Pre-1997 (%)	55.3%	70.4%	88.9%	60.0%	77.8%	76.0%	88.2%
Post-1997(%)	44.7%	29.6%	11.1%	40.0%	22.2%	24.0%	11.8%





Government policies have also evolved since the 1980s. Many governments have adopted more flexible exchange rate regimes. The distribution of exchange rate regimes according to IMF classification has shifted from 68% fixed exchange rate regimes, 27% intermediate regimes, and 4% floating regimes in 1980, to 56% fixed regimes, 29% intermediate regimes, and 14% floating regimes in 1990, to 49% fixed exchange rate regimes, 26% intermediate regimes, and 26% floating regimes in 2000. ¹⁹ Monetary policy has generally been more stable since the 1980s, with increasing central bank independence and with many countries moving towards inflation-targeting regimes. Also, since the financial crises of the 1990s, banking systems in many countries have been strengthened, financial supervision has improved, and holdings of foreign exchange reserves have increased significantly.

Finally, the liberalization of capital controls and financial transactions has not only contributed to the internationalization of the banking and corporate sectors, but has also meant a lower administrative capacity for enforcing a possible payments moratorium. In addition, financial innovation, such as the introduction of derivative products, has meant a greater scope for avoiding a possible moratorium.

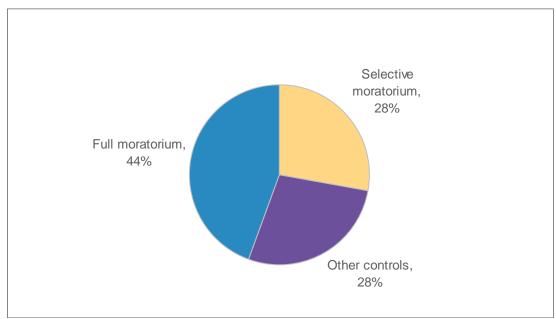
Levy-Yeyati, E. and Sturzenegger, F., "Classifying Exchange Rate Regimes: Deeds vs. Words", European Economic Review 49(6), August 2005, p. 1603-1635.

Types and Length of Moratoria

Of the 18 moratorium events we surveyed in Appendix IV, 44% of events have included a full moratorium on external private sector payments where either all external private sector payments have been explicitly banned or purchases of foreign currency have been frozen. Peru 1985, Venezuela 1994, and Russia 1998 would be examples of comprehensive moratoria. Additionally, as illustrated in Exhibit 14, another 28% of events have included a selective moratorium where foreign payments have been severely restricted either by limiting external payments to favored sectors or companies, or by requiring a case-by-case authorization by the Central Bank and/or the Ministry of Finance. Costa Rica 1981, the Philippines 1983, Brazil 1990, Venezuela 1994 after the relaxation of the freeze on foreign exchange purchases, as well as Argentina 2001 are examples of selective moratoria. Finally, the other 28% of events have included the imposition of exchange controls or regulations that would have severely affected external private sector payments and that would have encouraged, implicitly or explicitly, the rescheduling of private foreign debt payments. Mexico 1982 and Argentina 1982 would be examples of the latter.

The length of payments moratoria has varied significantly – the Russian full moratorium of 1998 was enforced for 90 days, while the Philippines' 1983 and the Argentinean 2001 selective moratoria each lasted for about one year. On the other hand, Peru in 1985 and Venezuela in 1994 imposed shorter full moratoria, two weeks in the case of Venezuela, which were subsequently followed by selective moratoria lasting much longer, almost two years in Peru. Both comprehensive moratoria and selective moratoria can be extremely costly and disruptive for the private sector: both the 90-day comprehensive Russian 1998 moratorium and the one-year selective Argentinean 2001 moratorium have been perceived as extremely damaging and have contributed to corporate defaults on foreign obligations.

Exhibit 14: Government Interference with Private External Debt Servicing Has Taken Several Forms



Recent Country Experiences with Capital Controls

As we noted above, while debt crises in the 1980s were generally accompanied by relatively more comprehensive capital and exchange controls, capital controls in the 1990s and the current decade have been imposed in such a way that private sector debt payments were not affected. There have been only two cases over the past ten years where capital controls have affected private sector debt payments – the two largest sovereign defaults in history up to now – Russia 1998 and Argentina 2001.²⁰

Russia intensified its existing exchange and capital controls at the same time as it announced its debt default in August 1998, in order to prevent large outflows of capital. A 90-day moratorium on private sector payments of external liabilities was announced: all legal entities, banks and corporates, were explicitly forbidden to service their external debt. The controls covered not only capital (principal) but also current transactions (interest). Thus, the moratorium contributed to the defaults on foreign obligations of many Russian banks and corporates. At the same time, conversion operations for non-resident accounts used for investing in ruble-denominated government securities were suspended. The balances on those accounts were frozen for non-residents not participating in government securities restructuring operations. Other controls were also tightened: export surrender requirements were increased from 50% to 75%, and a 100% deposit requirement on advance payments for imports was introduced. Ultimately, however, the controls failed to limit pressure on international reserves and the exchange rate continued to depreciate.

None of the other countries affected by the Russian crisis in 1998 – Ukraine, Ecuador, and Pakistan – imposed private sector debt payments moratoria. Ukraine's existing regime of exchange and capital controls was tightened in August 1998, shortly before the first external debt restructuring. Even though the capital controls imposed were similar to those in Russia, Ukraine's controls never covered the servicing of private external debt, and Ukrainian banks did not run into external arrears with foreign creditors. Restrictions included export surrender requirements, controls on import financing (including strict screening of importers' application for foreign exchange), limits on prepayments for import contracts, and restrictions on foreign exchange loans to importers and on interbank currency market transactions. The controls were removed gradually by August 1999.

Similar to Ukraine, Pakistan tightened existing controls in June and October 1999 during the debt restructuring negotiations. Certain exchange and capital account transactions were restricted: residents were not permitted to purchase bonds (or other debt securities), money market instruments, or real estate abroad and make loans to non-residents; direct investment abroad required prior approval; export surrender requirements and the control of import financing were tightened. However, Pakistan's step-up in exchange restrictions did not include external debt servicing. Finally, no additional capital controls were imposed in Ecuador as the deposit freeze had restricted most banking funds from moving abroad, even in the absence of other explicit capital controls.

Special steps were also taken to avoid private sector payments moratoria during the Asian crisis of 1997-1998. Korea's capital account remained open. Korea, Indonesia, and Thailand liberalized foreign ownership rules during the crisis to attract additional foreign capital to the financial and corporate sectors. Even though Indonesia, the Philippines, Thailand, and Malaysia imposed temporary capital and exchange control measures to fight currency speculation, private sector debt payments were exempt. The controls mainly targeted the activities of non-residents by restricting their access to domestic currency that could be used to take speculative positions. The controls explicitly exempted current international transactions, foreign direct investment flows, and certain portfolio investments. For example, Indonesia imposed limits on forward sales of foreign exchange by domestic banks to non-residents in August 1997, but trade and investment-related transactions were excluded. In the summer of 1997, Thailand took a series of measures to limit baht lending to

See Hoelscher, D. and Quintyn, M., "Managing Systemic Banking Crises", Occasional Paper 224, IMF 2003; Ariyoshi, A, Habermeier, K.F., Laurens, B, Otker-Robe, I., Canales-Kriljenko, J.I., Kirilenko, A., "Capital Controls: Country Experiences with Their Use and Liberalization", IMF Occasional Paper 190, 2000; and Lindgren, C.J., Balino, T., Enoch, C., Gulde, A.M., Quintyn. M., and Teo, L., "Financial Sector Crisis and Restructuring: Lessons from Asia", IMF Occasional Paper 188, 1999.

nonresidents through transactions that could facilitate a build-up of baht positions in the offshore market. However, current international transactions, FDI flows, and various portfolio investments were exempt.

Malaysia introduced a number of exchange control measures in September 1998, aimed at eliminating the offshore ringgit market and restricting the supply of ringgit to speculators. The measures eliminated practically all legal channels for transfer of ringgit abroad; required the repatriation of ringgit held offshore to Malaysia; blocked the repatriation of portfolio capital held by non-residents in Malaysia for a 12-month period; and imposed tight limits on transfers of capital abroad by residents. However, the controls did not affect FDI or current account transactions. Repatriation of profits and dividends from documented FDI activities were freely allowed and foreign currency transactions for current-account purposes were not restricted.

The most recent moratorium on private sector debt payments was imposed by Argentina in 2001. In response to the large-scale bank runs, controls on capital outflows were introduced in December 2001, along with the deposit freeze, and were subsequently frequently revised. A dual exchange rate regime was introduced, as well as prior authorization requirements for transfers abroad and import payment restrictions. Deposits restricted by the corralito could be used to purchase foreign exchange for payments of imports of goods and services, profits and dividends, financial obligations (interest and principal) and other current account operations, particularly for trade-related operations. However, prior authorization from the central bank was needed for most international transfers: debt service, profit remittances and dividends, purchase of foreign securities and other portfolio investment abroad, and foreign exchange sales to non-residents above certain limits. Other exchange controls included surrender requirements on export proceeds and new foreign financing, the control of import financing including minimum maturity financing, restrictions on prepayments, and strict limitations on interbank currency trading. Argentina's exchange and capital controls, along with the pesoization of contracts and the significant devaluation, contributed to corporate defaults during the crisis. The controls began to be removed in late 2002.

Appendix I: Selected Deposit Freeze Events

1982 Mexico

Crisis context

In the late 1970s, the Mexican government had funded expenditures by borrowing from foreign banks. The drop in the price of oil and the increase in US interest rates precipitated a debt crisis in 1982. In an attempt to restrict foreign exchange outflows, the government imposed capital controls, instituted a multiple exchange rate system, nationalized the banks, and on 13 August 1982 imposed a forced conversion of FC deposits into LC, effectively expropriating the dollar accounts held by Mexicans and foreigners in the country's banks. De-dollarization was imposed on all outstanding dollar-denominated transactions - both deposits and credits. Both actions only increased capital flight, further reducing the stock of dollars that could be used to meet debt payments. On 20 August 1982, the government suspended payments on its international debts. The moratorium on foreign debt made it clear that a major devaluation was inevitable, and thus individuals and business enterprises converted their liquid assets into dollars and moved them to US banks. The financial disintermediation that followed contributed to a series of consecutive crises that culminated in a major disruption in 1995.

Deposit freeze details

FC. 13 August 1982: All foreign currency accounts in Mexican banks were frozen and their conversion limited to Mexican pesos at Mex\$69.50 per US dollar, the so-called MexDollar rate, which was also made applicable to liquidation of maturing "Petrobonds", thus creating a three-tier exchange rate system. 19 August 1982: The foreign exchange market was re-opened, and banks were authorized to buy and sell foreign currencies at a free market rate.

Loss to depositors

At the time, US\$12 million was held domestically in dollar-denominated accounts, accounting for about 30% of the banking system's private sector deposits. Depositors suffered severe losses as foreign currency deposits were converted into pesos at an exchange rate about one-third below the market rate. The confiscation element of the forced conversion amounted to between 30% and 70% of the value of the MexDollar accounts.

1985 Peru

Crisis context

Economic problems left over from the previous military government, worsened by El Niño weather phenomena in 1982-1983, had led to inflation, economic hardship, and terrorism. Alan García became President on 28 July 1985 with three primary goals: to control inflation and reorganize the economy; to place his party firmly in command of the bureaucracy; and to make an impact on the world political stage in the Non-Aligned Movement (NAM) and with the Group of 77. García took office in a difficult economic situation, with 250% annual inflation. To check inflation, he froze most wages and prices, devalued the currency 25%, raised tariffs, banned imports of some 500 items, and imposed controls on foreign exchange and foreign currency-denominated bank deposits. In his inaugural address, García declared that Peru would only pay a portion of its foreign debt, not to exceed 10% of the value of exports in any given year. Owing to the chronic inflation, the Peruvian currency, the sol, was replaced by the Inti in mid-1985. García also prohibited the repatriation of profits, dividends, and licensing and royalty fees by all companies. Coupled with his tight import controls and the debt situation, he had effectively ended further foreign investment in Peru. García also made an attempt to nationalize the banking and insurance industries. García's presidency left the country isolated from the international financial community, with negative reserves of US\$900 million, and with hyperinflation reaching 7,649% in 1990.

Deposit freeze details

FC. 30 July 1985: Peru's banks were closed to avoid withdrawal of dollar deposits. The exchange controls froze foreign currency-denominated deposits in the Peruvian banking system, amounting to about 60% of all deposits at the time. The authorities announced that they would prohibit transactions in dollars, which many Peruvians were using instead of the national currency, the sol, because of the sol's rapid devaluation. 2 August 1985: The Inti was cut 10.7% to Inti 13.94 per US dollar. At the same time, convertibility into foreign currency of certificates of deposit (CD) was suspended for 90 days and then extended to April 30, 1986. CDs could be converted into Inti at the newly established fixed Official Market Rate of 13.94 per US dollar plus a premium of 3%; used to make payments abroad through the Official Market; or at their maturity, used to buy new certificates of deposits. The US dollar denomination CD market was replaced by a Free (Financial) Market, initially at Inti 17.35 per US dollar, which governed purchases of exchange for travel, insurance, technical services and personal remittances abroad. All other transactions were to be handled at the Official Market Rate.

Loss to depositors

Depositors suffered severe losses.

1989 Argentina

Crisis context

The public sector debt distress, coupled with loss of access to international credit markets, in addition to the government's decision to free the foreign exchange market and remove all price controls, provoked a sudden price increase and a banking crisis with large-scale bank deposit withdrawals. Both Argentina's 1989 and Brazil's 1990 crises were rooted in fiscal problems and had a similar build-up. Primary fiscal imbalances, sizeable quasi-fiscal deficits in public banks, growing public debts, along with an environment of high inflation rates, high and volatile real interest rates, and a credit boom - with a high portion of credits directed to the public sector - had preceded the crises. Consequently, when the solvency of the public sector was questioned, banks' large exposure to the public sector triggered an erosion of confidence and a deposit run.

Argentina's 1989 hyperinflation had its roots in stabilization programs that drove the Central Bank into 'debt distress.' Previous efforts at reducing Argentina's money supply had left the Central Bank with a large portfolio of interest-bearing debt. During the late 1980s, rapidly rising interest rates dramatically increased the cost of servicing this debt, ultimately outstripping the Bank's ability to issue new debt to finance existing obligations. The debt swelled, and interest rates were pressured upward. Heavy pressure against the exchange rate, devaluation, and hyperinflation then ensued when the public-sector debt stock exceeded what financial markets could be persuaded to hold at reasonable interest rates.

In January 1990, the government announced that all time deposits would be converted into 10-year, dollar-denominated treasury bonds. The Central Bank would then use these bonds to pay off its debts with commercial banks, and those banks would use the bonds to pay their depositors. This conversion scheme, dubbed the BONEX plan, had the double effect of dramatically reducing the supply of money in the economy on the one hand, and recapitalizing the Central Bank on the other. The BONEX plan's partial expropriation of deposits and default on domestic debt succeeded in eliminating the public sector's solvency problem. This, in turn, solved the banking sector crisis caused by the public sector's solvency problem, and ultimately prepared the ground for the introduction of the 1991 convertibility law which eventually succeeded in controlling inflation.

However, neither Argentina's nor Brazil's plan was able to protect the countries from paying a high economic price. Both countries fell into recession for at least a year. The reputation of the monetary authorities and the financial sector was damaged severely. In Argentina inflation accelerated at first and deposits did not return to historical levels until fours years after the deposit restructuring. In 1992, the Minister of Economy Domingo Cavallo renegotiated the public debt through the first of a series of sovereign debt bond swaps as part of the Brady debt restructuring.

Deposit freeze details

LC. The BONEX plan: a once-and-for-all conversion of deposits into bonds, which froze deposits only briefly. 1 January 1990: After attempts to place fixed-income instruments in the market had only resulted in a run on banks and the declaration of a bank holiday, the government announced compulsory rescheduling of all LC bank certificates of deposit (CDs) - excluding only savings accounts and sight deposits - and domestic public debt. Term deposits (the bulk of which had a tenor of up to seven days) and public debt instruments (mainly held by banks) were replaced by 10-year dollar-denominated bonds (BONEX) which would make semi-annual interest payments and had a 2-year grace period. At the same time, banks were not permitted to accept new CDs, and their lending activities were severely restricted. Approximately US\$500 of each deposit account was exempted from conversion and was to be made available in cash; firms were allowed to receive additional cash to meet payroll and other liabilities. In addition, the government issued a new BONEX 89 bond series, with monthly coupon payments to be used to pay the taxes owed by companies. 8 January 1989: A few days after the BONEX had been announced, the emergency bank holiday was lifted, and financial markets re-opened. In essence, the BONEX plan represented a government refinancing from bank liabilities it imposed losses on depositors but reduced the need to rely on inflation to manage government debt.

Loss to depositors

Since the BONEX traded in domestic financial markets at a heavy discount - about 30% of par, and since the discount was bound to deepen as the outstanding BONEX stock increased, the BONEX plan conversion corresponded to a loss of value of 70% of term deposits and constituted a substantial unilateral write-down of the public sector's obligations to the private sector, i.e. a substantial confiscation of private asset holdings.

1990 Brazil

Crisis context

The breakdown of the Brazilian government's budget-balance mechanism had begun in the mid-1980s. Unable to balance its budget through tax increases or expenditure decreases, the government began to rely on unannounced reductions in the indexed inflation compensation on its debt, which represented an implicit default on domestically held debt.

The first post-military-regime president elected by popular suffrage, Fernando Collor de Mello (1990-92), was sworn into office in March 1990. Facing imminent hyperinflation and a virtually bankrupt public sector, the new administration introduced a stabilization plan, dubbed the Collor plan, together with a set of reforms, aimed at removing restrictions on free enterprise, increasing competition, privatizing public enterprises, and boosting productivity. The Collor plan was introduced on March 16, a day after the new government took office, and its principal aim was to reduce an inflation level that was running at a monthly rate of 84% in March 1990 (close to 3,000% per year). The plan was drastic: replacement of the existing currency, the Cruzado Novo, by the Cruzeiro at a parity exchange rate; freezing of 80% of private assets for 18 months (receiving the prevailing rate of inflation plus 6% in interest while frozen); an extremely high tax on all financial transaction; indexation of taxes; elimination of most fiscal incentives; increase in the prices charged by public utilities; the adoption of a floating exchange rate; gradual economic opening to foreign competition; temporary freeze of wages and prices; extinction of several government agencies, with plans for a reduction of over 300,000 government employees; and stimulus of privatization and the beginning of a deregulation of the economy.

The plan succeeded in bringing down inflation (to 9% in June 1990); however, the freeze caused a strong reduction in trade and industrial output. The government faced two choices: either hold the freeze and risk a recession, or re-monetize the economy by "unfreezing" money flow and risk the return of inflation. The failure of the Collor plan to control inflation is attributed to the government's failure to control the re-monetization of the economy. As the government issued more and more exceptions granting liquidity (which were fully exploited by the private sector), it was ultimately unable to reduce spending, and the government's fiscal situation made it impossible for the plan to work. Although a Brady deal restructuring of foreign bank debt was reached in 1992, inflation accelerated again in 1993.

Deposit freeze details

LC. The Collor plan: a gradual program of deposit freezing and unfreezing over almost 2 years - allowing for frequently changing exceptions to the deposit freeze. 16 March 1990: A package of economic policies was announced that included the introduction of a new currency (cruzeiro) and the freezing of demand, savings and overnight deposits (together amounting to about 30% of GDP).

The 18-month freeze affected nearly two-thirds of the money supply (M4). Of the funds deposited before the new government took office, individuals and companies were only allowed to withdraw from their savings or demand deposits up to a limit of US\$1,000. There was no limit on money deposited after the government took office. No one was allowed to withdraw more than one-fifth of funds deposited on the money markets. For the following 18 months, any deposit would be kept in interest-bearing (and inflation-indexed) accounts - with remuneration of indexation plus 6% per year. Companies could pay wages from blocked accounts by bidding in Central Bank auctions for the right to convert their old currency deposits into the new currency. Beginning in September 1991, the frozen deposits were officially released in 12 monthly installments. Brazilian regulations did not allow FC deposits in domestic institutions.

Loss to depositors

The 18-month freeze affected nearly two-thirds of the money supply (M4) and about 30% of GDP. Although Brazilians eventually managed to circumvent some of the controls, the financial freeze took over personal assets and was widely unpopular. Frozen accounts were not tradable, but the ensuing economy-wide scramble for liquidity induced massive capital losses as agents liquidated other instruments at distressed prices. Immediately after the freeze, frozen cruzados traded at 65% of face value; however, the government quickly moved to eliminate this market.

1994 Venezuela

Crisis context

The 1994 banking crisis broke out against a background of macroeconomic imbalances and political uncertainty: growing fiscal imbalances and low growth coupled with poor bank management, rising share of non-performing loans, and inadequate bank supervision. At the beginning of the 1990s, the government fiscal position deteriorated significantly. Political uncertainty increased after two attempted military coups in 1992. Monetary policy had switched from a tight to a lax stance, and several runs on the Bolivar had led to a sharp depreciation. As real GDP fell in 1993-1994, the budget deficit deteriorated further, and political uncertainty persisted as Congress removed President Perez from office on charges of misuse of funds.

The crisis was triggered by the collapse of Banco Latino in mid-January 1994, the second largest bank in terms of deposits. Banco Latino had to meet bank runs though large-scale asset sales and borrowing from the central bank. The runs became unsustainable when they reached twice the amount of the bank's capital, and the bank was closed. The bank's liabilities were frozen, affecting over 10% of total commercial bank deposits, including a large share of trust and pension funds, and government and interbank deposits. Inappropriate lending practices were among the major reasons contributing to the bank's failure. The uncertainty created by the freezing of Banco Latino's deposits, along with uncertainly surrounding the new government's economic policies and widespread fears of exchange controls, devaluation and deposit freezes, shook the public's confidence in the financial system. Interbank markets came to a stand-still, while waves of subsequent bank runs ultimately led to waves of bank closures and nationalizations.

The large-scale assistance offered by the Deposit Guarantee Fund and then by the central bank did not succeed in restoring confidence. The central bank did not manage to fully sterilize the large liquidity injections and inflation crept up further (12-month inflation reached 70% by end-December). By early July 1994, the government decided to fix the exchange rate against the dollar and to impose strict exchange rate controls, in order to stem the capital flight and the loss in reserves. By August 1994, failed banks represented nearly 50% of total bank deposits and assets. By August 1995, 11 large banks had been intervened. Bank closures ceased through the second half of 1995, while deposits stopped falling at end-1995.

In 1995, exchange controls were relaxed and a parallel market for foreign exchange was legalized. This allowed imbalances to spill over into the balance of payments. Because of the mounting overvaluation of the currency and declining central bank reserves, on 11 December 1995, the Bolívar was devalued by 41%. However, imbalances persisted and another devaluation followed in April 1996. The recovery of the economy helped banks improve prudential ratios. The banking crisis, however, had a huge cost both in economic and in fiscal terms.

Deposit freeze details

FC and LC. January 1994: Banco Latino was closed for 77 days and depositors were not able to access their funds. Access to deposits under the guarantee or through deposit transfers to other institutions was more prompt in subsequent interventions. Deposits above Bs10 million were converted to long-term non-negotiable bonds at below market rates.

Loss to depositors

Deposit conversion to bond occurred at below market rates.

1998 Korea

Crisis context

In the Asian crisis of 1997, financial and corporate sector weaknesses had made financial institutions vulnerable to external shocks, including declines in asset values, market contagion, speculative attacks, exchange rate devaluations, and a reversal of capital flows. Capital inflows had helped fuel rapid credit expansion, which lowered credit quality and led to asset price inflation. The inflated asset prices encouraged further capital inflows and lending. Weak supervision combined with highly leveraged corporate sectors, weak corporate governance, formal or informal currency pegs discouraging exchange risk hedging, and large unhedged short-term debts. The floating of the Thai baht in July 1997 triggered the crisis. Changing expectations led to the depreciation of most other currencies in the region, bank runs, rapid withdrawal of foreign private capital, and economic downturns. The crisis was particularly severe in Indonesia, Korea, and Thailand, which also used IMF financial support; Malaysia and the Philippines were less affected.

Korea's macroeconomic performance before the crisis had been strong, with high growth, strong fiscal position, a low level of public debt and a small share of foreign debt. The current account deficit had been financed by private capital inflows. Korea's exchange rate had been broadly stable through October 1997. However, in 1997 external debt increased and the share of short-term debt rose to about two-thirds of total debt. This high share of short-term debt and the low level of usable foreign reserves made the economy vulnerable to shifts in market sentiment.

The devaluation of the Thai baht in July 1997, the subsequent contagion to other regional currencies, and the crash of the Hong Kong stock market in late October 1997 sent shockwaves to the Korean financial system. Market confidence dropped sharply; rating agencies downgraded Korea. International creditors began to reduce their exposure to Korean financial institutions and to withdraw their short-term credit lines. The blanket guarantee on deposits and external liabilities announced by the central bank in August and the subsequent central bank liquidity support did not succeed in restoring confidence, further hit by the growing awareness of problems in the financial sector and by industrial groups' bankruptcies.

Korea widened the exchange rate band on 17 November 1997; the won fell sharply, and the Bank of Korea provided large amounts of foreign exchange for Korean banks to honor their overseas commitments. However, official reserves were quickly depleted. On 4 December 1997, Korea entered into an agreement with international financial institutions, augmented with several countries' pledges to provide further support. Initially this failed to increase roll-over rates and the won fell further. However, the combination of an agreement with private foreign banks on a voluntary short-term debt rescheduling, concluded at end-January 1998, and a re-phasing of the IMF arrangement to allow an advancement of drawings, succeeded in alleviating short-term foreign exchange pressures and permitted stabilization to begin.

Deposit freeze details

FC. August 1997: External liabilities of banks were guaranteed, and a deposit guarantee was extended (November 1997-December 2000) by Korea Deposit Insurance Corporation. 24 December 1997: Though no formal controls were imposed, foreign private bank creditors agreed to maintain exposure temporarily. 28 January 1998: Korea continued to keep its capital account open and renegotiated the country's short-term bank foreign debt: In response to declining rollover rates of short-term foreign debt, Korea reached an agreement with foreign banks to reschedule some \$22 billion in interbank deposits and short-term loans due in 1998. Bank deposits were effectively frozen as a result of the rescheduling. This marked the beginning of the stabilization of capital flows and of the rapid reduction in central bank liquidity support.

Loss to depositors

The interbank credit lines rescheduling involved lengthening of maturities at below-market interest rates.

1998 Russia

Crisis context

The 1998 Russian currency, banking, and debt crises were rooted in a combination of weak domestic economic conditions, exogenous shocks, and shifting investor confidence in the aftermath of the Asian crisis. Stagnating economic activity, chronic budget deficits in the years preceding the crisis, and uncertainty about the sustainability of domestic policies - including inconsistent fiscal and exchange rate policies and non-payment of taxes by the energy and manufacturing industries, coupled with weak oil and nonferrous metals prices, and unfavorable market sentiment. Pressures in the financial markets surfaced in secondary markets and reserve losses. As investors pulled out of domestic markets, securities and equity prices collapsed. As the central bank intervened to support the domestic currency, capital outflows put pressure on reserves.

Withdrawals of bank deposits started in December 1997, accelerated in July-August 1998, and affected many banks, including the state-owned Sberbank which held 85% of total household deposits. On 17 August 1998, forced by the escalating payments crisis, the authorities announced a series of emergency measures: a large devaluation of the ruble, unilateral restructuring of ruble-denominated debt, and a 90-day moratorium on private sector payments on external liabilities enforced through extensive capital and exchange controls. The announcement of the default, followed by the dissolution of the existing government, increased pressures on the already weak banking system and triggered a severe banking crisis. Deposit withdrawals continued and in June-September 1998 Sberbank lost approximately 19% of its domestic deposits. Interbank market activity and the payments system slowed dramatically, and foreign credit lines dried out. The ruble, which was considered significantly overvalued at the time of default, depreciated sharply despite the exchange controls. The depreciation passed on to prices and inflation surged. On 2 September 1998, the currency was officially floated. After the sovereign debt restructuring monetary policy was tightened, contributing to inflation deceleration.

The central bank announced a blanket guarantee for all household deposits, and required that deposits held by six large Moscow banks (13% of total deposits) be transferred to Sberbank. Dollar deposits were also covered by the guarantee, but these would be paid out in rubles due to the lack of foreign reserves. The central bank provided considerable support to Sberbank and selected financial institutions, including through the creation of an overnight unsecured loan facility and an easing of required reserves. In subsequent months, the authorities put in place a comprehensive bank restructuring strategy, which involved closing a large number of banks and helping rebuild a core group of viable institutions.

As the banking system was not a major source of credit to private firms (domestic credit was less than 10% of GDP), and relatively few firms had access to international finance, Russia's crisis had a comparatively limited impact on the corporate sector. Russia recovered fast aided by the rise of world oil prices in 1999-2000, the infusion of funds, and the fact that domestic industries benefited from the devaluation, which had caused a steep increase in the prices of imported goods.

Deposit freeze details

FC and LC. No official measures. However, a number of large banks unilaterally froze deposits, while others introduced administrative means of discouraging withdrawals. There measures were permitted, though not officially sanctioned. With

extensive (although not tight) capital controls already in place, the deposit freeze was comparatively narrow in scope and was mainly a response to deal with a few of the larger, clearly insolvent banks in the context of limited bank restructuring legislation. A comprehensive blanket guarantee was not extended officially. However, within three months of the debt rescheduling, the authorities transferred the household deposits from a large number of private banks (which had frozen deposits) to Sberbank, the state-owned savings bank, where deposits were guaranteed by the government. In August-October 1998, the central bank injected liquidity by lowering reserve requirements and extending special stabilization credits to some of the larger banks.

Loss to depositors

Household deposits were guaranteed at par; the deposit freeze was of relatively short duration. However, dollar deposits, also covered by the guarantee, would be paid out in rubles due to the lack of foreign reserves, potentially imposing losses on foreign investors.

1998-1999 Pakistan

Crisis context

Pakistan's 1998 crisis was of a different nature, as there was no banking crisis, and the disruptions to the economy were less severe - growth continued and inflation remained subdued. The roots of the crisis, however, lay in unsustainable government policies during the previous decade. Pakistan's capital account was liberalized with the introduction of foreign currency deposits (FCDs), which were intended to mobilize domestic and external savings to boost investment. Banks were required to sell all foreign exchange to the central bank, which in turn provided foreign exchange forward cover to commercial banks at subsidized rates. However, instead of building international reserves, these short-term FCDs were instead used to finance large fiscal and external current account deficits, creating a debt overhang problem.

By the mid-1990s, the authorities were facing not only a public sector debt of unsustainable proportions but also a problem of inadequate international liquidity. The resulting open foreign exchange position became an increasingly difficult problem for the central bank, with continued growth of FCDs on the one hand, and the rundown of international reserves on the other hand. International sanctions, imposed following Pakistan's nuclear tests in May 1998, coupled with unfavorable market sentiment after the Asian and Russian crises, exacerbated the fragile external position, and triggered a debt crisis that had been looming during much of the 1990s.

In response to the external debt crisis of May 1998 and a shortage of foreign currency, the authorities imposed a deposit freeze on most foreign currency deposits. In January 1999, Pakistan concluded a debt restructuring agreement with the Paris Club, followed by an agreement with the London Club in June 1999. In May 1999, in order to fulfill the comparability of treatment clause included in the Paris Club agreement, the authorities began negotiations on a voluntary restructuring of their Eurobonds. The official exchange offer was extended in November 1999, shortly after a new government had assumed office. In the meantime, provisions to further tighten capital controls were introduced in June and October 1999. In mid-2000, in view of a continuing fragile external position, the authorities decided to switch to a more flexible exchange rate regime. The rupee was not viewed as significantly overvalued at the time, and had a relatively smaller adjustment.

Deposit freeze details

FC. 28 May 1998: A deposit freeze on resident and non-resident foreign currency deposits was imposed and preceded the debt restructuring. The main motivation was the prevention of capital flight. The FC deposits were largely owned by non-residents at the time. The frozen deposits could be converted into domestic currency deposits, or so-called special US dollar bonds.

Loss to depositors

In May 1998, the central bank allowed deposit holders to draw their money in rupees at the rate of 46 rupees per dollar, against an official rate of 44.05/44.49.

1999 Ecuador

Crisis context

The sequence of events in Ecuador runs almost opposite to the other 1998 crises as the initial run on the banking system preceded the government default. The costly bank restructuring contributed to the increasing debt burden, while the banking crisis also undermined monetary policy. In turn, the external debt default in September 1999 prompted a second currency crisis and further bank runs in the last months of 1999.

Although weakening economic activity and weak budget discipline had preceded the crisis, the banking crisis was triggered in August 1998 when Banco de Prestamos, the country's largest bank, was intervened as its credit lines were cut in response to the Russian crisis and supply shocks (oil prices and El Nino weather related). Confidence in the Ecuadorian banks deteriorated rapidly in early 1999, following the failure of five small banks. The interbank market suffered severely due to caution of lending to failing banks and due to the drying-up of government paper used as collateral for interbank lending. Loss of confidence was exacerbated by the slow response of the Deposit Guarantee Agency under the blanket guarantee approved in December 1998. The fear of a systemic meltdown increased after the country's second largest bank became illiquid. In response to the evolving bank run, the government declared a banking holiday on March 5-11, 1999, froze most of deposits for one year, and floated the exchange rate as pressures on the sucre mounted. Subsequent political pressure led to the progressive easing of the freeze.

In September 1999, the government announced a comprehensive default on all Brady and Eurobonds, all domestic public debt, and external credit lines in closed banks. The default prompted a second currency crisis and further bank runs in the last months of 1999. Administered caps kept interest rates at moderate levels. However, even with the deposit freeze in place, substantial pressure on the exchange rate continued, with the sucre depreciating 200% during 1999.

In January 2000, amid political turbulence that resulted in a new government, a new economic plan was announced based on full dollarization of the economy. The dollarization and the announcement of an IMF-supported program succeeded in restoring confidence. In March 2000, deposits were unfrozen. Although some flight to quality occurred, the banking system was able to retain most of the deposits. After an almost one-year-long default, an external debt exchange offer was made in July-August 2000. The terms of the domestic debt restructuring were far more favorable than those offered for the external debt. A Paris Club agreement was reached in September 2000. Ecuador experienced a much more severe corporate crisis than Russia, and all corporate loans under US\$50,000 were automatically restructured, while larger loans were restructured on a case-by-case basis, as part of the general financial sector restructuring that followed the dollarization.

Deposit freeze details

FC and LC. One of the most prominent cases of a deposit freeze in terms of scale and duration. December 1998: Blanket guarantee announced, but due to the weak fiscal position the blanket guarantee was not credible and did not succeed in stemming deposit outflows. March 1999: Faced with widespread bank runs and capital flight already a few months before the debt rescheduling, most bank deposits were frozen. All bank deposit balances above a certain threshold and all investment fund participations were frozen: all demand and savings deposits for 6 months and all time deposits for 1 year. Sight deposits were liberalized gradually, a

process completed in September 1999. About 20% of deposits were freed in August 1999-January 2000 before dollarization was officially adopted, while the rest were gradually released after the dollarization - a general unfreezing scheme began in March 2000 and lasted through the year - returning to depositors a combination of cash and dollar-denominated negotiable bonds. No capital controls were imposed. The deposit freeze restricted most banking funds from moving abroad, even in the absence of explicit capital controls. In the meantime, a more credible blanket guarantee was approved in December 1999, and was later lifted in 2001.

Loss to depositors

Depositors suffered severe losses. The estimated haircut for sucre-depositors was 80%, for dollar-depositors about 12%.

2001 Argentina

Crisis context

The 2001 Argentinean crisis involved banking, currency, and debt crises, in the middle of a severe political crisis. *Banking Crisis*

The Argentine banking crisis of 2001-2002 materialized because of underlying fragilities in the banking system, coupled with policies that destroyed the franchise value of banks by rendering the payments system ineffective. Throughout its currency board experience, Argentina had a highly dollarized economy - a high percentage of banks' portfolios was dollar-denominated, and more than 80% of public debt was foreign currency-denominated. Banks were exposed to exchange rate risk as large amounts of dollar lending was extended to borrowers with peso-denominated sources of income, and also became increasingly exposed to government risk. Argentina experienced four separate bank runs in November 2000, March 2001, July 2001, and November 2001. The combination of a growing public debt, increasing overall fiscal deficits, and no sign of economic recovery during 2001 fueled perceptions of government default and abandonment of convertibility, and threatened to expose the risks in banks' balance sheets. A significant withdrawal of deposits took place and the banking system lost about 20% of deposits by end-2001.

While earlier runs perceived foreign and public banks as stronger and affected only weaker banks, as the crisis deepened later runs became systemic and affected all banks. Significant central bank liquidity support began in July 2001. The run of July 2001 prompted the government to pass a zero-budget law. However, the run of November 2001 resulted in a different response: bank and capital controls, the fall of the government, default, and devaluation. Banks' soundness was hampered by an exchange of government bonds held by banks for illiquid government bonds in November 2001. On 1 December 2001, the authorities imposed withdrawal restrictions (corralito), followed by a bank holiday in December 21-26. The moratorium on external debt was announced on December 23. On January 3, convertibility was abandoned, and another bank holiday was declared January 7-8 as dollar deposits were forcibly converted into pesos and the maturities of time deposits were extended. However, due to the severe government funding constraint following the exclusion of Argentina from international capital markets, the authorities had not put in place a serious and comprehensive program for bank restructuring to address bank solvency issues. Moreover, regulatory independence - a necessity for credible restructuring programs - had been significantly weakened during 2001 with the limitations imposed on the autonomy of the central bank and the dismissal of its president.

Deposits continued to decline in early 2002. A new bank holiday was declared during April 22-26. The runs on banks stabilized in mid-2002, following a number of measures, including capital controls, the gradual lifting of the deposit freeze, and voluntary swaps of time deposits for government bonds. The monthly cash withdrawal limits on the corralito were relaxed in October 2002 and sight deposit restrictions were fully lifted in December. Frozen time deposits were gradually liberalized over 2003.

Debt Crisis

In mid-2001, in the midst of a four-year recession, disagreements with the provinces regarding revenue transfers were increasingly contentious. With very high and rising spreads (the country risk premium exceeded 2,000 bps) making it increasingly difficult to meet debt-service payments on rolled-over debt, in November 2001 Argentina announced a two-phase approach to restructure its roughly US\$100 billion of domestic and external debt owed to private creditors. Phase 1, carried out in December 2001, was aimed at domestic resident investors and involved the exchange of US dollar and Argentine peso bonds into new government-guaranteed loans. By end-December, before Phase 2 could be initiated to restructure the remainder of mainly foreign-held sovereign debt, the financial and political situation had deteriorated considerably, and Argentina announced a moratorium on debt not included in Phase 1. While debt service was to be maintained on the loans issued in Phase 1, the general pesoization of domestic contracts in March 2002 included the loans of Phase 1. Several domestic debt operations were conducted in May-September 2002 (including deposit exchange schemes and bonds issued to banks to compensate them for the asymmetric pesoization of assets and liabilities), but little progress had been made in restructuring foreign-held sovereign debt. A successful foreign debt restructuring was not concluded until 2005.

Argentina's sovereign crisis spilled over into the corporate sector. Firms had borrowed extensively from the local banking system, and the private sector's external debt exceeded 20% of GDP. Many firms without export earnings had foreign currency-denominated debts. Consequently, the sharp real depreciation (estimated at 60%) that followed the end of the currency board presented a significant threat to the solvency of many firms. Argentina "pesoized" the domestic debts of Argentine firms in order to try to limit these pressures.

Political Crisis

Mass protests followed the deposit freeze in December 2001. The public, which had repeatedly been assured that their savings were untouchable, staged violent street protests that brought about clashes with the police and resulted in several fatalities. On December 20, President de la Rua resigned. In two weeks, three presidents followed in quick succession, until Eduardo Duhalde - a Senator and former governor of the province of Buenos Aires - was appointed interim President. The new authorities were quick to denounce the "old" economic policies - including the currency board - as inefficient, recessionary, and corrupt. In designing a new policy, however, they did not follow any of the blueprints that had been thoroughly discussed in preceding months. Instead, they implemented a series of contentious measures: The peso was devalued, most of public debt was repudiated, and dollar-denominated private debts were "pesoized" at different and arbitrary rates. Moreover, Cavallo's deposit freeze was generalized and strengthened, and the public was forbidden to transfer deposits across banks. This caused political instability to grow, as the population staged demonstrations against politicians, judges, and bankers. The events of December 2001-January 2002 generated a massive collapse in the demand for money in Argentina.

With a more competitive and flexible exchange rate, the country began to stabilize by end-2002. In 2003, Néstor Kirchner was elected president. During Kirchner's presidency, Argentina restructured its defaulted debt with a steep discount (about 66%) on most bonds, paid off debts with the IMF, renegotiated contracts with utilities, and nationalized some previously privatized enterprises.

Deposit freeze details

FC and LC. 3 December 2001: Sight deposit freeze imposed. The corralito limited cash withdrawals and forced domestic payments into the banking system. January-February 2002: Time deposits were frozen (corralon) and their maturities were extended. Forced conversion of dollar accounts into pesos. The corralito was lifted by December 2002; the other restrictions were gradually lifted over 2003. Government policy had the following effect on banks: First, the government imposed an asymmetric exchange of dollar bank assets and liabilities into pesos. Dollar-denominated loans were converted into pesos at the pre-devaluation exchange rate of 1 to 1, while dollar-denominated deposits were converted into pesos at the rate of 1.4 pesos per dollar. This policy benefited borrowers, but had severe consequences for banks' capital. Second, banks' foreign obligations remained in foreign currency, while banks assets were converted to pesos, introducing a large foreign currency exposure into banks' balance sheets. Third, a tighter freeze was imposed on time deposits because the authorities focused on containing deposit losses rather than restoring banking system solvency. (As the use of time deposits in transactions was limited, their maturity was forcefully restructured.) In the process, banks lost their franchise value as the payments system became impaired. Fourth, in February 2002, the government introduced more exchange and capital controls in an attempt to contain deposit losses and limit the effect of the outflows on the exchange rate. This further complicated banks' operations because payments abroad needed the approval of the central bank. The combination of all the measures implied a breach of existing contracts and significant legal uncertainty, which prompted the headquarters of foreign banks to deny financial support to their branches and subsidiaries. By mid-2002, the payments system was completely inoperative and banks' loan portfolios continued to deteriorate because no restructuring program was in place. Large deposit losses occurred in 2002, even with the comprehensive restrictions on withdrawals.

Loss to depositors

Depositors suffered severe losses. Dollar-denominated deposits were converted into pesos at the rate of 1.4 pesos per dollar, a much lower rate than the market exchange rate.

Sources: Moody's, IMF, and World Bank country reports, as well as: Allen, M., "Sovereign Debt Restructurings and the Domestic Economy Experience in Four Recent Cases", IMF 2002; Bekaert, G. and Harvey C.R., "Chronology of Economic, Political and Financial Events in Emerging Markets", http://www.duke.edu/~charvey/Country_risk/couindex.htm; The Chinese University of Hong Kong, "Historical Exchange Rate Regime of Asian Countries", http://intl.econ.cuhk.edu.hk/ exchange_rate_regime/index.php?cid=20; Fane, G., "Capital Mobility, Exchange Rates and Economic Crises", Edward Elgar Publishing 2000; Geithner, T., "Crisis Resolution in the Context of Sovereign Debt Restructuring: A Summary of Considerations", IMF 2003; Hoelscher, D. and Quintyn, M., "Managing Systemic Banking Crises", Occasional Paper 224, IMF 2003; IADB, "Unlocking Credit: The Quest for Deep and Stable Bank Lending", Washington DC 2005; Lindgren, C.J., Balino, T., Enoch, C., Gulde, A.M., Quintyn. M., and Teo, L., "Financial Sector Crisis and Restructuring: Lessons from Asia", IMF Occasional Paper 188, 1999; Mas, I., 1995, "Policy-Induced Disincentives to Financial Sector Development: Selected Examples from Latin America in the 1980s", Journal of Latin American Studies 27(3), October, pp. 683-706.

Appendix II: Sovereign Bond Defaults and Restructurings

		FC or I G	Dofoult on FO		
Year of Initial		FC or LC Bond Default	Default on FC Loans in	Concurrent	
Default or Restructuring	Country	or Restructuring?	the Same Crisis Event?	Military Conflict?	Comments on Bond Default and Restructuring Events
1960	Cuba	FC	yes	Castro's Cuban revolution, the Cuba- US missile crisis, embargo imposed in 1960.	Debt repudiation.
1965	Zimbabwe (Rhodesia)	FC		Independence. British sanctions imposed in December 1965.	Debt repudiation. Southern Rhodesia repudiated foreign debt after the Unilateral Declaration of Independence in November 1965. After its independence was legally recognized, Zimbabwe's new government settled with its creditors in 1980. Debt was paid nearly in full.
1975	South Vietnam	no	no	Vietnam War 1959- 1975, US embargo extended to the whole of Vietnam in 1975.	Debt repudiation. South Vietnamese LC debts were repudiated by the new communist regime.
1976	North Korea	FC	yes		Debt repudiation. The first peaceful-time debt default by a communist government.
1979	Congo, Democratic Republic of (Zaire)	LC	yes	Zaire crisis 1976-1980.	Currency confiscation.
1979,1982	Ghana	LC	no	Coups in 1979 and in 1981.	Currency confiscation.
1981	Poland	FC	yes	Martial Law 1981-1983, sanctions imposed in 1981.	Post-default debt restructuring in 1982 and 1983.
1981,1984	Costa Rica	FC	yes		Costa Rica ushered in the 1980s debt crisis decade being the first country to default on its loans. The 1985 debt exchange was one of the three successful sovereign bond exchanges during the 1980s. Accumulated interest arrears were cleared prior to the exchange.
1981	Ecuador	no	yes		
1982	Mexico	no	yes		
1982	Argentina	no	yes		
1982	Bolivia	no	yes	Coup in 1980, military rebellion in 1981.	
1983	Philippines	no	yes		
1983	Yugoslavia	FC	yes		Default on short-term government bonds.
1983	Uruguay	FC	yes		Default on bearer Treasury bonds.
1985	Peru	no	yes		
1985	South Africa	no	yes	Civil unrest, declaration of State of Emergency in July 1985, UN economic sanctions in August 1985.	
1985,1987	Myanmar	LC	no		Currency confiscation.
1986	Brazil	LC	yes		Unilateral removal of inflation-indexation on inflation-indexed LC bonds.
1986	Nigeria	FC	yes		The 1988 debt exchange was one of the three successful

Year of Initial Default or		FC or LC Bond Default or	Default on FC Loans in the Same	Concurrent Military	Comments on Bond Default
Restructuring	Country	Restructuring?	Crisis Event?	Conflict?	and Restructuring Events
					sovereign bond exchanges during the 1980s. Post-default exchange of government guaranteed promissory notes.
1987	Panama	FC	yes	Noriega political crisis 1988-1989, US invasion of Panama on 20 December 1989.	Bond default in 1987, a few years after the default on bank debt, and a post-default debt exchange in 1994. Officially dollarized since 1904.
1989	Argentina	FC and LC	yes		Measures to fight the hyperinflation included a two-year rescheduling of amortization due on most outstanding Treasury bond issues, followed by the 1990 BONEX Plan conversion of bank deposits and government obligations into new bonds, the adoption of the currency board in 1991, and the negotiation of a Brady bond external debt restructuring in 1992.
1989	Bolivia	FC	yes		Default on government bonds in 1989, settled with creditors in 1997.
1989	Guatemala	FC		Guatemalan civil war ending in 1996.	The 1989 debt exchange was one of the three successful sovereign bond exchanges during the 1980s. No arrears were accumulated before the exchange.
1989	Liberia	LC	yes	Civil war 1989-1996.	The national savings bond issued in 1981 and redeemable in 1989 was still outstanding a decade later.
1990	Kuwait	LC	no	Iraqi invasion August 1990 - February 1991.	Country shut down during the invasion. FC obligations serviced from London.
1990	Brazil	LC	yes		Collor Plan freezed private assets and government liabilities, including demand and savings deposits, mutual funds, and federal, state, municipal and private bonds.
1991	Former Soviet Union	no	yes	Country dissolution.	
1992	Former Yugoslavia	FC	yes	Country dissolution.	Debt assumed by new countries.
1994	Venezuela	no	no		
1996	Solomon Islands	LC	yes	Ethnic conflict.	Default on government securities.
1997	Mongolia	LC	no		Irregular interest payments on government securities.
1998	Korea	no	no		
1998	Venezuela*	LC	no		Default on LC bonds which did not have a grace period, due to administrative reasons, although the default was cured within a short period of time.
1998	Russia*	FC and LC	yes		Post-default restructuring. Second largest sovereign default in history.
1998,2000	Ukraine*	FC and LC	no		Pre-emptive restructuring.
1999	Pakistan*	FC	yes	Economic sanctions imposed in response to the nuclear tests in May 1998.	First comprehensive bond restructuring. Pre-emptive restructuring of Eurobonds initiated after Paris Club stressed the requirement of comparability of treatment.
1999	Ecuador*	FC and LC	no		Post-default restructuring. First default on international sovereign bonds and first default on already restructured Brady bonds. Officially dollarized in September 2000.
1999	Turkey	LC	no		The government imposed a retroactive withholding tax on interest income on all outstanding LC securities issued prior to December 1, 1999.

Year of Initial Default or Restructuring	Country	FC or LC Bond Default or Restructuring?	Default on FC Loans in the Same Crisis Event?	Concurrent Military Conflict?	Comments on Bond Default and Restructuring Events
2000	Ivory Coast	FC	no	Civil conflict, coups in 1999 and 2001, civil war after 2002.	Default on Brady Bonds obligations.
2001	Argentina*	FC and LC	yes		Largest sovereign default in history. Megaswap and Phase I in 2001 as pre-emptive restructuring. Phase II of global debt exchange in 2005 as post-default restructuring. Most of the debt in FC at the time.
2002	Moldova*	FC	no		Pre-emptive Eurobond restructuring in 2002 and post- default restructuring of promissory notes in 2004.
2003	Uruguay*	FC and LC	no		Pre-emptive restructuring.
2003	Dominica	LC	yes		Post-default restructuring.
2004	Paraguay	FC and LC	no		Arrears on Treasury bonds held by banks since December 2002. Debt restructuring in 2004.
2004	Cameroon	LC	no		Defaulted on LC bonds in 2004, but resumed normal debt service later that year. No FC commercial debt at the time apart from non-tendered debt of its London Club deal, already in litigation.
2004	Grenada	FC and LC	yes		Distressed debt exchange.
2004	Ukraine	no	no		
2005	Dominican Republic*	FC	yes		Pre-emptive restructuring.
2006	Belize*	FC	no		Debt restructuring amounted to forced exchange in February 2007. Few domestic LC bonds at the time, no external LC debt.

^{*} Moody's rated

Appendix III: Sovereign Defaults and Deposit Freezes

Year of Initial Default or Restruc- turing	Country	FC or LC Bond Default or Restruc- turing?	Default on FC Loans in the Same Crisis Event?	Systemic Banking Crisis in the Same Crisis Event? 1/	Generalized FC or LC Deposit Freeze?	Deposit Freeze Length and Comments
1960	Cuba	FC	yes	no. Bank nationalization in 1960.	FC and LC	Debt repudiation. Banking system nationalization and deposit expropriation.
1965	Zimbabwe (Rhodesia)	FC		no	FC and LC	Debt repudiation and blocks on non-resident funds deposited in Rhodesia. The British government froze Rhodesian reserves in Britain.
1975	South Vietnam	no	no	no. Bank nationalization in 1975 after the war.	LC (FC n.a.)	Debt repudiation and bank confiscation. No FC bank deposits.
1976	North Korea	FC	yes			Debt repudiation.
1979	Congo, Democratic Republic of (Zaire)	LC	yes	yes 1980s		Currency confiscation.
1979,1982	Ghana	LC	no	yes 1982-1989, high inflation	no	Currency confiscation.
1981	Poland	FC	yes	no		
1981,1984	Costa Rica	FC	yes	several instances in 1980s	FC	Default on FC deposits (CDs).
1981	Ecuador	no	yes	yes early 1980s	FC	Controls over bank deposits imposed in 1981.
1982	Mexico	no	yes	yes 1981-1991	FC	FC deposit freeze in August 1982 and forced conversion into LC deposits. Deposit conversion amounted to expropriation as conversion in pesos was at an exchange rate about one-third below market rate.
1982	Argentina	no	yes	yes 1980-1982	FC and LC	Interest rate controls eroded the real value of deposits.
1982	Bolivia	no	yes	no. high inflation	FC	US dollar deposits were forcibly converted into LC in 1982, with haircut of 27-35%. FC deposits were allowed again in 1985.
1983	Philippines	no	yes	yes 1981-1987	FC	Central Bank administered all FC bank receipts.
1983	Yugoslavia	FC	yes	no		
1983	Uruguay	FC	yes	yes 1981-1985	no	
1985	Peru	no	yes	yes 1983-1990, high inflation, hyperinflation 1988-1990	FC	3-month suspension of convertibility was imposed in August 1985, followed by partial restrictions for another 6 months. US dollar deposits were forcibly converted into LC. FC deposits were allowed again in 1988.
1985	South Africa	no	yes	no	FC	FC default on external interbank loans (moratorium).
1985,1987	Myanmar	LC	no	no. inflation		Currency confiscation.
1986	Brazil	LC	yes	milder crisis in 1985	no	
1986	Nigeria	FC	yes	no	no	
1987	Panama	FC	yes	yes 1988-1989	FC	9-week deposit freeze imposed in March 1988, with deposit restrictions lasting until April 1990. Panama has been officially dollarized since 1904.
1989	Argentina	FC and LC	yes	yes 1989-1990, hyperinflation 1989-1990. Currency board	LC	Brief deposit freeze followed by LC deposit conversion into bonds.

Year of Initial Default or Restruc- turing	Country	FC or LC Bond Default or Restruc- turing?	Default on FC Loans in the Same Crisis Event?	Systemic Banking Crisis in the Same Crisis Event? 1/ adopted in 1991.	Generalized FC or LC Deposit Freeze?	Deposit Freeze Length and Comments
1989	Bolivia	FC	yes	yes 1986-1988	no	
1989	Guatemala	FC		no	no	
1989	Liberia	LC	yes	yes 1991-1995	FC and LC	10 out of 14 banks closed during civil war.
1990	Kuwait	LC	no	no. Iraqi invasion 1990-1991.	FC and LC	Banks closed during the Iraqi War, then withdrawal restrictions imposed for 5 months. Kuwaiti assets abroad were frozen. In 1992, to restore confidence in the banking system after the Iraqi invasion, the government publicly committed to guarantee all bank deposits.
1990	Brazil	LC	yes	hyperinflation in 1990, banking crisis in 1994- 1999	LC (FC n.a.)	18-month deposit freeze. No FC deposits.
1991	Former Soviet Union	no	yes	no. Country dissolution.	FC	Frozen FC deposits paid out in MIN FIN bonds in 1993.
1992	Former Yugoslavia	FC	yes	yes. Country dissolution.	FC	Frozen FC deposits converted into bonds. Frozen FC deposits to be resolved by successor states.
1994	Venezuela	no	no	yes 1994-1995	FC and LC	77-day deposit freeze imposed in January 1994. Deposits above Bs10 million converted to bonds. Low share of FC deposits at the time.
1996	Solomon Islands	LC	yes	no	no	
1997	Mongolia	LC	no	yes 1996-1999. Banking sector reconstruction in 1996 contributed to budget costs.	FC and LC	No general deposit freeze, but individual banks were restricting access to deposits.
1998	Korea	no	no	yes 1997-	FC	FC interbank deposits forced exchange. In response to declining rollover rates of short-term foreign debt, Korea reached an agreement with foreign banks in January 1998 to reschedule \$22 billion in interbank deposits and short-term loans due in 1998.
1998	Venezuela*	LC	no	no	no	
1998	Russia*	FC and LC	yes	yes 1998-1999. The government default and the devaluation of the ruble triggered a banking crisis.	FC and LC	3-month deposit freeze: Q3 1998 to Q1 1999. No official measures. However, a number of large banks unilaterally froze deposits, while others introduced administrative means of discouraging withdrawals. These measures were permitted, though not officially sanctioned.
1998,2000	Ukraine*	FC and LC	no	yes 1997-1998	no	
1999	Pakistan*	FC	yes	no	FC	Deposit freeze May 1998 to December 98, partial freeze in place until end-2000.
1999	Ecuador*	FC and LC	no	yes 1996-1997, 1999 The banking crisis preceded the debt crisis: bank run, devaluation, government default.	FC and LC	1 year deposit freeze from March 1999 to March 2000.
1999	Turkey	LC	no	yes 2000-	no	

Year of Initial Default or Restruc- turing	Country	FC or LC Bond Default or Restruc- turing?	Default on FC Loans in the Same Crisis Event?	Systemic Banking Crisis in the Same Crisis Event? 1/	Generalized FC or LC Deposit Freeze?	Deposit Freeze Length and Comments
2000	Ivory Coast	FC	no	no. Civil conflict.	no	Banks in the North closed after 2002.
2001	Argentina*	FC and LC	yes	yes 2001-	FC and LC	1-year deposit freeze imposed December 2001 to December 2002. In February 2002 dollar deposits forcibly converted into pesos.
2002	Moldova*	FC	no	no	no	
2003	Uruguay*	FC and LC	no	yes 2002-	FC	Maturity extension 1 to 3 years. Maturity extension of FC time deposits, after a 5-day banking holiday in July 2002.
2003	Dominica	LC	yes	no	no	
2004	Paraguay	FC and LC	no	yes 1995-1999, near-crisis 1999-	no	
2004	Cameroon	LC	no	no	no	
2004	Grenada	FC and LC	yes	no	no	
2004	Ukraine	no	no	no. Political near- crisis.	FC and LC	1-2 month deposit freeze.
2005	Dominican Republic*	FC	yes	no. Previous bank resolutions increased debt.	no	
2006	Belize*	FC	no	no	no	

^{*} Moody's rated

^{1/} Banking crises data sources: Caprio, G. and Klingebiel, D., "Episodes of Systemic and Borderline Financial Crises", World Bank Database 2003; World Bank country reports; IMF country reports.

Appendix IV: Moratoria on Private External Debt Servicing

Year of Initial Default or Restruc- turing	Country	FC or LC Bond Default or Restruc- turing?	Default on FC Loans in the Same Crisis Event?	Generalized FC or LC Deposit Freeze?	Controls Significantly Affecting Private External Debt Servicing?	Moratorium Controls Details
1960	Cuba	FC	yes	FC and LC	yes	Nationalization.
1965	Zimbabwe (Rhodesia)	FC		FC and LC	yes	Full exchange and capital controls were applied, including prohibitions on profit repatriations and blocks on non-resident funds deposited in Rhodesia.
1975	South Vietnam	no	no	LC (FC n.a.)	n.a.	
1976	North Korea	FC	yes			
1979	Congo, Democratic Republic of (Zaire)	LC	yes			
1979,1982	Ghana	LC	no	no	no	
1981	Poland	FC	yes			
1981,1984	Costa Rica	FC	yes	FC	yes	Foreign exchange controls put in place in 1981. Foreign debt payments required Central Bank and Ministry of Finance approval. A government-owned bank had defaulted as a result of the exchange restrictions.
1981	Ecuador	no	yes	FC	yes	Exchange controls imposed in 1982.
1982	Mexico	no	yes	FC	yes	Exchange controls imposed in 1982. Multiple exchange rates regime, encouraging rescheduling of private foreign debt repayments.
1982	Argentina	no	yes	FC and LC	yes	Regulation measures encouraging rescheduling of private foreign debt. Exchange controls introduced in 1982, tax on export proceeds (equivalent to 7% surcharge), multiple exchange rate regime, various taxes and retentions on foreign trade and debt repayments.
1982	Bolivia	no	yes	FC	yes	Exchange controls
1983	Philippines	no	yes	FC	yes	Exchange controls October 1983-October 1984. Interbank trading in foreign exchange suspended, de facto multiple exchange rate structure introduced. The Central Bank required all agent banks to surrender their FX receipts into a common pool. The Central Bank administered the pool and rationed payments in accordance with an administratively set priority imports, including oil, cereals, and a few other critical items.
1983	Yugoslavia	FC	yes			
1983	Uruguay	FC	yes	no	no	
1985	Peru	no	yes	FC	yes	Remittances of foreign exchange for private sector debt service payments, dividends, profits, royalties, patent fees and technical assistance fees by all companies were temporarily suspended in July 1986, followed by exchange controls till April 1988. Multiple exchange rates regime was introduced, all foreign exchange held locally or abroad had to be converted into Intis or U.S. dollar-indexed certificates of deposits, imports of some 500 items were banned, and certain oil businesses were nationalized.

Year of Initial Default or Restruc- turing	Country	FC or LC Bond Default or Restruc- turing?	Default on FC Loans in the Same Crisis Event?	Generalized FC or LC Deposit Freeze?	Controls Significantly Affecting Private External Debt Servicing?	Moratorium Controls Details
1985	South Africa	no	yes	FC	yes	Exchange and capital controls. Freeze on all capital repayment including loans in 1985. Multiple exchange rates regime, certain transactions subject to exchange control approval.
1985,1987	Myanmar	LC	no			
1986	Brazil	LC	yes	no	no	
1986	Nigeria	FC	yes	no	no	
1987	Panama	FC	yes	FC	yes	All general license (onshore) banks were closed, but those with significant international transactions were allowed to request an international license to continue their offshore operations. The BNP stopped servicing its external obligations. Private banks, on the other hand, were able to tap international support to service their obligations.
1989	Argentina	FC and LC	yes	LC	no	
1989	Bolivia	FC	yes	no	no	
1989	Guatemala	FC		no	no	
1989	Liberia	LC	yes	FC and LC	yes	10 out of 14 banks closed during civil war.
1990	Kuwait	LC	no	FC and LC	yes	Banks closed during the war. In December 1991, the government announced a comprehensive settlement plan for bank's and private bad debts and purchased the entire domestic loan portfolio of the banking system. The government purchased the debts of resident Kuwaiti and GCC customers existing at 1 August 1990, in addition to related interest up to 31 December 1991, and settled the debts with the issue of 20-year bonds.
1990	Brazil	LC	yes	LC (FC n.a.)	yes	Selective exchange and capital controls, including multiple exchange rate regime, and all foreign exchange transactions directed through the Central Bank.
1991	Former Soviet Union	no	yes	FC	n.a.	
1992	Former Yugoslavia	FC	yes	FC	n.a.	
1994	Venezuela	no	no	FC and LC	yes	Exchange controls imposed in July 1994 with all FC purchases frozen for two weeks. After this, FC could be bought only for specified transactions and exporters were obliged to sell all foreign currency earnings. A fixed exchange rate was adopted.
1996	Solomon Islands	LC	yes	no	yes	Exchange and capital controls.
1997	Mongolia	LC	no	FC and LC	no	
1998	Korea	no	no	FC	no	Capital account remained open.
1998	Venezuela*	LC	no	no	no	
1998	Russia*	FC and LC	yes	FC and LC	yes	Exchange and capital controls. 90-day moratorium on private sector payments on external liabilities enforced through extensive capital and exchange controls.
1998,2000	Ukraine*	FC and LC	no	no	no	
1999	Pakistan*	FC	yes	FC	no	

Year of Initial Default or Restruc- turing	Country	FC or LC Bond Default or Restruc- turing?	Default on FC Loans in the Same Crisis Event?	Generalized FC or LC Deposit Freeze?	Controls Significantly Affecting Private External Debt Servicing?	Moratorium Controls Details
1999	Ecuador*	FC and LC	no	FC and LC	no	
1999	Turkey	LC	no	no	no	
2000	Ivory Coast	FC	no	no	no	
2001	Argentina*	FC and LC	yes	FC and LC	yes	Exchange and capital controls. December 2001 to December 2002: for 1 year, prior authorization from the Central Bank needed for most international transfers.
2002	Moldova*	FC	no	no	no	
2003	Uruguay*	FC and LC	no	FC	no	
2003	Dominica	LC	yes	no	no	
2004	Paraguay	FC and LC	no	no	no	
2004	Cameroon	LC	no	no	no	
2004	Grenada	FC and LC	yes	no	no	
2004	Ukraine	no	no	FC and LC	no	
2005	Dominican Republic*	FC	yes	no	no	
2006	Belize*	FC	no	no	no	

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