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## **This Time It's Different: Eight Centuries of Financial Folly-Chapter 1**

Reinhart, Carmen and Rogoff, Kenneth

University of Maryland, College Park, Department of Economics,  
Harvard University

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VARIETIES OF CRISES  
AND THEIR DATES

**B**ecause this book is grounded in a quantitative and historical analysis of crises, it is important to begin by defining exactly what constitutes a financial crisis, as well as the methods—quantitative where possible—by which we date its beginning and end. This chapter and the two that follow lay out the basic concepts, definitions, methodology, and approach toward data collection and analysis that underpin our study of the historical international experience with almost any kind of economic crisis, be it a sovereign debt default, banking, inflation, or exchange rate crisis.

Delving into precise definitions of a crisis in an initial chapter rather than simply including them in a glossary may seem somewhat tedious. But for the reader to properly interpret the sweeping historical figures and tables that follow later in this volume, it is essential to have a sense of how we delineate what constitutes a crisis and what does not. The boundaries we draw are generally consistent with the existing empirical economics literature, which by and large is segmented across the various types of crises we consider (e.g., sovereign debt, exchange rate). We try to highlight any cases in which results are conspicuously sensitive to small changes in our cutoff points or where we are particularly concerned about clear inadequacies in the data. This definition chapter also gives us a convenient opportunity to expand a bit more on the variety of crises we take up in this book.

The reader should note that the crisis markers discussed in this chapter refer to the measurement of crises within individual countries. Later on, we discuss a number of ways to think about the international dimensions of crises and their intensity and transmission, culminating in our definition of a global crisis in chapter 16. In addition to reporting on one country at a time, our root measures of crisis

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thresholds report on only one type of crisis at a time (e.g., exchange rate crashes, inflation, banking crises). As we emphasize, particularly in chapter 16, different varieties of crises tend to fall in clusters, suggesting that it may be possible, in principle, to have systemic definitions of crises. But for a number of reasons, we prefer to focus on the simplest and most transparent delineation of crisis episodes, especially because doing otherwise would make it very difficult to make broad comparisons across countries and time. These definitions of crises are rooted in the existing empirical literature and referenced accordingly.

We begin by discussing crises that can readily be given strict quantitative definitions, then turn to those for which we must rely on more qualitative and judgmental analysis. The concluding section defines *serial default* and the *this-time-is-different syndrome*, concepts that will recur throughout the remainder of the book.

### Crises Defined by Quantitative Thresholds: Inflation, Currency Crashes, and Debasement

#### *Inflation Crises*

We begin by defining inflation crises, both because of their universality and long historical significance and because of the relative simplicity and clarity with which they can be identified. Because we are interested in cataloging the extent of default (through inflating debt away) and not only its frequency, we will attempt to mark not only the beginning of an inflation or currency crisis episode but its duration as well. Many high-inflation spells can best be described as chronic—lasting many years, sometimes dissipating and sometimes plateauing at an intermediate level before exploding. A number of studies, including our own earlier work on classifying post–World War II exchange rate arrangements, use a twelve-month inflation threshold of 40 percent or higher as the mark of a high-inflation episode. Of course, one can argue that the effects of inflation are pernicious at much lower levels of inflation, say 10 percent, but the costs of sustained moderate inflation are not well established either theoretically or empirically. In our earlier work on the post–World War II era, we chose a 40 percent cutoff

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because there is a fairly broad consensus that such levels are pernicious; we discuss general inflation trends and lower peaks where significant. Hyperinflations—inflation rates of 40 percent *per month*—are of modern vintage. As we will see in chapter 12 on inflation crises (especially in table 12.3), Hungary in 1946 (Zimbabwe’s recent experience notwithstanding) holds the record in our sample.

For the pre–World War I period, however, even 40 percent *per annum* is too high an inflation threshold, because inflation rates were much lower then, especially before the advent of modern paper currency (often referred to as “fiat” currency because it has no intrinsic value and is worth something only because the government declares by fiat that other currencies are not legal tender in domestic transactions). The median inflation rates before World War I were well below those of the more recent period: 0.5 percent per annum for 1500–1799 and 0.71 percent for 1800–1913, in contrast with 5.0 percent for 1914–2006. In periods with much lower average inflation rates and little expectation of high inflation, much lower inflation rates could be quite shocking and traumatic to an economy—and therefore considered crises.<sup>1</sup> Thus, in this book, in order to meaningfully incorporate earlier periods, we adopt an inflation crisis threshold of 20 percent per annum. At most of the main points at which we believe there were inflation crises, our main assertions appear to be reasonably robust relative to our choice of threshold; for example, our assertion that there was a crisis at any given point would stand up had we defined inflation crises using a lower threshold of, say, 15 percent, or a higher threshold of, say, 25 percent. Of course, given that we are making most of our data set available online, readers are free to set their own threshold for inflation or for other quantitative crisis benchmarks.

### *Currency Crashes*

In order to date currency crashes, we follow a variant of an approach introduced by Jeffrey Frankel and Andrew Rose, who focus exclusively on large exchange rate depreciations and set their basic threshold (subject to some caveats) as 25 percent per annum.<sup>2</sup> This definition is the most parsimonious, for it does not rely on other vari-

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ables such as reserve losses (data governments often guard jealously—sometimes long delaying their publication) and interest rate hikes (which are not terribly meaningful in financial systems under very heavy government control, which was in fact the case for most countries until relatively recently). As with inflation, the 25 percent threshold that one might apply to data from the period after World War II—at least to define a severe exchange rate crisis—would be too high for the earlier period, when much smaller movements constituted huge surprises and were therefore extremely disruptive. Therefore, we define as a currency crash an annual depreciation in excess of 15 percent. Mirroring our treatment of inflation episodes, we are concerned here not only with the dating of the initial crash (as in Frankel and Rose as well as Kaminsky and Reinhart) but with the full period in which annual depreciations exceeded the threshold.<sup>3</sup> It is hardly surprising that the largest crashes shown in table 1.1 are similar in timing and order of magnitude to the profile for inflation crises. The “honor” of the record currency crash, however, goes not to Hungary (as in the case of inflation) but to Greece in 1944.

*Currency Debasement*

The precursor of modern inflation and foreign exchange rate crises was currency debasement during the long era in which the principal means of exchange was metallic coins. Not surprisingly, debasements were particularly frequent and large during wars, when drastic reductions in the silver content of the currency sometimes provided sovereigns with their most important source of financing.

In this book we also date currency “reforms” or conversions and their magnitudes. Such conversions form a part of every hyperinflation episode in our sample; indeed it is not unusual to see that there were several conversions in quick succession. For example, in its struggle with hyperinflation, Brazil had no fewer than four currency conversions from 1986 to 1994. When we began to work on this book, in terms of the magnitude of a single conversion, the record holder was China, which in 1948 had a conversion rate of three million to one. Alas, by the time of its completion, that record was surpassed by

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**TABLE 1.1**  
Defining crises: A summary of quantitative thresholds

Crisis type	Threshold	Period	Maximum (percent)
Inflation	An annual inflation rate of 20 percent or higher. We examine separately the incidence of more extreme cases in which inflation exceeds 40 percent per annum.	1500–1790	173.1
		1800–1913	159.6
		1914–2008	9.63E+26 <sup>a</sup>
Currency crash	An annual depreciation versus the U.S. dollar (or the relevant anchor currency—historically the U.K. pound, the French franc, or the German DM and presently the euro) of 15 percent or more.	1800–1913	275.7
		1914–2008	3.37E+9
Currency debasement: Type I	A reduction in the metallic content of coins in circulation of 5 percent or more.	1258–1799	–56.8
		1800–1913	–55.0
Currency debasement: Type II	A currency reform whereby a new currency replaces a much-depreciated earlier currency in circulation.	The most extreme episode is the recent Zimbabwean conversion at a rate of ten billion to one.	

<sup>a</sup>In some cases the inflation rates are so large (as in Hungary in 1946, for example) that we are forced to use scientific notation. Thus, E+26 means that we have to add zeroes and move the decimal point twenty-six places to the right in the 9.63 entry.

Zimbabwe with a ten-billion-to-one conversion! Conversions also follow spells of high (but not necessarily hyper) inflation, and these cases are also included in our list of modern debasements.

*The Bursting of Asset Price Bubbles*

The same quantitative methodology could be applied in dating the bursting of asset price bubbles (equity or real estate), which are

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commonplace in the run-up to banking crises. We discuss these crash episodes involving equity prices in chapter 16 and leave real estate crises for future research.<sup>4</sup> One reason we do not tackle the issue here is that price data for many key assets underlying financial crises, particularly housing prices, are extremely difficult to come by on a long-term cross-country basis. However, our data set does include housing prices for a number of both developed and emerging market countries over the past couple of decades, which we shall exploit later in our analysis of banking crises.

### Crises Defined by Events: Banking Crises and External and Domestic Default

In this section we describe the criteria used in this study to date banking crises, external debt crises, and domestic debt crisis counterparts, the last of which are by far the least well documented and understood. Box 1.1 provides a brief glossary to the key concepts of debt used throughout our analysis.

#### *Banking Crises*

With regard to banking crises, our analysis stresses events. The main reason we use this approach has to do with the lack of long-range time series data that would allow us to date banking or financial crises quantitatively along the lines of inflation or currency crashes. For example, the relative price of bank stocks (or financial institutions relative to the market) would be a logical indicator to examine. However, doing this is problematic, particularly for the earlier part of our sample and for developing countries, where many domestic banks do not have publicly traded equity.

Another idea would be to use changes in bank deposits to date crises. In cases in which the beginning of a banking crisis has been marked by bank runs and withdrawals, this indicator would work well, for example in dating the numerous banking panics of the

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**BOX 1.1**

## Debt glossary

*External debt* The total debt liabilities of a country with foreign creditors, both official (public) and private. Creditors often determine all the terms of the debt contracts, which are normally subject to the jurisdiction of the foreign creditors or to international law (for multilateral credits).

*Total government debt (total public debt)* The total debt liabilities of a government with both domestic and foreign creditors. The “government” normally comprises the central administration, provincial governments, federal governments, and all other entities that borrow with an explicit government guarantee.

*Government domestic debt* All debt liabilities of a government that are issued under and subject to national jurisdiction, regardless of the nationality of the creditor or the currency denomination of the debt; therefore, it includes government foreign-currency domestic debt, as defined below. The terms of the debt contracts can be determined by the market or set unilaterally by the government.

*Government foreign-currency domestic debt* Debt liabilities of a government issued under national jurisdiction that are nonetheless expressed in (or linked to) a currency different from the national currency of the country.

*Central bank debt* Not usually included under government debt, despite the fact that it usually carries an implicit government guarantee. Central banks usually issue such debt to facilitate open market operations (including sterilized intervention). Such debts may be denominated in either local or foreign currency.

1800s. Often, however, banking problems arise not from the liability side but from a protracted deterioration in asset quality, be it from a collapse in real estate prices (as in the United States at the outset of the 2007 subprime financial crisis) or from increased bankruptcies in the nonfinancial sector (as in later stages of the financial crisis of the late 2000s). In this case, a large increase in bankruptcies or nonperforming loans could be used to mark the onset of the crisis. Unfortunately, indicators of business failures and nonperforming loans are usually available sporadically, if at all, even for the modern period



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in many countries. In any event, reports of nonperforming loans are often wildly inaccurate, for banks try to hide their problems for as long as possible and supervisory agencies often look the other way.

Given these data limitations, we mark a banking crisis by two types of events: (1) bank runs that lead to the closure, merging, or takeover by the public sector of one or more financial institutions (as in Venezuela in 1993 or Argentina in 2001) and (2) if there are no runs, the closure, merging, takeover, or large-scale government assistance of an important financial institution (or group of institutions) that marks the start of a string of similar outcomes for other financial institutions (as in Thailand from 1996 to 1997). We rely on existing studies of banking crises and on the financial press. Financial stress is almost invariably extremely great during these periods.

There are several main sources for cross-country dating of crises. For the period after 1970, the comprehensive and well-known studies by Caprio and Klingebiel—the most updated version of which covers the period through 2003—are authoritative, especially in terms of classifying banking crises into systemic versus more benign categories. Kaminsky and Reinhart, and Jácome (the latter for Latin America), round out the sources.<sup>5</sup> In addition, we draw on many country-specific studies that pick up episodes of banking crisis not covered by the multicountry literature; these country-specific studies make an important contribution to this chronology.<sup>6</sup> A summary discussion of the limitations of this event-based dating approach is presented in table 1.2. The years in which the banking crises began are listed in appendixes A.3 and A.4 (for most early episodes it is difficult to ascertain exactly how long the crisis lasted).

*External Debt Crises*

External debt crises involve outright default on a government's external debt obligations—that is, a default on a payment to creditors of a loan issued under another country's jurisdiction, typically (but not always) denominated in a foreign currency, and typically held mostly by foreign creditors. Argentina holds the record for the largest default; in 2001 it defaulted on more than \$95 billion in external

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**TABLE 1.2**  
Defining crises by events: A summary

Type of crisis	Definition and/or criteria	Comments
Banking crisis Type I: systemic (severe) Type II: financial distress (milder)	We mark a banking crisis by two types of events: (1) bank runs that lead to the closure, merging, or takeover by the public sector of one or more financial institutions and (2) if there are no runs, the closure, merging, takeover, or large-scale government assistance of an important financial institution (or group of institutions) that marks the start of a string of similar outcomes for other financial institutions.	This approach to dating the beginning of banking crises is not without drawbacks. It could date crises too late, because the financial problems usually begin well before a bank is finally closed or merged; it could also date crises too early, because the worst of a crisis may come later. Unlike in the case of external debt crises (see below), which have well-defined closure dates, it is often difficult or impossible to accurately pinpoint the year in which the crisis ended.
Debt crisis External	A sovereign default is defined as the failure of a government to meet a principal or interest payment on the due date (or within the specified grace period). These episodes include instances in which rescheduled debt is ultimately extinguished in terms less favorable than the original obligation.	Although the time of default is accurately classified as a crisis year, in a large number of cases the final resolution with the creditors (if it ever did take place) seems indeterminate. For this reason we also work with a crisis dummy that picks up only the first year.
Domestic	The definition given above for an external debt crisis applies. In addition, domestic debt crises have involved the freezing of bank deposits and/or forcible conversions of such deposits from dollars to local currency.	There is at best some partial documentation of recent defaults on domestic debt provided by Standard and Poor's. Historically, it is very difficult to date these episodes, and in many cases (such as those of banking crises) it is impossible to ascertain the date of the final resolution.

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debt. In the case of Argentina, the default was managed by reducing and stretching out interest payments. Sometimes countries repudiate the debt outright, as in the case of Mexico in 1867, when more than \$100 million worth of peso debt issued by Emperor Maximilian was repudiated by the Juarez government. More typically, though, the government restructures debt on terms less favorable to the lender than were those in the original contract (for instance, India's little-known external restructurings in 1958–1972).

External defaults have received considerable attention in the academic literature from leading modern-day economic historians, such as Michael Bordo, Barry Eichengreen, Marc Flandreau, Peter Lindert, John Morton, and Alan Taylor.<sup>7</sup> Relative to early banking crises (not to mention domestic debt crises, which have been all but ignored in the literature), much is known about the causes and consequences of these rather dramatic episodes. The dates of sovereign defaults and restructurings are those listed and discussed in chapter 6. For the period after 1824, the majority of dates come from several Standard and Poor's studies listed in the data appendixes. However, these are incomplete, missing numerous postwar restructurings and early defaults, so this source has been supplemented with additional information.<sup>8</sup>

Although external default dates are, by and large, clearly defined and far less contentious than, say, the dates of banking crises (for which the end is often unclear), some judgment calls are still required, as we discuss in chapter 8. For example, in cataloging the number of times a country has defaulted, we generally categorize any default that occurs two years or less after a previous default as part of the same episode. Finding the end date for sovereign external defaults, although easier than in the case of banking crises (because a formal agreement with creditors often marks the termination), still presents a number of issues.

Although the time of default is accurately classified as a crisis year, in a large number of cases the final resolution with the creditors (if it ever was achieved) seems interminable. Russia's 1918 default following the revolution holds the record, lasting sixty-nine years. Greece's default in 1826 shut it out of international capital

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markets for fifty-three consecutive years, and Honduras's 1873 default had a comparable duration.<sup>9</sup> Of course, looking at the full default episode is useful for characterizing borrowing or default cycles, calculating “hazard” rates, and so on. But it is hardly credible that a spell of fifty-three years could be considered a crisis—even if those years were not exactly prosperous. Thus, in addition to constructing the country-specific dummy variables to cover the entire episode, we have employed two other qualitative variables aimed at encompassing the core crisis period surrounding the default. The first of these records only the year of default as a crisis, while the second creates a seven-year window centered on the default date. The rationale is that neither the three years that precede a default nor the three years that follow it can be considered a “normal” or “tranquil” period. This technique allows analysis of the behavior of various economic and financial indicators around the crisis on a consistent basis over time and across countries.

*Domestic Debt Crises*

Domestic public debt is issued under a country's own legal jurisdiction. In most countries, over most of their history, domestic debt has been denominated in the local currency and held mainly by residents. By the same token, the overwhelming majority of external public debt—debt under the legal jurisdiction of foreign governments—has been denominated in foreign currency and held by foreign residents.

Information on domestic debt crises is scarce, but not because these crises do not take place. Indeed, as we illustrate in chapter 9, domestic debt crises typically occur against a backdrop of much worse economic conditions than the average external default. Usually, however, domestic debt crises do not involve powerful external creditors. Perhaps this may help explain why so many episodes go unnoticed in the mainstream business and financial press and why studies of such crises are underrepresented in the academic literature. Of course, this is not always the case. Mexico's much-publicized near-default in 1994–1995 certainly qualifies as a “famous” domestic default crisis, although not many observers may realize that the bulk of

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the problem debt was technically domestic and not external. In fact, the government debt (in the form of *tesobonos*, mostly short-term debt instruments repayable in pesos linked to the U.S. dollar), which was on the verge of default until the country was bailed out by the International Monetary Fund and the U.S. Treasury, was issued under domestic Mexican law and therefore was part of Mexico's domestic debt. One can only speculate that if the *tesobonos* had not been so widely held by nonresidents, perhaps this crisis would have received far less attention. Since 1980, Argentina has defaulted three times on its domestic debt. The two domestic debt defaults that coincided with defaults on external debt (1982 and 2001) attracted considerable international attention. However, the large-scale 1989 default that did not involve a new default on external debt—and therefore did not involve nonresidents—is scarcely known in the literature. The many defaults on domestic debt that occurred during the Great Depression of the 1930s in both advanced economies and developing ones are not terribly well documented. Even where domestic defaults are documented in official volumes on debt, it is often only footnotes that refer to arrears or suspensions of payments.

Finally, some of the domestic defaults that involved the forcible conversion of foreign currency deposits into local currency have occurred during banking crises, hyperinflations, or a combination of the two (defaults in Argentina, Bolivia, and Peru are in this list). Our approach to constructing categorical variables follows that previously described for external debt default. Like banking crises and unlike external debt defaults, for many episodes of domestic default the endpoint for the crisis is not easily established.

## Other Key Concepts

*Serial Default*

*Serial default* refers to multiple sovereign defaults on external or domestic public (or publicly guaranteed) debt, or both. These defaults may occur five or fifty years apart, and they can range from whole-

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sale default (or repudiation) to partial default through rescheduling (usually stretching interest payments out at more favorable terms for the debtor). As we discuss in chapter 4, wholesale default is actually quite rare, although it may be decades before creditors receive any type of partial repayment.

*The This-Time-Is-Different Syndrome*

The essence of the this-time-is-different syndrome is simple.<sup>10</sup> It is rooted in the firmly held belief that financial crises are things that happen to other people in other countries at other times; crises do not happen to us, here and now. We are doing things better, we are smarter, we have learned from past mistakes. The old rules of valuation no longer apply. The current boom, unlike the many booms that preceded catastrophic collapses in the past (even in our country), is built on sound fundamentals, structural reforms, technological innovation, and good policy. Or so the story goes.

In the preamble we have already provided a theoretical rationale for the this-time-is-different syndrome based on the fragility of highly leveraged economies, in particular their vulnerability to crises of confidence. Certainly historical examples of the this-time-is-different syndrome are plentiful. It is not our intention to provide a catalog of these, but examples are sprinkled throughout the book. For example, box 1.2 exhibits a 1929 advertisement that embodies the spirit of “this time is different” in the run-up to the Great Depression, and box 6.2 explores the Latin American lending boom of the 1820s, which marked the first debt crisis for that region.

A short list of the manifestations of the syndrome over the past century is as follows:

**1. The buildup to the emerging market defaults of the 1930s**

<i>Why was this time different?</i>	<i>The thinking at the time: There will never again be another world war; greater political stability and strong global growth will be sustained indefinitely; and debt burdens in developing countries are low.</i>
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## BOX 1.2

The this-time-is-different syndrome on the eve of the Crash of 1929

FAMOUS WRONG GUESSES  
IN HISTORY*when all Europe guessed wrong*

The date—October 3rd, 1719.  
The scene—*Hôtel de Nevers*, Paris.  
A wild mob—fighting to be heard.  
“Fifty shares!” “I’ll take two hundred!” “Five hundred!” “A thousand here!” “Ten thousand!”

Shrill cries of women. Hoarse shouts of men. Speculators all—exchanging their gold and jewels or a lifetime’s meager savings for magic shares in John Law’s Mississippi

Company. Shares that were to make them rich overnight.

Then the bubble burst. Down—down went the shares. Facing utter ruin, the frenzied populace tried to “sell”. Panic-stricken mobs stormed the *Banque Royale*. No use! The bank’s coffers were empty. John Law had fled. The great Mississippi Company and its promise of wealth had become but a wretched memory.

Today you need not guess.

HISTORY sometimes repeats itself—but not invariably. In 1719 there was practically no way of finding out the *facts* about the Mississippi venture. How different the position of the investor in 1929!

Today, it is inexcusable to buy a “bubble”—inexcusable because unnecessary. For now every investor—whether his capital consists of a few thousands or mounts into the millions—has at his disposal facilities for obtaining the *facts*. Facts which—as far as is humanly possible—eliminate the hazards of speculation and substitute in their place sound principles of investment.



## STANDARD STATISTICS

200 VARICK ST.

New York, New York (now the home of Chipotle Mexican Grill)

Saturday Evening Post, September 14, 1929

Note: This advertisement was kindly sent to the authors by Professor Peter Lindert.

The major combatant countries in World War I had built up enormous debts. Regions such as Latin America and Asia, which had escaped the worst ravages of the war, appeared to have very modest and manageable public finances. The 1920s were a period of relentless global optimism, not dissimilar to the five-year boom that preceded the worldwide financial crisis that began in the United States in mid-2007. Just as global peace was an important component of the 2000s dynamic, so was the widely held view that the experience of World War I would not soon be repeated.

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In 1929, a global stock market crash marked the onset of the Great Depression. Economic contraction slashed government resources as global deflation pushed up interest rates in real terms. What followed was the largest wave of defaults in history.

## 2. The debt crisis of the 1980s

*Why was this time different?*

*The thinking at the time: Commodity prices are strong, interest rates are low, oil money is being “recycled,” there are skilled technocrats in government, money is being used for high-return infrastructure investments, and bank loans are being made instead of bond loans, as in the interwar period of the 1920s and 1930s. With individual banks taking up large blocks of loans, there will be incentive for information gathering and monitoring to ensure the monies are well spent and the loans repaid.*

After years of secular decline, the world experienced a boom in commodity prices in the 1970s; commodity-rich Latin America seemed destined to reap enormous profits as world growth powered higher and higher prices for scarce material resources. Global inflation in the developed world had led to a long period of anomalously low real interest rates in rich countries’ bond markets. And last but not least, there had been essentially no new defaults in Latin America for almost a generation; the last surge had occurred during the Great Depression.

Many officials and policy economists spoke very approvingly of the loans from Western banks to developing countries. The banks were said to be performing an important intermediation service by taking oil surpluses from the Organization of Petroleum Exporting Countries and “recycling” them to developing countries. Western banks came into the loop because they supposedly had the lending and monitoring expertise necessary to lend en masse to Latin America and elsewhere, reaping handsome markups for their efforts.



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The 1970s buildup, like so many before it, ended in tears. Steeply higher real interest rates combined with a collapse of global commodity prices catalyzed Mexico's default in August 1983, and shortly thereafter the defaults of well over a dozen other major emerging markets, including Argentina, Brazil, Nigeria, the Philippines, and Turkey. When the rich countries moved to tame inflation in the early 1980s, steep interest rate hikes by the central banks hugely raised the carrying costs of loans to developing countries, which were typically indexed to short-term rates (why that should be the case is an issue we address in the chapter on the theory of sovereign debt). With the collapse of global demand, commodity prices collapsed as well, falling by 70 percent or more from their peak in some cases.

### 3. The debt crisis of the 1990s in Asia

*Why was this time different?*      *The thinking at the time: The region has a conservative fiscal policy, stable exchange rates, high rates of growth and saving, and no remembered history of financial crises.*

Asia was the darling of foreign capital during the mid-1990s. Across the region, (1) households had exceptionally high savings rates that the governments could rely on in the event of financial stress, (2) governments had relatively strong fiscal positions so that most borrowing was private, (3) currencies were quasi-pegged to the dollar, making investments safe, and (4) it was thought that Asian countries never have financial crises.

In the end, even a fast-growing country with sound fiscal policy is not invulnerable to shocks. One huge weakness was Asia's exchange rate pegs against the dollar, which were often implicit rather than explicit.<sup>11</sup> These pegs left the region extremely vulnerable to a crisis of confidence. And, starting in the summer of 1997, that is precisely what happened. Governments such as Thailand's ultimately suffered huge losses on foreign exchange intervention when doomed efforts to prop up the currency failed.<sup>12</sup> Korea, Indonesia, and Thailand among others were forced to go to the International Monetary

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Fund for gigantic bailout packages, but this was not enough to stave off deep recessions and huge currency depreciations.

#### 4. The debt crisis of the 1990s and early 2000s in Latin America

*Why was this time different?*      *The thinking at the time: The debts are bond debts, not bank debts. (Note how the pendulum swings between the belief that bond debt is safer and the belief that bank debt is safer.) With orders of magnitude more debt holders in the case of bonds than in the case of international banks, countries will be much more hesitant to try to default because renegotiation would be so difficult (see instance 2 earlier).*

During the early 1990s, international creditors poured funds into a Latin American region that had only just emerged from a decade of default and stagnation. The credit had been channeled mainly through bonds rather than banks, leading some to conclude that the debts would be invulnerable to renegotiation. By spreading debt claims out across a wide sea of bond holders, it was claimed, there could be no repeat of the 1980s, in which debtor countries had successfully forced banks to reschedule (stretch out and effectively reduce) debt repayments. Absent the possibility of renegotiation, it would be much harder to default.

Other factors were also at work, lulling investors. Many Latin American countries had changed from dictatorships to democracies, “assuring greater stability.” Mexico was not a risk because of the North American Free Trade Agreement, which came into force in January 1994. Argentina was not a risk, because it had “immutably” fixed its exchange rate to the dollar through a currency board arrangement.

Eventually, the lending boom of the 1990s ended in a series of financial crises, starting with Mexico’s December 1994 collapse. What followed included Argentina’s \$95 billion default, the largest in history at that time; Brazil’s financial crises in 1998 and 2002; and Uruguay’s default in 2002.

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**5. The United States in the run-up to the financial crisis of the late 2000s (the Second Great Contraction)**

*Why was this time different?*      *The thinking at the time: Everything is fine because of globalization, the technology boom, our superior financial system, our better understanding of monetary policy, and the phenomenon of securitized debt.*

Housing prices doubled and equity prices soared, all fueled by record borrowing from abroad. But most people thought the United States could never have a financial crisis resembling that of an emerging market.

The final chapters of this book chronicle the sorry tale of what unfolded next, the most severe financial crisis since the Great Depression and the only one since World War II that has been global in scope. In the intervening chapters we will show that the serial nature of financial crises is endemic across much of the spectrum of time and regions. Periods of prosperity (many of them long) often end in tears.