



## *This Time Is Different*

### *Eight Centuries of Financial Folly*

By **Carmen M. Reinhart** and **Kenneth S. Rogoff**

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463 pages

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*Nobody can hope to understand the economic phenomena of any, including the present, epoch who has not an adequate command of historical facts and an adequate amount of historical sense or what may be described as historical experience.*

—Joseph Schumpeter<sup>1</sup>

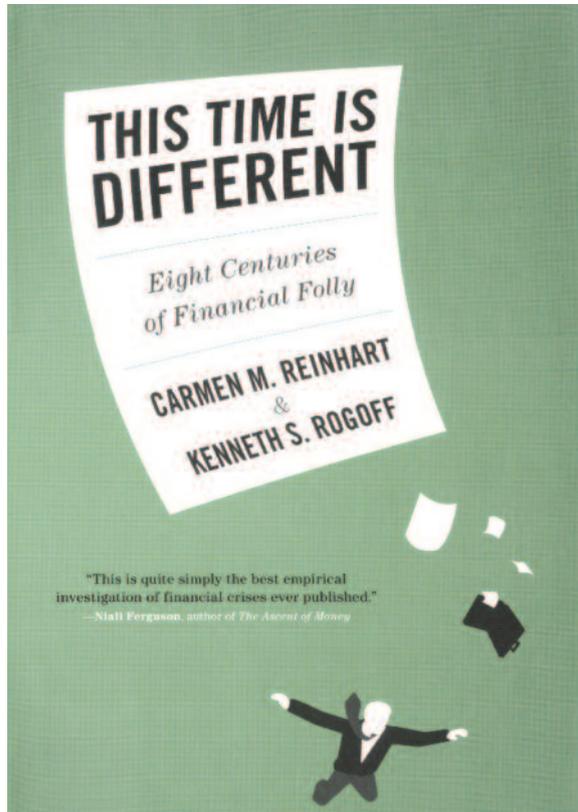
Toward the end of his life, Harvard economist Joseph Schumpeter remarked that of the three building blocks of economics—theory, statistics and history—economic history “is by far the most important.”<sup>2</sup> The importance of economic history is on grand display in *This Time Is Different: Eight Centuries of Financial Folly*. In their book, Carmen Reinhart (University of Maryland) and Kenneth Rogoff (Harvard University) convincingly remind us that economic crises are recurring events. (See an interview with Rogoff in the December 2008 *Region*, online at [minneapolisfed.org](http://minneapolisfed.org).) This fact naturally leads to two important conclusions: There will be more in the future and, accordingly, financial reform legislation will not prevent future crises. But Reinhart and Rogoff also remind us, in a way that Schumpeter would no doubt appreciate, that economic policymakers repeatedly fail to fully grasp one of the key lessons of history: Economic misfortune falls upon countries that fail to heed the consequences of excessive debt accumulation.

## Overview

Building on a historical narrative that uses an extensive data set of their construction, Reinhart and Rogoff (hereafter R&R) show that periods of excessive public debt accumulation generally do not end well. Over time, many countries have defaulted on their debt (including restructuring) for a variety of reasons and by a variety of methods (inflating away the real value of the debt has been very popular). These defaults, they show, can produce detrimental spillover effects. Recent defaults by Russia (1998) and Argentina (2001) come to mind, and the possibility of a future restructuring by Greece looms large for its foreign creditors (for example, European banks)—and for European policymakers.

One drawback of R&R’s analysis, which they readily admit, is that it focuses almost entirely on debt issued by governments, or sovereigns, rather than by the private sector. In the financial crisis of 2007-09, which they term the “Second Great Contraction,” the accumulation of private debt (chiefly mortgage debt of the dodgy variety) and the collapse in nominal house prices eventually helped trigger a banking and financial crisis of immense proportions and a collapse in economic activity. In response, federal government outlays in the United States and other advanced economies rose enormously, which resulted in huge budget deficits that have significantly boosted debt-to-GDP levels.

Since emerging and developing countries tend to rely heavily on foreign creditors such as large multinational banks, sharply higher debt-to-GDP ratios in the context of weakening economic fundamentals can lead to “sudden stops”—that is, credit is withdrawn abruptly, leading to a cascade of defaults. In advanced economies, which have better credit and inflation histories, and thus sharply lower probabilities of default, rising debt-to-GDP ratios tend to weaken economic growth.<sup>3</sup>



As the world's largest economies return to their long-run rates of economic growth (relative to the growth downturn of the recent recession), their governments will increasingly be forced to undertake fiscal readjustments. The European sovereign debt crisis in the first half of 2010 has demonstrated that the retribution for inaction can be swift—plummeting currencies and sovereign credit ratings. The debate at present, though, is whether this adjustment should occur before or after these countries have returned to their normal growth paths. R&R remind us that returning to this growth path after financial crises is often a protracted affair.

### Outline of the book

The book comprises six parts; broadly speaking, the first three are historical, the last three topical. And the six parts are further divided into a total of 17 chapters.

Part I provides a historical overview of the various financial crises discussed in the book: banking

and currency crises, external debt default and inflation crises. To give readers a sense of the historical significance of the “this time is different syndrome,” chapter 1 discusses five well-known episodes over the past 75 years that most readers will be familiar with: (1) the buildup to the emerging market defaults of the 1930s, (2) the debt crisis of the 1980s, (3) the debt crisis of the 1990s in Asia, (4) the debt crisis of the 1990s and early 2000s in Latin America and (5) the financial crises prior to the Second Great Contraction in the United States.

A common thread running through this discussion: hubris. Households, governments, institutions, financial market participants, economists and businesses (have I missed anyone?) consistently underestimate the fragility of highly leveraged economies. Why? Innovations or improvements in the real economy or in public policies lead many to conclude that a boom is based on solid fundamentals. In the mid to late 1990s, for example, an acceleration in productivity growth, financial innovations and new risk management tools were thought by many to explain the rapid rise in prices of financial and tangible assets (the so-called tech boom).<sup>4</sup>

Not surprisingly, R&R show that serial default is a common occurrence among many of the world's less-developed countries—although more-advanced economies also default on their debts. R&R tell us that Greece, the most recent poster child for fiscal malfeasance, was in “continual default” from 1800 to just after World War II. We also learn that, perhaps surprisingly, default tends to occur at debt levels well below the Maastricht Treaty threshold (60 percent of GDP).<sup>5</sup> For middle-income countries from 1970 to 2008, more than half of all defaults occurred at debt-to-GDP levels below 60 percent.

This raises an interesting question: What is a safe debt threshold? R&R argue that a nation's safe debt threshold depends heavily on its historical record of defaults (if any) and its past inflation performance. Typically, only countries with good repayment and inflation histories are able to regularly access global capital markets.

Part I also contains one of the most impressive aspects of this book—its historical data set. The authors focus primarily on 66 countries that accounted for about 90 percent of global GDP in

1990. Although the book's title suggests that the analysis covers the past 800 years, and some of the data extend back to the 13th century, the core analysis is generally based on data from 1800 to the present.

A key to the book's success—besides its accessibility to the noneconomist—is the use of this data set. For instance, in parts II and III, R&R discuss crises associated with default on government debt held by foreign purchasers (external debt) and domestic purchasers (domestic debt). The level of detail is impressive. One of the more interesting chapters (chapter 4) discusses the theoretical aspects of debt crises and why countries choose to default. A vexing question is why lenders repeatedly trust some less-than-reliable borrowers, since lenders presumably know that default over the life of the loan is a good possibility. In this vein, readers of parts II and III will learn, among other things, the following key points:

1. Despite the limited ability of creditors to fully recoup their losses, countries are nonetheless able to borrow from foreign creditors because of concerns about access to international capital markets (for example, borrowing to buy food in case of a natural disaster) or facilitating trade or foreign direct investment, or for reasons related to diplomatic relations. They argue that countries do not repay their debts for the opportunity to borrow even more in the future.
2. Historically, banking crises that originate in global financial centers tend to be contagious because they produce a “sudden stop” in lending to smaller countries—particularly crisis-prone countries, which often borrow in excess when times are good. As these crises unfold, falling commodity prices and rising interest rates in smaller countries help to precipitate sovereign debt crises. In short, smaller countries that borrow too much are exceptionally vulnerable when global growth slows.
3. Defaults on external debt frequently occur in clusters. These types of defaults can occur regionally, such as the wave of European debt defaults after the Napoleonic Wars, or internationally, as during the Great Depression. Cluster defaults have been reduced because of large lending programs by the International Monetary Fund and the World Bank.
4. Governments of emerging markets often view favorable shocks as permanent developments and, as a result, increase government spending and borrowing.
5. Economic conditions before and after a default on domestic debt are considerably worse than for a default on external debt. For instance, from 1800 to 2008, the inflation rate in the three years following a crisis averaged nearly 120 percent for domestic defaults, but only 32 percent for episodes of external default.

### The Second Great Contraction

The second half of the book, parts IV through VI, is a topical discussion of banking and inflation crises, the aftermath of financial crises, the recent U.S. subprime crisis and the international dimensions of the subprime crisis. The book concludes with historical composite measures of financial turmoil and the typical “what have we learned” chapter. There are also several appendixes listing data sources.

In the authors' view, banking crises are remarkably similar in how they affect rich and poor countries. In this sense, they are an “equal opportunity menace.” At the same time, banking crises can take different forms across the income strata of nations. For instance, financial repression is a type of banking crisis that only poor countries tend to experience: Depositors in poor or developing countries deposit funds in banks (because there are few or no alternatives), and then the bank is directed by the government to purchase debt issued by the government. The situation is sometimes made worse by the government instituting interest rate caps at a low nominal rate and then generating much higher rates of inflation.

A second type of crisis is the traditional bank run. The bank funds its assets, which tend to be long-term loans, with short-term liabilities (demand deposits). During a crisis, depositors withdraw their funds in a sudden panic—a bank run, which forces banks to liquidate assets, often at “fire sale” values—which further magnifies the crisis. In the United States, deposit insurance has effectively eliminated bank runs, at least in the formal banking sector. However, as Gorton (2010) details, “runs” did happen in the shadow banking system in the 2007-09 financial crisis. These runs

occurred because some financial firms refused to renew repurchase agreements or they imposed sizable “haircuts,” which forced a significant amount of deleveraging—that is, reducing debt through rapid asset sales—by banks and other financial intermediaries.<sup>6</sup>

One reason banking crises are protracted affairs is the amplification mechanisms that stem from this deleveraging.<sup>7</sup> Using their data set, R&R show that real house prices typically rise sharply prior to a banking crisis and then fall sharply during the crisis and even after the crisis ends. A decline in real house prices, they argue, produces much more virulent banking crises than a decline in stock prices. This may help explain the relative mildness of the 2001 recession, which came on the heels of the collapse in the prices of technology stocks.

Another difference among types of asset price collapses is the marked increase in public indebtedness after a banking crisis triggered by a collapse in real housing prices. R&R find that in peak-to-trough cycles of real housing prices and banking crises, there is little quantitative difference between emerging and advanced economies. More important, unlike debt defaults, they argue that no country has been able to “graduate” from banking crises. Banking crises seem to be an enduring feature of the economic and financial landscape.

### **Sovereign credit risk**

According to R&R, increased public indebtedness is the true legacy of banking crises. Focusing on crisis episodes for 13 emerging and advanced economies in the post-World War II period, they show that real (central) government debt increases by 86 percent in the three years following the crisis. And since real GDP falls, according to their data, by an average of more than 9 percent during an average two-year crisis, the result is a near doubling of the debt-to-GDP ratio in a relatively short time. In the United States, the federal debt-to-GDP ratio in nominal terms is projected to rise from about 36 percent in fiscal year 2007 to about 67 percent in 2012. In the aftermath of the Second Great Contraction, rising public indebtedness has run head-on into subdued economic recovery.

The authors note that recessions in advanced economies tend to spill over onto emerging market

economies. This “collateral damage” may linger if advanced economies take longer than usual to return to their normal growth rate. If history is any guide—and of course, that is the premise of their book—then the fallout from the Second Great Contraction will be an “elevated number of defaults, reschedulings, and/or massive IMF bailouts” for emerging market economies. Indeed, one of the key legacies of banking and financial crises is rising public indebtedness and increased sovereign credit risk. But in the aftermath of the recent crisis, it is generally the advanced economies rather than the emerging market economies which, so far, have seen rapidly rising debt-to-GDP ratios.<sup>8</sup>

Admittedly, default on sovereign debt is an extremely low-probability event for most advanced countries. R&R show that Canada and the United States have managed to avoid this outcome over their relatively short histories, while default in other advanced economies in the 20th century, such as France, Germany and the United Kingdom, generally occurred only during periods of exceptional turmoil (the aftermath of wars or hyperinflation).<sup>9</sup> Still, with debt-to-GDP ratios in the advanced countries rising to ignominious levels, the question is not so much whether the advanced economies will default on their debt in the Russian or Argentinean sense, but whether default will occur in a different form.

One old-world favorite, they argue, is debt default through debasement—devaluation of the currency. In the old days, a monarch could reduce the gold or silver content of coins to finance wars or other large expenditures. Debasement is much easier under a modern fiat currency system, since the monetary authority can generate unexpected increases in inflation, so that debt can be repaid in currency with significantly less purchasing power than when first issued. But with many people more worried about deflation risks than inflation risks these days, the possibility of debasement seems remote. Nonetheless, R&R ominously warn that quiet periods of inflation “do not extend indefinitely.” Perhaps those who can’t fathom an acceleration of inflation in the foreseeable future would be wise to ponder why this time is different.

It is difficult to conceive that today’s central bankers would countenance an unexpected surge in inflation as a way to reduce real debt burdens. Yet,

there have been alarming discussions—if only conjectural at this point—that the world’s major central banks should contemplate raising their explicit or implicit inflation targets. Why? To better escape the zero nominal bound problem in the future.<sup>10</sup> Although they do not address this issue directly, R&R warn that there are clear inflation risks from rising levels of domestic debt. But at the same time, they warn that a strict inflation targeting regime can only be justified if there are equally strict regulations against excessive leverage. This seems like cold comfort to those who worry about the dangers of high and rising inflation in an era of aging populations and exploding debt-to-GDP ratios.

#### Four expensive words

The legendary British investor Sir John Templeton might not have been the first to utter the words, but his quip that “this time is different [are the] four most expensive words in the English language” rings loud and clear through R&R’s analysis. In the final chapter of their book, they argue that no country—regardless of its size or importance—is immune to the syndrome of believing that times—and financial prospects—have changed, because so few people remember the key lessons from history.

What is needed, the authors contend, is an entirely new international regulatory institution that would collect, analyze and disseminate cross-country data designed to improve macroprudential oversight. Only an international authority, they claim, would “provide some degree of political insulation from legislators who relentlessly lobby domestic regulators to ease up on regulatory rule and enforcement.”

But would such a supranational financial regulator with a long institutional memory have prevented the worst of the 2007-09 financial crisis? Perhaps a better question is whether the benefits of an all-powerful regulator would exceed its costs—or whether the world’s countries would be willing to cede some of their sovereignty to prevent a once-in-100-years crisis, let alone a vastly smaller crisis.

Recently, Wilkinson, Spong and Christensson (2010) assessed the effectiveness of the information and analysis provided before and during the financial crisis by the Financial Stability Reports (FSRs) published by the central banks of four countries:

The United Kingdom, Sweden, the Netherlands and Spain. They concluded that

these four FSRs were generally successful in identifying risks that played important roles in the crisis—although they underestimated its severity. While it is not clear that FSRs helped to reduce the damages, it would be a mistake to dismiss them as a useful tool. Overall, publishing FSRs appears to be a worthwhile exercise that encourages central banks and international authorities to identify and monitor important trends and emerging risks and to develop a better understanding of the underlying structure of domestic and global financial markets.

This evidence of modest effectiveness suggests that R&R, and maybe even many policymakers themselves, should temper their enthusiasm for how much a new supranational financial regulator might accomplish. It might help identify risk, but likely won’t prevent crises.

History teaches important lessons for designing future economic policies. In that regard, it is difficult to believe that R&R could have timed the release of their book any better. But if, as they insist, everyone regularly underestimates the fragility of highly leveraged economies, then what are the global implications of an aging population that, based on current policies, will produce future debt-to-GDP ratios that would make a third-world dictator blush? It can’t be pretty.

*This Time Is Different: Eight Centuries of Financial Folly* belongs on the short list of economic books that key policymakers should carefully read—if for no other reason than to remind them that when they hear economists, analysts and even other policymakers utter the popular refrain “this time is different,” what should immediately come to mind is not smooth sailing ahead, but storm clouds building on the horizon. Or, in the immortal words of Charles Kindleberger, financial crises are “hardy perennials.”<sup>11</sup> Maybe Schumpeter was onto something after all. **R**

## Endnotes

<sup>1</sup> Quoted in McCraw (2007), p. 250.

<sup>2</sup> Ibid.

<sup>3</sup> In a subsequent paper, R&R examine real GDP growth (median) at various levels of federal government debt for 20 advanced economies, from 1790 to 2009. They find that real GDP growth is 3.9 percent per year when a government's debt-to-GDP ratio is below 30 percent. But when the debt-to-GDP ratio rises to 90 percent or higher, the median level of annual GDP growth falls to 1.9 percent. See Reinhart and Rogoff (2010).

<sup>4</sup> Mian and Sufi (2010) argue that two main competing explanations seek to explain the 2000s housing and credit boom. On the one hand was a shift in the demand for credit chiefly due to real factors (for example, former Fed Chairman Alan Greenspan's productivity-driven New Economy). On the other hand was an increase in the supply of credit driven by financial innovations, such as securitization. Using microeconomic data, Mian and Sufi find data support for the latter explanation.

<sup>5</sup> The Maastricht Treaty is a 1992 agreement that created the European Union and set the rules for membership in the euro-area.

<sup>6</sup> A haircut refers to the difference between the market value of the collateral pledged by the borrower and the amount of the funds lent. For example, a 10 percent haircut means that the lender will loan to the borrower 90 percent of the value pledged as collateral.

<sup>7</sup> These dynamics are discussed in the context of the financial accelerator models of Bernanke and Gertler (1990) or Kiyotaki and Moore (1997).

<sup>8</sup> See Buiter (2010).

<sup>9</sup> In the United States, three states repudiated their debts from 1841 to 1842; in the late 1800s, 10 defaulted.

<sup>10</sup> See "IMF Tells Bankers to Rethink Inflation," which appeared in the Feb. 12, 2010, *Wall Street Journal*. Briefly, the zero nominal bound problem refers to a situation in which the central bank—seeking to boost growth or reduce the probability of deflation—cannot lower its nominal interest rate target below zero.

<sup>11</sup> See Kindleberger and Aliber (2005).

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