# SURVIVING LARGE LOSSES

Financial Crises, the Middle Class, and the Development of Capital Markets

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Philip T. Hoffman, Gilles Postel-Vinay, and Jean-Laurent Rosenthal

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Le souvenir se présente à l'imparfait . . .

Memory appears in the imperfect . . .

-Francis Ponge, "Proèmes"

# Contents

	Acknowledgments	vii
	Introduction	1
1.	The Political Economy of Financial Crises	9
2.	Information and Crises	31
3.	Crises and the Middle Class	64
4.	What Happens after Crises	101
5.	Financial Intermediaries and the Demand for Change	128
6.	Governments and the Demand for Reform	157
	Conclusion: The Lessons of History	194
	Notes	225
	References	239
	Index	255

## Introduction

AVE YOU EVER WORRIED about the chances of a financial disaster? Ever lost sleep over the possibility that your savings might be gutted or your investments wiped out? Maybe you haven't, because you are smart and savvy and have taken all sorts of steps to defend yourself. Or maybe you are simply confident that modern financial markets and government safeguards will always protect you.

But that protection doesn't always work. Just ask Sandra Stone or any one of the 20,000 or so other former employees of the Enron Corporation whose pensions and savings were swallowed up when their company went bankrupt late in 2001. Stone could have been speaking for any one of her colleagues when she exclaimed: "I'm livid, absolutely livid. I have lost my entire friggin' retirement to these people."

No one wants to end up like Sandra and her coworkers. But the sad fact is that she and her colleagues are by no means alone. Financial crises have struck repeatedly for centuries, leaving countless victims in their wake. Some of those victims were so noted for their brilliance that we think they surely ought to have known better: Isaac Newton sustained losses in an early English stock market bubble;

Voltaire, who had speculated to great advantage, dropped a sizable chunk of his profits in a government debt default; and the brilliant economist Irving Fisher saw his fortune annihilated in the Great Crash of 1929.<sup>2</sup> If geniuses like these proved so vulnerable, what's the outlook for everyone else?

Hindsight often persuades us that the crises could easily have been avoided. Yet the truth is that financial crises are virtually inevitable, like earthquakes or hurricanes. Indeed, despite all the reforms they have inspired, they continue to batter us, as we can see from the collapse of the Asian banks and stock markets, the bursting of the Internet bubble and subsequent wave of bankruptcies, and the corporate scandals of the late 1990s. Nor do they show any signs of abating, despite government programs offering new ways for investors to shelter their holdings.3 Fears about possible financial debacles are in fact constantly bubbling up in the media. Will they arise from mutual fund scandals or insolvent company pensions in the United States, from rollercoaster real estate prices in prosperous countries such as Britain or Australia, or from some rapacious government just about anywhere in the world?

What makes the crises so important—beyond the painful losses they entail—is that they often prove to be turning points in the evolution of financial markets and long-term economic growth.4 Some of them, obviously, have ended up shackling economic growth. The 1929 stock market crash and ensuing epidemic of bank panics in the United States is perhaps the most familiar example.<sup>5</sup> Yet others have had a very different effect. Indeed, a number have actually helped foster long-run growth by reshaping financial institutions. In 1719-20, a stock market bubble in Paris ruined many investors. But it also gave birth to a new financial market, which raised unparalleled amounts of capital for private investment. And even the crash of 1929 helped bring about beneficial reforms that improved financial institutions, both in the United States and elsewhere. Crises thus seem to have the potential not only to do harm but also to wipe the slate clean, leaving actors free to design new institutions that better resist trouble in the future. Innovation and financial failure may thus be inseparable—a financial parallel to a process sketched long ago for technology by the economist Joseph Schumpeter.

Since financial crises will inevitably recur, we must explore their causes and long-run consequences and in particular how they shape the evolution of financial systems. The crux of the matter is determining how crises affect—and are in turn affected by—the development of financial institutions. Are there institutions that attack the causes of crises and make it less likely that they will strike? Are there institutions that prevent crises from crippling a financial system when they do hit? Are there institutions that keep crises from hobbling financial development and economic growth or make it more likely that they are followed not by stagnation but by beneficial reforms? And under what conditions will such institutions arise?

Both the causes and consequences of crises play out over a span of years, decades, or even generations, as do economic growth and the development of financial institutions. It is therefore impossible to study the relationship between crises and financial development by examining contemporary evidence alone. Only a study of longer periods can reveal the linkages among crises, institutions, and financial development. Only history can give us the necessary perspective.

Imagine, for example, that you had lived through the financial crisis at the beginning of Great Depression. The economic distress had just opened the door to new political leaders-among them, Roosevelt in the United States and Hitler in Germany. At that moment, in the opening months of 1933, could you possibly have foreseen all the political and economic ramifications of Roosevelt's presidency or Hitler's dictatorship, if you had only taken into account what was known at the time? Even if you had considered only financial development and economic growth, could you have known that New Deal

legislation would shape financial markets in the United States for the rest of the century or that regulations from the Third Reich would influence the German economy into the 1980s?<sup>6</sup>

History helps us to understand the relationship among crises, institutions, and financial development. But we also need the tools of political economy to appreciate all that history tells us. Despite a great deal of excellent work, no one has yet combined history and political economy in a way that explains why financial crises are virtually inevitable or why they can have such strikingly different longrun consequences—why some are destructive while others turn out to be creative.7 Nor has anyone determined what institutions are likely to help a financial system surmount crises and continue its development. Yet these issues are not mere academic questions; they demand our attention, and not simply because the savings, investments, and retirements of so many people today are at stake. Future generations are at risk too. Financial markets are an extraordinary engine for promoting investment and innovation and for making economies expand. They can finance an education or help entrepreneurs start businesses in countries rich or poor. When ineffective financial systems prevent individuals from borrowing, investing, or diversifying their holdings, then the economy as a whole suffers, and later generations are poorer than they would otherwise have been.8 That is true whether the country is wealthy or impoverished.

#### Definitions

Before we go any further, we should make several things clear, beginning with what we mean by a financial crisis. A number of definitions are possible—a sudden drop in market values might qualify, as would sheer volatility of prices—but for our purposes we have chosen something slightly different. For us, there is a crisis when a large number of financial contracts are suddenly broken. The simplest case

would involve a number of borrowers defaulting on their loans, but a wave of corporate bankruptcies that wipes out shareholders will also count.9 So too will a government's decision to renege on its debts or to pay its bondholders in money made worthless by inflation or devaluation. And one can think of other examples as well. Imagine that a hedge fund sells scores of investors insurance against adverse events such as a drop in the stock market. If the stock market tumbles but the hedge fund is unable to pay off on the insurance, then that too would constitute a crisis—one that, as we shall see, came perilously close to happening in 1998.

The crises that meet our definition are often triggered by sudden shifts of value or sharp changes in incomes, revenues, or costs—what economists and other social scientists call shocks. Because shocks often provoke crises, the two concepts may seem practically synonymous, but they do in fact differ. To take a concrete illustration, suppose that farmers borrow to buy land and machinery when agricultural prices are high and interest rates low. If prices then drop and interest rates soar, that will constitute a shock, but there will be a crisis only if a large number of the farmers default on their debt, as happened in the 1980s in the American Midwest. Fortunately, institutions can sometimes keep shocks from unleashing crises or diminish the havoc that crises wreak. The key lies in trying to create such institutions and ensuring that they also promote financial development and economic growth.

When we speak of institutions, we also have a specific meaning in mind: for us, institutions are rules, along with some means of enforcing them. The rules may be laws, regulations, or contracts upheld by courts; rules of this sort, which are enforced by the state, we call formal institutions. But the rules may also simply be regular patterns of private behavior kept in place not by the state, but by expectations about what other people will do—for instance, an investor's decision to follow the advice of a trusted financial adviser rather than listening

to some unknown broker who telephones him out of the blue. Rules of this type we will call informal institutions. We have to ask why some crises bring on formal institutional change—that is, modified laws and government regulations—and why others alter private patterns of behavior.

### What Lies Ahead

What, then, do history and political economy reveal about the causes and consequences of crises? What do they divulge about the relationship between crises, institutions, and long-run financial development?

What they show is that three factors are critical for the development of financial institutions: the level of government debt, the size of the middle class, and the amount of information that is available for parties to perform financial transactions. To illustrate the enormous impact that these factors have, we turn to financial dramas acted out in the capital markets of Europe, Asia, and North and South America—some recently, and some long ago. These dramas are illuminating histories that we probe with the tools of political economy to help make clear under what circumstances our three factors will promote financial development and keep crises from taking too heavy a toll, and when it is that they will unfortunately do the reverse. They also demonstrate that no financial institution is optimal for all times and places: an institution that seems best one day—a bank or a stock exchange—can easily falter or crumble as our three factors change. In contrast to what short-run statistical evidence has led many observers to believe, there is simply no one single best specific mix of banks, markets, and other institutional arrangements for financial transactions.

These dramas and stories are thus our evidence. In nearly every case, they could be supported with quantitative evidence and formal economic models, but to make things easy for readers we have chosen to limit ourselves to our analytical stories. They are the most effective—and certainly the most interesting—way to make our points.

We start with a look at two of the major causes of crises: predatory behavior by governments and problems with information that bedevil all financial transactions. Both of these causes can in turn be traced back to our three factors, for informational problems reflect the different information that parties to financial transactions usually have, and governments are usually driven to prey on capital markets when they have run up too much debt. We then examine the demands for institutional change that arise in the wake of crises, show how these demands are shaped by our third factor—the size of the middle class—and then see how they can be met, whether by the government or by private entrepreneurs. Throughout, we ask what institutions will make financial markets more effective, by encouraging financial development and limiting the harm that crises can do.

In tying financial development and crises together, we do not mean to imply that stronger financial markets are just a terrible danger. Such a claim might fit the common belief—particularly on the left that financial markets are purely evil, but it would mean blinding oneself to the immense good that they do. The trouble is that economies cannot enjoy this good without running the risk of having crises. In that sense, the truth about financial markets is reminiscent of what the seventeenth-century philosopher and mathematician Blaise Pascal said about human beings: they are neither angels nor beasts and thus are neither completely good nor completely evil. The virtue of financial markets is that they enable transactions that make people better off, by boosting investment, providing protection against risk, and fostering innovation and economic growth. The downside is that financial development often brings crises in its wake. The stereotypes of the left are thus mistaken, as are equally unrealistic assertions made by observers on the right, who overlook crises and blithely assert that financial markets never do any harm.

Our ultimate goal is to understand financial development, which has long been of deep importance in countries rich and poor. Financial development matters for us all, but to grasp it, we must study the causes of crises and their unforeseen consequences, which only history can unveil.

#### CHAPTER 1

# The Political Economy of Financial Crises

MAGINE THAT YOU are an investor, a cautious one. Why might you be wary? Perhaps you recently dropped a sizable bundle in the stock market. Perhaps accounting scandals or terrifying world events make you fret about the future. Or perhaps advancing age leaves you with little time to recoup losses before you retire. In any case, you are anxiously seeking a safe haven for your savings.

If you are fortunate enough to live in a country like the United States in the early twenty-first century, or in certain other Western democracies, you will have many ways of assuaging your fears, from buying inflation-indexed treasury bonds to socking your money away in a government-insured bank account. Sure, terrorists may still strike, and companies may continue to doctor their books. But there is at least one nightmare that will not make you toss and turn at night—namely, the threat that the government itself will trample on the guarantees protecting your money. The federal government of the United States will simply not default on its bonds or get rid of indexing. Nor will it renege on the insurance payments owed you if your bank goes under. It just does not behave that way. If anything, when the U.S. government intervenes in financial markets, it strives to pro-

tect investors: recall how in 1998 the Federal Reserve Bank bailed out the hedge fund Long Term Capital Management in order to avoid a market panic that would have harmed not just the rich but many middle-class investors as well.1

Elsewhere, however, you might not be so lucky. Suppose, for example, that you had the misfortune to be living in Argentina late in 2001, and had to invest your savings there, perhaps because, as a small-scale middle-class investor, you could not easily open an offshore bank account or buy foreign bonds or money fund shares.2 Since you could not send your money abroad, your options would be grim. Argentine government bonds would be too risky. On the market they were in fact plummeting to a quarter of their face value because of concerns (justified, it turned out) that the government would default outright or would repay the bonds in devalued Argentine currency. Bank accounts would terrify you, too. Indeed, from July on, panicking Argentines were rushing to yank their money out of banks because they were alarmed that the government would in effect loot the country's banks. They wanted to get their money out and if possible convert it to dollars, a move that would also protect them against a likely currency devaluation. Faced with a bank run, the government finally froze savings accounts and imposed a ceiling on withdrawals from checking accounts. Had you put your money in a bank, it would have been stuck there.3

As an investor, you would clearly do worse in Argentina than in the United States, at least at the end of 2001. Blame for your woes in Argentina could in large part be laid at the government's feet. But Argentina is not the only country whose government mistreats investors. There are many others that do the same, just as there are many besides the United States that nurture investors. What is it that makes a government protective of investors? And what makes it predatory? What, in short, turns some states into Argentinas, and others into countries like the United States?