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# Financial crises, past and present

**Past financial crises had very different effects on the real economy. Although the lessons of the past don't give much cause for optimism, they do provide hints on how companies should prepare this time around.**

David Cogman and Richard Dobbs



Financial crises occur with surprising frequency—in every decade in the past century there has been at least one big shock to a major economy’s financial system. Judging from that history, the current upheaval will probably rank among the largest, and we face the prospect of a severe, painful recession. Yet comparing the current financial crisis with those of the 20th century may provide some comfort: the impact of past crises on the real economy was by no means uniform, and it depended, critically, on the way governments acted to recapitalize the banking system and to restore stability and confidence.

The boom that preceded the present crisis uniquely combined several leverage-driven bubbles: a residential-mortgage bubble, an associated one in the real-estate market, and a bubble in corporate earnings. At the time of writing, US financial institutions had taken total credit crisis–related write-offs of almost \$1 trillion.<sup>1</sup> McKinsey estimates that the total eventual credit losses in the United States are likely to be between \$1.7 trillion to \$2.2 trillion: at best, a rapid recovery would result in losses of \$1.3 trillion; at worst, a protracted recession could see losses as high as \$3.1 trillion. In addition, the Bank of England’s estimates suggest losses of around \$1.4 trillion from debts in the United Kingdom and the European Union.<sup>2</sup> The losses will be greater if another major asset area (such as credit default swaps) collapses or if a misguided policy response exacerbates the problems, as it did in Japan during the 1990s. This range of possible losses represents 10 to 15 percent of US GDP.

By historical standards, that is substantial. In the past century, it was exceeded only three times: during the banking crisis that inaugurated Japan’s “lost decade” in the early 1990s, the Asian financial crisis of the late ’90s, and the Great Depression. In the first two, the afflicted banking systems recorded total losses of 15 and 35 percent<sup>3</sup> of GDP, respectively. Losses in the Great Depression were around 20 percent of GDP in 1929, but this occurred in a very different industry environment from today. Due to a combination of runs on deposits, high levels of bank leverage, progressive deleveraging of the economy, and limited ability of the Fed to intervene,<sup>4</sup> this quickly became a protracted economic downturn in which more than 9,000 financial institutions either went into bankruptcy or sought governmental assistance, and the economy experienced massive deflation.

From a company standpoint, the critical issue is the impact such shocks and subsequent downturns can have on the availability of credit—and the impact of a credit shortage on the real economy and on consumer and corporate confidence. The downturn after the S&L crisis of the 1980s and ’90s, when bank write-offs equaled some 4 percent of GDP, lasted about two years. GDP ended up about 4 to 5 percent lower than it would have been given the pre-crisis trend line. After the bursting of Japan’s asset bubble, the country’s economy

grew by less than half a percent a year in real terms for a decade, and GDP ended up around 18 percent lower than it would have given its pre-crisis trend line. We estimate that the present credit crisis will cut real GDP by around 3 to 7 percent from trend growth. If the US economy were to follow the same path it did in the more severe crises, the total lost GDP could be two to three times greater than that estimate.

But the fallout from the past century's two worst crises did considerably more damage. In the countries hardest hit by the 1990s' Asian financial crisis—Indonesia, Malaysia, the Philippines, South Korea, and Thailand—GDP shrank by an average of 8 percent in 1998 in local-currency terms. Since their currencies halved in value, on average, in US dollar terms the damage was catastrophic—bankrupting many companies and causing widespread social unrest. And during the Great Depression, from 1929 to 1933, 28 percent of real GDP was lost.

As of December 5, 2008, US unemployment stood at 6.7 percent.<sup>5</sup> That is slightly above its level during the 2001–02 recession but still some way below the level associated with the oil shocks of the 1970s (8.5 percent) and the S&L crisis (nearly 10 percent). It is far short of unemployment during the Great Depression, which conservative estimates put at around 25 percent.

How long it takes an economy to emerge from a downturn depends heavily on what kind of cleanup and stimulus package governments employ—especially in repairing the banking system's ability to provide credit efficiently and restoring confidence among companies and consumers. On average, countries have needed two years to emerge from past recessions after banking crises<sup>6</sup> and up to twice as long to return to trend growth.<sup>7</sup> Only in two cases did a downturn last substantially longer: in Japan during the lost decade, as a result of counterproductive government policies, and in the Great Depression, when the government was far less able to mount a coordinated response than it is today.

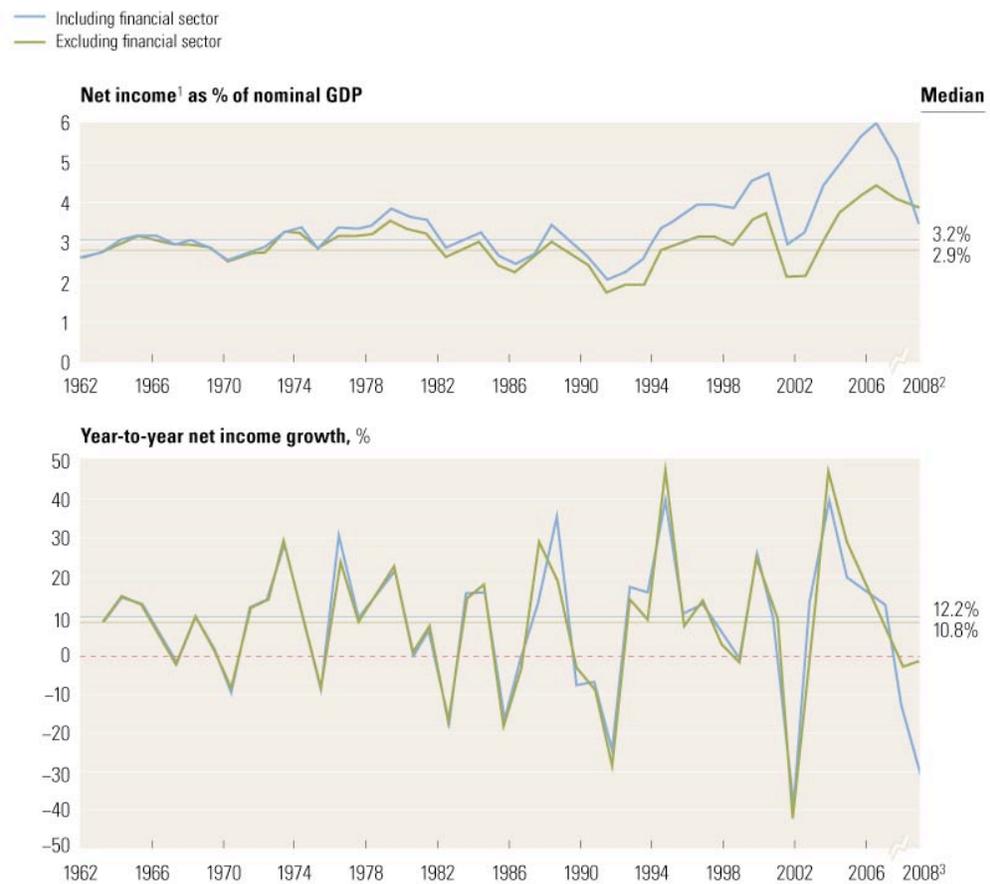
Equity markets are the most visible and dramatic indicators as crises unfold. At the end of October 2008, the S&P 500 index had fallen by 46 percent from its peak a year before (October 9, 2007, to October 27, 2008). By late November 2008, the US equity market had given up almost all of its gains since the 2001–02 dot-com bust. Although nobody knows if the market has reached bottom, the fall so far isn't unusual by historical standards. Japan's Nikkei 225 fell by 48 percent from peak to trough (December 29, 1989, to October 1, 1990) during the banking crisis, though the market has subsequently fallen still further; at the end of October 2008, it retained less than 20 percent of the peak value reached in 1999. During the Asian financial crisis, the equity markets of Indonesia, South Korea, and Thailand fell by 65, 72, and 85

percent, respectively, in local-currency terms. In the United States, the S&P 500 index fell by 49 percent from March 24, 2000, to October 9, 2002, after the tech bubble burst.

There is, however, one important difference in the current crisis. In previous ones, market valuations, as measured by price-to-earnings (P/E) ratios, hit excessive levels before the crash.<sup>8</sup> This time, corporate earnings, which were around 50 percent above their long-run trend line as a proportion of GDP, experienced a bubble as well. Before the onset of the credit crisis, US corporate earnings were substantially above their trend growth (exhibit).<sup>9</sup> Both the numerator and the denominator of P/E ratios were inflated.

EXHIBIT

Back in sync



<sup>1</sup>Before extraordinary items, adjusted for goodwill impairment.

<sup>2</sup>Estimated using actual GDP as of Q3 2008.

<sup>3</sup>Estimated using sum of net income of last quarter of 2007 and net income of first three quarters of 2008.

Source: US Bureau of Economic Analysis; McKinsey analysis

By historical standards, the real-estate market bubble is more worrisome, because of the medium-term impact on household wealth. From the mid-1970s to the end of the last century, US housing values enjoyed average nominal growth of around 5.4 percent a year, according to the House Price Index of the Office of Federal Housing Oversight. There were two major cycles during this period: in the late 1970s and the late 1980s. In both, national average home prices climbed, at most, 5 to 6 percent above the trend line. From 2000 to 2007, however, home prices climbed to 40 percent above the previous trend.

Going into the present crisis, the US economy was more exposed to real estate than ever before. In the run-up to the S&L crisis, the total stock of US residential property was worth around 104 percent of GDP, and mortgage debt financed a third of that property. In 2001, it was worth around 121 percent of GDP<sup>10</sup> and more than 40 percent of it was financed by mortgages. At the end of 2007, Harvard's Joint Center for Housing Studies estimates, the total stock of US residential property was worth \$19 trillion, around 140 percent of US GDP, and more than half was financed by mortgages. If commercial mortgages are included, total mortgage debt was \$14.4 trillion, more than 100 percent of GDP.

Since the peak, housing prices have fallen by 18 percent, as measured by the Case–Shiller housing index, whose futures imply a further fall of 19 percent from the peak. Losses in the housing and mortgage markets, when realized, could considerably exceed those in the stock market as of early December 2008.

### **What does the future hold?**

Despite the shared features of the past century's financial crises—usually, excess leverage somewhere in the financial system and then a breakdown in confidence—the recessions following them were quite different. What determined the length and severity of those recessions was how governments responded: in particular, whether they managed to restore confidence among consumers, companies, investors, and lenders.

An economic crisis becomes a catastrophic recession only if it blocks the provision of capital to businesses long enough to generate widespread corporate failures. This blockage is what made the Asian financial crisis so devastating. Net capital inflows to the region, \$93 billion in 1996, turned into net outflows of \$12 billion in 1997. Local banking systems just couldn't provide the capital to plug this gap, foreign banks weren't prepared to extend credit, and the International Monetary Fund (IMF) moved too slowly. As a result, businesses couldn't finance working capital, let alone investment, and failed to

obtain the export financing these countries needed given the high share of exports in their GDPs. Once the flow of credit had been restored, the economies affected by the crisis recovered quickly.

Similar dynamics were at work during the Great Depression, when a combination of bank runs and limited federal controls undermined the financial economy. From 1929 to 1933, almost half of the banks operating in the United States before 1929 failed, as a result of falling prices, the doubling of the country's debt-service ratio, and the default of more than half of US farm debt.<sup>11</sup> Even most of the companies with the strongest credit couldn't obtain long-term debt capital in the years after the crisis. Moreover, capital had minimal cross-border mobility in the 1930s. With businesses starved of funding, corporate investment fell by more than 75 percent from 1929 to 1933, according to Bureau of Economic Analysis data.

Under less extreme conditions, with the right kind of government intervention, economies can weather even sizable credit crises. From 1981 to 1983, for example, Federal Deposit Insurance Corporation (FDIC) data show that 258 US banks failed or required assistance. Nonetheless, nonresidential US investment fell by less than 1 percent in all. During the entire 1980s, almost 750 banks failed and more than 1,500 required assistance, as opposed to 35 during the preceding decade. Yet corporate investment increased by an average of 4.5 percent a year in the '80s.

Today, the nonfinancial economy goes into the recession surprisingly well prepared: US industrial companies had lower leverage and higher interest coverage than they did going into the dot-com bust, the S&L crisis, or even the oil shocks of the 1970s. How the real economy fares will depend greatly on the way the current policy debate plays out over the next few quarters.

### **What should companies do?**

We do not yet know how the current crisis will evolve. The confidence of consumers, corporations, and investors—a key factor—cannot be forecast. Nor can government policy. Yet research shows that in past recessions, companies pursuing a purely defensive strategy fared less well than their more active counterparts.<sup>12</sup> As the economy enters what will probably be a difficult downturn, companies should prepare to seize their opportunities.

#### **Examine the patterns**

Although recessions differ, it's worth understanding how different industries performed during past downturns and what factors determined the speed of recovery. In coming months, as the focus of government policy shifts from fire fighting to economic stimulus, this kind of research will help companies

understand the implications for themselves and assess how the evolving macroenvironment will affect them in the next few years.

### Overprepare

Most companies already have contingency plans, but few plan as aggressively as they should. It's worth preparing for the worst—for example, major customers filing for bankruptcy, capital expenditures needing to be cut in half quickly, or a country sales operation losing access to local-currency working capital. What seems improbable now could become a reality sooner than you expect.

### Scan for opportunities

Managing downside risk shouldn't blind executives to potential upsides. Despite the current turbulence, in most industries it isn't hard to identify either the companies that will find themselves under pressure or which consolidation and reshaping scenarios might emerge. Instead of reacting to situations on short notice as they arise, invest time now to understand how such forces might affect your industry and what role you want your company to play. 

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### Notes

<sup>1</sup> Source: Bloomberg. Numbers cited refer to total credit losses, irrespective of ownership of the debts.

<sup>2</sup> *Financial Stability Report*, Bank of England, Issue 24, October 28, 2008.

<sup>3</sup> Source: National Bureau of Economic Research. By 1933, total deposits in the more than 9,000 suspended banks were \$7 billion; nominal GDP was \$58 billion in 1933.

<sup>4</sup> The regulatory environment for the banking industry in 1929 was very different from today's, particularly around deposit insurance, which was instituted after the Great Depression; the Federal Reserve's ability to act as lender of last resort; and the degree of visibility that the Fed had into banks' balance sheets.

<sup>5</sup> "Employment situation summary," US Department of Labor, Bureau of Labor Statistics, December 5, 2008.

<sup>6</sup> Carmen M. Reinhart and Kenneth S. Rogoff, "Is the 2007 sub-prime financial crisis so different? An international historical comparison", NBER working paper number 13761, January 2008.

<sup>7</sup> "Financial Stress and Economic Downturns," *World Economic Outlook, October 2008: Financial Stress, Downturns, and Recoveries*, International Monetary Fund.

<sup>8</sup> Marc Goedhart, Bin Jiang, and Timothy Koller, "Market fundamentals: 2000 versus 2007," *mckinseyquarterly.com*, September 2007.

<sup>9</sup>Richard Dobbs, Bin Jiang, and Timothy Koller, “Preparing for a slump in earnings,” mckinseyquarterly.com, March 2008.

<sup>10</sup>*Flow of Funds Accounts of the United States*, Federal Reserve Statistical Release, December 7, 2001.

<sup>11</sup>See Ben S. Bernanke, “Nonmonetary effects of the financial crisis in the propagation of the Great Depression,” *American Economic Review*, 1983, Volume 73, Number 3, pp. 257–76.

<sup>12</sup>Richard F. Dobbs, Tomas Karakolev, and Francis Malige, “Learning to love recessions,” mckinseyquarterly.com, June 2002.

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