

## Recoveries From Recessions Associated With Banking Crises: How Does This One Compare?

By Juan Carlos Hatchondo, David A. Price, and Jonathan Tompkins

**Recessions associated with banking crises tend to differ from other recessions in that the weakness of the financial sector, particularly the limited supply of credit, encumbers the subsequent recovery. The recovery from the 2007–09 recession, compared to past recoveries from recessions associated with banking crises, is within the historical range in terms of its level of GDP growth. In terms of unemployment, however, the recovery from the 2007–09 recession is markedly weaker than the historical norm.**

The aftermath of the 2007–09 recession has been an outlier in a number of respects. The recovery of GDP has been slower than recoveries following past recessions, which are normally followed by a steep rebound in output; unemployment has remained above 9 percent for more than two years, a pattern not previously seen during the post-World War II era; and in September 2011, the rate of long-term unemployment—the share of unemployed workers who have been out of work for at least six months—reached 46 percent, another first in the postwar era.

But the 2007–09 recession was unique among postwar U.S. recessions in that it was associated with a major financial crisis, which could have contributed to the depth of the recession and the protracted recovery observed so far. To what extent does the current recovery remain an outlier when considered against this backdrop? To shed light on that question, two of the authors of this *Economic Brief*, Juan Carlos Hatchondo and Jonathan Tompkins of the Richmond Fed, have looked at data from this recession and from 45 past recessions

associated with banking crises worldwide. The results of this analysis suggest that the present recovery is indeed an anomaly in important respects, even in comparison to recoveries from other recessions associated with financial crises.

Earlier literature observes that financial-crisis recessions historically have affected both economic output and unemployment differently than recessions generally. An International Monetary Fund (IMF) study in 2009 of business cycles in advanced economies finds that while an economy in recession typically returns to its peak GDP level in less than a year, GDP declines tend to be more severe and more drawn-out during financial-crisis recessions.<sup>1</sup> Carmen Reinhart and Kenneth Rogoff's investigation of financial crises in advanced economies, published in their book *This Time Is Different* (2009), finds that systemic crises, in particular, are "associated with profound declines in output and employment."<sup>2</sup>

Part of the reason for this relationship may be simple correlation: Financial crises are most likely to occur in the context of weak economic fundamentals. But in addition, there is an

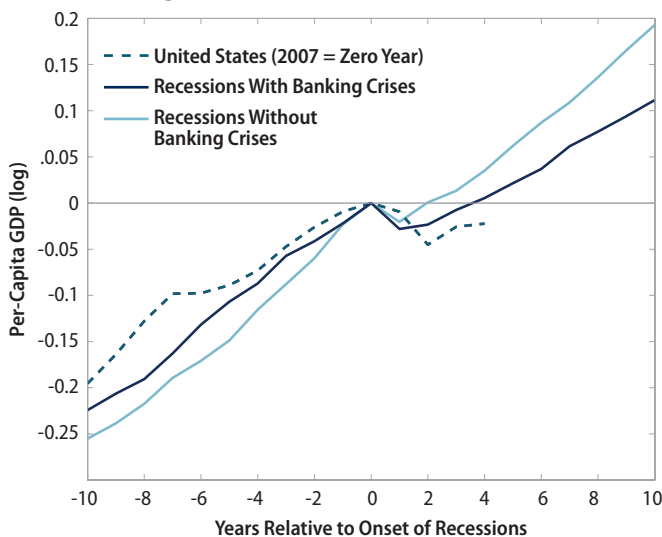
extensive literature documenting that financial crises in fact retard the recovery process by constraining the supply of credit. A 1983 paper on the subject by Ben Bernanke (a Stanford University economist at the time who now chairs the Federal Reserve) finds that the collapse of the financial system in the early 1930s, and the resulting collapse in credit supply, was a major cause of the long duration of the Great Depression.<sup>3</sup>

Hatchondo and Tompkins' analysis compares the current economic recovery with those associated with past banking crises in 34 countries in the Organization for Economic Cooperation and Development (OECD) from 1960 to 2010. A recession year is one in which real per-capita GDP decreases. For purposes of the study, a recession associated with a banking crisis is one in which a banking crisis occurred either in the year in which per-capita GDP peaked or during the subsequent recession. (Thus, the analysis covers recessions that coincided with banking crises, whether or not the banking crises caused or even preceded the recessions.) As in Reinhart and Rogoff's study, a banking crisis is defined by the occurrence

of either of two types of events: (1) bank runs that led to the closure, merging, or takeover by the public sector of one or more financial institutions, or (2) the closure, merging, takeover, or large-scale government assistance of an important financial institution.

Figure 1 illustrates the evolution of the log of real per-capita GDP in OECD countries before and after the start of each recession. The figure shows that recessions associated with banking crises are longer, lead to larger output drops, and have more protracted recoveries than other recessions. (A logarithmic presentation is used to facilitate comparisons of growth rates.) This is consistent with what the IMF's 2009 study finds using different sample periods. In terms of the long-term consequences of banking crises, the figure suggests that growth rates are lower in the aftermath of recessions associated with banking crises than in the aftermath of other recessions. The figure also suggests that the recent U.S. recession was more severe than typical recessions associated with banking crises and that the current recovery of GDP in the United States has been

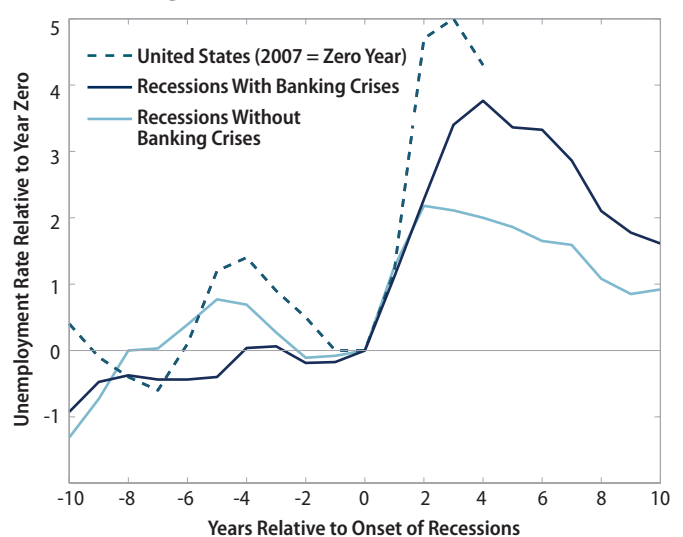
Figure 1: GDP Performance Relative to Years When Recessions Began



Note: Data are from OECD countries that experienced recessions beginning in 1960 through 2008. Years when recessions began are normalized to zero for comparison purposes. The blue line represents average GDP performance across countries before, during, and after recessions with financial crises. The light blue line represents average GDP performance across countries before, during, and after recessions without financial crises.

Sources: International Monetary Fund and *This Time Is Different* (Reinhart and Rogoff, 2009)

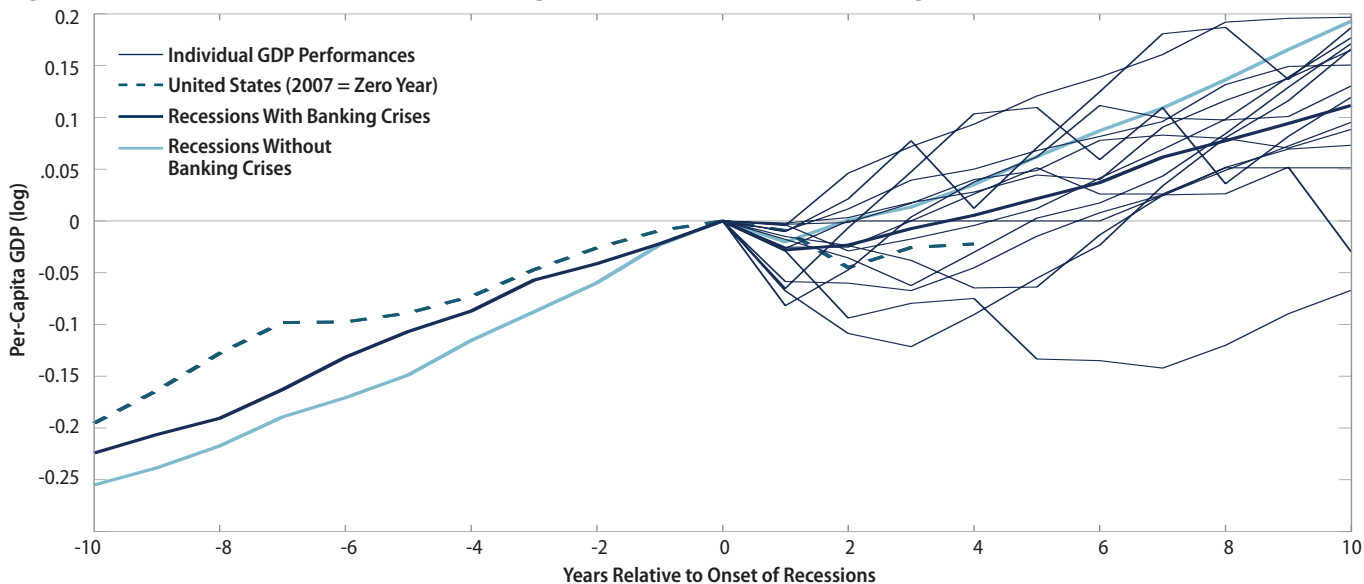
Figure 2: Unemployment Rates Relative to Years When Recessions Began



Note: Data are from OECD countries that experienced recessions beginning in 1960 through 2008. Years when recessions began are normalized to zero for comparison purposes. The blue line represents an average unemployment rate across countries before, during, and after recessions with financial crises. The light blue line represents an average unemployment rate across countries before, during, and after recessions without financial crises.

Sources: International Monetary Fund and *This Time Is Different* (Reinhart and Rogoff, 2009)

Figure 3: Individual GDP Performances Following Onset of Recessions With Banking Crises



Note: Data are from OECD countries that experienced recessions beginning in 1960 through 2008. Years when recessions began are normalized to zero for comparison purposes. The thick blue line represents average GDP performance across countries before, during, and after recessions with financial crises. The thin blue lines break out individual GDP performances during and following recessions with financial crises. The light blue line represents average GDP performance across countries before, during, and after recessions without financial crises. Sources: International Monetary Fund and *This Time Is Different* (Reinhart and Rogoff, 2009)

weak compared to the recoveries following previous crisis episodes.

With regard to unemployment, Figure 2 shows that the unemployment rate increases more in recessions associated with banking crises and that it remains at a higher level for many years following the peak in GDP, regardless of the type of recession. Figure 2 shows that the unemployment rate in the United States has increased substantially more than the increases observed in past recessions associated with banking crises.

Reinhart and Rogoff show that the qualitative behavior of GDP, equity prices, house prices, and the unemployment rate is similar across banking crises. While more severe, the recent crisis in the United States was not dissimilar from previous crises in terms of those variables, but the behavior of other variables has been significantly different. One important difference is that the U.S. currency appreciated during the crisis, in contrast to what has been observed in other recessions associated with banking crises. It has been argued that the depreciations that accompany many banking crises tend to amplify recessions by weaken-

ing the balance sheets of banks, leaving some creditors unable to service debts denominated in other currencies. A second important difference is that the United States did not experience a fiscal crisis as severe as in some other recessions associated with banking crises. While the long-term fiscal situation in the United States is a source of widespread concern, it differs from the fiscal situation seen in some other crises in that it has not impaired the ability of the government to borrow at low interest rates.

These differences may signal the need for a cautious interpretation of comparisons of the current state of the economy in the United States to what has been observed in other episodes at the same stage of recovery. But the absence of these factors suggests that the 2008 banking crisis—perhaps in combination with other policy and nonpolicy factors—may have had an even more powerful effect on the economy than previous banking crises in the sample.

A second qualification to the comparison with other episodes is that there is a significant degree of heterogeneity underlying the lines presented in Figures 1 and 2. This is clear in Figure 3, which presents the

evolution of the log of per-capita GDP in all OECD recessions associated with banking crises.

Given the heterogeneity of banking crises, the unique behavior of the exchange rate, and the demand for U.S. government bonds, one should not draw firm conclusions from analyses of this kind. Hatchondo and Tompkins' results suggest, however, that the aftermath of the 2007–09 recession, while consistent with other banking-crisis recessions in terms of GDP recovery, nonetheless poses unique problems in terms of unemployment compared with past banking-crisis recessions. ■

Juan Carlos Hatchondo is an economist, David A. Price is a senior editor, and Jonathan Tompkins is a research associate in the Research Department at the Federal Reserve Bank of Richmond.

## Endnotes

- <sup>1</sup> Marco E. Terrones, Alasdair Scott, Prakash Kannan, et al. "From Recession to Recovery: How Soon and How Strong?" in *World Economic Outlook*, International Monetary Fund, April 2009, pp. 113–114.
- <sup>2</sup> Carmen M. Reinhart and Kenneth S. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly*, pp. 224, 227, Princeton: Princeton University Press, 2009.
- <sup>3</sup> Ben S. Bernanke, "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression," *American Economic Review*, June 1983, vol. 73, no. 3, pp. 257–276.

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