



## Japan as a Role Model?

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In recent decades, Japan has proved a fascinating laboratory for economists to study financial intermediation and monetary policymaking.<sup>1</sup> Fifteen years ago, a number of economists argued that poorly chosen fiscal and monetary policies were holding back Japanese economic growth (e.g., Krugman, 1998; Bernanke, 2000).<sup>2</sup> More recently, in a series of speeches between 2010 and 2012, former Bank of Japan (BOJ) Governor Masaaki Shirakawa argued that although the political will to resolve troubled banks developed slowly during the 1990s, growth resumed thereafter—and aggressive monetary policy contributed to the rebound.<sup>3</sup> Further, he argued that Japanese economic activity rebounded more strongly following two adverse events—the end of land price appreciation (1990) and the banking crisis (1997-98)—than U.S. economic activity did following similar events in the United States in 2006 and 2008. In a recent reversal of earlier criticism, economist Paul Krugman lauded Japanese policy and economic performance during the past decade, stating

“What we thought was that Japan was a cautionary tale. It has turned into Japan as almost a role model. They never had as big a slump as we have had. They managed to have growing per capita income through most of what we call their ‘lost decade.’ My running joke is that the group of us who were worried about Japan a dozen years ago ought to go to Tokyo and apologize to the emperor. We’ve done worse than they ever did. When people ask: might we become Japan? I say: I wish we could become Japan” (in Martin, 2012).

Japan’s path during the 1980s and 1990s is well known. Financial deregulation in 1982 empowered the lightly regulated financial sector to fuel an unsustainable boom in equities and land prices during the latter half of the 1980s. Asset prices rose rapidly, inflation was quiescent, and monetary policy remained accommodative. In early 1989, seeking to temper asset-price increases, the BOJ increased its policy rate. The stock market collapsed at the beginning of 1990; land price appreciation slowed during 1990 and even-

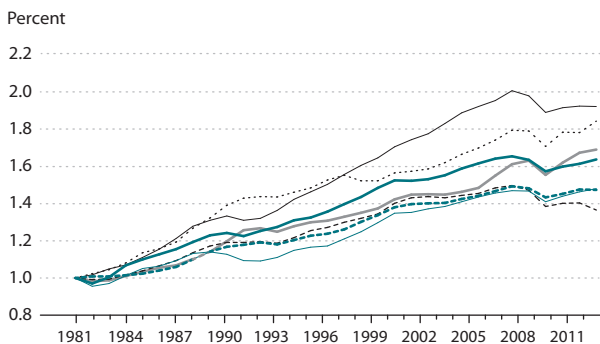
**Some analysts, noting Japan’s continued slow deflation, assert that Japan is trapped in a slow-growth, deflationary equilibrium. Former Governor Shirakawa argued that Japan had “gotten out”—at least when judged by the growth of real GDP.**

tually ended in 1992, saddling Japanese banks with large amounts of nonperforming loans. By some estimates, those loans equaled nearly 20 percent of gross domestic product (GDP). Political infighting stalled resolution of the loans crisis, and the handicapped banking industry hampered economic growth during the early and mid-1990s. Eventually, the 1997-98 banking crisis generated the political will to clean up the system. By 1999, real GDP was again increasing. Some refer to the 1990s as Japan’s “Lost Decade.”

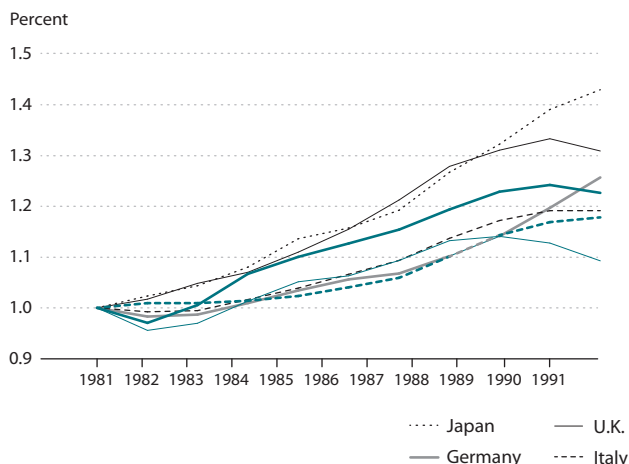
Today, some analysts, noting Japan’s continued slow deflation, assert that Japan is trapped in a slow-growth, deflationary equilibrium. Benhabib, Schmidt-Grohé, and Uribe (2001) offer the principal academic support for this argument. They provide a rational expectations model that demonstrates that interactions between the Fisher equation and a linear (Taylor-type) policy rule can produce multiple equilibria. More recently, Schmidt-Grohé and Uribe (2010) have argued that a nonlinear policy rule that switches to a quantitative easing-style scheme when the policy rate reaches zero can avoid unfavorable equilibria. Kearns and Black (2013), for example, quote Federal Reserve Bank of St. Louis President James Bullard, who drew on Benhabib, Schmidt-Grohé, and Uribe (2001) in a May 21, 2013 speech: “The lesson in Japan is once you get stuck there, it’s pretty hard to get out. They’re trying very hard right now and so maybe they’ll be successful, but this time around we’ll see. But it’s been very hard to get out.”<sup>4</sup>

**Real GDP per Working-Age Person**

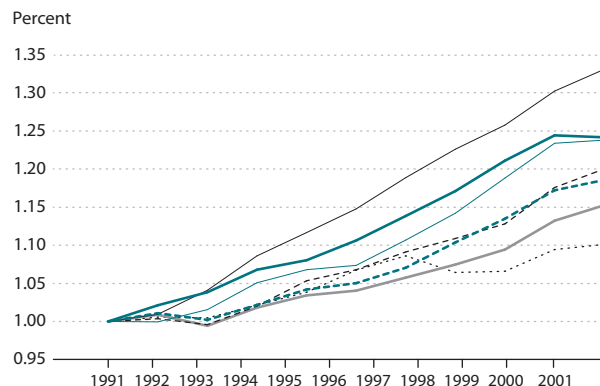
**A. 1981-2012**



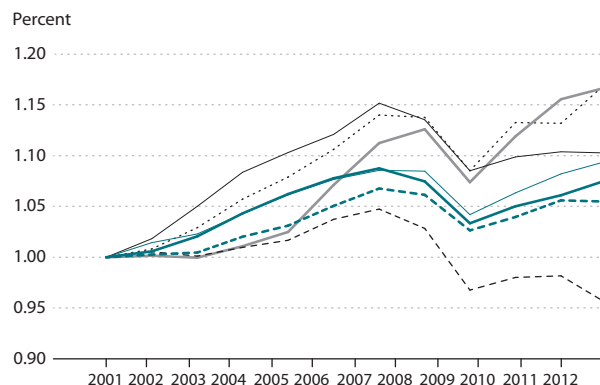
**B. 1981-91**



**C. 1991-2001**



**D. 2001-12**



Former Governor Shirakawa argued that Japan *had* “gotten out”—at least when judged by the growth of real GDP, despite persistent slow deflation—and that aggressive monetary policy contributed. From August 1998 to February 2007, the BOJ sustained its policy rate target (the uncollateralized overnight call rate) between zero and 0.25 percent. A quantitative easing policy was introduced in March 2001.<sup>5</sup> During the subsequent five years, the BOJ more than doubled its holdings of long-term Japanese government debt (Japanese government bonds, JGBs), from ¥27.3 trillion at year-end 2000 to ¥63.1 trillion at year-end 2005 (peaking at ¥65.4 trillion at year-end 2004), and the monetary base increased by more than half, from ¥74.4 trillion at year-end 2000 to ¥115 trillion at year-end 2005. The BOJ ended the program on July 14, 2006, setting a policy rate target of 0.25 percent. At that point, the public’s expectations of deflation had ended: More than 95 percent

of the households in a BOJ survey expected prices would increase or remain the same during the next year.

The international financial crisis brought additional action. The BOJ reduced its policy rate target from 0.5 percent to 0.3 percent on October 31, 2008, and to 0.1 percent on December 19, 2008. On December 1, 2009, it announced an initiative to furnish up to ¥10 trillion in 3-month loans to banks, at a 0.1 percent interest rate, against a variety of collateral, including JGBs, corporate bonds, and commercial paper. On October 5, 2010, it announced “comprehensive monetary easing,” including an additional asset purchase program. On October 30, 2012, it increased the total amount of assets to be purchased to ¥91 trillion from ¥80 trillion and initiated a program called the “Stimulating Bank Lending Facility.” As of year-end 2012, the BOJ had purchased ¥67.1 trillion in assets under this program, including ¥24.1 trillion in JGBs, ¥9.6 trillion in Treasury

bills, and ¥5.0 trillion in commercial paper and corporate bonds, and had loaned an additional ¥24.1 trillion to banks.

Data on Japanese economic activity support Shirakawa and Krugman. The chart compares the growth of real GDP per working-age person (15 to 64 years of age) in the G7 countries since 1980.<sup>6</sup> From 1981 to 2012, Japan's approximately 60 percent growth is second only to that of the United Kingdom. During the 1990s, prior to its 1997-98 banking crisis, Japan's growth parallels that of France, Italy, and unified Germany. In 2000 and 2001, Japan's post banking-crisis rebound begins. Finally, Japan's 15 percent growth during 2001-12 ranks first among the G7: Real GDP increased approximately 9 percent, while the working-age population decreased 6 percent. The evidence suggests that Japan deserves more study as a possible role model for how aggressive monetary policy (and fiscal policy, not discussed here) can assist recovery from a financial crisis. Further, the evidence suggests that reasonable economic growth, in at least some cases, is achievable during periods of sustained mild deflation. ■

## Notes

<sup>1</sup> For example, Cargill, Hutchison, and Ito (2000).

<sup>2</sup> Many authors have assumed that deflation, in and of itself, is corrosive to economic activity; for example, see Benhabib, Schmidt-Grohé, and Uribe (2001, 2002), Bullard (2010), and Schmidt-Grohé and Uribe (2010). The latter authors note, however, that sufficiently flexible wages and relative prices might render mild deflation harmless.

<sup>3</sup> See, for example, Shirakawa (2010, 2012). Posen (2010) also notes that growth resumed in 2002, after resolution of the banking crisis, as was predicted by Cargill, Hutchison, and Ito (2000).

<sup>4</sup> See also Bullard (2010, 2013).

<sup>5</sup> Here, the BOJ, at least in part, is following the advice offered by Bernanke (2002, 2003).

<sup>6</sup> Shirakawa argues that real GDP must be adjusted for changes in population demographics; I agree. Japan's working-age population peaked in 1995. Charts displaying real GDP not adjusted for working-age population are available from the author.

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