

Lessons From Japan

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ABSTRACT

We argue that Japan's experience with fiscal policy over the period 1990-2009 confirms the rational expectations and new classical position that fiscal policy, particularly when it is not accompanied by an accommodating monetary policy, is ineffective. We show that Japan's combination of a loose fiscal policy, together with a tight monetary policy has given them the worst of all possible worlds over the past twenty years; i.e. slow growth, deflation, rising unemployment, and a huge increase in their national debt burden. We argue that the Obama administration should be careful not to fall into the same trap the Japanese have been floundering in for the past twenty years.

Keywords: Japan, Keynesian, Recession, Deficit Financing, Expectations, Tax Increase

INTRODUCTION

In the 1970s and 1980s, at a time when Japan had already vaulted into the ranks of the developed countries, its economy expanded at annual rates of 5 and 4 percent respectively, which was faster growth than in the U.S. and most other industrialized countries. Japanese business practices, such as 'just in time' manufacturing, dominated management theory. Harvard Professor Ezra F. Vogel (1979) saw "Japan as Number One." Former U.S. ambassador to Japan, Edwin O. Reischauer (1979), summarized the prevailing view up until 1990 when he wrote, "... unquestionably Japan today has a more smoothly functioning society and an economy that is running rings around ours."

After 1990, a different scenario unfolded. The Nikkei, in inflation-adjusted terms, is now approximately one-quarter of its price in December 1989. Land prices have been in decline since the early 1990s but there are indications that land prices may be turning up. Japan's real GDP has increased at less than one percent per year since the mid-1990s, on average.

What went wrong? Our view is that Japan made two major policy mistakes. One is running unsustainable Federal budget deficits and dramatically increasing their debt-to-GDP ratio to such an extent that Moody's downgraded the Japanese foreign-currency debt grade in May 2009. Japan's leaders have taken conventional Keynesian steps of pump priming over twenty years with the end result being a recession-prone economy weighted down with a huge public-debt-to-GDP ratio.

The other policy mistake documented in a paper by Cosgrove, Marsh and Gasper (2008), is that the Bank of Japan ran an excessively tight monetary policy, except for a few years when the BOJ followed a quantitative easing program. The conclusion of that paper was that BOJ officials appear to be confused about the role of monetary policy in an economy that has near-zero inflation or is experiencing deflation.

What can the U.S. learn from Japan's errors? Clearly, Federal Reserve policy actions following the financial panic that occurred in U.S. financial markets in October 2008 tell us that Federal Reserve officials have no desire to repeat the Bank of Japan's mistakes in monetary policy. However, policy actions of Congress and the administration in terms of running large Federal deficits appear to be moving in the direction of repeating Japanese Keynesian-style discredited pump priming policies in developed economies.

THEORY

The first theoretical model to support the idea that bond-financed deficit spending could increase equilibrium output was due to Hicks (1937). His IS-LM framework, with the intuitively appealing Keynesian Income Multiplier, quickly became the conventional wisdom in principles of economics textbooks throughout the world. (See Samuelson (1965) for example.) Democratic presidents such as John F. Kennedy and Lyndon B. Johnson staffed their Councils of Economic Advisers with loyal Keynesians.

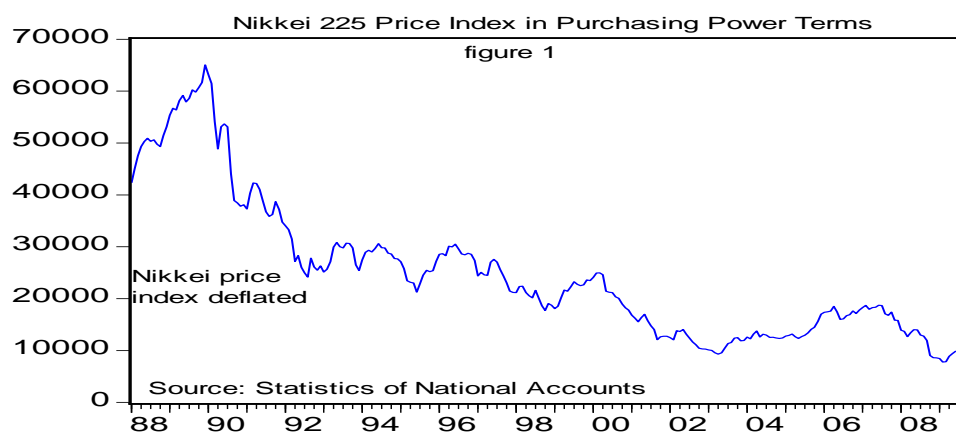
The stagflation of the 1970s cast doubt on the validity of the early, simple Keynesian models. Robert J. Barro (1974) began the counterattack by pointing out that rational consumers with forward-looking expectations would regard bond-financed government spending as creating future tax liabilities of equal present value levels. Such rational consumers would reduce current consumption spending in order to pay the future tax liabilities, with the result that aggregate demand would show no net increase as a result of higher government spending. The Keynesian Income Multiplier would be zero. Barro noted that David Ricardo had made much the same point 160 years earlier, and thus dubbed this idea “Ricardian equivalence,” meaning bond-financed deficit spending was equivalent to spending paid for by tax increases.

Robert E. Lucas, Jr. (1972) made a similar argument for the case of monetary policy, arguing that consumers with rational expectations would adapt their behavior to any change in monetary policy in such a way that money would only affect nominal variables, but not real variables. The overall principle was summarized by Thomas J. Sargent and Neil Wallace (1976) in their Policy Ineffectiveness Proposition: Consumers will alter their behavior in response to any announced macroeconomic policy in such a way that the policy loses its effectiveness. The economy only responds to stochastic shocks, or policy surprises, and then only in the short run.

Our argument in this paper is that Japan’s experience with fiscal policy over the period 1990-2009 essentially confirms the point of Barro, Lucas, and Sargent & Wallace. Over the past 19 years, Japan’s central government has run up an enormous public debt, the consequence of two decades’ worth of profligate deficit spending. Their tight monetary policy has told Japanese consumers that this debt will not be monetized, and inflated away, thus it realistically represents an enormous future tax liability. The Keynesian theory, as elaborated by Hicks and Samuelson, predicts that Japan should have continued the robust growth and full employment of the 1970s and 1980s. Instead, we show that all Japan’s enormous fiscal stimulus has accomplished has been slow growth, deflation, rising unemployment, and a crushing burden of debt to be passed on to Japan’s steadily shrinking population. Recent work by John B. Taylor (2009) and Robert J. Barro (2009) confirm our argument.

ECONOMIC PARAMETERS

Behavior of economic indicators such as equity prices, land prices and economic performance tells everyone that the fiscal and monetary policies implemented by Japanese policy makers have failed.



Japan has been in recession or slow economic growth since their equity market and land prices peaked in 1989 and 1991, respectively. Japan’s equity price index in 2009, adjusted for inflation, is about ¼ of its value in 1989 (Figure 1). And there doesn’t appear to be an indication that the Nikkei is about to enter an extended uptrend in prices. Behavior of the Nikkei suggests that investors never expected that Japan’s stimulative policy of large budget deficits would work, in particular, that Keynesian policy would not work when combined with a tight monetary policy.

Japanese urban land prices collapsed shortly after their equity market. Performance of land prices since 1991 is another indicator that buyers have no confidence in owning Japanese assets (Figure 2). However, the index for the six major cities has turned up and the index for the all urban area continues to drift lower.

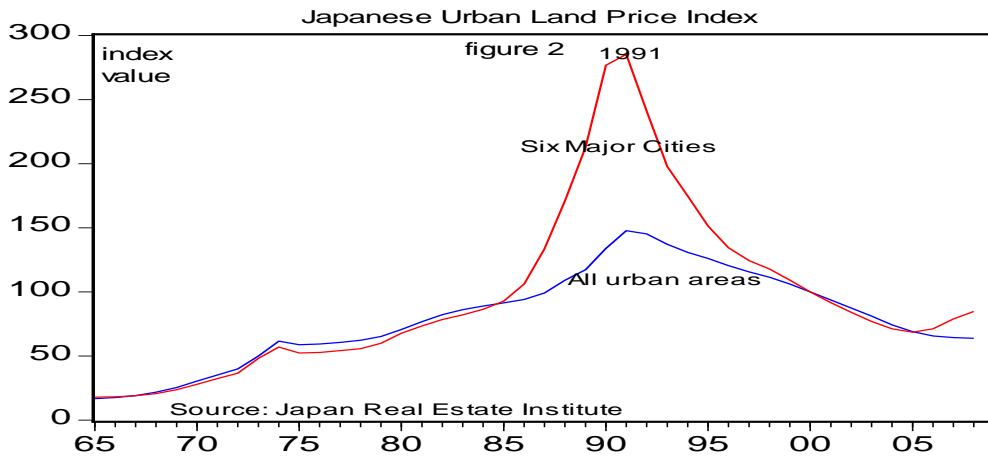
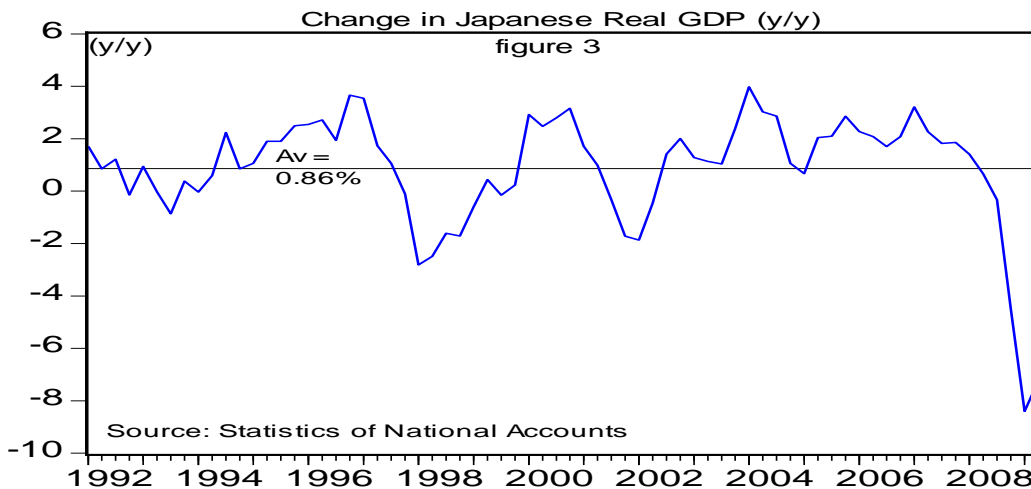
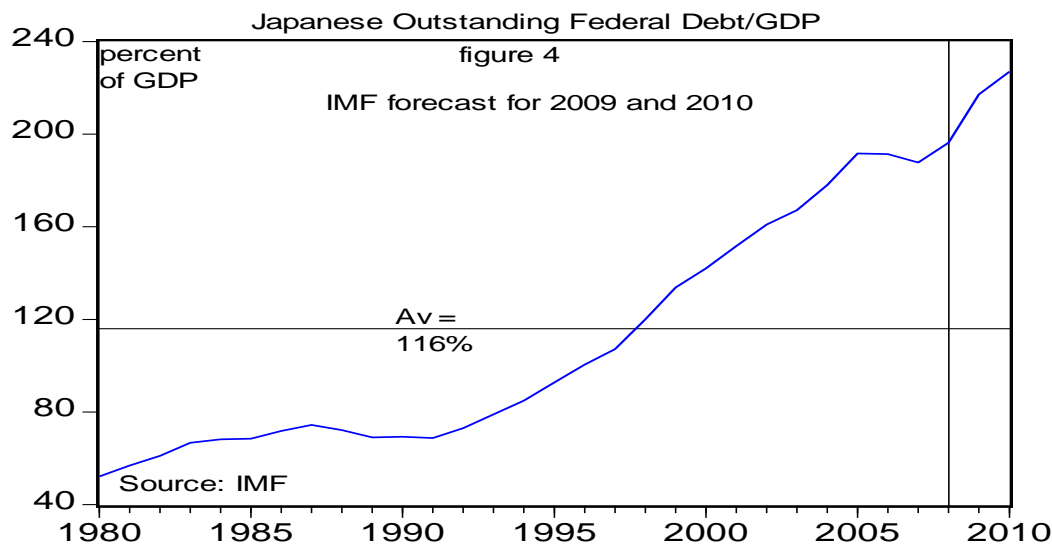


Figure 3 shows growth in real GDP since the mid-1990s. Growth of slightly less than one percent/yr suggests that major sectors of the economy, such as consumption and investment, have been reluctant to spend enough to help the economy grow faster in response to large increases in the central government spending and deficits. Behavior of these indicators suggests that the Japanese made major policy mistakes after the initial collapse in the equity market and land prices and continued to repeat the same policy mistakes in the years since. Over that same time period, countries in the region ranging from Australia to China enjoyed robust growth. Japan was an outlier in terms of participating in the regional growth. North Korea, of course, was another country in the region that didn’t participate.



DEBT MEASURES

In 1991, both the U.S. and Japan had an outstanding central government debt-to-GDP ratio of 68%. In 2008, the U.S. percentage was 70.5%, while Japan's was 196%. The IMF forecasts that percentage will be over 225% in 2010 (Figure 4). Moody's lowered Japan's foreign-currency debt grade from Aaa to Aa2 in May 2009. Japan's multi-year effort of Keynesian pump-priming failed to work as the resulting multiplier may be less than one. Productivity doesn't seem to have been enhanced by the additional government spending.



A partial list of Japanese efforts to jump start their economy during the 1990s which led to the surge in the public-debt-to-GDP ratio was compiled by The Wall Street Journal (2008). A stimulus package per year in Japan tended to be the norm during the 1990s as Japanese policy makers attempted to increase employment and investment and shift aggregate demand to the right.

August 1992: Japan passed its largest ever stimulus package at that time totaling 10.7 trillion yen or 2.2% of GDP. Approximately 80% was earmarked for public works projects and the remainder was allocated to loans for small- and medium-sized businesses and the Japan Development Bank.

In April 1993 a 13.2 trillion yen package --2.8% of GDP --was enacted. It was allocated primarily to public works and small businesses. But as the economy stagnated politicians responded with more assistance; so in September 1993, politicians rolled out another package at 6.2 trillion yen. Over 45% of that was for low-interest home financing with part of the remaining amount going for social infrastructure and business. The economy failed to respond.

In February 1994 a 15.3 trillion yen -- 3.2% of GDP -- stimulus was implemented with approximately one-third for income-tax cuts and 59% for more public investment with the remainder for small business and employment-support, land purchases and agricultural modernization. The income tax cut was temporary, effective only for 1994.

September 1995 saw a pump-priming package of 14.2 trillion yen – 2.9% of GDP -- with one-third for more public works, one-fifth for government land purchases and the remainder for other earmarks such as business loans. In June 1996 the Prime Minister agreed to raise consumption taxes to 5% from 3%, starting in April 1997, to reduce its fiscal deficit. The decision to increase tax rates was a major policy mistake and sent the economy downhill once more.

Then in April 1998 the government rolled out another large package of 16.7 trillion yen – 3.3% of GDP. Again over 45% was earmarked for public works and nearly 15% for the disposal of bad loans. Temporary income-tax cuts for two years were also implemented.

The largest ever stimulus plan of 23.9 trillion yen or 4.7% of GDP was announced in November 1998. Approximately one-third was for social public works, 25% for business loans with the remaining for items such as job-creation programs and sending checks to households.

Another handout of 18 trillion yen – 3.6% of GDP -- was rolled out in November 1999. Of that, nearly 40% went to businesses, another 40% for infrastructure projects with the remaining for areas such as housing loans. The economy stagnated most of the 1990s and the central government outstanding debt-to-GDP ratio increased rapidly during this period.

Japan also implemented stimulus packages in the current decade. In 2009 a pump-priming package that amounted to approximately 3% of GDP was rolled out. This package is for a shopping list of items including job training, health care, solar power, public works and tax breaks on purchases of fuel-efficient autos.

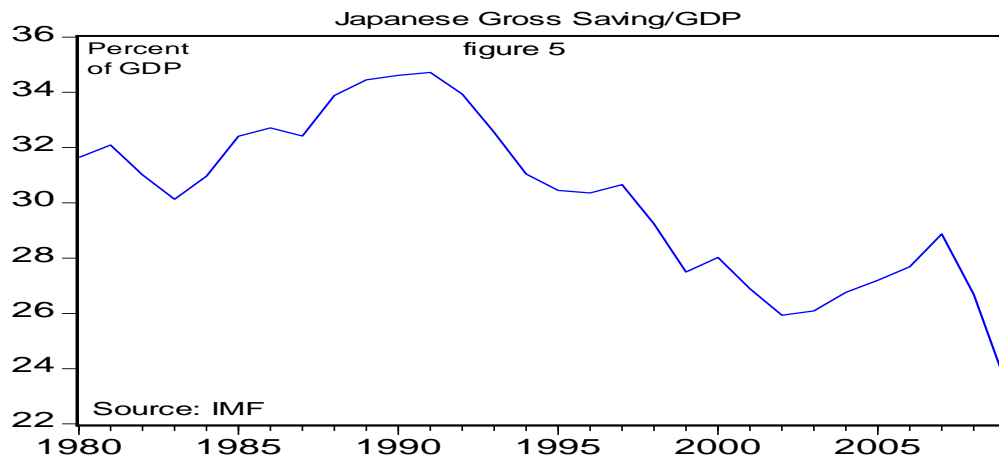
Japan tried the Keynesian pump-priming multiple times over two decades with very limited multiplier and productivity effects. If deficit spending were a solution, Japan would have been growing rapidly. Instead, Japan is left with a very high central government outstanding debt-to-GDP ratio compared to other developed economies (Table 1) and very slow economic growth. Japan has an outstanding debt-to-GDP ratio that is double that of Italy. An economy that experiences slow growth, on average, fails to generate adequate tax revenues to meet government outlays. The resulting deficit is compounded when policy makers increase government spending in multiple pump-priming attempts.

Countries	<u>2008</u>	<u>2009</u>	<u>2010</u>
France	67.3	74.9	80.3
Germany	67.2	79.4	86.6
Italy	105.8	115.3	121.1
Japan	196.3	217.2	227.4
United Kingdom	51.9	62.7	72.7
United States	70.5	87.0	97.5

Source: IMF

Obviously Japan's experience should give pause to all developed economies that expect benefits from running large deficits in order to increase government spending but not taxes. Households understand that large central government deficits mean higher taxes at some point and slow their rate of personal spending in anticipation of that. The physical and social infrastructure, job training programs, health care facilities to name but a few are already in place in developed economies. Gains in productivity are therefore likely to be minimal from incremental government spending on these activities. Increases in government spending and gains in the government share of GDP in developed economies appear to be of limited usefulness as the twenty-year experiment in Japan tells us. Japan has stagnated by using massive fiscal stimulus programs as well as policies similar to Mexico (Minneapolis Federal Reserve 2008.)

Japan's multi-year trend of large central government deficits has resulted, as expected, in a declining trend in gross savings as a percent of GDP. Public dissaving likely accounts for much of the decline in gross savings. The old-age dependency ratio is expected to increase faster in Japan than in Europe and European old-age dependency ratios are expected to rise more rapidly than in the U.S., OECD (2001). The implication is that personal saving rates may fall significantly in Japan as aging households start to spend their accumulated wealth. The longer term perspective for economic growth in Japan is not positive with a background of higher tax rates, huge debt burden, gross saving trends (Figure 5) and demographic issues.



SUMMARY

The experiences of Japan appear to be very relevant to the U.S. Both countries had an equity market and real estate crash. Japan's real estate collapse was concentrated in commercial and industrial property, while the U.S. crunch was in residential real estate. Japan's central bank followed a tight monetary policy, which was a mistake, and the Federal Reserve appears to have learned from the Bank of Japan's mistake.

However, the Japanese have run huge central government deficits following a Keynesian pump-priming approach with stimulus package after stimulus package being trotted out in an attempt to maintain production and employment. The result is that Japanese taxpayers are saddled with a central government debt-to-GDP ratio of over 200% compared to 68% in 1991 and slow economic growth. The U.S. government implemented a \$787 billion Keynesian style stimulus program in the spring of 2009 that was expected to enhance aggregate demand. The U.S. stimulus appears very similar to stimulus programs that Japan implemented in multiple failed attempts to generate growth.

Lessons from Japan on the household and business spending response to large serial central government deficits and the failure of increases in government spending to enhance productivity in the Japanese economy would appear to be a very useful case study for U.S. fiscal policymakers. Perhaps it would be useful if the current U.S. administration carefully evaluated the Japanese experience.

AUTHOR INFORMATION

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