

DAILY GLOBAL
COMMENTARY

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History Repeats Itself in Different Hues – Japan vs. United States

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Several questions pertaining to the Japanese economic crisis and quantitative easing have been trickling in as unprecedented economic and financial events unfold in the U.S. This Q&A is a bird's eye view of the trying period of Japan's economic history and recent economic and financial developments in the U.S. economy.

Highlights of Japan's Economic History 1989-2008

Q1. What is the all-time high of the Nikkei 225, when did it occur, and how drastic was the correction?

A1. The Nikkei 225 recorded the all-time high on December 29, 1989 when it closed at 38,915.97. By end-1990 it had fallen by over 38%, but reclaimed some stability afterwards, only losing a further 3.8% over the course of 1991 and 13.1% between 1992 and end-1995. As of end-November 2008, the Nikkei was at 8,512.27 – a mere 21.9% of its value at the peak.

Chart 1
Stock Price Index: Japan: Nikkei 225 Average
5/16/49=100



Source: Wall Street Journal/Financial Times /Haver Analytics

Q2. Did other asset prices decline along with equity prices?

A2. A sharp decline in real estate and other asset prices occurred following the drop in equity prices. By mid-1992, real estate prices had declined by one-third. Many properties had been used as loan collateral in the late 1980s, and usually when their values were significantly inflated. In turn, this decline put significant pressure on the balance sheets of most banks.

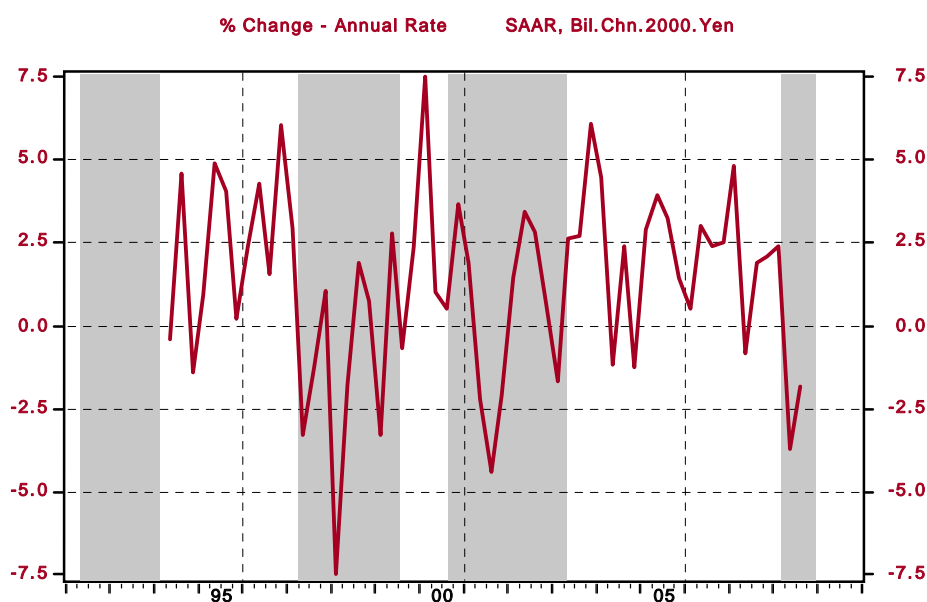
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Q3. When did the Japanese economy experience a recession following the decline in asset prices?

A3. The Japanese economy experienced three recessions between 1992 and 2003. The first recession, resulting in part from the bursting of the Nikkei bubble and in part from restrictive interest rates, officially started in April 1992, although headline industrial production had been contracting since Q2 1991. The official recession lasted until March 1994.

Chart 2

Japan: Gross Domestic Product



Source: Cabinet Office /Haver Analytics

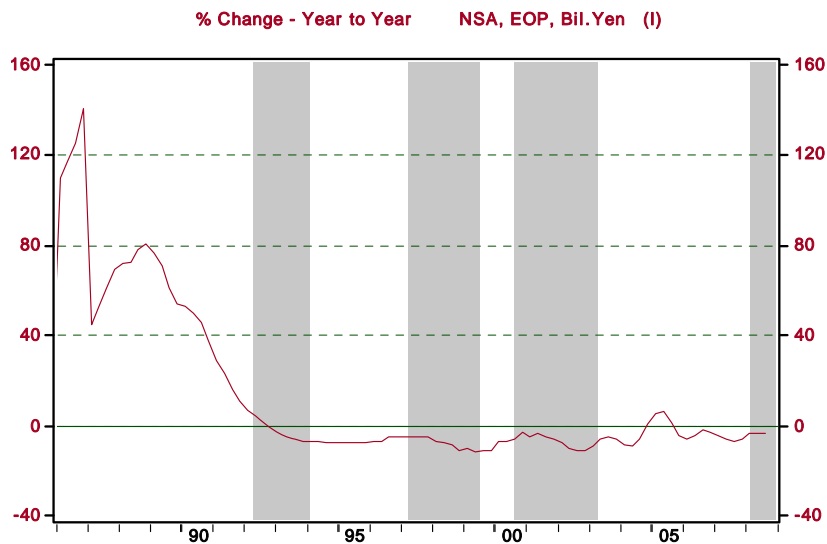
* Gray areas denote recession. GDP under current methodology only dates back to 1994.

Q4. How did the balance sheets of households and companies fit in to all this?

A4: Households and firms had borrowed to buy assets, with the former increasingly buying on credit and companies leveraging overvalued assets. Consumer credit growth peaked at just over 80% on the year by the end of 1988, but had fallen to 53.6% one year later when the Nikkei peaked, and by Q4 1992 consumer credit went into a prolonged period of contraction.

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Chart 3
Japan: Domestic Bank Lending: Consumer Credit



Source: Bank of Japan /Haver Analytics

Corporations began having problems financing their excessive loan portfolios in 1992, and reported non-performing loans (NPLs) rose by over 50% on the year. At the time, there were fears that the ratio of NPLs to total loans could exceed 14% – the ratio would eventually exceed 20%. Cozy relationships between banks and corporations kept a number of loss-making businesses open as banks rolled over their debts, while poorly-structured bankruptcy laws and a general avoidance of corporate failure kept many companies in business even though they were stuck in a perpetual debt trap. On a national level, corporate profits contracted throughout most of the 1990-93 period, with only four quarters of profit growth during a period where total profits fell by almost 50%

Q5. What were the main policy responses by the government and the Bank of Japan?

A5: The Bank of Japan (BoJ) had been gradually raising rates during the late 1980s in an attempt to deflate the growing Nikkei bubble. However, as economic activity still carried some momentum after the Nikkei had peaked, the BoJ continued tightening until March 1991. During those 15 months, the BoJ increased the overnight rate a total of 190 basis points, to 8.56%, only to see industrial production start contracting and the effects of the bubble’s collapse roll onto the corporate sector.

During FY1989-1990 (April-March), the government was in the midst of narrowing the annual budget deficit, which had peaked at 5.7% of GDP a decade earlier but had been reduced to a more manageable 1.2% deficit when the Nikkei peaked. The government only took action to offer fiscal stimulus in FY1992, and at first it was through tax cuts and front-loading public spending, neither of which addressed the larger problem of weakening balance sheets at an increasing number of banks. After 1992, the government initiated a series of increasingly-costly attempts (see

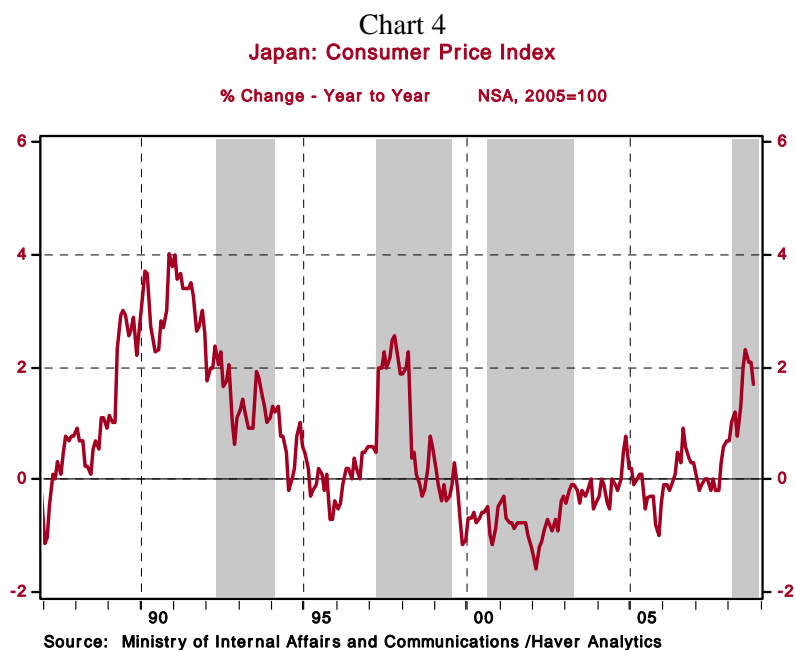
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paragraph below) to save the financial sector, and by FY1998 the budget deficit had ballooned to 10.2% of GDP, with the public debt stock at 82.7% and rising, compared with 50.4% in 1990.

The Cooperative Credit Purchasing Company was created by the Parliament and came into existence in January 1993 to purchase bad loans from banks and sell off the underlying collateral assets (real estate). During its two-plus years of operations it cleared ¥87 trillion in assets (at book value), but this was a small amount compared to the actual total – most of which had not been realized at this point. In September 1995, the Tokyo Kyodo Bank was created to further assist in the cleaning up of bad assets, and one year later it was restructured into the Resolution and Collection Bank (RCB). The RCB's structure closely matched the Resolution and Trust Corporation set up in 1989 in the USA to handle its own S&L crisis. By this time, Japan's official NPL total was close to ¥40 trillion, or around 10% of GDP, and unofficial estimates placed the actual figure at closer to 25% of GDP. In 1998 the government initiated a massive (\$500 billion) program (the Obuchi plan) for bank capitalization and covering of loan losses, followed by bank mergers, nationalizations and even outright closures. By 2002, the total cost of rescue funds had risen to almost 24% of GDP.

Q6. When did Japan experience deflation?

A6: Consumer price growth began to decelerate as of end-1990 as BoJ monetary tightening began to pinch. Consumer lending slowed rapidly as purchasers became more conservative, and by 1992 inflation had fallen beneath 1% for short periods of time. However, as the BoJ began easing rates, consumers did not return as the recession dragged on, and price pressures retreated further. July 1994 witnessed the first negative year-over-year change in the CPI (-0.2%), and deflation set in for almost the entirety of 1995. After a one-year spike in prices throughout most of 1997 due to a hike in the consumption tax, deflation settled in for most of the next decade.

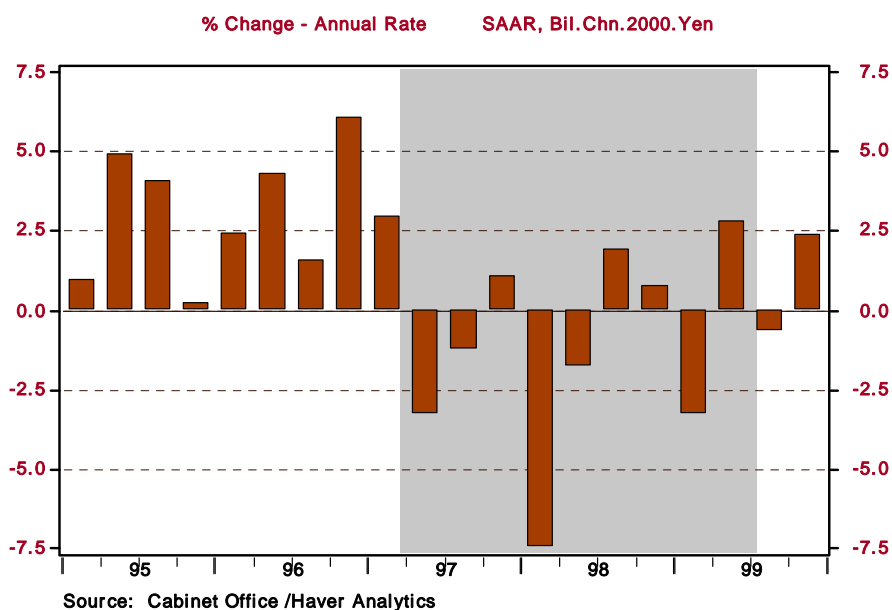


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Q7. Why did the economy fall into recession in 1997, months prior to the Asian financial crisis? Was this related to Japan’s bank crisis?

A7: At the beginning of 1997, once the RCB was in place and economic growth had resumed to a reasonable degree, fears were growing that the government was building a debt situation that would be difficult to unwind. Since inflation had returned to a modest degree, the economy was growing and banks had a facility to help them dispose of their bad loans, PM Hashimoto took the critical step of initiating a two percentage point increase in the consumption tax, from 3% to 5%, as a first step in narrowing the budget deficit. Unfortunately this tax hike, effective on April 1, 1997, proved to be the economy’s undoing, as consumers had not rebuilt their confidence in the economic recovery. Private consumption collapsed in Q2 after spiking in Q1 in a wave of pre-tax hike buying, and the slowdown fed through into struggling retail chains and restructuring companies still under a heavy debt burden.

Chart 5
Japan: Gross Domestic Product

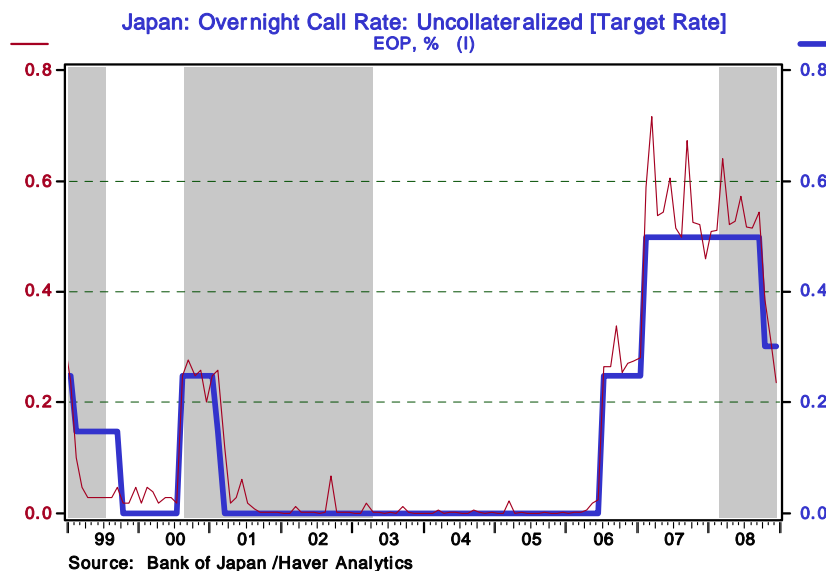


Q8: How much of an impact did the central bank’s Zero Interest Rate Policy have?

A8: In October 1999, the BoJ reduced its overnight rate target to 0.001% – effectively a 0% rate – in an effort to promote a recovery that had not gained much traction and was driven largely by exports rather than by domestic consumption. The brave move lasted until August 2000, when the BoJ decided that its ultra-easy monetary policy could end and hiked the overnight rate to 0.25%. The central bank misread the market signals for this hike, and confidence slumped yet again. This brought the onset of Japan’s worst post-bubble recession to-date, and also set the stage for five years of the Quantitative Easing (QE) policy.

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Chart 6
Japan: Overnight Call Rate: Uncollateralized [Effective Rate]
 EOP, % (l)



Under QE monetary policy, the BoJ flooded the market with yen by increasing its target for "current account balances" of commercial banks at the BOJ far in excess of their required reserve levels. This had the expected impact of reducing the overnight rate to zero. By 2004, the BoJ had raised its target to ¥35 trillion, where it remained until early 2005, when central bank officials began winding the target down in preparation for an eventual "normalization" of interest rates starting in 2006. It is generally accepted that the QE program helped weaker banks stabilize, but it is less clear whether the unwinding of this position correlated with the latest recession, which started in March 2008.

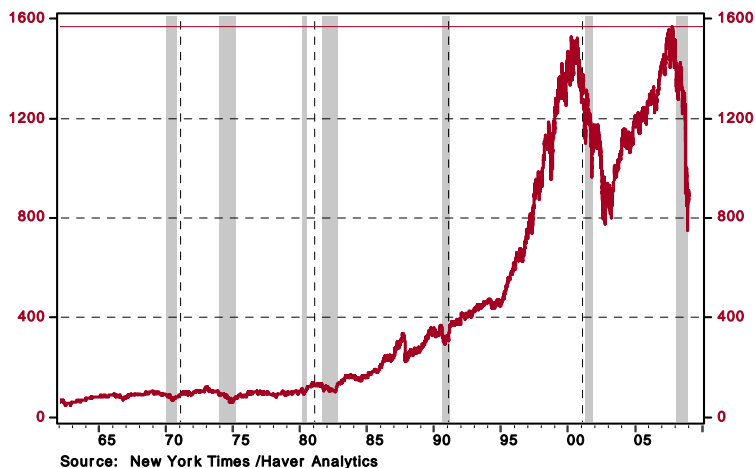
We will go through a nearly similar Q&A for the U.S. economy and draw inferences about policy responses in the U.S.

Q9. What is the all-time high of the S&P 500, when did it occur, and how drastic has the correction been?

A9. The S&P 500 closed at a high of 1565.15 on October 9, 2007. On November 20, 2008, the S&P 500 lost 52.9% from its peak mark and has recovered slightly as of December 17, 2008 (885.28). On a monthly average basis, the November 2008 average of the S&P 500 is down 42.7% from the peak in October 2007. Starting from recessions in 1953, the largest drop in the S&P 500 was in the 1973-75 recession amounting to a 43.4% decline. In the 2001 recession, the S&P 500, on a month average basis, lost 42.8%. These are the three largest declines of the S&P 500 during recessions in the 1953-2008 period.

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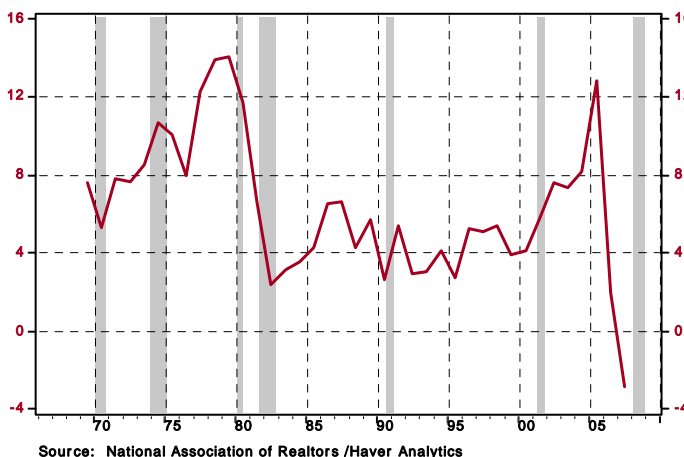
Chart 7
Standard & Poor's 500 Stock Price Index
1941-43=10



Q10. What other asset classes have posted significant price declines?

A10. Of the asset classes that have suffered setbacks, the rapid decline in home prices is what triggered the current economic turmoil. Nationally, the median price of an existing home in the U.S. economy has the unique distinction of decelerating but not declining in 1968-2006. The first price decline was first posted in 2007.

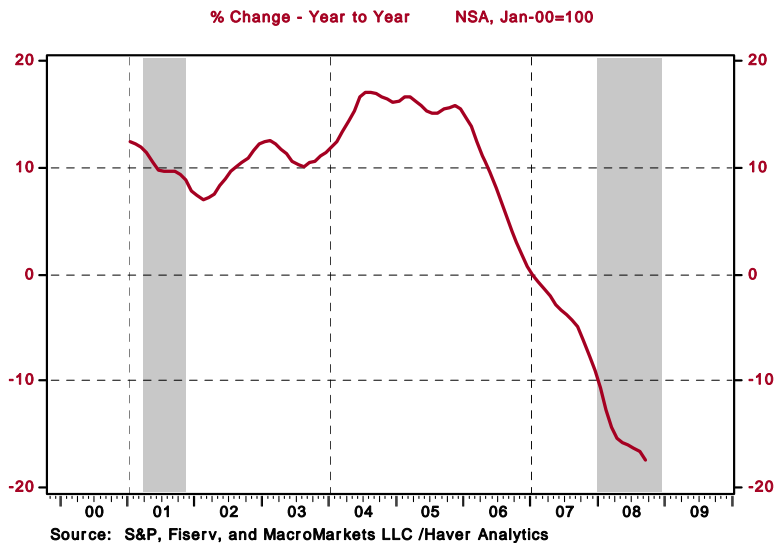
Chart 8
NAR Median Sales Price: Existing 1-Family Homes, United States
% Change - Period to Period \$



The Case-Shiller Home Price Index, a more representative home price index but with a shorter history, shows double-digit declines of home prices. This radical departure of home prices is the challenge for policy makers.

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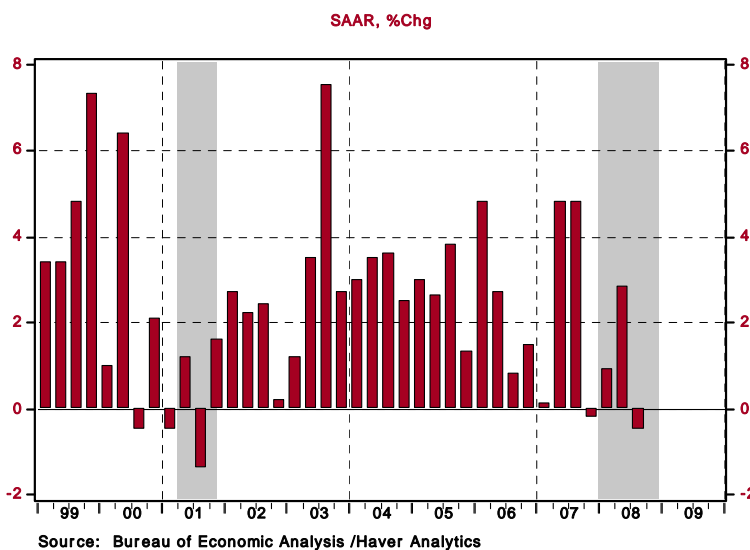
Chart 9
S&P/Case-Shiller Home Price Index: Composite 20



Q11. When did the U.S. economy experience a recession following the decline in asset prices?

A11. The National Bureau of Economic Research identified the onset of the recession as December 2007. The U.S. economy has been in a recession for twelve months. Historically, this is the third-longest recession in the post-war period. The 1973-75 and 1981-82 recessions lasted for sixteen months. The median span of a recession is ten months.

Chart 10
Real Gross Domestic Product



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Q12. How did the balance sheets of households and companies fit in to all this?

A12. Households are financially strapped with the debt-asset ratio at a record high and household net worth is likely to register a significant decline, the second such event since 1952, following the 2000-2002 equity market debacle.

Chart 11
Households: Debt/Asset Ratio

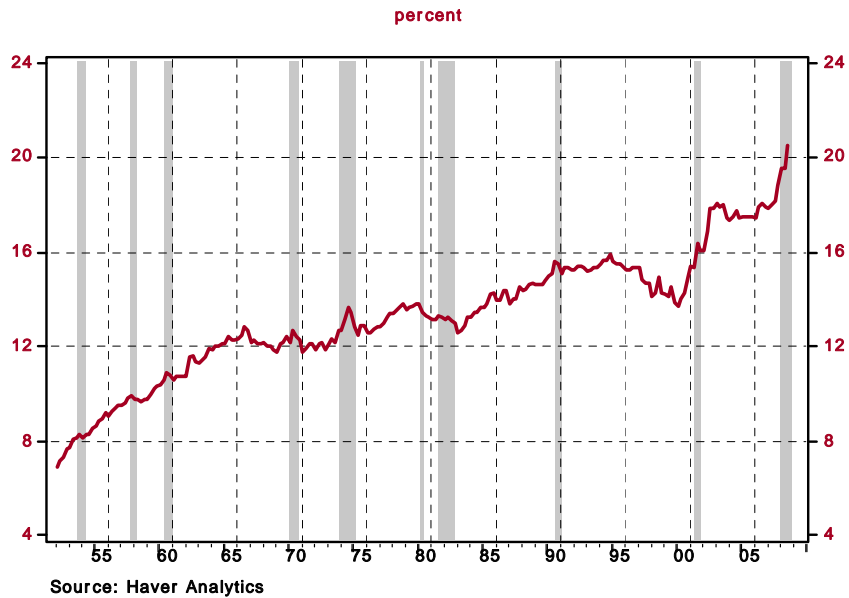
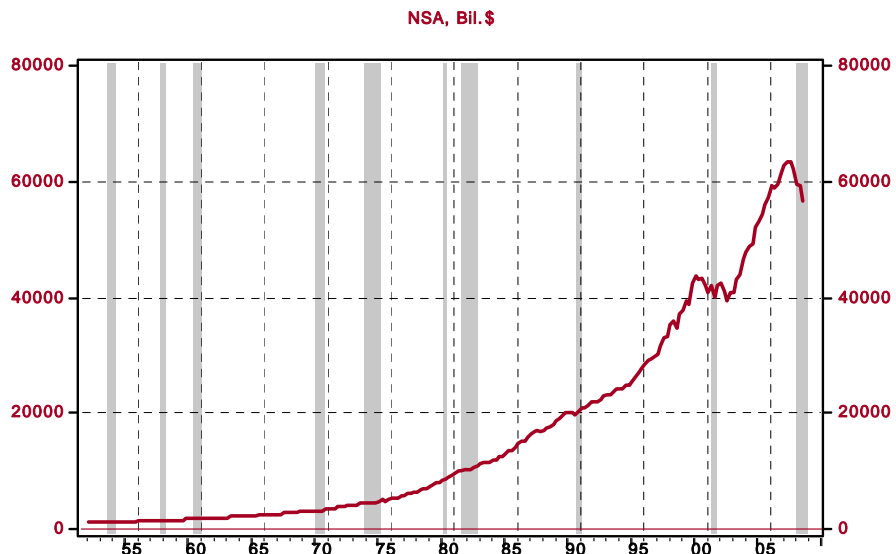


Chart 12
Households & Nonprofit Organizations: Net Worth



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By contrast, the financial well-being of nonfinancial businesses is relatively reassuring because their debt-asset ratio is not alarming. But, weak profits present a serious threat to a recovery of capital spending. Also, the large but unknown size of non-performing loans of the financial sector is at the heart of the credit crunch enhancing the severity of the crisis.

Chart 13
Nonfinancial Corporations: Debt/Asset Ratio

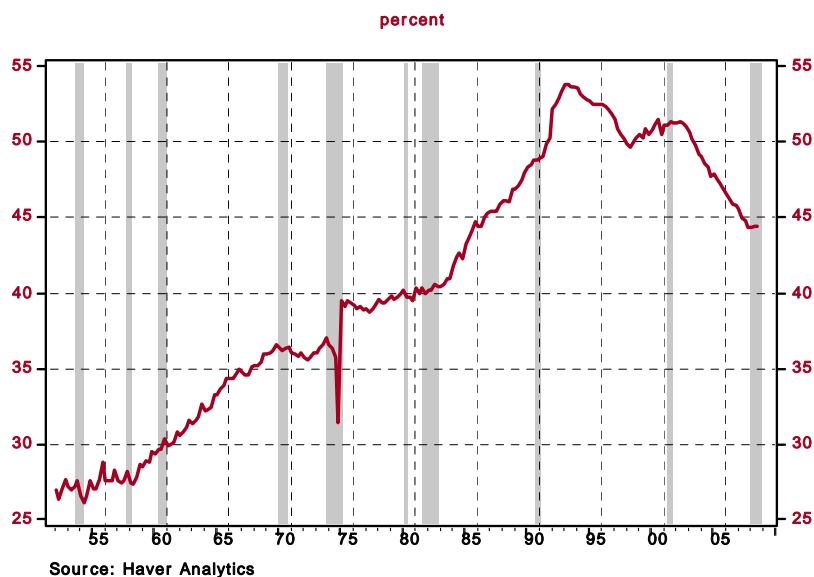
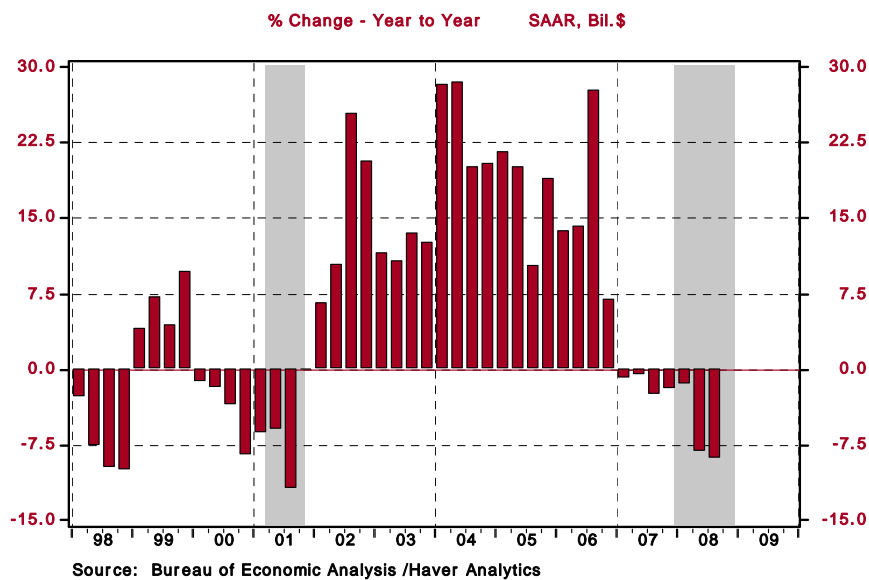


Chart 14
Corporate Profits with IVA and CCAdj

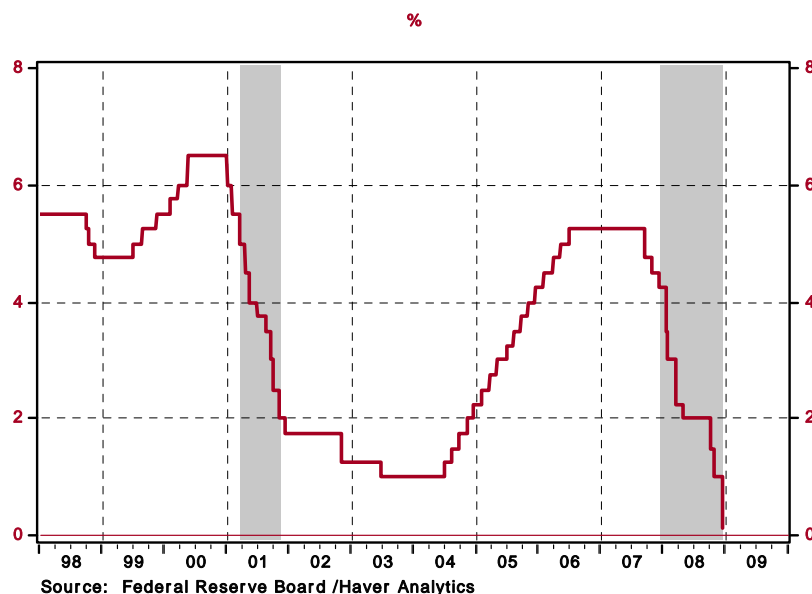


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Q13. What have been the main policy responses by the Fed and the Treasury?

A13. The aggressive easing of monetary policy is visible in the fact that the federal funds rate is now near zero, a full 525 bps cut over a period of sixteen months. This is an historic move with the FOMC operating in a completely new environment. Discount window borrowing is now more lenient with a wider range of eligible collateral and extended loans.

Chart 15
Federal Open Market Committee: Fed Funds Target Rate



In addition, the Fed has created new facilities to lend directly to banks, primary dealers, money market mutual funds, and nonfinancial firms as the credit markets have frozen. The Fed has also provided direct financing to prevent the outright bankruptcy of Bear Stearns and AIG, whose failure was seen as a threat to global financial stability. Late-November the Fed announced it would start purchasing securities issued by Fannie Mae, Freddie Mac, and Federal Home Loan Banks. Purchases of direct obligations and mortgage backed securities backed by these agencies will be undertaken under this program. The Fed also has initiated a joint program with the Treasury of lending up to \$200 billion to holders of AAA-rated asset backed securities “backed by newly and recently originated consumer and small business loans.” The main criticism directed at the Fed about management of monetary policy during the Great Depression was that it failed to provide ample liquidity. These wide-ranging actions and programs implicitly address this allegation. The Fed has carried out its obligations responsibly and creatively as a “lender of resort.”

Congress authorized the U.S. Treasury through the Emergency Economic Stabilization Act of 2008 to address the economic crisis with a large purse of \$700 billion. These funds have been made available in two installments of \$350 billion. Though originally planned to purchase illiquid

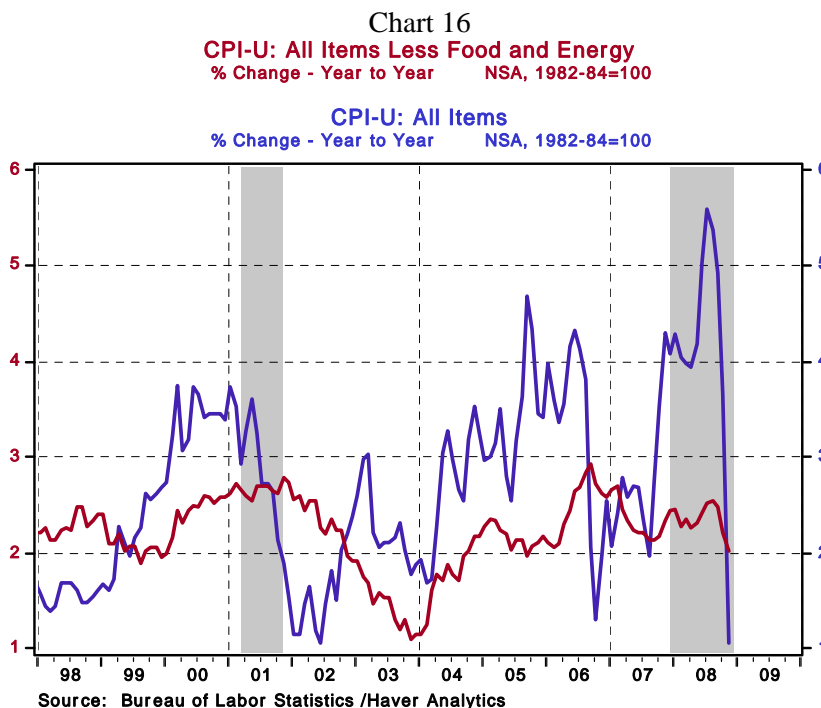
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assets of banks, the program was modified to acquire equity stakes in banks. In other words, the Treasury has undertaken a capital injection plan to help financial institutions clean up their balance sheets. The success of this approach will be known in the months ahead. At the present moment, it appears banks are holding a large part of the new capital as excess reserves at the Fed. There is enormous pressure for banks to start lending once again and fire up the credit machine.

Other programs are also in place to directly address the advancing pace of home foreclosures and declining trend of home sales. Hope Now Alliance brings together homeowners with mortgage market participants to rework mortgage loans to prevent foreclosures. Hope for Homeowners is another program under which lenders have to forgive a part of the principal in exchange for a government guarantee when loan modifications are made such that they are more affordable. Other proposals are under consideration with the basic idea being that the U.S. government would buy mortgages under-water and refinance a new mortgage loan at a lower affordable rate. An alternate plan aims at increasing overall demand for housing by reducing the cost of borrowing, with the 30-year fixed rate mortgage at 4.50%.

Q14. Japan experienced deflation, what is in the situation in the U.S. economy?

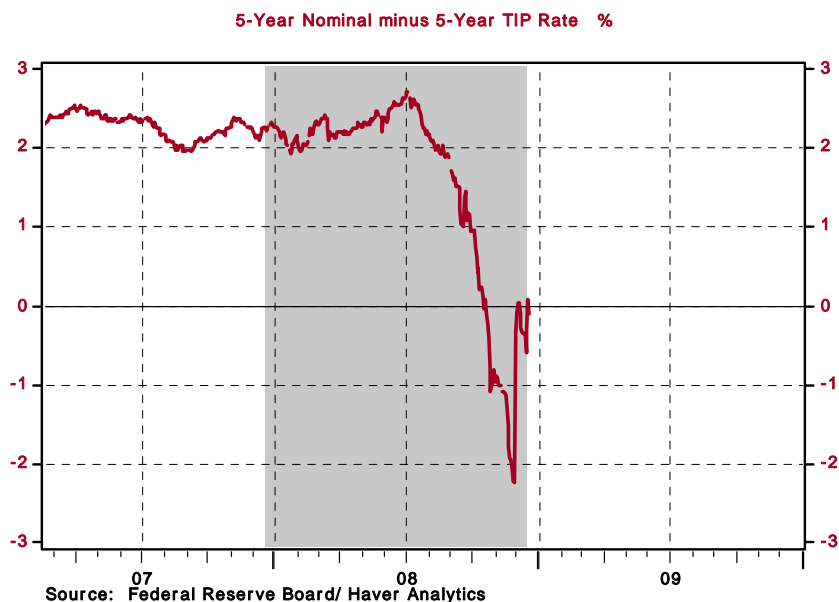
A14. The overall Consumer Price Index (CPI) has dropped on a month-to-month basis in October and November, entirely due to a sharp decline in energy prices. On a year-to-year basis, the CPI rose 1.1% in November. Excluding energy, the CPI held steady but moved 2.6% on a year-to-year basis. The core CPI, which excludes food and energy, advanced 2.0% from a year ago in November.



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Essentially, a threat of deflation has emerged in the marketplace. The expected rate of inflation inferred from the spread between the 5-year Treasury note yield and the 5-year TIP rate has largely been negative from mid-October, with the exception of few positive readings.

Chart 17
Inflation Expectations



The Fed is cognizant of the consequences of deflation and is taking steps to prevent this from occurring. Chairman Bernanke in a 2002 speech outlined the options available to the Fed to tackle a deflationary threat. The latest Fed policy statement to a large degree is a reflection of these remarks. The policy statement of December 16, 2008 noted that *“the Federal Reserve will employ all available tools to promote the resumption of sustainable economic growth and to preserve price stability. In particular, the Committee anticipates that weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.”* [emphasis added]. In addition, the Fed *“is also evaluating the potential benefits of purchasing longer-term Treasury securities.”* The Fed is out front and center to address the economic and financial crisis.

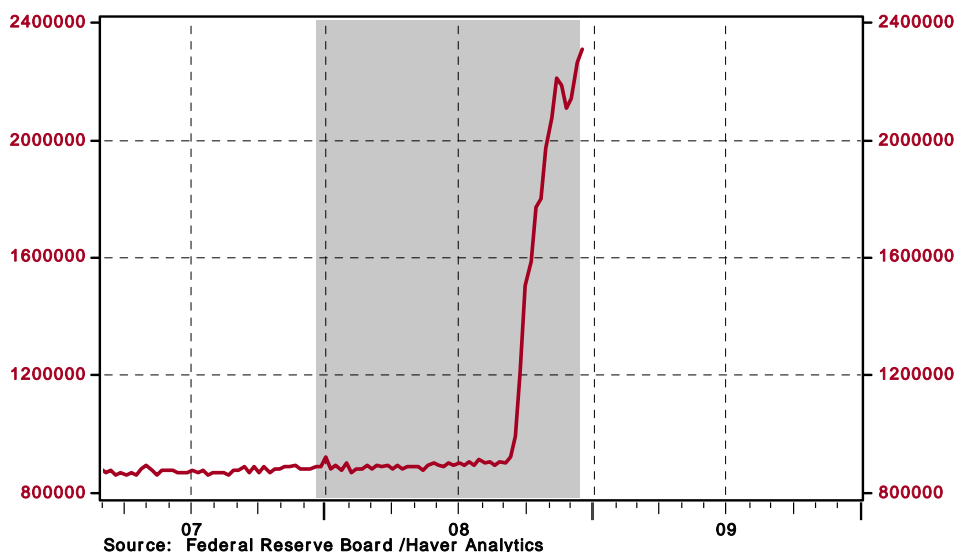
Q15. What is the difference between QE in Japan and the QE program of the Fed?

A15. The BoJ’s QE policy changed the operating target from the overnight rate to the outstanding current account balances held by banks at the BoJ to provide ample liquidity with a target for the current account balance in excess of required reserves. It also engaged in outright purchases of long-term Japanese government bonds to ensure a smooth availability of liquidity. The QE policy of Japan maintained financial market stability and avoided further deterioration of the macroeconomy. The Japanese economy is again mired in a recession. A complete assessment of the success or failure of the central bank’s QE policy will be determined in the future.

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We will gather more information about QE as seen by the Fed as it manages monetary policy in the months ahead. At the present time, the Fed is designing monetary policy by changing the composition of its assets and the size of its balance sheet. The operational strategy appears to be one of the FOMC directly influencing credit markets via its various programs rather than engaging in indirect swaying of credit market conditions by targeting the quantity of excess reserves. The Fed has a range for the federal funds rate of 0.0-0.25% – effectively the overnight rate is zero. It also has no explicit target for reserves but it has indicated that it stands ready to purchase government agency securities, those backed by government agencies, and will lend to issuers of asset backed securities to increase credit extended to consumers and households. The QE policy of the Fed commenced informally when the balance sheet size started growing rapidly by the end of the September. A formal recognition emerged only after the Fed announced the target federal funds rate as a range between 0.0-0.25% on December 16.


Chart 18
All Fed Res Banks: Total Assets
 EOP, Mil. \$



Q16. What are the differences in policy approaches in the U.S. vs. Japan?

A16. The first and most obvious difference is that Japan’s policy responses were stretched out from 1990-2001, the deliberate reactive approach leads to conclude that it extended the sluggish performance of the economy. Second, the political will to act aggressively and decisively was lacking. To their defense, we can add that the U.S. benefits from the experience of Japan. Third, Japan adopted a target for excess reserves when it embarked on the QE path after exhausting the policy rate reduction option. The Fed is on a different path to the extent it has been more aggressive, driven the federal funds rate to zero more rapidly, and put in place a plethora of programs to address the credit crunch in a comparatively short period of time. Fourth, it is a

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global recession where several central banks are acting in the same direction, which allows policy makers more latitude and political support. Fifth, the process of deleveraging is proceeding at a different pace in the U.S. Japan addressed the issue of non-performing loans only in the mid-1990s. True, information about non-performing loans is sparse and it is not clear if the U.S. banking system will address it sooner and more completely. Martin Fackler of the New York Times notes that Heizo Takenaka, a former banking minister of Japan, is given credit for taking a tough stance of auditing banks and forcing weak institutions to raise new capital or accept a government takeover. It is recognized that credit began to flow freely in Japan only after this policy was executed starting in 2003. This is an important take away for regulators in the U.S. to begin the hard process of auditing banks to ensure a speedy end of the credit crunch.

The U.S. economy is running a grand experiment of testing both competing economic philosophies –Keynesian and Monetarist – simultaneously. Time will be the judge about the success of this exercise. For now, the integrity of the global financial system is intact owing to the aggressive intervention of central banks.