



HIGHLIGHTS

- **US policy makers learned much from Japan's lost decade. It motivated the Federal Reserve to ease policy quickly, deeply, and to entertain non-traditional choices in 2008-2010. These actions helped to revive the US financial system and foster a recovery.**
- **However, one lesson has not received adequate attention. The stagnation in Japan was partly due to the fact that financial intermediation remained impaired for many years.**
- **This suggests that expectations for more quantitative easing to put the US economy on a sustained stronger growth profile could be disappointed**
- **The remaining lesson from Japan is that US authorities must address the on-going foreclosures crisis, and this likely requires radical mortgage reforms**

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RESOLVING U.S. HOUSING PROBLEM ESSENTIAL TO AVOIDING JAPAN EXPERIENCE

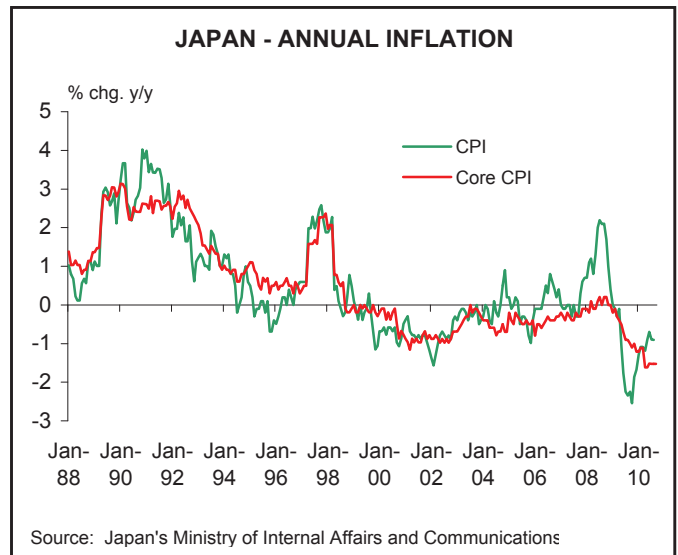
The expression “Japan’s lost decade” refers to the 1990s period, where Japan experienced weak economic growth and mild deflation following a collapse in stock and real estate market values in 1991. This weakness carried through to the early 2000s. Real GDP growth significantly decelerated from an annual average of 4.5% during the eighties to 1.5% during the nineties, and then to a mere 0.8% during the 2000-09 period. Likewise, core annual inflation peaked at 3% in March 1990 and dipped into negative territory by September 1998. Since then, annual inflation has averaged -0.5%, though it did record positive figures briefly in 2008.

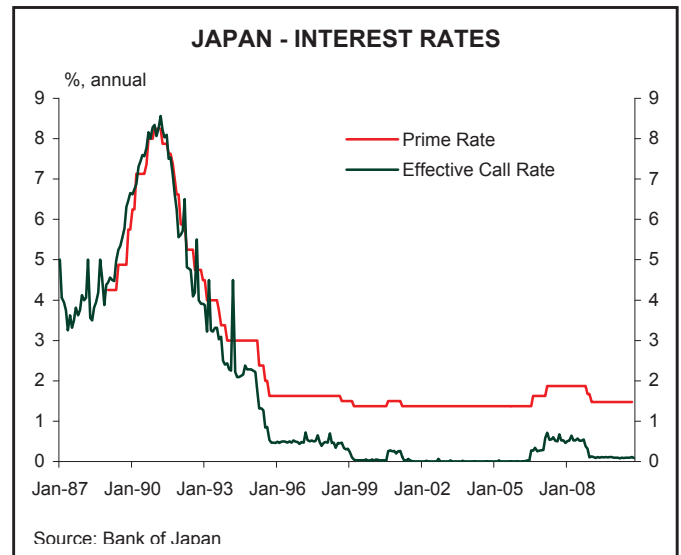
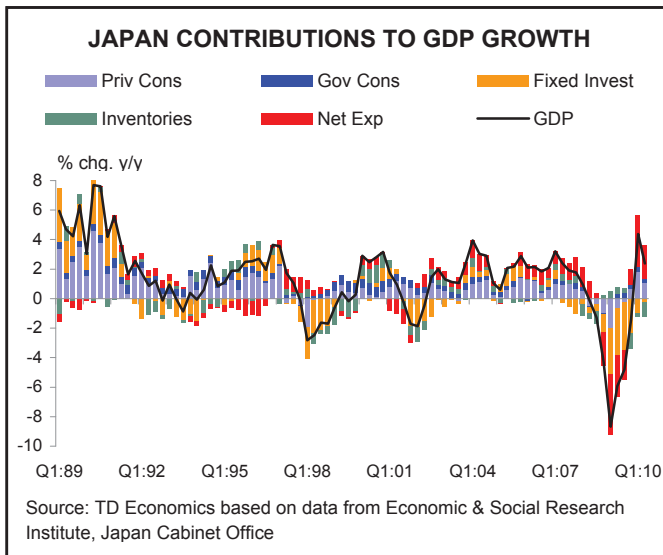
The recent downshift in U.S. economic growth has stoked concerns that America is destined to repeat the Japanese experience. However, to the Federal Reserve’s credit, many lessons were learned from that experience, which is why massive amounts of liquidity were quickly injected during the recent financial crisis. It also explains U.S. Federal Reserve’s recent decision to embark on a second round of quantitative easing. These measures are deemed to be effective techniques that stimulate economic growth and lift inflation expectations. However, there is one critical lesson from the Japanese experience that is not receiving sufficient attention. U.S. policymakers should be

concentrating their efforts on resolving the foreclosure situation in America, rather than expecting more monetary easing to do the heavy lifting of jump-starting the slow economic recovery. Failure to do so risks a multi-year period of very subdued growth and high unemployment that would have Japan-like qualities.

Lessons learned in years past...

The Japanese response following the collapse in real estate and equity values was extremely slow and drawn-out relative to the recent U.S. experience. A 1999 essay by Fed Chairman Bernanke – then Chair of the Economics Department at Princeton University – cited “exceptionally poor monetary policy-making” had greatly contributed to Japan’s prolonged slump after the real estate and stock market bubbles burst in 1991. He added that “among the more important monetary-policy mistakes were 1) the failure to tighten policy during 1987-89, despite evidence of growing inflationary pressures, a failure that contributed to the development of the “bubble economy”; 2) the apparent attempt to “prick” the stock market bubble in





1989-91, which helped to induce an asset-price crash; and 3) the failure to ease adequately during the 1991-94 period, as asset prices, the banking system, and the economy declined precipitously.”¹

This perspective is firmly supported by the facts.

- The Bank of Japan (BoJ) reduced the policy interest rate for the first time in July 1991; a year and a half after the stock market had peaked.
- It took the BoJ more than four years to lower the overnight call rate to 0.5%; and in late 1995, when economic activity gained some traction and core inflation stabilized, the BoJ stopped its easing cycle.
- In November 1997, alongside the negative effects of the Southeast Asian financial crisis, the failure of a Japanese bank and two insolvent security firms paralyzed the domestic interbank market and sent the economy back into recession. In response, by April 1998, the BoJ lowered the policy rate to 0.25% and expanded its liquidity provision mechanisms by accepting a broader range of asset-backed securities and government bonds as collateral.
- In February 1999, almost 8 years after the crisis hit, the BoJ formally introduced a zero interest rate policy.
- However, it wasn't until ten years after the initial crisis episode in March 2001, that the BoJ finally engaged in quantitative easing by purchasing asset-backed securities and stocks held by Japanese banks. They were shaken into action by the collapse of the IT bubble, with inflation in negative territory and with economic activity quickly decelerating.

...helped to avoid previous mistakes

Many of the lessons drawn from the Japanese experience helped policy makers better understand the magnitude of the challenges they faced during the recent global financial crisis. They also provided guidance on how to respond. Immediately after the failure of Lehman Brothers in September 2008, the U.S. Federal Reserve, the Bank of England, the Bank of Japan, and the European Central Bank engaged in most of the practices which had been recommended for Japan back in the late nineties by Mr. Bernanke and others. For instance, the Federal Reserve (Fed) initially responded to the crisis by lowering the discount rate and extending the maturity of loans from overnight to ninety days. It established regular liquidity auctions, so banks could avoid the reputational cost of accessing the discount window. The Fed established U.S. dollar swap lines with other central banks to ease pressure on U.S. money markets. When it became clear that more needed to be done given the severity of the crisis, the Fed engaged in massive asset purchase programs to reduce long-term interest rates. The Fed purchased \$300 billion of Treasury securities, \$175 billion of agency debt obligations, and \$1.25 trillion of agency mortgage-backed securities from September 2008 to October 2010. These actions by the U.S. central bank, and similar actions conducted by the other major central banks, were instrumental in easing credit conditions and avoiding complete paralysis of global financial markets. In combination with expansionary fiscal measures, monetary policy measures helped to spur a recovery – a similar response took a decade for Japan to accomplish during its crisis episode.



the last few FOMC meetings’ minutes and also by recent remarks by Chairman Bernanke.³ Among the risks is the challenge to calibrate the size and pace of purchases, and subsequently, the ability to exit this policy smoothly without causing major disruptions on the markets for those assets.⁴ Furthermore, maintaining extraordinary monetary stimulus for a prolonged period could erode public confidence in the Fed, and eventually hinder its ability to tighten the monetary stance if faced with an unexpected rapid improvement in economic conditions. These risks have been discussed extensively both within and outside the FOMC, and this certainly isn’t an exhaustive list of the Fed’s concerns. However, we’d like to reinforce one in particular. At this juncture, we deem a major risk is in being over confident that monetary policy in general, and further quantitative easing in particular, is well suited to solve an economic problem that is structural in nature rather than cyclical.

So why is this not a sufficient fix for the economy?

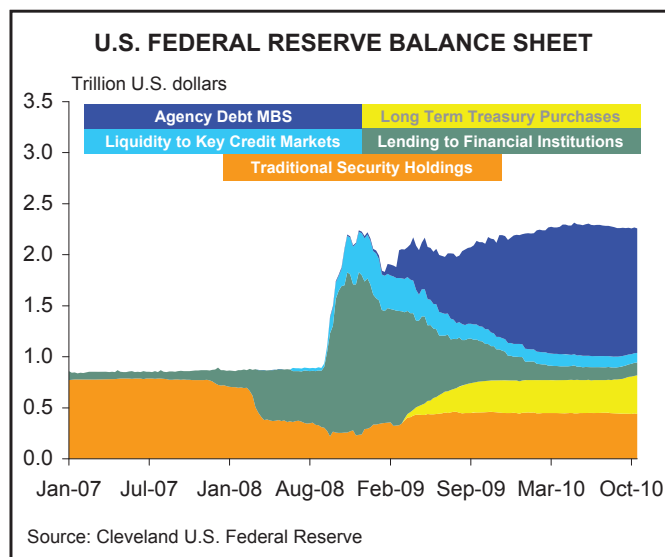
In spite of the monetary and fiscal measures that were rapidly put in place, the U.S. economy lost momentum after the first quarter of 2010. Several indicators of economic activity decelerated. Net job creation remained uninspiring and the unemployment rate continued to hover near 10%. Meanwhile inflation held steadfast to a downward trend. Clearly these developments unnerved the Fed, who responded by laying out plans for a second round of quantitative easing on November 3rd to purchase US\$ 600 billion in additional Treasuries by June 2011.

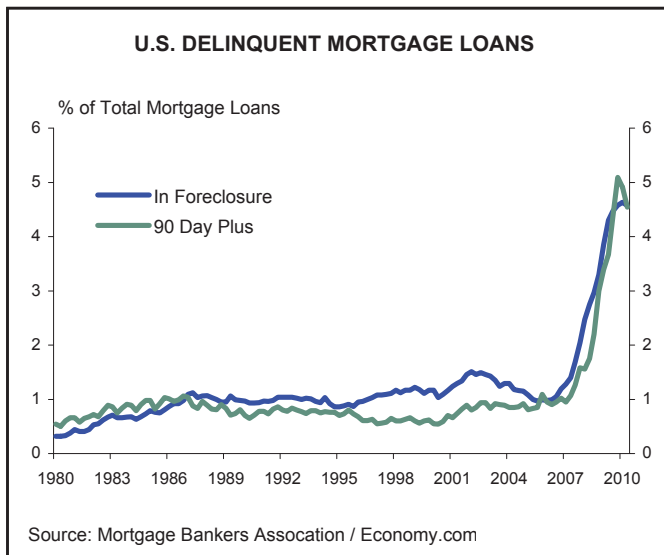
While we agree with empirical research that shows large scale asset purchases are instrumental in reducing long-term interest rates, it appears to have met resistance in stoking credit expansion². Household deleveraging and the need for financial institutions to recapitalize and clean-up their balance sheets have suppressed both the demand and the supply of credit. In turn, this has suppressed the interest-rate transmission mechanism from laxer monetary policy to steadier economic growth. Unfortunately, the process of household deleveraging and financial institutions re-fortifying balance sheets will take a long time. A rudimentary analogy to this second round of quantitative easing is to assume you drive a car with half a tank full of gas and a broken transmission which only allows you to shift up to second gear. Would your car run any faster if you fill up the gas tank? Certainly not, unless you fix the transmission.

This notion has not been missed by some FOMC members, and all are aware of the possible economic costs of these nonconventional measures. This was made clear by

The lesson not learned from the Japanese experience

There was one lesson taught in the Japanese experience that is not receiving sufficient attention from policy makers. Although long lags in a monetary policy response is in part to blame for Japan’s lost decade, not immediately tackling the consequences of the financial crisis on the banking system was a major contributor to the protracted recovery and the deflationary trend.⁵ In particular, Japanese authorities failed to recognize and address non-performing loans and insolvent jusen companies, which were non-bank financial institutions affiliated to bank holdings that extended housing loans. During the boom, increasing competition from banks getting into all types of real estate lending pushed





jusens into riskier, lower-quality segments of the market. After the bubble burst, the persistent decline in real estate prices triggered a sharp increase in jusens' non-performing loans. The vast majority of jusens were liquidated and their loans were absorbed by their parent banks, although with only partial recognition of losses. Later on, the prolonged stock market decline, rising non-performing loans, and falling interest rates – which hurt bank margins – caused the deterioration in Japanese bank credit risk profiles, raising their funding costs and further eroding their profitability. When the Southeast Asian crisis erupted in 1997, it came to light that many Japanese banks had been manipulating their balance sheets, and their capital positions were extremely weak. A program of government capital injections was initiated in February 1998, and then extended in October of that year and in March 1999. Although those actions improved banks' capital positions, they did not address the root cause of rising non-performing loans because these measures were initially accompanied by very lax conditions that failed to impose discipline on banks. Ultimately, in 2003 – twelve years after the bubble burst – the government created a bad-loan resolution company with attributions to write-off bad loans and force bank mergers. This last step was critical to solving the structural issue that had impaired the normal functioning of the banking system for more than a decade.

In the case of the current U.S. experience, there have been 304 acquisitions of financial institutions since January 2008, so consolidation in the industry has been taking place and is not the barrier it was to Japan. In addition, financial institutions are acknowledging a significant amount of non-

performing loans, with real estate charge-off rates equal to about one-quarter of outstanding delinquent loans.

However, while this is a historically high rate of mortgage charge-offs, it still leaves a significant share to be addressed. And, this massive cloud of non-performing loans continues to linger above the heads of financial markets. It is here where a lack of resolution threatens the speed of recovery in the financial system and the U.S. economy. At the end of the second quarter, 4.6% of mortgages were in foreclosure and another 4.5% were 90 days past due but not yet in foreclosure. This represents more than 4 million delinquent loans. Attempts to solve this issue through the Making Home Affordable Program – a component of the Financial Stability Plan put in place by the Obama administration in February 2009 – has resulted in only 467,000 active permanent loan modifications and 173,500 active trials at the end of August 2010 – less than 16% of outstanding delinquent loans. Out of the 1.4 million trials started under this program, roughly half have been canceled. Although this initiative is a step in the right direction, progress is far too slow relative to the pace of increase in foreclosures. Unfortunately, stubbornly high unemployment and sharp declines in home values have made it very difficult for many homeowners to stay in their homes. In turn, rising non-performing mortgage loans are not only affecting financial institutions, but are also proving to be a constraint on labor mobility, as unemployed people find it difficult to sell their homes to relocate in search of a new job. This effect is contributing to inertia in the housing market, stalling the improvement in sales and prices. (please see our recent publication [U.S. Unemployment In The Aftermath Of The Great Recession](#)).

The lesson from Japan's lost decade is that allowing non-performing loans to linger for an extended period on financial institutions balance sheets hinders the functionality of the banking system. The Fed in its role of banking regulator and supervisor is a key player in this process;⁶ however, solving the foreclosure situation will require the collaboration of all the parties involved. This includes homeowners, lenders and mortgage brokers, loan servicers, underwriters of mortgage-backed securities, title insurers, buyers of securitized mortgages, risk rating agencies, the government sponsored enterprises Fannie Mae and Freddie Mac, the government regulators and supervisors of all of the above, and lastly, the judiciary system. The length of this list makes clear the complexities involved in a quick resolution to the foreclosure situation. And, the list also shows that more quantitative easing by the Fed is not a solution. In fact, the solution exists outside of the Fed's available tool kit.



No easy fixes in sight

In principle, any solution to the foreclosure crisis has to deal with two basic obstacles: first, it has to alter pre-existing contracts, which by definition implies a violation of property rights, unless the parties to the contract agree voluntarily to the renegotiation. Second, it has to be done in a way that does not create incentives for homeowners to intentionally default on their loans (i.e., the moral hazard problem).

There is no easy fix to either of these issues, though some ideas have been floated. One such notion is to have lenders agree to write down the negative equity on a mortgage (i.e. the difference between the outstanding principal owed by the borrower minus the current value of the property) in exchange for a share of the future increase in the property value. This idea seems plausible in theory; however, its implementation presents significant challenges. First, it would be difficult to establish the fair-value of a property to determine the negative equity. Second, the lender should have the option to exercise its claim prior to a change in ownership of the collateral; likewise, the borrower should have the option to cancel the claim under the same conditions. This further complicates the valuation process. Third, this type of arrangement would be much harder to implement in the case of securitized mortgage loans, where outright ownership of the mortgage is difficult to ascertain (according to the IMF, roughly US\$4.5 trillion mortgage-backed securities were originated in the U.S. during 2003-07). Fourth, even if lenders agreed to proceed with write-downs in exchange for a claim on future property appreciation, the losses they would incur could drive their capital ratios so low that they

would need recapitalization. Lastly, although this proposal has the potential to speed up the recovery in the housing market, it would still take a considerable amount of time to implement.

And, of course, simple logic tells us that if this was an easy process to implement, it would have already been done because it's in the interest of a bank to do so. When an underwater borrower sells their home, it typically yields a price 13% below the mortgage value. However, a foreclosed home carries a much larger discount of 35%, largely due to poor maintenance of the property.⁷ So, implementing large-scale voluntary write-downs are unlikely, and it's highly doubtful that there is any public appetite to facilitate the process by offering government subsidies of the loan's book value.

An alternative approach would be to modify the Chapter 13 bankruptcy proceedings and allow judges to alter the terms of the mortgage loans, but this could trigger lawsuits from lenders whose property rights were violated. Furthermore, any serious approach to resolve the foreclosure crisis could lead to, or even force, an overhaul of the housing government sponsored enterprises Fannie Mae and Freddie Mac, which would add enormous complexities to the already difficult housing crisis.

The choices to addressing mounting foreclosures are limited and all appear fraught with potential unintended negative consequences. Yet, if we have learned anything from Japan's lost decade experience it is that not directly tackling the root financial problem (i.e. the foreclosure crisis) could be the costlier alternative by perpetuating an ex-

Quantitative easing and currency valuations

In late 1999, Mr. Bernanke's view was that the BoJ should aim to reflate the economy to avoid the pernicious effects of a deflationary trend that was becoming deeply entrenched. Among the policy alternatives that seemed more plausible to Mr. Bernanke were: first, a commitment to zero interest rates combined with an inflation target; second, that the BoJ attempted to achieve a substantial depreciation of the yen through large open market sales of the currency; third, the BoJ could agree with the Ministry of Finance to buy government debt which would be issued to provide funding for tax-cuts; and lastly, the purchase of long-term government bonds and corporate bonds.

In its response to the 2008 financial crisis and ensuing recession, the only policy the Fed has not pursued – at least explicitly and openly- is the depreciation of the U.S. dollar. That might be part of the motivation for a second round of quantitative easing. While a weaker US dollar would be supportive to economic growth, there are limits to how far the greenback can depreciate without prompting other central banks to respond in kind. And although the Fed has the upper hand because it is the sole producer of the dominant reserve currency, competitive currency depreciations could be very damaging. Currency interventions would trigger retaliatory interventions by other countries, and then be matched by trade sanctions and restrictions, which could reduce global growth. This is a risk that must be avoided at all costs.



tended economic recovery cycle of weak economic activity.

Concluding Remarks

Stubbornly high unemployment and very low inflation have put the U.S. Federal Reserve at odds with its dual mandate to promote maximum employment and price stability. While quantitative easing may boost economic growth in the near term, the Fed's decision to inject more liquidity into the economy does not address the ongoing foreclosure problem in the housing market. A major risk of further monetary stimulus is not that it could stoke inflation that will be difficult to tame down the road; but rather, that it could generate unrealistic market and public expectations regarding its potential to deliver higher economic growth. A critical lesson from the Japanese lost decade is that after swift monetary policy actions stop the cardiac arrest of financial flows and once the economy has stabilized, all efforts should be targeted at resolving the structural issues that are

impairing the normal conduit of financial intermediation. U.S. authorities must grab the foreclosure crisis by the horns, where the ultimate solution appears to lie in radical mortgage reform. Markets must recognize that the Fed alone cannot offer all the solutions. If anything, the low interest rate environment created by quantitative easing may have bought some time for authorities to piece together alternative solutions to the housing woes. But make no mistake, if the escalating foreclosure problems are not directly addressed, weak economic growth will become the order of the day for many years to come.

In short, paraphrasing from Mr. Bernanke's essay on the Japanese experience, perhaps it is time for U.S. authorities "to experiment, to try anything that isn't absolutely guaranteed to work. Perhaps it's time for some Rooseveltian resolve".

**Endnotes:**

- 1) “Japanese Monetary Policy: A Case of Self-Induced Paralysis?”, Bernanke, Ben, December 1999.
- 2) “Large-Scale Asset Purchases by the Federal Reserve: Did They Work?”, Gagnon et al. 2010; and “The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment”, Hamilton and Wu, 2010.
- 3) “Monetary Policy Objectives and Tools in a Low-Inflation Environment”, Remarks by Ben Bernanke, October 15, 2010.
- 4) “Focusing on Bank Interest Rate Risk Exposure”, speech by former Vice Chairman Donald Kohn, January 29, 2010.
- 5) Research has also suggested that the weak growth performance in Japan during the 1990s can also be attributed to a declining workforce and poor productivity gains. See “The 1990s in Japan: A Lost Decade,” Fumio Hayashi and Edward C. Prescott *Review of Economic Dynamics*, 5, 2002, pp. 206–235.
- 6) Beyond its extraordinary monetary policy actions, the Federal Reserve has also adopted a strategy to tackle rising foreclosures. It implemented in early 2009 the Mortgage Outreach and Research Effort (MORE) Initiative to support foreclosure prevention and neighborhood stabilization strategies at a local level.
- 7) “Drowning or waiving”, *The Economist*, October 23, 2010, page 94.

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