

Lazard Japanese Equity Team/June 2010

# The Case for Japan as the New Normal

*The only thing I learned from reading history books is that no one ever learns anything from reading history books.*  
Anonymous

In this commentary, we provide the finding of research performed by the Lazard Japanese Equity team, which makes the case for investing in the Japanese equity market.

Anyone involved in the stock market should understand the power of leverage on returns. Too little credit creation makes for subpar economic growth. Too much leverage often leads to over-inflated asset prices, which in turn eventually lead to too little credit creation. Therefore, as investors, it is very important to understand where an economy is in its longer-term credit cycle.

Japan's longer-term credit cycle peaked in 1990, and appears to have bottomed in 2003, with the end of the country's massive bad debt problem. The United States, which enjoyed a historic bull market in the 1980s, most likely saw its longer-term credit cycle peak in 2006, in tandem with the country's housing prices.

Taking these factors into account, Japan is at least a decade ahead of the United States from a credit-cycle perspective. What investment insights can we learn from Japan's "lost decade," and what are the implications for the United States?

In summary, if the Japan experience is the "New Normal," we can likely expect the following in the United States:

1. The private sector will deleverage, and the public sector (government) will leverage.
2. Returns will be below historical averages for the foreseeable future, and bonds will most likely perform better than equities.
3. A new structural bull market cannot begin until the majority of problem assets have been written off.

Against this backdrop, there is a case supporting the view that Japan, whose longer-term credit cycle has already bottomed, may offer an attractive investment opportunity for investors.

## Longer-term Credit Cycles

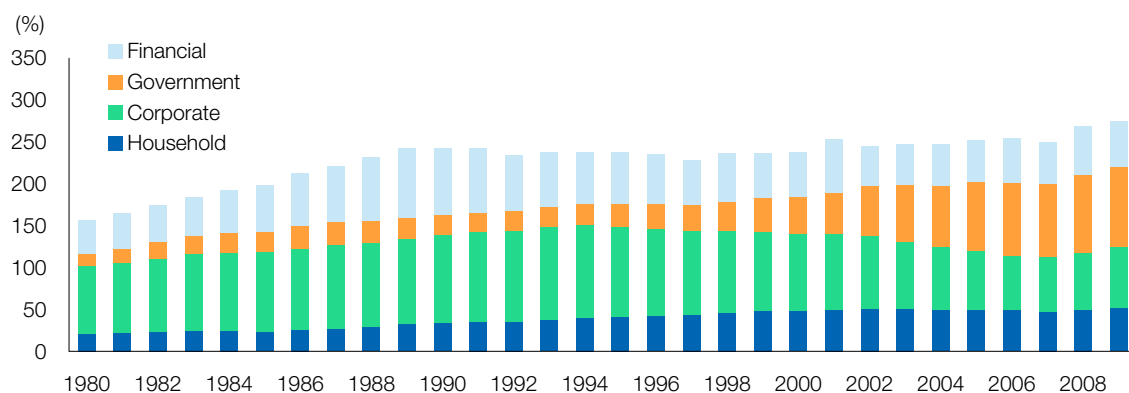
As we learned in Economics 101, credit is the valve that can most quickly turn an economy up or down. This is due to the magic of leverage: consumers are usually levered when they take out a housing loan, banks are traditionally levered 10 to 1, and brokers and some hedge funds have historically been levered 30 to 1 or more. All things being equal, if you allow people to take on more leverage, they will often bid up prices of finite assets. Take leverage away, and prices will generally fall, as assets are sold.

Occasionally, a number of forces converge—demographics, overconfidence, and greed—to create excessive credit creation. Generally speaking, anytime credit growth—particularly in non-productive financial assets—is significantly higher than the underlying core economic growth, bad debts will not be far behind. As an example, during Japan's prime "bubble" years of 1983-1990, bank loans grew at roughly 10% per year, while GDP grew at roughly 5% per year. A significant amount of this excess lending was devoted to real estate.

This 2:1 debt-to-economic-growth ratio produced over ¥100 trillion (or roughly 20% of GDP) worth of bad debts, which were written off by Japanese banks between the years 1993 and 2003.<sup>1</sup>

Japan's debt crisis was primarily driven by the corporate sector. Many Japanese companies used their balance sheets to speculate on real estate, creating an unsustainable upward spiral in prices. Japanese corporations were eventually forced to delever, as they paid back debt and wrote down assets. This is the primary reason cheap money does not work as a solution to a "balance sheet recession"—generally, no one takes on more debt (even if it is very cheap) when they already have too much debt. Looking at Exhibit 1, we can see clearly that the delevering of the corporate sector was offset by an increase in government debt.

### Exhibit 1: Japan Total Debt to GDP

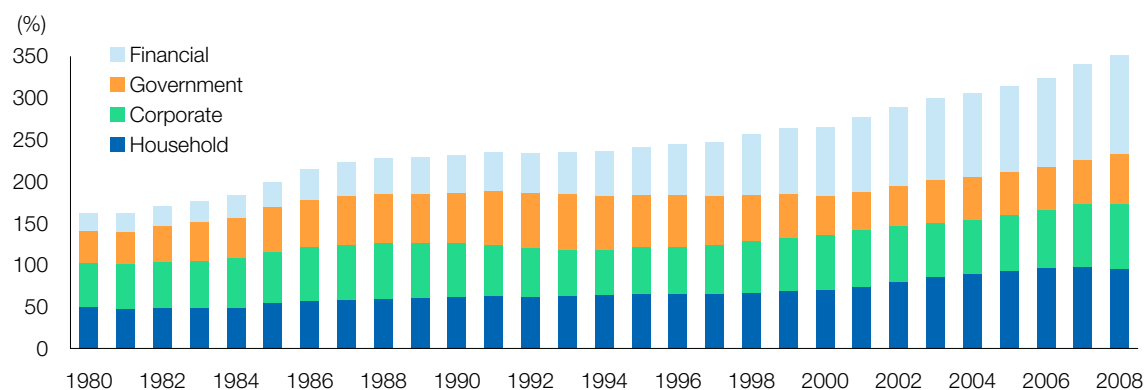


As of December 31, 2009

Source: Bank of Japan, Japan Bank Association, Nomura

In the United States of more recent times, the sectors are different, but the outcome is the same: credit growth has clearly been the highest in the household (real estate) and financial (securitized products, etc.) sectors, as shown in Exhibit 2. It is very possible that delevering in these sectors of the economy will be met with a similar increase in U.S. government debt.

### Exhibit 2: United States Total Debt to GDP



As of December 31, 2008

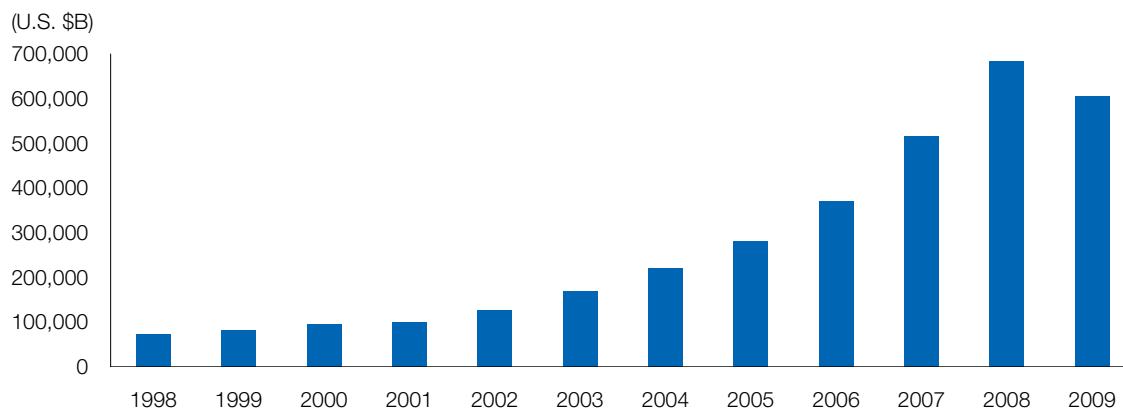
Source: U.S. Treasury, Merrill Lynch

Unfortunately, a direct comparison of credit growth in 1980s Japan and 1990-2000s United States is complicated by the huge role capital markets play in the United States economy. While corporate Japan had very little off-balance-sheet debt in the 1980s, leverage in the United States became ever easier with the growth of securitization, derivatives, and other off-balance-sheet mechanisms.

While the growth of on-balance-sheet financial and household debt in the United States rose roughly in line with nominal GDP, the growth of derivatives was nothing short of spectacular. Exhibit 3 shows that the amount of nominal derivatives outstanding grew at a 26% compounded annual growth rate, or CAGR, (versus a roughly 3% global GDP CAGR) over the period from 1998 to 2008, and now stands at 14 times the world GDP. While this is a global figure, according to Bank for International Settlements statistics, the vast majority of derivatives are originated and held in the United States and European Union. (As an aside, the gross amount of these

derivatives is roughly \$11 trillion—3.5 times the equity in the banking system of all G-7 nations.) While it is nearly impossible to break out the content of the derivatives market precisely by product or country, a combination of the on-balance-sheet and off-balance-sheet credit growth shows that total credit growth in the United States between 1998 and 2008 was at least equal to—and more likely, well in excess of—the credit growth in 1980s Japan. More importantly, incremental credit found its way primarily into non-productive real estate and financial assets.

### Exhibit 3: OTC Derivatives Outstanding



As of June 30, 2009

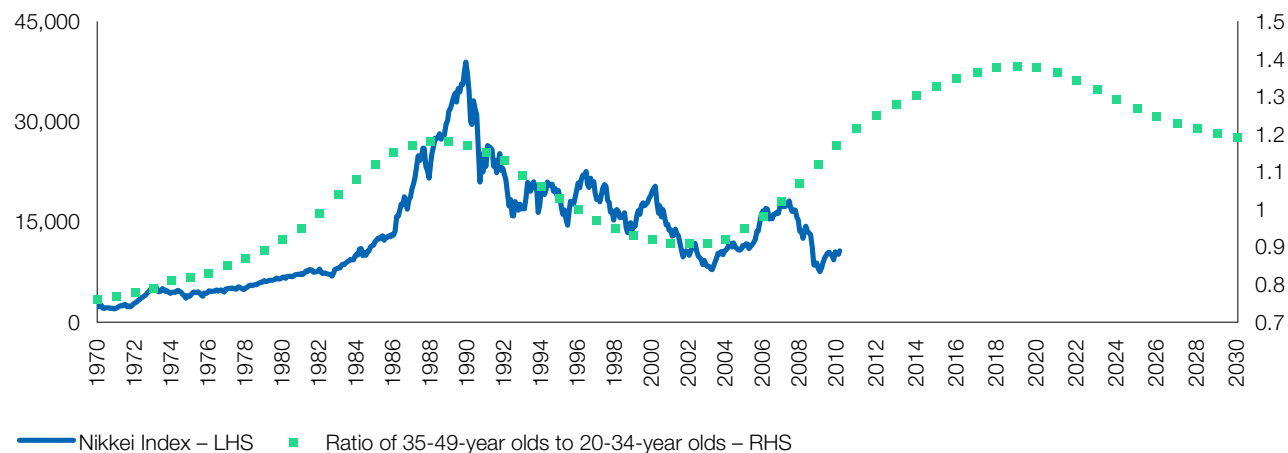
Source: Bank for International Settlements

Demographics also play a role in longer-term credit cycles. Baby Boomer consumption through the 1980s and 1990s, for example, is an oft-cited reason for the U.S. bull market over this same period.

Exhibits 4 and 5 show Japan and the United States' respective stock markets versus the ratio of 35-49-year-olds to 20-34-year-olds. The period from 35 to 49 years old is the prime income generation/consumption period for most adults, and this consumption leads the economy; this, in turn, can have a positive reinforcing effect on credit creation. Not coincidentally, this ratio peaked near the peak of each country's respective credit cycle—for Japan in 1990 and for the United States in 2006.

From the chart in Exhibit 4, it appears that Japan is now entering a positive demographic cycle, with the Baby Boomer “echo” generation potentially representing a catalyst for Japanese equity markets.

### Exhibit 4: Ratio of 35-49-year Olds to 20-34-year Olds and the Nikkei Index

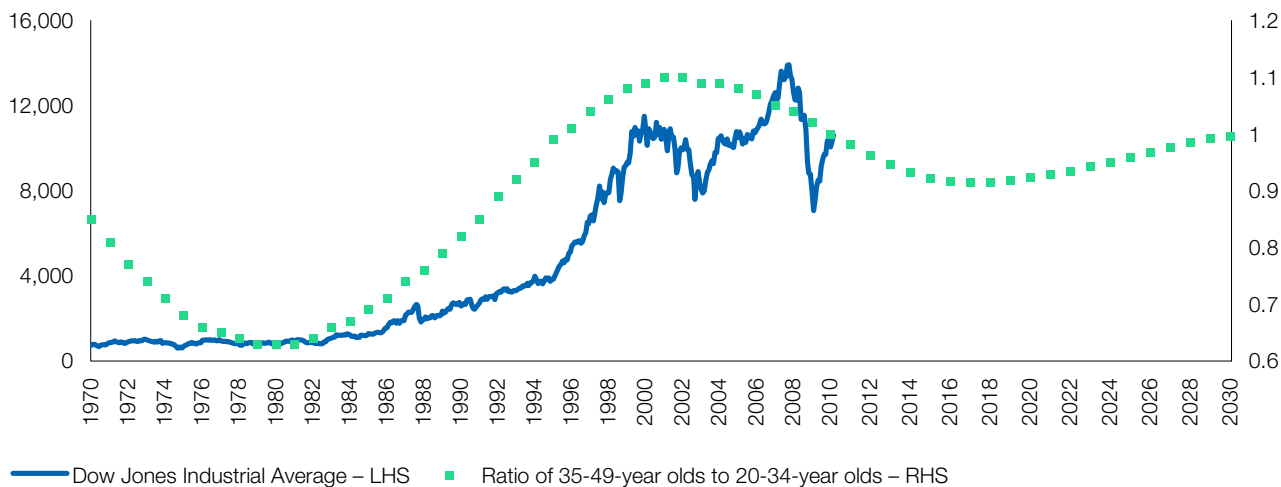


As of March 2010

Source: United Nations

Future ratio of 35-49-year olds to 20-34-year olds as estimated by the United Nations.

**Exhibit 5: Ratio of 35-49-year Olds and 20-34-year Olds and the Dow Jones**



As of March 2010

Source: United Nations

Future ratio of 35-49-year olds to 20-34-year olds as estimated by the United Nations.

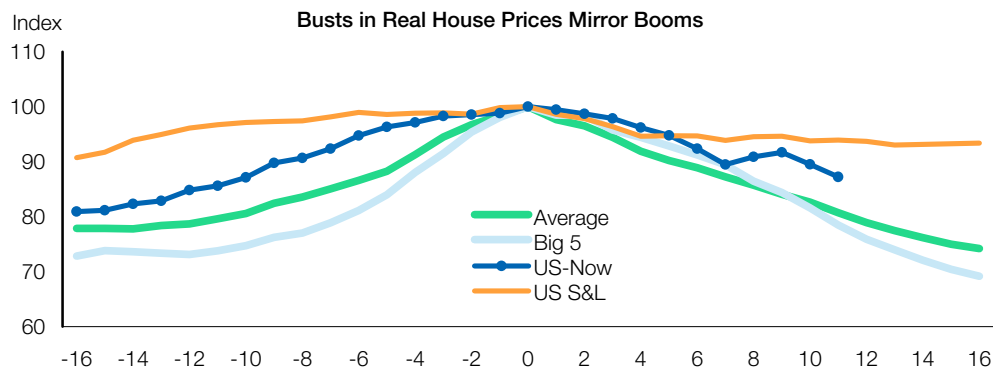
## Aftermath and Solutions

What do we believe is the ultimate solution to a credit bubble? In essence, time. Most governments have neither the balance sheet nor the political will to write down all problem assets as soon as the problem becomes apparent. Some observers claim that Japan’s bad-debt problem was enlarged by the slow pace at which the government tackled it. This is no doubt true. During the debt crisis, Japanese banks did not have to mark their assets to market, as Japanese authorities lowered their interest rates to zero and pumped massive amounts of monetary and fiscal stimulus into the economy. The hope was that the economy would recover thanks to all this easy money, and that the banks would not have to realize their losses.

Does any of this sound familiar to those watching the U.S. and European Governmental responses to the present financial crisis?

Exhibit 6 plots 24 different housing booms and busts in OECD countries over the last 50 years. A powerful constant in this data is that peaks create valleys, and that asset prices have to return to pre-bubble levels before real growth can begin again. If this remains true, then the United States still may have further to go before problem assets bottom in price. That both Japan’s and the United States’ housing prices rose by almost exactly the same amount—approximately 100% over seven years, as shown in Exhibit 7—further supports this thesis.

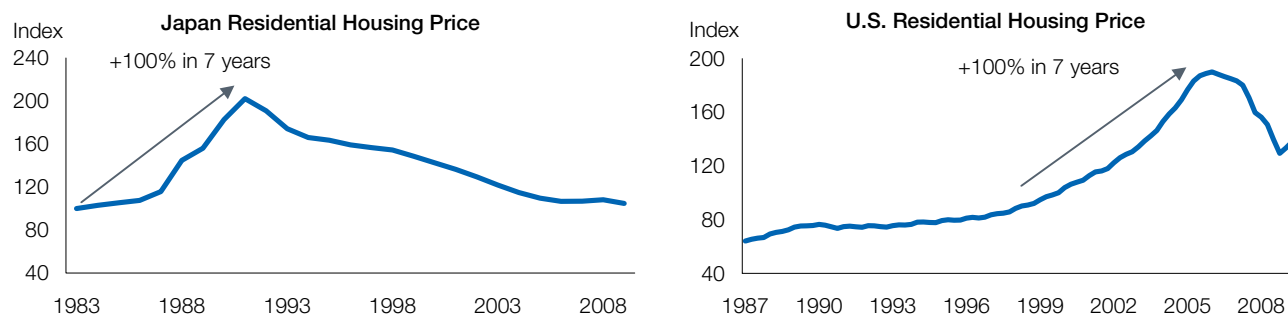
**Exhibit 6: 24 Housing Booms and Busts in OECD Countries Over the Last 50 years**



As of December 2009

Source: OECD, Goldman Sachs

### Exhibit 7: Japan and U.S. Residential Housing Prices



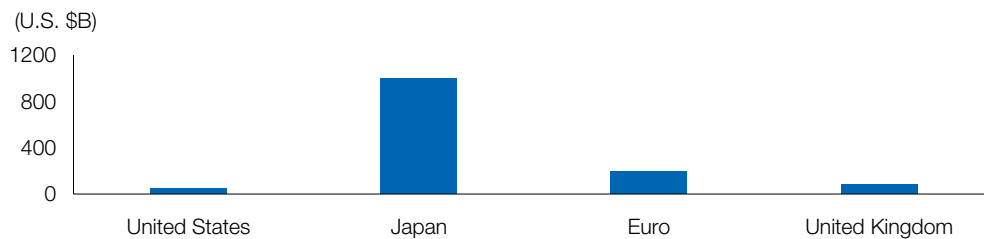
As of December 31, 2009

Source: Japanese Ministry of Land & Transport, UBS, S&P/Case-Shiller

The United States' problem is made even more difficult by the composition of its government bond market. As Japan's corporate balance sheet contracted, the government's balance sheet expanded in order to take up the slack in GDP. Japan could do this easily, as approximately 90% of Japanese Government bonds (JGBs) are held by domestic financial institutions.<sup>2</sup> As Exhibit 8 shows, Japan is a net creditor nation, with \$1 trillion in currency reserves (including \$770 billion in U.S. Treasuries—the single largest foreign holder): in essence, Japan's debt holders are its own citizens.

Unlike Japan, however, the United States is a net debtor nation, whose government bond market is heavily dependent on foreign ownership (currently, roughly 47% of U.S. Government debt held by the public is in the hands of foreigners.)<sup>3</sup> As the private sector continues to delever, and the Government is forced to issue ever more debt, it may become increasingly difficult to keep interest rates low and the bond market stable (see Exhibit 9).

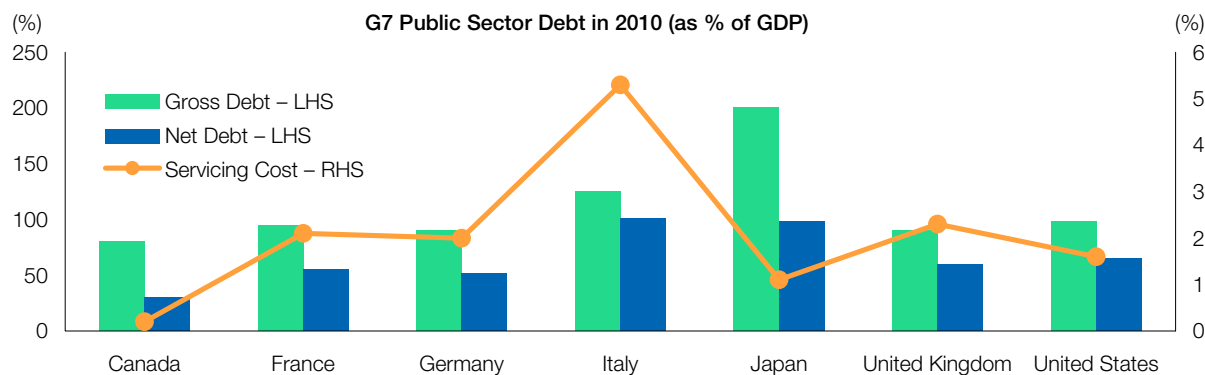
### Exhibit 8: Foreign Currency Reserve Levels



As of February 2010

Source: OECD

### Exhibit 9: Gross, Net Government Debt Levels, and Cost of Debt Servicing



As of December 2009

Source: OECD

## Lessons Learned

What are some of the main lessons we have learned from the peak and valley of Japan's credit cycle?

1. Government debt rose, as the private sector was forced to delever.
2. Equity returns were muted for an extended period, and bonds massively outperformed equities. The TOPIX Index is still 60% below its 1990 high, while the 10-year JGB yield contracted from 8.2% to 1.3% over the same period. Pension return assumptions halved, from 6% to 3% per year.
3. It was difficult to begin a new bull market until problem assets were written off and appetite for debt (and risk) returned—we are, in fact, still waiting for this part to come true.

## The Case: Japan as an Interesting Investment?

Based on this investment case, Japan may be as much as 10 years ahead of the United States in its longer-term credit cycle; its delevering process has bottomed out, its private-sector balance sheets are underlevered, and the cost of its debt is low. Additionally, while it may be difficult for Japan to enter a major bull market at a time when the rest of the developed world is delevering, at the very least it could make for a solid relative investment.

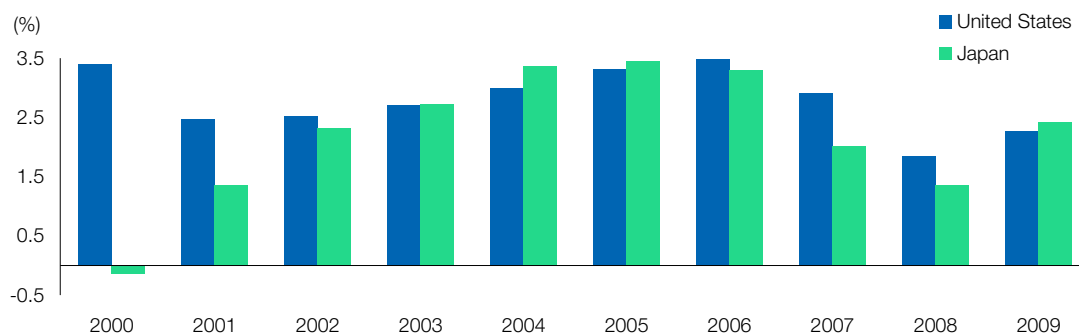
We often hear that Japan is not an attractive investment opportunity, for the following three reasons:

1. Its debt levels are dangerously high.
2. It has poor demographics.
3. It has low profitability, and rarely outperforms.

In fact, we believe that all three are misperceptions. In order:

1. As Exhibits 1 and 2 show, Japan's total debt-to-GDP ratio is well below that of the United States. While gross government debt has grown and is at an OECD high of 200% of GDP, net government debt is still at 100% of GDP. More importantly, as Exhibit 9 shows, the cost of servicing that debt is below that of the United States. Given where Japan is in its longer-term credit cycle, over the next 5 to 10 years it is more likely that government debt levels will decline, while private sector debt levels rise.
2. As Exhibits 4 and 5 show, Japan is about to enter a Baby Boomer "echo" over the next 10 years. Conversely, the Baby Boomer generation ratio in the United States peaked in 2006, and looks to bottom around 2018. While it is fair to say that the correlation of population trends to stock market returns has not yet been tested with a larger Baby Boomer population overhang, Japan is currently trading at roughly 1.1 times the price-to-book ratio (PBR), with a relatively positive demographic curve, while the United States is trading at roughly 2.2 times the PBR, with a relatively negative demographic curve. It is interesting to note that, in 1982, the median age of the U.S. Baby Boomer population was only 25, therefore Baby Boomers had their prime consumption years ahead of them. Conversely, in 2009 their median age was 52, meaning that they are now moving out of consumption mode.
3. Over the last 10 years Japan has outperformed the United States in U.S. dollar terms over different years, on a cumulative basis. Moreover, non-financial return on assets (ROA) does not differ greatly between the two countries (see Exhibit 10). While the United States has historically had a higher return on equity (ROE) than Japan, much of this relates to leverage. Japanese companies have spent much of the last 15 years delevering, while American companies have spent much of the same time leveraging. It is very possible that these two trends will reverse over the next 5 to 10 years.

Exhibit 10: ROA Ex-financials in the United States and Japan



As of December 31, 2009

Source: Merrill Lynch

## Conclusion: the Investment Case

There is a strong case for Japan as an attractive investment opportunity for the following reasons:

1. Japan has completed the deleveraging part of its longer-term credit cycle; most likely, private sector leverage will increase going forward.
2. While Japan's government debt levels are not ideal, its cost of debt is low, its bond market is not captive to foreign buyers, and its ratio of government debt to GDP is likely near a ceiling.
3. Baby Boomer echo population demographics suggest a strong Japan over the next 5 to 10 years.
4. It is likely that Japanese ROE will rise.
5. The TOPIX Index currently trades at half the PBR valuation of the S&P 500 Index (1.1x versus 2.2x, respectively).

*Written by:*  
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*Lazard Japanese Equity Team*

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### Notes

- 1 Source: Daiwa Securities
- 2 Source: Bank of Japan
- 3 Source: U.S. Treasury, Morgan Stanley

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### Important Information

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