Outlook for Global Finance: The Evolving Crisis and Japan's Experience

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Since the bankruptcy of Lehman Brothers in September 2008, global financial markets have fallen into a tremendous state of turmoil. This, together with the deterioration in the global economy and the unsteady banking system, is fuelling an adverse feedback loop that has engulfed the real economy. In order to stabilise the banking system and restore its normal function, governments in the US, Europe and elsewhere are spending public funds to provide debt guarantees and capital injections for financial institutions. As a result, the markets have managed something of a lull recently, compared to the drastic volatility and decline in the autumn of 2008. Even so, there is still no clear sign of an end to the chaos. The outlook for the global financial crisis remains rather grim, and Japan's economy remains threatened, based on a comparison with Japan's financial crisis of the late 1990s and early 2000s.

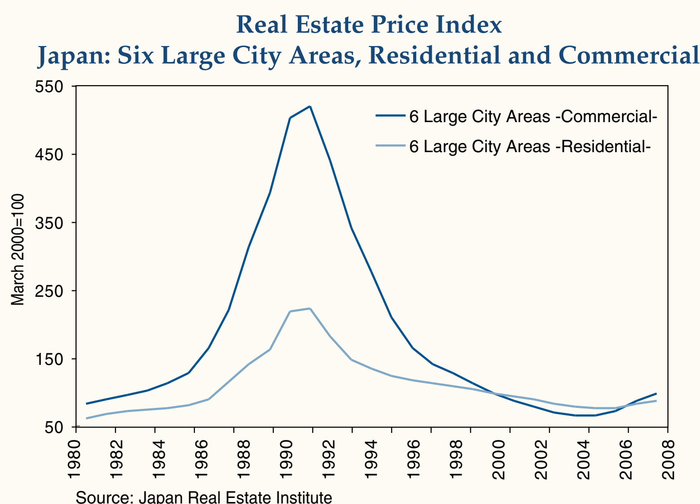
Part 1: Lessons from Japan

We examined Japan's previous financial crisis and its lessons in detail in the last *Japan Credit Perspectives* (August 2008). Certain points may be useful in gauging the near-term future scenario.

Lesson 1: There are limits to the government's ability to halt asset deflation

The only cures for asset deflation (mainly in real estate assets) are a recovery in property demand via expectations of economic growth and improvement in asset operating profitability. This may sound like a simple tautology, but in a situation where the economy continues to retreat amid a financial crisis, demand for real estate will not recover until a severe enough drop in prices significantly reduces the downside risk of holding property. In Japan's case, it took 15 years for real estate prices to hit bottom (Chart 1), and it is unlikely that earlier government action might have halted the slide at a higher price level. Even if it could have shortened the process and duration of the crisis, the government probably could not have prevented the drop in prices. That is, while government and central bank initiatives, such as liquidity provisions and outright purchases of securitised products, can help temper the disarray in financial markets, there are limits to government's ability to prevent deterioration in the real estate market.

Real Estate Price Index
Japan: Six Large City Areas, Residential and Commercial



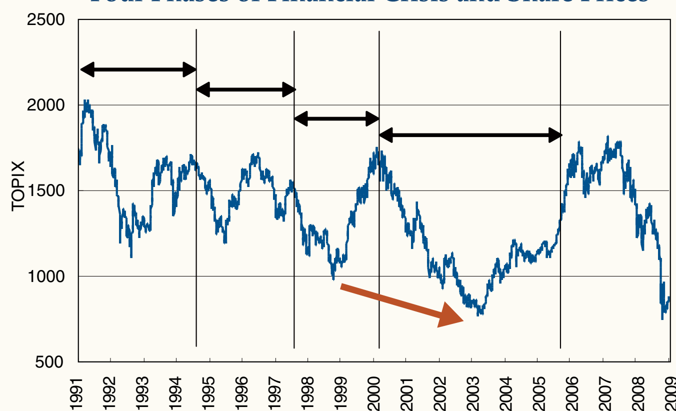
Source: Japan Real Estate Institute

Chart 1

Lesson 2: Following asset deflation, the economic downturn spurs a second-wave crisis

As deeper asset deflation worsens the economic downturn in a downward spiral that aggravates the financial market crisis and hinders the real economy, bad debt is bound to increase as a result. In the first wave of Japan's financial crisis in 1997–99, caused primarily by bad debt related to commercial real estate, anxiety in the markets calmed after the government injected capital into the major banks. However, after another year (and the bursting of the technology bubble), the crisis re-emerged in a second wave from 2001–03 due to massive bad debt in the corporate sector (Chart 2). The slump in share prices was even greater in this second wave. In the present global turmoil, a similar second-wave crisis is likely, and it is unclear whether capital injections of the current magnitude can counter such an impact.

Four Phases of Financial Crisis and Share Prices



Source: Bloomberg

Chart 2

Lesson 3: Capital injections into banks are only one of the several necessary conditions for financial stability

The recent capital injections into US and European financial institutions appear similar to the Japanese government's injections into the nation's major banks in 1999. The UK took such measures early in the current crisis, a plan that seems to have been modeled directly from Japan's approach. As noted in *Japan Credit Perspectives* last August, while there was no question about Japan's need to infuse capital in 1999, due to the small scale and unclear objectives, the injections proved insufficient to resolve the crisis. When the second wave hit the economy, the authorities had to revise their strategy. In the current crisis, capital injections by the US and European governments will be only the first steps toward tackling the situation. Given the risk of further stress on financial institutions, governments will need to carefully prepare a much more comprehensive policy response.

Lesson 4: Growth is the key factor in recovery

Japan's financial turmoil hit its worst period in 2003 and was finally resolved in 2005. Banks began accelerating their bad debt write-offs in 2002, and market confidence in the financial system was gradually restored, thanks to regulations that increased transparency of bank finances along with capital injections to stave off bankruptcy. This increasing confidence was a major turning point in the crisis. At the same time, the real drivers of the nation's subsequent rapid recovery were the increase in exports amid robust global economic growth and the inflow of foreign risk capital into the Japanese stock and property markets, which helped stabilise and revive asset prices. In this sense, the true key factors in ending the financial crisis were foreign demand and foreign risk money. If not for the global economic growth from 2003, Japan might have suffered an even longer period of deflation and financial difficulty.

Lesson 5: The effectiveness of a reflationary policy is uncertain

Is it possible for monetary policy to spur a reflationary effect that can eliminate deflationary pressures? There has been much debate in Japan and elsewhere over the introduction of an inflation target, but it remains highly questionable whether a desired inflation rate can be achieved at just the desired timing and for the necessary period. When the government's finances deteriorate due to fiscal spending during the crisis and a decrease in tax revenues amid the economic downturn, be wary of the risk of steep inflation in the future. Experience suggests that reflationary and other monetary measures are only part of what is necessary to solve the crisis, with economic measures to promote long-term growth being critical.

Part 2: Scenario Based on a Comparison with Japan's Crisis

The current financial crisis is far more complex than Japan's bad debt problem, and the impact on the world economy is massively larger. There are several reasons for this.

Scale of deleveraging effects

In financial markets, "deleveraging" refers to a phenomenon in which a financial bubble created by excess leveraging finally bursts, structurally destroying the supply and demand balance and triggering a decline in asset prices. The current financial crisis began with a collapse in the supply/demand balance for securitised products that gradually spread to financial assets overall, intensifying the dislocations in the financial system. Deleveraging is unlikely to end until financial institutions finish restructuring their capital and their risk tolerance returns to normal. If the economic slump further reduces risk appetite among market participants as a whole, the downward trend in asset prices could continue for the long term. The US Treasury and the Federal Reserve have tried to restore the damaged supply/demand balance with colossal injections of liquidity, such as the purchase of residential mortgage-backed securities (RMBS). The next big question is how they plan to manage the risk of collateral damage resulting from their policies, including a massive increase in government debt issuance.

Final disposal of bad housing loans

In the case of non-performing commercial real estate and corporate debt, there are well-developed methods for efficient disposal based on market and business principles. The story differs starkly, however, for bad housing loans, the source of the present crisis. How do banks adjust their balance sheets to accommodate the vast number of mortgage borrowers? Also, since many mortgages have been securitised and are now held by investors other than financial institutions, the process of balance sheet adjustment will be complicated and will take time. On top of this, if the debts are written off to the disadvantage of the creditor, it could invite a further drop in securitised product prices. We need to closely monitor the situation going forward. The US Troubled Assets Relief Program (TARP), a core initiative under last October's Emergency Economic Stabilisation Act, initially focused on capital infusions for financial institutions, but is also expected to play a key role in final disposal of bad debt going forward.

Risk of global recession

Even after the troubles have passed their peak, the system will not necessarily return to the pre-crisis state. Japan's financial crisis came to an end with the export-led economic recovery and the influx of risk capital from abroad. The global economic expansion over the past several years was driven by the consumption boom in the US, which itself was fueled by the wealth effect from rising home prices. With both developed and emerging nations skidding ever deeper into a slump, it will likely take time for other potential global economic drivers to emerge and replace what US consumption has done in the past. Until such a factor materialises, it's hard to foresee an end to the present morass.

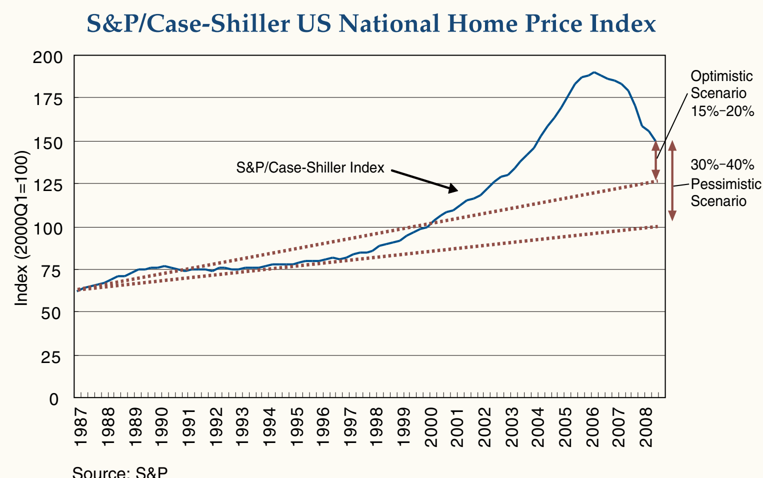
Part 3: Financial Crisis – Current Situation and Outlook

In light of the points above, we analyse the current predicament from the standpoint of its main elements – the US housing market (asset deflation), deleveraging pressure and the economic downturn. We also consider the scenario for the months ahead.

Vicious spiral: Asset deflation and economic recession

The S&P/Case-Shiller Home Price Index shows that US housing prices, the trigger for the global financial crisis, have fallen nearly 20% from their peak over the past two years (Chart 3). The impact of this decline has spread from subprime loans to the

S&P/Case-Shiller US National Home Price Index



Source: S&P

Chart 3

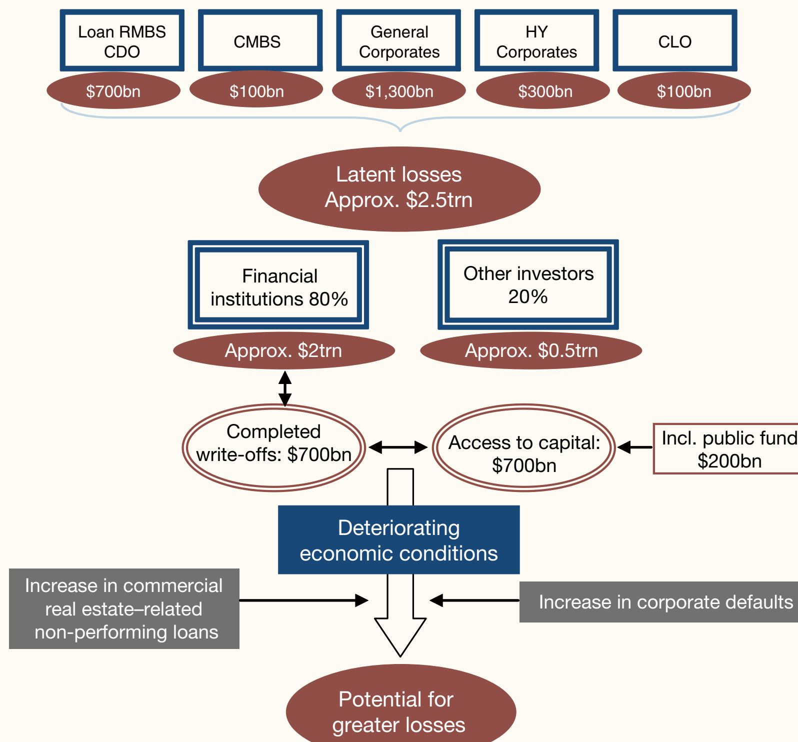
mortgage market as a whole. The market consensus calls for a further drop of 15%–20% over the next one to two years. However, the housing slump is not just a short-term adjustment, but a full-fledged case of asset deflation that is unlikely to hit bottom in a year's time. Even worse, there is further downside potential in housing prices, given the weakening economy. An alternative scenario could mean a further decrease of as much as 30%–40% in home prices, and in that case, a bottoming out might not occur for another several years. As a rough estimate, the most optimistic scenario for the end of asset deflation would be around two years, while a bleaker scenario sees prolonged deflation for three years or longer.

Latent losses could reach 10%–15% of GDP

Given the size of the US housing loan market, at $12 trillion, a 10% drop in prices would mean a loss of $1.2 trillion or 9% of GDP in underlying asset value. For normal home mortgages, a drop in asset prices would not lead immediately to delinquencies. However, as the prices fall further, latent bad debt grows faster. Until last summer, a reasonable estimate of overall losses on securitised products was around $1–$1.2 trillion, including $500 billion from subprime loans as narrowly defined. However, with the collapse of Lehman Brothers in September and the resulting drastic decline in financial asset prices along with the sputtering economy, a more grim scenario could mean losses as high as $2–$2.5 trillion (Chart 4). Based on the Bank of England's Financial Stability Report (October 2008), this could be composed of total losses of $1.58 trillion in the US, £123 billion ($199 billion) in the UK, and €785 billion ($996 billion) in the euro area.[1]

Under those calculations, losses in the US would amount to over 10% of GDP, but if the economy continues to wither that ratio could climb to around 15%. In Japan's financial crisis, aggregate losses at the banks reached ¥150 trillion ($1.5 trillion)[2] or 30% of GDP, but because this was depreciated over a period of 14 years, financial institutions were able to write off the losses against their profits. Therefore, the amount of public funds introduced, ¥50 trillion ($500

Latent Losses and Actual Write-offs (Estimate)

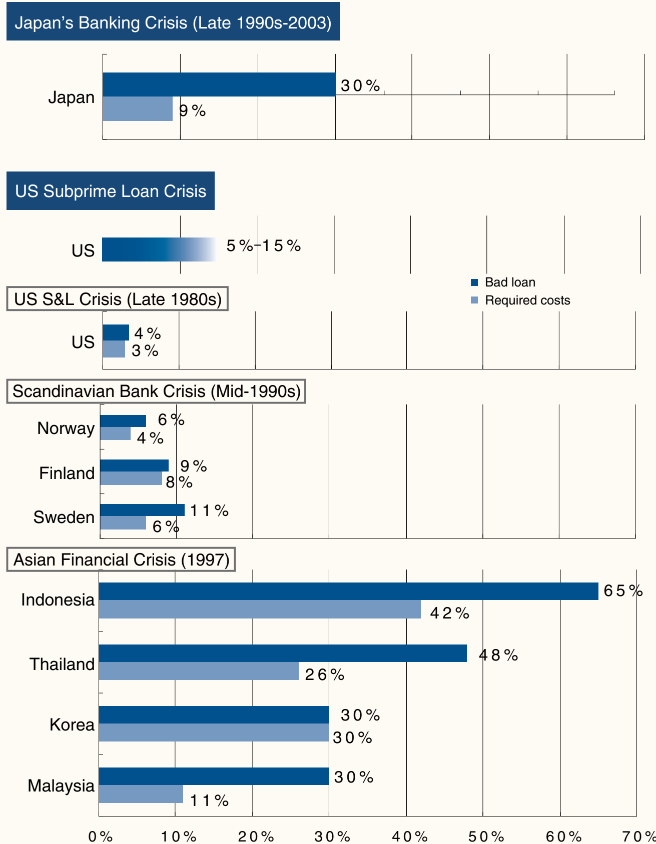


Source: PIMCO estimates (December 2008)

Chart 4

PIMCO

Bad Loan and Public Costs (% of GDP)



Source: World Bank, OECD, PIMCO

Chart 5

billion) or 10% of GDP, was relatively small compared to the scale of the overall losses (Chart 5). As the US financial crisis has unfolded extremely rapidly, financial institutions don't have time to accumulate their operating profits to write off the losses. The government has therefore been forced to increase public funding for a recovery to a level that could exceed 10% of GDP.

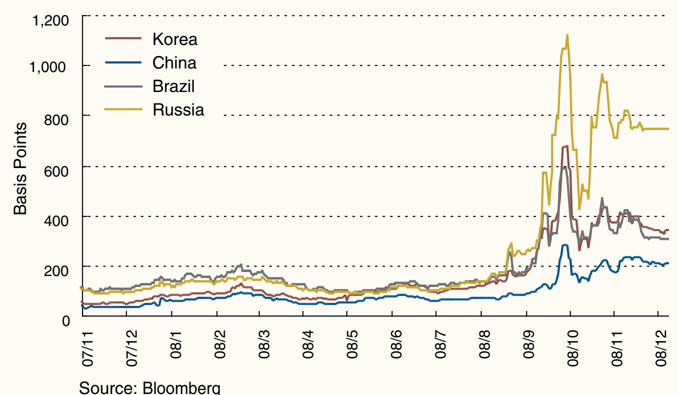
Assistance to the financial system seems insufficient thus far

The US has enacted stimulus measures to deal with the crisis. The Fed has moved with impressive speed, cutting rates effectively to zero and supplying liquidity through programs including the outright purchase of securitised products and commercial paper (CP). At the same time, the government has begun capital injections into financial institutions as part of the TARP initiative. However, its budget of $700 billion (¥70 trillion) now encompasses industries beyond finance and amounts to only 6% of the nation's real GDP, well short of the potential losses estimated at above 10% of GDP. The amount thus seems insufficient to accomplish the job. Japan's initial round of capital injections into its big banks in 1999 totaled just 1.8% of GDP, and failed to secure an early resolution of the crisis. In this light, the US financial normalisation program so far doesn't seem sufficient, and a further expansion of the legal framework and budgetary measures is possible in the months ahead.

Economic slump slows growth and increases concerns in emerging economies

The dramatic deterioration in the US, European and Japanese economies in recent months is well known, but emerging economies are also beginning to feel the impact of the sudden plunge in exports to the US and Europe. Asian nations, especially the giant economies of China, India and South Korea, actively sought foreign funds to sustain their rapid growth of the past several years. The dependence on overseas financing has reached particularly high levels in the Indian and Korean banking sectors and in Chinese real estate development (especially residential). Since last fall, the chaos in global financial markets has made it difficult for these sectors to raise funds and therefore indirectly affected these nations' economies, though the impact was generally thought to be limited to individual financial institutions and corporations. After the Lehman Brothers bankruptcy, however, governments and central banks in some emerging economies followed their counterparts in the developed economies and began to provide full support for private banks. Since these measures

Sovereign 5yr CDS (USD)



Source: Bloomberg

Chart 6

were announced, coupled with the already slowing economies, the premiums on credit default swaps have widened sharply. Besides systemic influences on credit spreads, this may also suggest that the market's concerns over sovereign risks, or the ability of those nations to repay their debt, are also growing (Chart 6). If growth prospects for developing nations worsen significantly in the next three to six months, there remains a risk of a vicious cycle in which an unexpectedly severe slowdown leads to an increase in bad debt, so that bank lending no longer functions normally. The credit market environment for emerging economies will warrant close attention going forward because while a recurrence of an Asian financial panic similar to 1997 is unlikely given the substantial volumes of foreign reserves accumulated by these nations, it can become a risk factor to their smooth flow of funds if the market views of those countries turn more cautious.

Outlook on the course of the current crisis

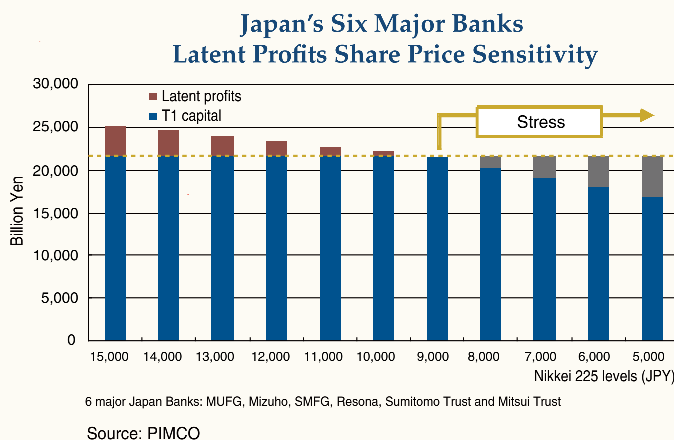
After serious dislocations following the Lehman failure, financial markets seem to have settled into a temporary lull thanks to massive capital injections by the US and European governments into their nations' banks. In the US, government support for the economy has widened from financial institutions to the automobile industry. If such actions can ease the short-term shock of a major corporate bankruptcy, the markets could steer clear of the crisis mode for the time being. However, the economic setback is still in its early stages, and any further decline in housing prices could accelerate the downturn, intensifying the pernicious feedback loop and possibly leading to a second wave in the financial crisis in the next 6–12 months. In order to overcome that second wave, governments worldwide would have to spend vast quantities of fiscal funds. The resulting erosion in their finances would increase the risk of dangerous side effects. It is no exaggeration to say that confidence in the currency of the US, a net debtor nation, could determine the fate of the entire world economy. Even if the US fiscal standing deteriorates for a time, an economic recovery based on effective use of government funds should restore faith in the dollar. Conversely, if US policy actions do not adequately restore stability, foreign exchange market volatility could sharply increase uncertainty about the global economic outlook.

Part 4: Financial Crisis - Impact on Japan

Through the summer of 2008, many observers believed that Japan's damage was relatively limited among the nations affected by the current crisis. Certainly the subprime losses as narrowly defined had not led directly to net losses at the banks, and Japanese financial markets still maintained a certain level of liquidity compared to the tight conditions in the US and Europe. Highly leveraged sectors in Japan, such as real estate investment, were adversely affected by the financial turmoil abroad, including an exodus of foreign funds, bankruptcies among real estate firms and REITs (Real Estate Investment Trusts), and a fall in property prices. Nevertheless, the impact on the Japanese economy as a whole was within permissible limits up until last September.

Stock drop triggers drastic change

However, the situation in Japan changed abruptly with the plunge in share prices after the Lehman Brothers collapse. Japanese stock markets have bled over ¥200 trillion ($2 trillion) in value in the subsequent months. Further adverse effects are possible if securities losses and unrealised losses at banks and general businesses hurt their profits and core capital, and also if the reverse wealth effect depresses household consumption. For banks, when the Nikkei stock average fell below 9,000 in October 2008, the value of their share holdings likely turned negative, increasing the pressure on profits and the capital ratios (Chart 7).



6 major Japan Banks: MUFG, Mizuho, SMFG, Resona, Sumitomo Trust and Mitsui Trust

Source: PIMCO

Chart 7

PIMCO

Sudden downturn puts Japan in crisis mode

Moreover, the Japanese economy has soured at an unprecedented speed in the past several months. Japan's auto exports, a barometer of the nation's economy, have taken a nosedive since October, indicating the harsh reality of the overall economic downturn. Japan's growth in the past few years has been led by exports, but exporters' profits were lifted not only by volume sales but artificially to an extent by the cheap yen. One reason the rise in corporate profits did not translate into higher wages – which might have boosted consumption – was that corporate management worked intensely to avoid unnecessary costs, as they recognised the unstable nature of this type of growth. As the growth drivers did not transition during the expansion period from greater corporate earnings to higher wages, then to higher consumption and finally to an expansion in domestic demand, the Japanese economy remains highly sensitive to any slowdown in the global economy. The economy could face a much faster contraction pace than anticipated in the months ahead.

A sharp deterioration in the Japanese economy would lead directly to an increase in bad debt and an even more brutal credit crunch for the banks. By our calculations, if corporate failures (total liability basis) should exceed 1.5% of GDP, credit costs could reach levels that essentially erase bank profits. At present, this liability level is rising from around 1.1%–1.2% of GDP and approaching closer to the 1.5% threshold (Chart 8).

Japan's structural problems and hangovers from the last financial crisis have been resolved, including excessive debt at corporations and the commercial real estate bubble. Still, the operating environment for lenders is extremely tight, and the credit crunch will likely continue to worsen even after the March fiscal year end. In light of these circumstances, the Bank of Japan voted at its December policy board meeting to cut rates, but also began extending help for corporate finances, starting with a program to buy CP. On the fiscal policy side, the government has increased the budgetary framework under the Financial Function Early Strengthening Law. However, we do not believe these are sufficient measures, given the liquidity issues surrounding the overall economy, including small businesses. Depending on the course of the economy, the government may need to consider taking additional steps, such as a larger scale of capital injections into banks as a countermeasure for a severe credit crunch. Investors in Japan will continue to monitor closely the progression in the global financial crises.

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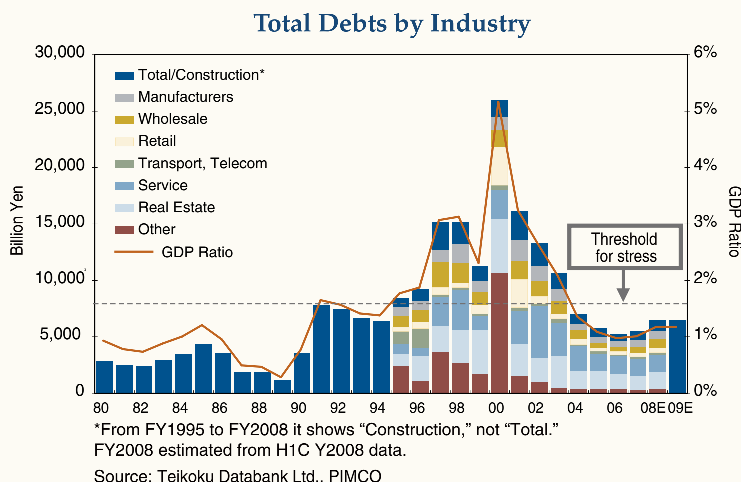
Executive Vice President



*From FY1995 to FY2008 it shows "Construction," not "Total."
FY2008 estimated from H1C Y2008 data.
Source: Teikoku Databank Ltd., PIMCO

Chart 8

[1] Exchange rates as of October 31, 2008: 1 US dollar = 1.27 euro, 1.62 pounds sterling. Publication date of Bank of England Financial Stability Report is October 28, 2008.

[2] Approximate exchange rate as of October 31, 2008: 1 US dollar = 100 yen.

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