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The Financial Crisis in Japan – Are There Similarities to the Current Situation?

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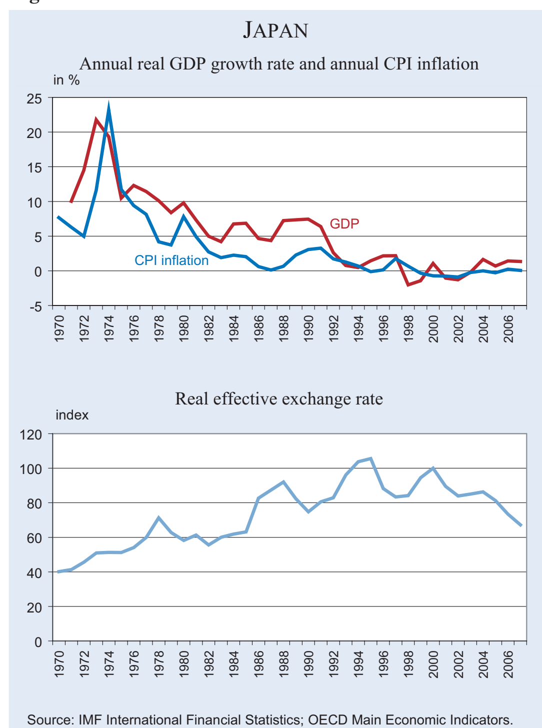
In the 1990s Japan experienced a deep financial crisis that lasted for more than a decade and whose effects strain the Japanese economy even today. In this article, we give a brief overview of the major developments that preceded the crisis and describe the legislative actions that were decided to ease the markets and to restore confidence in banking. Employing major financial and economic indicators, we compare the developments in Japan to the current turmoil on the international financial markets that originated in the US subprime mortgage market. The comparison shows that the following phenomena played a crucial role in the run-up to both crises:

Figure 1



Source: IMF International Financial Statistics; OECD Main Economic Indicators.

- an expansive monetary policy
- a strong increase of prices on the real estate and stock markets
- a fall in savings of private households
- high risk propensity and comparable low equity ratios in the banking sector
- the development of new financial products combined with a comparable low degree of market regulation

The run-up to the crisis

The economic situation in Japan in the 1980s was characterized by high GDP growth rates and a decreasing level of inflation (Figure 1). Following the Plaza Agreement the Japanese *yen* appreciated first gradually and later strongly.[1] To prevent a further appreciation and to support the exporting sectors of the economy, the Bank of Japan lowered its interest rates subsequent to the Louvre Agreement to 2.5 percent (Figure 2).[2] The expansive monetary policy and the resulting increase in liquidity led to a boost in prices on the real-estate and stock markets.

The safety system of the banking sector was initially characterized by the Convoy System (Hoshi 2002). Originally, the Convoy System was designed to rebuild Japan after World War II. Banking supervision and regulation was conducted such that the viability of the weakest banks was not undermined. It was implicitly understood that the banking sector was fail-safe, as the Japanese Ministry of Finance was expected to step in to find a remedy for any problem that could threaten the viability of a bank. In return for protection by the financial authorities, banks were expected to function as financial intermediaries

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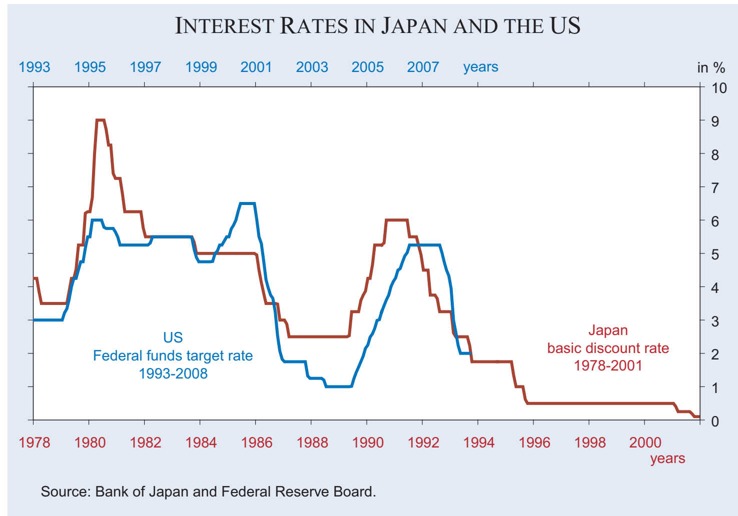
[1] The Plaza Agreement was signed on 22 September 1985 at the Plaza Hotel in New York City by 5 nations – France, West Germany, Japan, the United States and the United Kingdom. The five agreed to depreciate the US dollar in relation to the Japanese *yen* and German *deutsche mark* by intervening in currency markets.

[2] The Louvre Agreement was signed by the then G-6 (France, West Germany, Japan, Canada, the United States and the United Kingdom) on 22 February, 1987 in Paris. The goal of the Louvre Agreement was to stabilize the international currency markets and halt the continued decline of the US dollar caused by the Plaza Agreement.

Figure 2



Source: Bank of Japan and Federal Reserve Board.

of risky portfolio assets in order to compensate losses of market shares and significantly lowered their equity ratio. This resulted in a decrease of interest margins and of the interest spreads between loans of different ratings. Neglecting their profitability and riskiness, loans were extended even at negative lending spreads and the volume of credits increased steadily (Figure 3). Additionally, the banks widened the range of accepted securities, especially for mortgage loans on real estate. This development was intensified by the formation of new mortgage banks outside of the traditional banking sector. These so-called *Jusen* or housing loan corporations were non-bank financial institutions that were founded by banks and other financial institutions in the 1970s to complement the housing loans offered by banks. In the 1980s, the *Jusen* companies shifted their lending towards real-estate developers. However, the banking supervision was not adequately adjusted to the new structure of the financial markets.

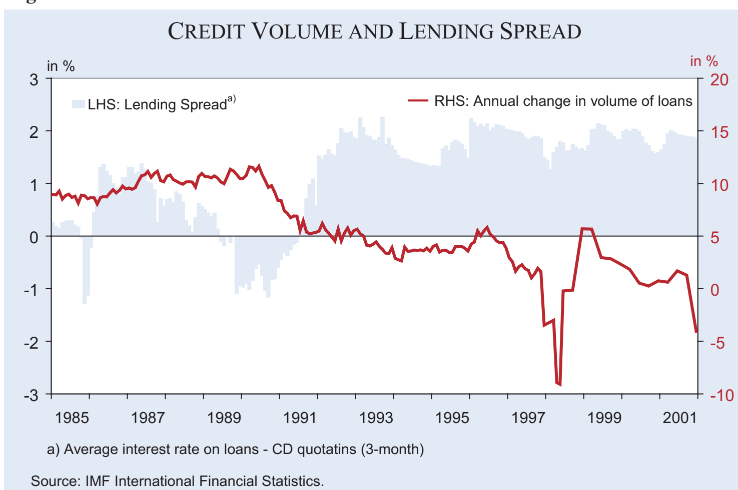
channelling surplus household savings into the industrial sector. To guarantee safety for the financial system, the Deposit Insurance Cooperation (DIC) provided a payoff in which a failed bank would be closed down for liquidation and a depositor with the failed bank would be protected by up to 10 million *yen* per depositor. Furthermore, the DIC provided financial assistance by transferring the sound assets and liabilities to an assuming bank. As larger banks generally perceived to be protected by the Convoy System, the DIC insurance fund had a volume of only 300 billion *yen* in 1987, what was far too little in the case of the failure of a major bank (Nakaso 2001, 3).

As a consequence of the opening of the Japanese financial markets for foreign investors in the early 1980s, domestic regulation and the by then dominating main bank system[3] came under increasing competitive pressure. The Japanese banks broadened their shares

The beginning of the crisis

As a reaction to the overheating of the real estate and stock markets – the Nikkei Index rose from 13,000 points (end of 1985) to 39,000 points (end of 1989) – numerous measures were implemented to guarantee a soft landing of the economy. The Bank of Japan tightened its monetary policy and successively raised the discount rate from May 1989 to August 1990 from 2.5 to 6 percent. Furthermore, a tightening of the modalities for loan granting on the real-estate market and a tax on speculation gains were introduced. The rise in interest rates led to a significant increase in refinancing costs. To generate liquidity, investors sold their assets, and the prices on the

Figure 3

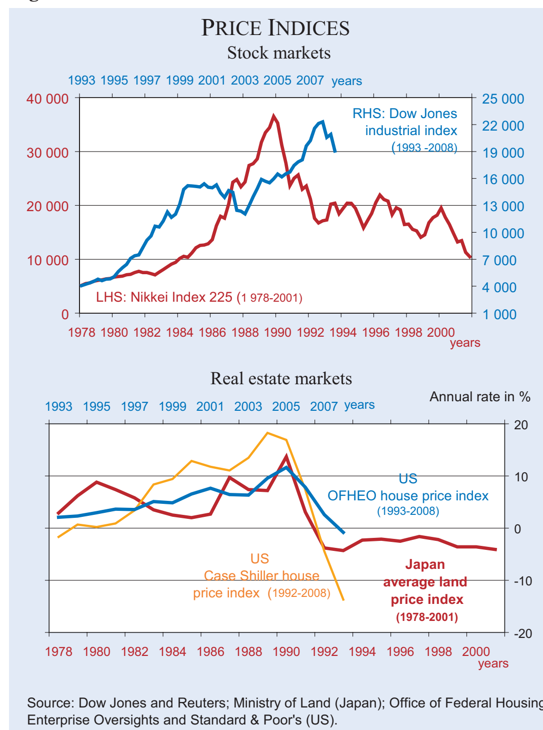


a) Average interest rate on loans - CD quotations (3-month)

Source: IMF International Financial Statistics.

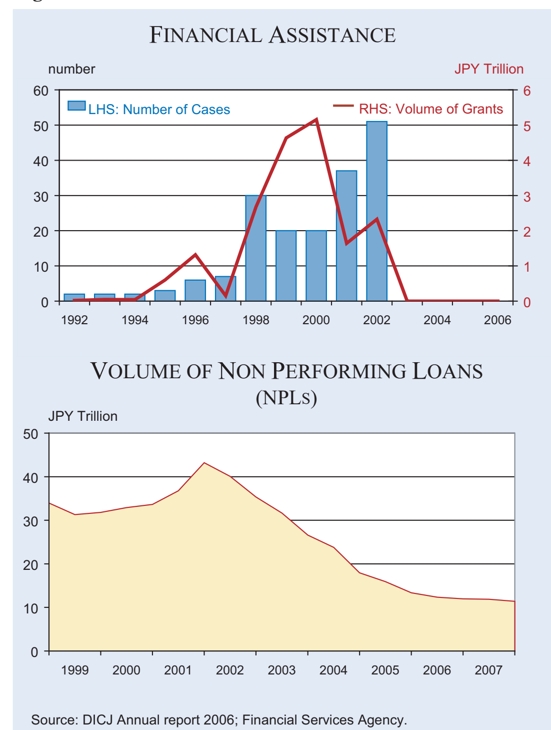
[3] A main bank relationship means that a firm meets a substantial proportion of its financial needs through the intermediation of one bank. In return for the preferential business that it receives from the firm, the main bank implicitly undertakes the monitoring of the firm and bears the responsibility for organizing expensive debt workouts in case the firm encounters financial distress.

Figure 4



Source: Dow Jones and Reuters; Ministry of Land (Japan); Office of Federal Housing Enterprise Oversights and Standard & Poor's (US).

Figure 5



Source: DICJ Annual report 2006; Financial Services Agency.

real-estate and stock markets dropped sharply until midyear 1992 by 65 and 75 pecent, respectively (Figure 4).

Thereupon a considerable part of the overall volume of credit was rated as NPLs (non-performing loans) and important credit rating agencies downgraded the Japanese banks, which again put further pressure on equity prices.

The height of the crisis

Between 1994 and 1996, a number of major Japanese banks became insolvent and, following the drop in real estate prices, a growing number of *Jusen* companies encountered difficulties and accumulated losses that were far beyond the amounts that founder banks could cover. The financial crisis hit its peak in November 1997 when major financial institutions collapsed almost on a weekly basis. As a result, foreign financial institutions squeezed their credit limits to Japanese banks in general and domestic lender banks increasingly placed their money with the Bank of Japan instead of offering it on the interbank market. As a result, liquidity in the interbank market dried up and interest rates came under strong upward pressure. These developments forced the Bank of Japan to pump massive liquidity into the market.

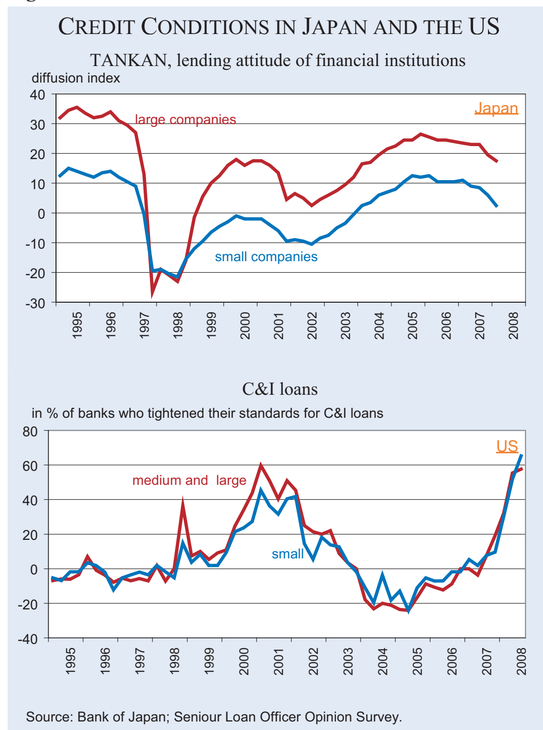
To restore financial system stability and in order to avert a run on banks, the Japanese government decided to introduce further public funds and gave a blanket guarantee for deposits and other liabilities of financial institutions for a period of 5 years. From 1992 to 2002, 180 deposit-taking institutions were dissolved under the deposit insurance system (Figure 5). The DIC provided financial assistance for the assuming institutions of about 19 trillion *yen*.[4] More then 10 trillion *yen* were paid by the taxpayers and the rest was funded by private financial institutions through the deposit insurance system. Furthermore, the government injected about 12 trillion *yen* into financial institutions by purchasing preferred or common stocks and extending subordinated loans (DICJ 2006). All issues related to capital injections were handled by the newly created Financial Crisis Management Committee (FSA). The volume of NPLs continued to rise and reached its peak of 43 trillion *yen* or 8.4 percent of the total credit volume of all banks not until the end of March 2002 (Figure 6).

The aftermath of the crisis

Japanese banks had only limited incentives to remove their NPLs from the balance sheet. The Bank of Japan maintained its loose monetary policy, which reduced the opportunity costs of holding bad loans, and sales of

[4] The average annual nominal GDP of Japan between 1995 and 1998 was about 500 trillion *yen*.

Figure 6



Source: Bank of Japan; Seniour Loan Officer Opinion Survey.

bad loans were only possible at deeply discounted prices. Thus, in order to fulfil short-term profit expectations the banks used different accounting methods to cover the total need for write-downs. To accelerate the process of identifying the bad assets and the disposals thereof, the FSA conducted several rounds of special inspections of major banks and later of smaller and regional institutes from 2001 onwards. Additionally, the government installed the so-called Resolution and Collection Cooperation (RCC) to assume failed credit cooperations and to purchase NPLs from failed financial institutions as well as from solvent operating banks, helping them to clean up their balance sheets.

The fall of asset prices implicated a decline of the equity ratios of Japanese banks, which tightened credit conditions for smaller as well as for large companies to meet the minimal capital requirements agreed upon in the Basel I accord[5] (Figure 6). After their growth rates had already fallen sharply since the increase of the interest rates in 1989, the volumes of total credit declined from the end of 1998 onward. The credit conditions were not gradually untightened until mid-1999.

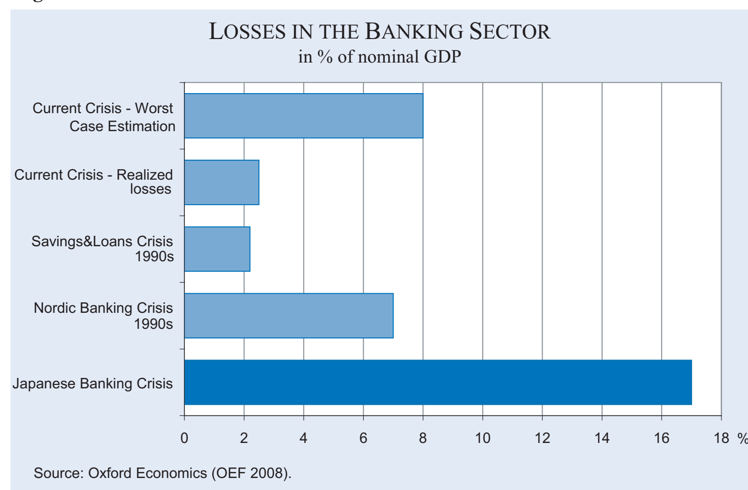
Comparison

A comparison of the Japanese financial crisis with the current financial and banking crisis shows a number of similarities (Reinhart and Rogoff 2008). In both cases, very low interest rates promoted a huge run-up in prices on the real-estate and stock markets.

As in the current situation, where declining lending standards in the mortgages markets, an increase in loan incentives and a long-term trend of rising housing prices had encouraged US private households with a low degree of creditworthiness to assume difficult mortgages and run into debt, the starting point of the Japanese financial crisis was the liberalization and deregulation of the real-estate and mortgage market. In both cases, these developments came along with an insufficient adjustment of the financial supervision to the new structure of the financial and real-estate markets.

The delayed tightening of monetary conditions lead in both cases to a strong adjustment of asset prices resulting in striking contractions in wealth and equity capital followed by increases in risk spreads and finally a liquidity crisis. In contrast to the current crisis, where the securitization of debts has lead to an internationalization of the problem, the Japanese financial crisis was regionally bound to Japan. As during the Japanese crisis, banks in the United States

Figure 7



Source: Oxford Economics (OEF 2008).

[5] Basel I is the round of deliberations by central bankers from around the world, and in 1988, the Basel Committee (BCBS) in Basel, Switzerland, published a set of minimal capital requirements for banks. This is also known as the 1988 Basel Accord and was enforced by law in the Group of Ten (G-10) countries in 1992, with Japanese banks permitted an extended transition period.

are currently tightening credit conditions in response to the decline of their equity ratios.

In Japan, the total amount spent in dealing with the NPL problem grew to 86 trillion *yen*, roughly 17 percent of nominal GDP (Figure 7). Estimates for the ultimate scale of aggregate losses in the banking sector caused by the current crisis range from one to two trillion US dollars. The latter figure would represent some 8 percent of US and European nominal GDP. According to this measurement, the Japanese crisis was by far the most severe of the listed crisis, with relative losses exceeding the worst case scenarios of today's turmoil by far.

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