## JAPAN'S FINANCIAL CRISIS IN 1992 AND UNBALANCED INCENTIVES

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#### Abstract

In this paper the author analyzes corporate governance in the wake of a financial crisis. In Section 1, the author will explain why the banking crises occurred and how we can avoid them in the future. And in Section 2, there will be discussion on Japan's financial crises in 1990s, focusing on why Japan's financial authorities delayed efforts to resolve the NPL issue and why they did not try to expand the monetary base.

The bank supervision authority (Ministry of Finance at that time) and financial institutions had incentives to delay the disposal of bad loans. They wanted to cloud their responsibilities by delaying the disposal. Their strategy had the desired effect, as many escaped their responsibilities because of the delay.

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#### Introduction

After experiencing "Two Lost Decades" of deflation and recession, which some have called the "Great Recession," Japan has been trying to revive the economy through a bold, expansionary monetary policy in the present Prim-minister Abe's administration (December 2012-). The results of this policy, though, are not yet clear.

One factor behind the protracted economic stagnation was Japan's banking crisis, although there is no consensus on the magnitude of its impact. In general, policy authorities try to expand the monetary base and promptly solve the problem of nonperforming loans (NPLs) after a banking crisis (See Mishkin 2013, p. 241, Chapter 9, "Government Intervention and the Recovery," for example), but Japanese authorities did neither. Why didn't they? What were the motives for their behavior?

The purpose of this issue is to analyze corporate governance in the wake of a financial crisis, but we firstly need to know the respective concerns and motives of financial institutions, financial supervision authorities, and central banks. Stigler (1971) warns that regulators (congress, government agencies, or

whatever) are always captured by special interest groups that they regulate, and regulations are conducted for the regulated. Without this information, we cannot create an effective corporate governance system.

By 1992, Japanese banks and security companies had amassed NPLs and bad debts much higher than they could manage given their scale. They failed to reveal the full extent of their losses and experienced a long recession before a banking crisis finally occurred in 1997 and 1998. This was quite different from the experience of other countries. In the wake of the global financial crisis of 2008, the United States resolved its NPL issue in a year and expanded the monetary base. I believe Japan's unique experience provides many interesting lessons.

The structure of this paper is as follows. In Section 1, I will very briefly explain why the banking crises occurred and how we can avoid them in the future. And in Section 2, I will discuss Japan's financial crises in 1990s, focusing on why Japan's financial authorities delayed efforts to resolve the NPL issue and why they did not try to expand the monetary base. Then, my concluding remarks follow.

#### 1. Inevitability of Financial Crises

#### What is a financial crisis?

Reinhart and Rogoff (2009) use the term "financial crisis" in a very broad sense. They include sovereign defaults, banking crises, exchange rate crises, and even inflation. It might be reasonable to include inflation, since under inflation debtors do not actually repay the true value of their debts. In this paper, though, I will use the term in a narrower sense, focusing on banking crises. A banking crisis occurs when a significant part of the banking sector becomes insolvent due to heavy investment losses, a banking panic, or both, according to Reinhart and Rogoff (2009) (p. xxvi).

#### Banks do not keep the deposit

Financial crises are inevitable, in a sense, because banks accept deposits, which originally meant putting something (money, in this case) in some place (a bank). Banks do not keep the money, however, but loan it out leaving a small fraction of it to the bank as a reserve. Therefore, there are two risks. One is not being able to repay the deposit when people make a run on a bank, since it does not have the money on hand. The second is that money loaned can become uncollectable.

#### Liquidity problem

The first problem occurs because of a fractional reserve banking system; there is thus a proposal to divide the banking system into two parts, one for settlements, and the other for investments. The settlement banks would have a very high reserve ratio, perhaps only purchasing short-term government bonds (Litan 1987 and Kay 2009, for example).

Still, if the investment banks amass huge bad debts, this could cause major problems. Lehman Brothers, after all, was not a bank but a securities company, and its bankruptcy triggered the global financial crisis. The fractional reserve banking system may be a reason for financial crises, but even if we instate a 100% reserve banking system in place of a fractional reserve system, we will not be able to avoid financial crises. Thus, I will not dwell on the shortcomings of the fractional reserve system in this paper but focus instead on bad assets as triggers for financial crises.

Banks can mutually borrow and lend cash, and central banks can extend loans to the banks if they have good loans and assets as collaterals. There is also a risk that a 100% reserve banking system will sap capitalism of its dynamism if banks can find good opportunities for economic development just by creating loans.

#### **Bad loans**

Regarding the second problem of bad loans, one solution would be a deposit insurance system, under which depositors can be repaid their money. The impact on the total economy would not be serious if the amount of money the insurance system must pay is small. But it would be serious if the amount is substantial.

In the insurance system, other banks that do not have huge bad loans or the government will have to bear the burden; banks will thus need to increase their margins, and the governments will have to borrow money by issuing bonds or raising taxes, causing interest rates to rise and public expenditures to decline. This will affect the total economy for a long time if the magnitude is substantial.

The value lost by bad loans in the case of Japan and Scandinavian countries are estimated to be 20% of GDP for Japan (See Source of Figure 4), 4.4% for Finland, 2.8% for Norway, and 3.8% for Sweden (Sandal (2004) p.84, Table 1)

Under what circumstances would banks and securities companies have such huge losses?

### Is sufficient capital requirement a solution?

The first is an insufficient capital requirement. If Lehman Brothers and other financial institutions had enough capital, could the crisis have been avoided? The magnitude of the crisis would probably have been lessened (Admati and Hellwig (2013)), but how much capital is enough? How can we measure the capital, and how can the government regulate? If capital is not cash, measurement and pro-cyclical problems would arise.

If the capital is invested in assets, the value of those assets would increase under good business conditions and decrease in bad conditions. The capital requirement would induce optimistic behavior among financial institutions during prosperous periods and pessimistic behavior in periods of stagnation, causing wider economic swings.

Of course, some propose a capital requirement to avoid the pro-cyclical problem. Actually, the international bank regulation authority, the Bank for International Settlements, proposed non pro-cyclical regulations on capital requirement (BIS (2011), BIS (2013)), but still there are problems with the proposal. Regulations to require increasing the ratio of cash and cash equivalents to total capital might help to avoid measurement and pro-cyclical problems, but still it would not be a solution because we do not know how to discount the value in prosperous periods or to precisely increase the value in a recession.

#### Excessive monetary expansion

The second is excessive monetary expansion.

Monetary expansion can create optimism, cause bubbles, and result in bursts, leading to massive bad assets and financial crises. Some economists recommend pursuing a monetary policy that does not create bubbles so nothing could burst (BIS view, See White 2006), but how can we differentiate bubbles from asset price increases that reflect new technological opportunities, discovery of new resources, and market participations of new countries. If policy authorities misinterpret the opportunities as bubbles, then the economy would lose a chance for growth. Other economists argue that central banks should only respond to general prices and employment, not to asset prices (FRB view, See Mishkin (2007)).

Schumpeter (1912) interprets the credit creation process as an entrepreneurial activity. I cannot see that central bankers would have greater insights into the economy than Schumpeter.

#### Unbalanced risk sharing

Third, I would stress the unbalanced risk sharing of economic agents. In a fractional banking system, banks have no penalty even if they do not have cash to repay depositors. Banks can very easily borrow the cash from the central bank at cheap cost. Managing directors of banks are only fired when they amass huge bad assets. Bank capital is the equity owners' money, not the general managers'. Of course, bank capital can offset the losses caused by bad assets to some extent, but it cannot change the behavior of bank managers. In this sense, the capital requirement is not enough. Bank managers are simply fired if they make huge NPLs.

Some argue that the greed of financial institutions created financial crises, but their greed

can make them very deliberate if they are betting their own money.

#### 2. Japan's Financial Crisis in the 1990s

#### Japan's peculiarity

Financial crises have been repeated even though most people understand the disastrous aftermath, but not all crises have had a huge impact on the whole economy. Based on extensive data collection, Reinhart and Rogoff (2009, p.216, Table 13.1) identified the "Big Five" financial crises and 13 milder financial crises among industrialized countries since World War II (the five are Spain in 1977, Norway in 1987, Finland in 1991, Sweden in 1991, and Japan in 1992, and the milder cases are the UK in 1974, 1991, and 1995, Germany in 1977, Canada in 1983, the US in 1984, Iceland in 1985, Denmark in 1987, New Zealand in 1987, Australia in 1989, Italy in 1990, Greece in 1991, and France in 1994), but not all the crises caused significant damage to the economy.

Figure 1 shows the growth rates of real GDP before and after the respective crises of the average of the 13 milder crisis-hit countries and the Big Five countries. The Big Five are divided into the average of the three Scandinavian countries, Spain, and Japan. In the case of Japan, the five-year average growth rates are shown as the rates after the crisis greatly fluctuated.

In the Big Five cases, the economies suffered long stagnation, but in the milder cases, real economic growth rates did not decline. Among the Big Five countries, the three Scandinavian countries returned to their pre-crisis rates in three years. It took nine years for Spain, and then the growth rate became higher. Japan's prolonged stagnation is an exception.

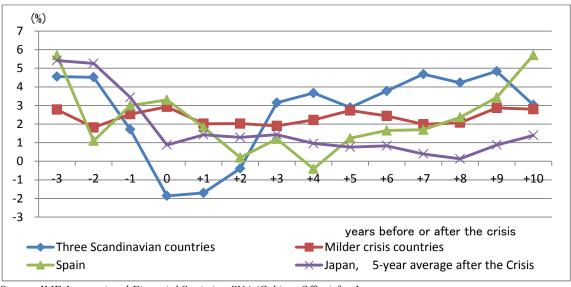


Figure 1. Real GDP Growth Rates Before and After the Crisis

Source: IMF, International Financial Statistics, SNA (Cabinet Office) for Japan Note: Selection of countries and periods is based on Reinhart and Rogoff (2009), p.216, Table 13.1 Growth rates for Japan after crisis are 5-year averagse, because annual growth rates are very volatile Japan's annual real economic growth rate was 4.7% in the 1980s, but it declined to 1.1% in the 1990s, to 0.8% in 2000s, and 0.8% from 2010 to 2013.

The two Lost Decades began when the bubbles that formed in the end of the 1980s burst in the early 1990s. This paper will only focus on why the bubble occurred and burst. How can the factors outlined in Section 1 - excessive monetary expansion, capital requirement, and unbalanced risk sharing - explain Japan's bubble, its collapse, and the long stagnation?

#### Monetary expansion and contraction

Monetary expansion and contraction at the end of the 1980s and early 1990s obviously caused the bubble and its collapse and the economic fluctuations of that period. Monetary expansion lowered interest rates, encouraged expansion of loans by banks, increased the price of collateral such as real estate and stocks, and again encouraged the expansion of loans.

The increase in land prices was criticized by journalists, who pointed out that the average salaried worker was now unable to afford a home even if they worked all their lives (Hasegawa (1989)). <sup>1</sup> Takenaka (2005) showed that the public was very critical to the politics about sharp increase of housing price. Bank of Japan Governor Yasushi Mieno aggressively shrunk the money supply in 1989 and 1990. He raised the official discount rate (the symbolic Japanese policy rate at that time) from 2.5% in May 1989 to 6% in August 1990, and as a result, land prices sharply declined while wages didn't decrease. But because of monetary contraction and a decline in annual household income, the ratio of land prices to wages also increased. <sup>2</sup>

Governor Mieno was portrayed as a hero in the Japanese media because he was able to lower land prices.<sup>3</sup> He realized, though, that NPLs were becoming a serious problem in the early 1990s. During the bubble era, Japanese banks extended loans taking land as collateral. The loans turned bad as land prices declined.

He thus lowered the call rate from 8% in 1991 to 3% in 1992. Takemori ((2010) pp. 230-31) questions, "Why did the BOJ abruptly have to decrease short-term interest rates by half while doubling it just the previous year? The BOJ should

not have increased the rate. It recognized its own error and lowered the rate, but then it was too late."

#### Pro-cyclical capital requirement problem

The abrupt monetary expansion and contraction caused a typical pro-cyclical capital requirement problem. The monetary policy made asset price fluctuate. Under Japanese regulations, capital includes a portion of the difference between the current price of stocks and their book value. The stock price of a company reflects the value of real estate the company owns. Share prices increased due to an expansionary monetary policy, causing an increase in capital value and an expansion of bank loans, but then decreased when a tightening monetary policy caused the opposite phenomenon.

Figure 2 shows the monetary base, bank loans, and index of industry production. The monetary base, bank loans, and IIP are shown to have fluctuated in the same way around 1990.

Figure 3 shows the stock price index (Nikkei stock price average) and land price index (for 6 major cities and other cities, index of urban land price, commercial use). The Nikkei average kept tripled between 1985 and the end of 1989. The land price index (6 Major Cities, Commercial Use) likewise increased by 3 times between 1986 and 1991. The fluctuation occurred with the monetary expansion and the contraction as shown in Figure 3.

The monetary base is an indicator of monetary policy, so we can conclude that the BOJ caused the economic fluctuations in the late 1980s and early 1990s. There are many academic studies on this topic, and most Japanese economists (Kosai et al. 2000, Miyao 2002) agree that monetary policy caused the fluctuations at the period.

However, there is no consensus that monetary policy and NPLs caused the two Lost Decades. Some economists focus on bad assets, but others stress that deflationary monetary policy caused it.<sup>4</sup> The government should have taken a policy to resolve the NPLs if the first was correct. And the Bank of Japan should have expanded the monetary base if the second reason was correct. The two reasons, however, are not mutually exclusive, because bad assets would increase if an expansionary monetary policy is not taken. But neither policy was taken. I will briefly explain why monetary policy and bad loans reduced the real economic growth rate after the latter half of the 1990s, and I will explain how the Japanese government actually treated bad loans and made monetary policy.

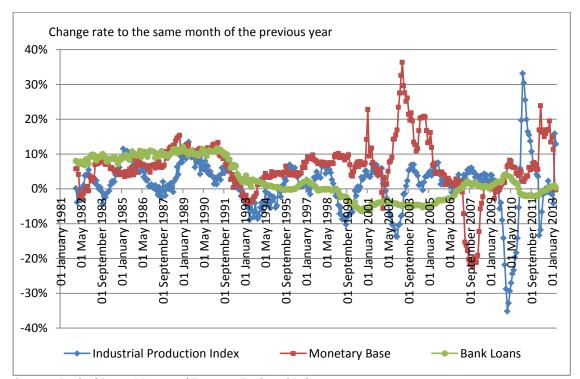
<sup>&</sup>lt;sup>1</sup> Rupo: Shutoken Zetsubo Jutaku Jijou (Report: Desperate Condition of Housing in Tokyo Area," *Aera Weekly*, August 1, 1989, wrote, "There was a time that common people could have owned a house near Tokyo."

<sup>&</sup>lt;sup>2</sup> The ratio of condominium price to average annual household income in metropolitan area increased 4.2 in 1985 to 8.0 in 1990, and declined to 4.9in 2002, but increased to 6.2 in 2011because income also declined. Data is in Ministry of Land, Transport, and Infrustructure, Juutaku Keiai Data Shuu (Data on Housing and Economy), Juutaku Sangyou Shinbunsha. 2011.

<sup>&</sup>lt;sup>3</sup> Mainich Newspaper's Colum, "Yurakucho: Onihei," praised Governor Mieno as he decreased land price (*Mainichi Newspaper*, March 19, 1992).

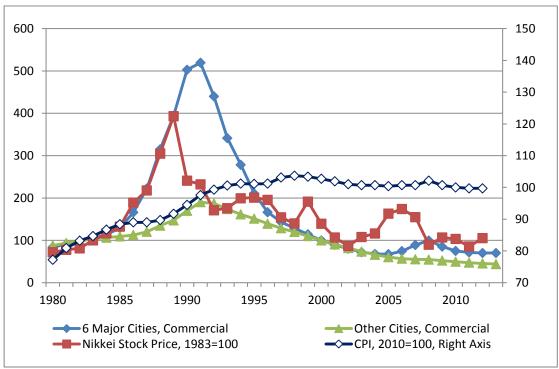
<sup>&</sup>lt;sup>4</sup> Most Japanese economists argue that structural problems caused the Lost Two Decades, but none of them can point out what structural problems caused them. See Harada (2012).

Figure 2. Monetary base and IIP



Sources: Bank of Japan, Ministry of Economy, Trade and Industry Note: industrial prodction and monetary base are sesonally adjusted

Figure 3. Indexes of Urban Land Price, Stock Price, and Consume Price



Sources: Bureau of Statistics, Institute of Real estate Economy of Japan, Nihon Keizai Shinbunsha (Newspaper

Note: 2000=100 if it is not stated.

# Why did monetary policy reduce the growth rate after the latter half of the 1990s?

Textbooks on economics explain that monetary policy does not affect the real economic growth rate in the long run, but unemployment increased from 2.5% in 1990 to 5% in 2000. During this period, the labor market could not have become inefficient or rigid because nominal wage rigidity was partly destroyed at the end of the 1990s, and firms could begin to flexibly hire labor through temporary employment agencies or from contract agencies. Thus, the two Lost Decades can be explained by a decline in the utilization of labor and production facilities. Monetary policy can stimulate an economy in such a situation. I have written on this topic at length in another paper (Harada 2012). Here I just wish to state that Japan's real GDP could have been substantially higher by, say 7.5%, if Japan's Okun's Law coefficient is 3 (according to Kurosaka 2011, the coefficient is 3 from 2001 to 2007), and the unemployment rate decreases from 5% to 2.5% because deflation can be overcome only with an expansionary monetary policy.

Ahearne et al. (2002) show that the BOJ was responsible for deflation and the delay in recovery by not expanding the money stock.

Harada (2013) flatly explained that wrong monetary policy could have an effect for two decades if those policies were repeated. In fact, the BOJ did not expand the money supply in response to the negative demand shocks that repeatedly occurred; it excessively expanded the money supply in the late 1980s and sharply contracted the money supply in the early 1990s. In the middle of the 1990s, the BOJ did not pursue an expansionary policy in response to the excessive appreciation of the yen. During the financial crisis of 1997-98, the BOJ did not expand the effective monetary base (Matsuoka 2000). Just before the collapse of IT bubble in 2000, the BOJ increased interest rates. And the BOJ ended its quantitative easing monetary policy while the inflation rate was not continuously positive in 2006. In response to the Lehman shock, other central banks aggressively expanded the monetary base, but the BOJ did not, which resulted in an excessively strong yen. These misguided monetary policies continued to reduce Japan's growth rate.

# Did a decline in financial intermediary functions significantly reduce the growth rate?

Rapid monetary expansion and contraction caused great swings in the Japanese economy, and at the same time, it created huge bad assets, leading to protracted stagnation. There are two reasons. One is that NPLs eroded bank capital, and banks could not expand loans, which reduced the growth rate of the economy. I call this hypothesis the 'credit crunch

hypothesis.' The other reason is that banks continuously extended loans to the very companies that created the NPLs in the hope that the problem would eventually somehow go away. Extending loans to inefficient firms made the whole economy inefficient, and may have caused the Lost Decades. I call this hypothesis the 'expanded loans to low-return-company hypothesis.'

With respect to the credit crunch, Miyao (2004) concludes, after surveying several studies, that in the first half of the 1990s the effect was limited with a credit crunch being seen in some sectors of the economy, and that only in 1997-98 was there a credit crunch which affected the economy overall. And even in 1997-98, the results are mixed.

Japan has various public financial institutions supporting small companies, such as the Japan Finance Corporation for Small and Medium Enterprise and the National Life Finance Corporation (both merged to form Japan Finance Corporation in 2008), and also system infrastructure, such as credit guarantee corporations, in all prefectures, which especially extend loans to small companies in a recession when a credit crunch might occur. While these entities might make the economy inefficient in the long run, in the short run they support it and mitigate the adverse effects of recession.

On the other hand, Sakuragawa (2002) shows that banks expanded loans to companies with low returns, resulting in a high ratio of NPLs to total assets, and a high debt to assets ratio in the 1990s.

Caballero, Hoshi and Kashyap (2008) argue that Japanese banks kept credit flowing to otherwise insolvent borrowers (which they call zombies). The congestion created by the zombies reduces the profits for healthy firms, which discourages their entry and investment.

These arguments are reasonable, but how can we gauge the impact of extending loans to non-profitable firms on the total economy? First we would need to know the amount of loans extended to non-profitable firms, but no study provides this data, although the Financial Services Agency has said that aggregate NPLs written off from 1992 to 2013 were 100 trillion yen (See source of Figure 4), which were mainly created in the bubble period through the extension of loans to firms which later become unprofitable. If loans to non-profitable firms totaled 100 trillion yen and assuming that loans to non-profitable firms conducted in the 1990s were, say, the 100 trillion yen (I think most NPLs were created in the bubble period), then this means that the Japanese economy lost 100 trillion yen in normal investment in the

Japan had total capital stock of 1,346 trillion yen in 2000.<sup>5</sup> Even if the 100 trillion yen in loans had

<sup>&</sup>lt;sup>5</sup> Private capital stock and fixed asset of general government, System of National Accounts, Cabinet office, Government of Japan, Private capital stock at 2000 price, fixed assets of

been utilized for completely useless purposes, the capital stock would only have been reduced by 7.4% (=100/1346). This means that real GDP would have been lowered by only 2.2%<sup>6</sup>, translating to the 1.1% GDP growth rate of the 1990s being lifted to 1.3% if inefficient loans had not been made. This might be an important factor explaining the two Lost Decades, but the numbers are guesses at the most.

Additionally, the value of NPLs depends on the monetary policy adopted. NPLs depend on the prices of collateral, which depend on land and other asset prices. Collateral prices would not have much declined if monetary policy had defended the fall of land prices. But the Bank of Japan did not expand the monetary base. This is a problem that I will discuss later in this paper.

### Two measures to be taken after bubble burst

After a bubble bursts, two policies should be taken. One is to expand the money base to avoid a decrease in land and stock prices. The other is to write off NPLs. Both policies are effective, but the government and the BOJ took neither. It might be reasonable that the second was not taken because managing directors of banks have responsibility for the NPLs; if the NPLs are huge compare to the assets or profits of the banks, the managing directors will have to quit. And in some cases, banks may go bankrupt, causing not only managing directors but also employees to lose their jobs.

The supervising authority for the Japanese banking industry was the Ministry of Finance at that time. It had close ties with banks and securities companies, and many MOF officials retired into lucrative jobs at the banks.

What the MOF initially did was to deny the existence of NPLs, or at least to underestimate their value. In April 1992, the MOF for the first time published a report indicating that the bad loans (with an arrearage of more than 6 months) of 21 major banks were 7 to 8 trillion yen, as of the end of March 1992. In November 1992, it published another report showing that the bad loans had increased to 12.3

general government at nominal figure, but this rough calculation does not produce any significant difference.

trillion yen as of the end of September 1992 (MOF (1992)). These amounts were severely underestimated, nobody believed the figure, and were bound to grow. In June 1995, MOF expanded the definition of bad loans and reported that the total amount was 40 trillion yen.

And in 1997 and 1998, big financial companies went bankrupt. Sanyo Securities, Hokkaido Takushoku Bank, and Yamaichi Securities went bankrupt in November 1997, the Long-Term Credit Bank of Japan in October 1998, and the Nippon Credit Bank in December 1998.

The MOF could not hide the truth any more. The Financial Reconstruction Law was enacted in October 1998, and the MOF and the Japanese government changed their policy to write off bad loans and to proceed with their disposal.

At the beginning of the 2000s, the accumulated loss caused by the bad loans was found to be nearly 100 trillion yen, as shown in Figure 4.

#### Hit and run by the U.S. CEOs

In case of the U. S., managers did not have incentives to delay the settlements of the NPLs, as long it did not cause legal problems. Richard S. Fuld, Jr., chairman and CEO of Lehman Brothers, had been receiving 350 million dollars since 2000, and Stanley Onyle, CEO of Merrill Lynch, resigned because of the massive loss in October 2007 and got 160million dollars as retirement allowance. Their pays were completely legal, and they did not have to return their income even after the profits of these companies were found to have been an illusion.

Japanese CEOs recently have come to be paid better than in the past (around 1 million dollars or more a year), but they were only paid several hundred thousand dollars a year then, with a low taxed retirement allowance and a very low taxed private retirement pension. They therefore had an incentive to hide the NPLs, since their long-term payments would be lost when the NPLs were discovered.

In the case of U.S. CEOs, hit and run was the strategy, but for Japanese CEOs hiding the problems and delaying their resolution was their central concern.

Additionally, the Japanese government had not experienced a major bank bankruptcy, so financial officials wanted to think that NPLs would not be serious and that land prices would recover; this would lower the value of the NPLs, making them more manageable<sup>9</sup>. As Figure 2 shows, however, land prices did not recover, and the value of NPLs continued to increase.

Assuming an ordinary Cobb-Douglas function, GDP=AL<sup>0.7</sup>K<sup>0.3</sup>, we can get *In*GDP=*In*A+0.7*In*L+0.3*In*K. Then, decrease of capital stock by 7.4% causes decline of GDP by 2.2% (0.3×7.4%).

Some argue that monetary expansion increases price and

Some argue that monetary expansion increases price and nominal interest rate at the same time, then does not increase asset price. Assuming that nominal profit and nominal interest rate increase at the same rate of inflation rate, then value of asset price becomes P/(1+ri+p-p) from the formula of infinite geometric progression where P: profit, ri: real discount rate, p: inflation rate. Increase rate of profit is offset by that of additional factor of p to real discount rate. This model is not held true in the real world. It is repeatedly confirmed that monetary expansion in recession increases stock price. Recent monetary expansion of the U.S. and Japan increased stock price sharply.

<sup>&</sup>lt;sup>8</sup> "Sekai Hendo Kiki no Naka de (9): Bei Goyoku Shugi no Magarikado (World Change in Crisis (9): Corner of Greedyism in the U.S.)," *Asahi Newspaper*, January 9, 2009.

<sup>&</sup>lt;sup>9</sup> Noboru Yanai, Former Managing Director of Long Term Credit Bank of Japan, said, "CEOs (of banks) were eager to survive by hiding bad assets as expecting divine winds might brow sometime." (Matsushima and Takenaka (2011) P.493).

**Figure 4.** NPL s and its Loss

Source: Financial Service Aagency, The status of Loans held by all banks based on the Financial Reconstruction Act." Note: End of March period of each year

Many former MOF officials testified that before the end of the 1990s, Japan did not have a system that resolves the NPLs of banks. Before the middle of the 1990s, MOF tried to solve the problem by letting the big banks merge small banks that had bad loans. Of course, this means, however, cannot be applicable when big banks had huge NPLs.

MOF did not try to enact a new law to solve the problem, because they were afraid of giving up the privileges to supervise financial institutions that gave them lucrative jobs. MOF was given the rights from the ruling Democratic Party of Japan, and LDP was not interested in it until the NPL problems appears in early 1990s. 10 MOF could not supervise the financial institutions well, and it needed a new law, but in order to make a law, they explained to LDP why they failed, and they might to lose the privilege. It is reasonable for LDP to take the privilege from MOF because they have to make a new law that give tax money to banks with NPLs, which was not popular to the public. The new law, Financial Reconstruction Law was enacted in 1998, the supervision role was taken away from MOF, and Financial Supervisory Agency (Financial Services Agency after 2000) was created in the same year.11

<sup>11</sup> Actually MOF succeeded in making the agency like a bureau of MOF.

## Delaying disposal is effective in clouding responsibilities

To delay the writing off of NPLs is effective in clouding the responsibilities of policy failures. The CEOs of Japanese banks who had created the NPLs had retired with handsome allowances were not prosecuted, and their successors were prosecuted for trying to hide the NPLs. Hiding NPLs is, of course, unlawful in Japan, as Japanese law clearly stipulates that accounting records must be true.

Former CEOs of Long-Term Credit Bank of Japan and the Nippon Credit Bank (both went bankrupt in 1998) were prosecuted on charges of accounting fraud in 1999 and 1998 respectively. In the first and second trials, they were handed guilty verdicts but were acquitted by the Supreme Court in 2008 <sup>12</sup> and 2011 <sup>13</sup> on the grounds that the MOF had allowed, at that time, window-dressing of accounts and not including information on the subsidiary companies that had purchased the bad assets of parent banks at high prices.

The initial prosecutions were as if the courts did not punish the thieves but those who bought the stolen goods. Japanese prosecutors probably recognized that this is not fair, but when the public became outraged over the fact that NPLs were being written off with

Former Secretary General of Liberal Democratic Party, Koichi Kato said, "Banking and finance is sanctuary where politicians cannot enter" (Matsushima and Takenaka (2011) p. 430).
11 Actually MOS

<sup>&</sup>lt;sup>12</sup> "Moto Chogin Todori ra Gyakuten Muzai, Kessan ' Iho de nai' (Turn Table to Not-Guilty for the Former CEO of Long-Term Credit Bank of Japan, Account Settlement was not Illegal," *Asahi Newspaper*, July 19, 2008.

<sup>&</sup>lt;sup>13</sup> "Nissaigin Funshoku Jiken, Kyukeieijin ni Gyakuten Muzai (Fraud of Account Settlement for Nippon Credit Bank, Turn Table to Not-Guilty for the Former CEO)," *NihonKeizai Newspaper*, August 30, 2011.

tax money, they were affected by public opinion. Prosecutors were thus inclined to make cases in accordance with public opinion and the will of politicians (Sato 2005). 14

NPLs were disposed of by 2002, as shown in Figure 4, after the responsibilities became vague enough.

#### Why didn't BOJ expand money?

Then, the simple question arises as to why BOJ didn't ease monetary policy? <sup>15</sup> In case of settling NPLs, it needs time to vague responsibilities, but time is not needed to expand money. Why was the BOJ reluctant to expand the money supply?

At that time, the BOJ is under MOF, then, the question should be also asked to MOF. The relation between the BOJ and MOF is complicated. Actually MOF was responsible for bank supervision, but was not responsible for monetary policy. MOF commissioned the BOJ to make monetary policy, but MOF could take out the mandate from the BOJ, but they did not. They allowed the BOJ took deflationary policy while Japanese banks had huge bad loans.

Yoshimasa Nishmura who was Director General, Banking Bureau, MOF in 1995 and 1996 answered to interviewers, "There wasn't such an idea (to expand money and to support the general price and asset prices) at that time, " and also said, "The problem would not have occurred if there was no deflation, and price increased by 3 to 4%. Land price would not have declined (NPLs would have been much smaller)." (Matsushima and Takenaka (2011) p.342-343.)

MOF might be only ignorant to the monetary policy, and they did not think that monetary policy can control nominal variables such as price, exchange rate, nominal GDP, and asset prices. <sup>16</sup>

For the BOJ, the reasons were as follows: Governor Mieno shrank the money supply and lowered land price, and he was praised by the media as a hero <sup>17</sup> as I mentioned, however, realized that he had made a mistake as Takemori already pointed out. Because of his monetary policy, Japanese banks accumulated huge bad assets, but he could not change the situation. Japanese price levels started to gradually decline, which made the bad asset problem more serious.

Governors since Mieno have tried to skirt their responsibility, asserting that the BOJ cannot control the money supply, exchange rate, asset prices and price levels, and arguing that monetary policy is not effective if bank loans do not expand. This is a kind of an old real bills doctrine that BOJ official had gotten used to.

Actually, Governor Mieno answered the BOJ cannot control monetary base to the question at the Diet by Kozo Yamamoto, Member of the House of Representatives, who had been criticized the BOJ's reluctance on monetary expansion since the 1990s. Naturally Yamamoto got angered to the answer (Yamamoto (2010) p.129), but this is the center of the BOJ's traditional doctrine.

The real bills doctrine asserts that money stock can be neither undersupplied nor oversupplied if the central bank accepts and discounts commercial bills assured by the demand of decent business activities (real bills) because decent commercial bills create both supply and demand at the same time. This doctrine suggests that the central bank only responds to correct demand and is not responsible for addressing economic fluctuations, inflation, and deflation. The BOJ, however, forgot that demand depends on the discount rate decided by the central bank. The central bank can actually control demand with interest rates and by changing the ease with which bills are accepted.

The BOJ is ignorant to the mechanism of monetary policy. And MOF officials that they never thought that monetary policy can increase asset price, that is collateral price, and can decrease the value of bad loans as I mentioned.

Journalists and academics have tended to agree with the BOJ's assertions, even though they are very different from that the roles and functions of monetary policy that are taught in textbooks, in which the money supply, price levels, and exchange rates (and real economic growth rates in short-run) are seen as being controlled by monetary policy (See Mankiw (2002) Chapter 29 and 30, for example). <sup>18</sup>

#### Worrying about banks' balance sheets

Because of long sustained deflation, the economy has continuously been shrinking, and interest rates have declined to an almost abnormal level. Ten-year government bond yields are less than 1%. Under such low interest rates, the Japanese government has been issuing a huge amount of government bonds to finance public construction projects to stimulate the economy. Japanese banks and insurance companies, unable to identify good investment opportunities,

<sup>17</sup> For example, "Kinyuu Seisaku Kui wa Nai (No regret for my monetary policy)," *Mainichi Newspaper*, December 17, 1994.

<sup>&</sup>lt;sup>14</sup> Sato called this investigation *Kokusaku Sousa* (national investigation). Sato explained this kind of investigation in a different case. See Sato (2005).

<sup>&</sup>lt;sup>15</sup> This partincludes a summary of Section5 of Harada (2013). <sup>16</sup> Japanese high lank bureaucrats including the BOJ are lobbyist rather than experts on the matters that they are responsible. They have a lot of knowledge about interests and human relations of politicians and businessmen, but lack of the knowledge as experts. Mr. Hiroaki Taya, former MOF elite bureaucrat, answered to an interviewer, "It was the power how much we drunk with influential politicians and bureaucrats at that time," (Kishi (1996)p.48).

<sup>&</sup>lt;sup>18</sup> Some economists oppose the real bills doctrine. Kikuo lwata, who was a professor of economics at Gakushuin University before being appointed deputy governor of the BOJ in March 2013, pointed out in the early 1990s that the BOJ can control the money supply and that it should increase the monetary base and money stock (lwata (1992), but many economists chose to side with the BOJ.

have been buying and holding huge stocks of government bonds. What would happen, then, should the BOJ take an aggressive expansionary monetary policy?

The economy may recover, but prices and interest rate will increase. If interest rate increases, the market price of bonds would decrease. The banks and insurance companies holding these bonds could be hit badly by such a decline.

The losses in the financial sector as a whole will not be substantial. Government bonds do not make up a large portion of the assets held by Japan's so-called megabanks and major regional banks, which also hold equities, real estates and foreign assets, enabling them to cancel out any bond losses with the increased value of equities and profits from foreign assets caused by the yen's depreciation. But some smaller financial institutions have invested too much in government bonds and do not hold equities and foreign assets. As the Bank of Japan is the guardian of the banking sector, it is natural to think that it wants to avoid losses for private banks. Therefore, the BOJ has continued to pursue a deflation policy that does not raise interest rates.

This is a fact that BOJ bureaucrats have admitted. A former high-ranking BOJ official has said, "At present, banks have a lot of government bonds. In terms of total volume, the big banks are predominant, but most of their holdings mature in two years or a little more. The maturity of bonds held by regional banks, on the other hand, is little longer, around four years. Regional banks do not have as many investment opportunities, and they need longer—term bonds offering higher interest rates. Should bond prices decline, the losers will be the regional banks, rather than the megabanks (Hayakawa (2012)."

#### The BOJ is a co-op for banks

This is the reason the BOJ has been reluctant to take an expansionary monetary policy. The BOJ is not the guardian of the currency but of banks. As the chief of the banking sector, the BOJ cannot ignore the banks' fears. It is easier to understand the behavior of the BOJ if it is compared to the Central Union of Agricultural Co-operatives, whose role is to guide all the agricultural co-operatives in Japan and protect their interests. The BOJ has to protect banks and cannot take risks that might hurt some of them.

There are many small interest groups such as small banks, farmers, construction companies, medical doctors, nurses, transportation industries, day nursery and preschools in Japan that politicians have been unable to consolidate effectively. The paralysis in Japan's monetary policy has been caused by Japan's political system. Japanese politicians are usually afraid of breaking up small interest groups, and Japan's inactive monetary policy has been the result.

Recently, the BOJ has begun to confess the truth.

It now admits that the reason it has not pursued monetary expansion is to restrain an increase of interest rates. Hayakawa's statement is one example. BOJ officials have been arguing that reflation is dangerous because it increases interest rates and decreases bond prices. Such a possibility cannot be denied, but the problem is not so serious now. The balance sheets of some small banks may be damaged by a decline in bond prices. Capital injections of hundreds of billion yen might be needed to protect deposits. But the benefits of ridding deflation would be an increase of 100 trillion yen to GDP, and this means tens of trillion yen of additional tax revenue. The cost of capital injection can be easily financed by a small part of the increase in revenues.

Additionally, there would have been no need to save such banks if the BOJ had aggressively expanded the money stock in the early 1990s. At that time, Japanese banks did not hold as many bonds as they do today.

#### **Conclusions**

There are many arguments why Japan experienced the two Lost Decades, but many economists agree that the bubble and its collapse in the late 1980s and early 1990s are related to the subsequent stagnation of the economy. And there is consensus that policy authorities should promptly resolve the issue of bad loans and expand the money base after financial crises. The U.S. did both after the global financial crisis in 2008, but Japan did neither, which at least partially explains the Lost Decades.

This paper explained why they did neither. The bank supervision authority (Ministry of Finance at that time) and financial institutions had incentives to delay the disposal of bad loans. They wanted to cloud their responsibilities by delaying the disposal. Their strategy had the desired effect, as many escaped their responsibilities because of the delay.

In the U.S., managing directors could take a hitand-run strategy, and they did not have incentives to delay the disposal, and the FRB was free from ignorance. The FRB had clear ideas that monetary policy can control nominal variables such as price levels, asset prices, and nominal GDP, to some extent.

The lessons for corporate governance of Japan's experiences in the Lost Decades are clear. Firstly, governance systems should be also applied to policy authorities. They need to be governed not to delay the disposal of bad loans and to not cause deflation and an asset price crash. A severe requirement for the accuracy of accounting data is a good policy, and it has been adopted in Japan since the early 2000s. Inflation targeting or nominal GDP targeting for central banks is a good policy, and an inflation target was in effect adopted in Japan in 2013.

Secondly, financial institutions have to seriously abide by the requirement for accurate accounting. Values of assets are known only after they are cashed.

Values derived through calculation by mathematical models are only imaginary, not real. Bonuses of employees of financial institutions should be linked to revenues after assets are cashed. 19

Thirdly, unbalanced risk sharing is an important cause of financial crises. CEOs' money should be incorporated into the capital of financial institutions. A bonus system linked to cash profits is helpful in lessening the degree of the unbalance.

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<sup>&</sup>lt;sup>19</sup> Afanasyeva (2014) recommends clawback policy of CEOs' remuneration.