## Analysis the Japanese banking crisis, using Minsky's "financial instability hypothesis

#### **EXECUTIVE SUMMARY**

The Japanese financial crisis has become of great concern to the world. Especially, the issue of banks non-performing loans is a most serious problem. In 1998, the estimated bad loans was 150 trillion-yen (AUD\$ 1.9 trillion) (Sydney Morning Herald, June 19th, 1998). This figure shows how serious the Japanese banking crisis is. Hence, the world started to worry about the reoccurrence of the Great Depression because the Japanese economy is the second largest in the world. Therefore, it is important to examine how and why the Japanese banking crisis occurred as a means to prevent such a serious financial crisis in the future.

To examine the Japanese banking crisis, Minsky's "financial instability hypothesis" seems to be suitable. Minsky's financial instability hypothesis is a variant of Post Keynesian theory which views the economy from the board room of Wall Street investment banks. The financial instability hypothesis explains the phenomenon of the business cycle, because the theory regards the financial crisis as a normal function which results from the economic process. In addition, the financial instability hypothesis says that the pace of investment is dependent on expectations. Therefore, Minsky's financial instability hypothesis is an alternative to current standard Neoclassical theory.

Minsky says that financial innovations, institutional change such as deregulation, and central bank behavior allow banks to expand their business rapidly by expanding the available financial instruments and freedom to do business. Hence, an inflationary boom is likely to occur and cause speculative financing. In Japan, after 1985, financial liberalization forced a significant change in banks' behavior. Innovative financial instruments were introduced. Deregulation of banking business allowed banks to have more flexible portfolios and investments. In addition, financial liberalization reduced the traditional way of banking business and corporate finance. As a result, banks had to look for new markets, and they tended to adopt riskier investments such as stocks and land. This phenomenon was more likely to happen in Japan due to a unique relationship between banks and corporations. These and similar observations are the basis of our assertion that the particular institutions of the Japanese financial sector both validate and modify Minsky's hypothesis. Since many corporations own land, rising land prices increase liquidation values. This is not reflected in balance sheets due to Japanese accounting practices, but it is reflected in increase stock prices. In addition, Japanese banks possess a significant amount of equity in non-financial corporations, and when equity prices rise, their capital base increases and expands the basis for lending. This investment in stocks and lands during Japan's economic boom from 1985 to 1990 is clearly defined as "speculative bubble" because stocks and land investment had a significantly high PER (Price Earning Ratio) as the boom developed, according to Minsky. Also, the Bank of Japan executed monetary expansion from 1986 to 1987 due to serious trade surplus with the U.S., an arguably inappropriate policy given that the domestic situation was quite good. This monetary expansion encouraged banks indirectly into such a speculative financing. All these activities led to Japan's excess "bubble and burst economy".

Minsky says that government policies *do* matter after the "bubble economy" bursts. How long assets deflation lasts depends on government intervention. In terms of the interventions of the Japanese government, monetary authorities in Kasumigaseki and politicians in Nagatacho delayed their response to the banking crisis so that banks' non-performing loans continued to increase. The Japanese government relied heavily on the "convoy system" to avoid straight forward bankruptcy, which delayed the restructuring of the banking sector. Even though deposit insurance started to be initiated, non-performing loans were too big to be absorbed. In contrast, these rescue plans themselves seemed to be bankrupted because the banking crisis was much worse than the government thought. Furthermore, protection of banks led to moral hazard behavior because the banking industry has been protected by the safety net in the name of the "no-failure" policy.

According to our observations, within the Japanese banking crisis lies an imbalance between old institutional factors such as interlocking shareholding, the "convoy system" and the "safety net"; and new institutional pressures such as financial liberalization and a significant reduction on corporate finance. Furthermore, the government's slow reaction to the banking crisis made the Minsky style of financial crisis in Japan much worse.

The government has increased the government expenditure and cut tax significantly to stimulate the domestic economy. Finally, the government cut its official discount rate 0.25 percent in September 1998. However, there is no sign that the economy will recover. Many economists state that Japan has been in a "Liquidity Trap".

## **METHODOLOGY OF RESEARCH**

#### **QUALITATIVE RESEARCH**

The data is analyzed using qualitative research or grounded theory. Qualitative data in this research is defined as that provided by Strauss et al (1990: 19) which refers to a "nonmathematical analytical procedure that result(s) in findings derived from data gathered 1997-1998 .(via) observations and interviews, documents, books and videotapes".

Accordingly, data used to address the question proposed in this research included such qualitative data as documents from related literature such as textbooks, journals and government documentation. Mathematical techniques will not be used, as data is not amenable to such statistical scrutiny. Being qualitative in nature, the data has insufficient length (ten years) and is from a diverse range of sources, which make it difficult to apply linear regression or other statistical techniques.

#### METHODOLOGY

Secondary data was collected from the Japanese Consulate, which is based in Sydney and the Japanese White Paper in 1997 and Tankan (the quarterly survey conducted by Bank of Japan), and also from JETRO (Japan Export-Import Organization). Additionally, other secondary data will be collected from journals and textbooks, which describe theories of the process of the "bubble economy", investment in property, and economic policy-making. Particular emphasis was placed on Minsky's theory the "financial instability hypothesis".

#### **ANALYSIS OF DATA**

Analysis of statistical data involved manipulation of information using ratios, graphs and percentage proportions. Other data is grouped in categories as addressed in the literature reviews. These categories are derived from a study of the Minskyian "financial instability hypothesis" which, is used to analyzed to the Japanese banking recent situation.

#### CONSTRAINTS

This research will be conducted in 12 weeks (from July 6<sup>th</sup> to September 21<sup>st</sup>, 1998). Therefore due to confidentiality denoted by the Japanese government, the "np" -not for publication-- made data inconsistent and left many parts of findings sketchy. Moreover, there are some differences in data collections, which are taken from a source written by different authors. Therefore, we use data from the Economic White Paper (Japanese) as this literature is often cited as the Japanese standard. Generally, the Economic White Paper (Japanese) provides some important data in support of the whole range of arguments in this research.

## CHAPTER II THE BEHAVIOR OF A CAPITALIST ECONOMY (FROM MINSKYIAN POINT OF VIEW)

#### 2-1 BACKGROUND

According to Minsky (1982: 73) finance affects the behavior of a capitalist economy in three ways. First, positions in the existing stock of capital assets need to be financed. Second, activities that are the production and distribution of consumption and investment goods need to be financed. Third, payment commitments as stated on financial contracts, need to be met.

In a capitalist economy, assets are priced. A debt involves an exchange of money today for promises to pay money in the future. In the short term, the supply of capital assets is fixed; therefore an increase in demand will lead to an increase in the price. Innovations in mobilizing funds through intermediation and in the contract used for financing ownership of assets will tend to raise the prices of assets. The various "innovations" in housing finance have led to higher investments of housing, the acceptance of a heavier weight of debt in corporation balance sheets has sustained the price of capital assets, and the explosive growth of money market has increased the availability of shot-term finance to business.

#### 2-2 THE CAPITALIST ECONOMY BEHAVIOR

Minsky (1982: 78) explains that the financial relations of units owning capital assets depend upon the views of borrowers and lenders as to their assuredness of cash flows, the appropriate margin of safety, and the availability of alternative sources if cash from operations falls short of expectations. Trends in financing reflect changes in views of how the economy normally functions and in the preference system of "operators". Therefore, the distinction between money demand and liquidity preference is useful for analyzing bank behavior. When planned spending rises, the non-bank public issues debt to finance spending. Banks purchase this debt by issuing those liabilities that can be used to finance spending, that is media of exchange. The "money" to be delivered will almost always take the form of bank liabilities, functioning as the means of payment.

Expectations with regard to cash flow depend upon the history of cash flows, the margin of safety that is deemed appropriate depends upon the adequacy of past margins, and the willingness to rely upon refinancing depends upon the history and institutionals structure of the markets in which refinancing may take place. Likewise, funds that are available to meet commitments on debts follow that present acceptable liability structures reflect current speculations on the course of future investment. Therefore, equity share prices -which fluctuates in a world with Wall Street- are determinant of the market valuation of capital assets as collected firms. The market value of capital assets affects the demand price for investment goods, which together with supply conditions of investment goods and conditions in financial markets, determines investment (Minsky, 1982: 71).

In the deal-making that goes on between banks, investment bankers and businessmen, the acceptable amount of debt to use in financing various types of activity and position increases. This increase in the weight of debt financing raises the market prices of capital assets and increases investment. As this continues, the economy is transformed into a boom economy. During high-growth period, success combined with institutional evolution make borrowers and lenders more assured of the case flows from operations, confident that success is compatible with smaller margin of safety, and secure in cash flow arrangements that require refinancing (Minsky 1982: 74).

Examining this booming condition in the business circle, Minsky (1982: 66) says that stable growth is consistent with the manner in which investment is determined in an economy in which debt-financed ownership of capital assets exists, and the extent to which such debt financing can be carried is market determined. It follows that the fundamental instability of a capitalist economy is upward. The tendency to transform doing well into a speculative investment boom is the basic instability in a capitalist economy. There are three types of finance postures such as hedge, speculative and Ponzi scheme<sup>1</sup> that effect the economy of long-term expectations. In particular during the booming economy, the three types of finance accelerate in line with a rise in capital assets that result in inflation (Minsky, 1982: 101). As the ratio of speculative and Ponzi finance units increase in the total financial structure of an economy, the economy becomes increasingly sensitive to interest rate variations. This fragile condition is the essence of the financial instability, which occur as a normal functioning result in a capitalist economy rather than abnormal. Under this circumstance, if central bank takes action to execute monetary contraction policy, a debt deflation and deep depression are likely to occur (Minsky, 1982: 82).

In Minsky's observation on the U.S. economy in the 1974-1975 when the Federal Reserve interfered in the market through monetary contraction policy by increasing the interest rates, it brought the economy to a crisis (Minsky, 1982: 111). This

<sup>&</sup>lt;sup>1</sup> A situation in which cash payments commitments on debt are met by increasing the amount of debt outstanding.

circumstance can be explained as an immediate effect of a change in liquidity preference upon the money price of capital assets, therefore a decrease in liquidity preference allows an increase in the ratio of near-term payment commitment to nearterm expected quasi-rent to take place. This leads to an increase in liquidity preference, which typically occurs when quasi-rent fail to refinance positions, and will force attempts to reduce near-term payment commitment relative to expected quasi-rent. As a result, a fall in the money price of capital assets occurs. Thus, the ratio of planed investment demand to expected-internal funds will fall; the thrust toward ever higher profits due to increasing investment reflecting ever higher leverage ratios will cease (Minsky, 1982: 84). Once the price of capital assets reflects inflationary expectations, an end to those expectations will lead to a sharp fall in investment. The upward instability of capitalism is a necessary precondition for the possibility of a deep depression (Minsky, 1982: 76).

Keynes (1973: 217) portrays that these bank liabilities fulfill the fourth function of money (payment), acting as stores of value in an uncertain condition. At the same time, the non-bank public may try to "liquidate" position by selling assets and retiring debt. Thus, for most agents, rising liquidity preference is very nearly the opposite of money demand. When liquidity preference rises, most agents are trying to reduce outstanding debt by cutting spending and spending assets to substitute liquid assets for illiquid assets (Boulding, 1944 and Keynes, 1973: 217).

In conclusion, Minsky (1982: 113) describes that instability is due to the emphasis upon investment and that inflation is due to the emphasis upon investment, transfer payments, and the need to bail out the threatened financial structure. The financial instability hypothesis indicates that an economy that is oriented toward the production of consumption goods by techniques that are less capital intensive than those now being induced by policy will be less susceptible to financial instability and inflation. Government intervention through its policies to sustain investment can become so overpowering that the "sharp pencils" needed to assure that investment yields are real (Minsky, 1982: 113).

## CHAPTER III APPLICATION OF MINSKY'S FINANCIAL INSTABILITY HYPOTHESIS TO THE JAPANESE ECONOMY

#### 3-1 BUSINESS CYCLE IN JAPAN BEFORE 1980s

According to Minks, financial crises are systematic rather than accidental (Minsky, 1982: 63). To examine whether this is applicable or not, it is necessary to look at the past trend of the Japanese economy. Table 3.1.1 shows post war business cycles in Japan. One complete cycle consists of a period of expansion (from a trough to a peak) and a period of contraction from a peak to a trough of the next cycle (Ito, 1994: 80). Japan's economic booms and trough have repeated almost regularly from 1950s to 1970s.

		EXPANSION				RECESSION	
Trough	Year	Length	Average	Peak	Year	Length	Average
Months		(Months)	Growth*	Months		(Months)	Gwroth *
Oct.	1951	27	13.5%	Jan.	1954	10	-3.7%
Nov.	1954	31	10.1%	June	1957	12	5.0%
June	1958	42	14.0%	Dec.	1961	10	3.7%
Oct.	1962	24	13.3%	Oct.	1964	12	4.1%
Nov	1965	57	14.4%	July	1970	17	3.9%
Dec.	1971	23	7.5%	Nov.	1973	16	-1.5%
Mar.	1975	22	5.9%	Jan.	1977	9	4.2%
Oct.	1977	28	5.6%	Feb.	1980	36	3.2%
Feb.	1983	28	6.3%	June.	1985	17	4.2%
Nov.	1986	46					

Table 3.1.1: Post War Business Cycles in Japan

Source: Ito The Japanese Economy 1994: 80

Between 1950s to 1970s, most of Japan's economic fluctuations were triggered by fluctuations in the international balance of payments. Japan had a fixed exchange rate system (USD 1 = 360 yen) under strong capital controls. When the economy was in a boom, imports rose faster than exports. The government raised interest rate and cut

government expenditures until import and investment slowed enough to bring the balance of payments back into the line. In this sense, the economic boom and recession were caused by government policy.

After the 1970s, Japan employed floating exchange rate system, and it became difficult to adjust the economic boom and trough. In 1970s, two oil crises (in 1974 and in 1977) caused Japan's recessions because Japan heavily relied on import of raw materials especially oil (Ito, 1994: 79-83).

## **3-2** APPLICATION OF MINSKY'S FINANCIAL INSTABILITY HYPOTHESIS TO THE JAPANESE ECONOMY

Minsky's financial instability hypothesis is based on the analysis of two sets of prices: current output which reflect short run or current considerations and capital assets which reflect long run expectations (Minsky, 1982: 102). Minsky (1982: 65) emphasises the importance of time and uncertainty, especially they relate to capital asset pricing, investment and liabilities asset structure of household, business and financial institutions. When people expect that the economy is going well, they will invest.

According to Graph 3.2.1, the expected growth rate dropped from 3.42 percent in the period 1986-88 to 2.70 percent in the period 1987-89. After the Plaza agreement in 1985, the yen started to appreciate aggressively, and Japan had what is known as the *"Endaka* Recession" (see Appendix-1). Therefore, it is understandable that the expected growth rate decreased. Also, nominal and real GDP reflects this situation as that both of them decreased gradually from 1985 to 1986.

**Graph 3.2.1:** The Expected Growth Rate of Industry and the Real Growth Rate of Industry



Note: The Economic Planning Agency "Survey on the Industry behaviour", "National Economic Statistics The Real Growth Rate" were an average of each year. Source: Economic White Paper: Economic Planning Agency, 1998: p. 209.

Graph 3.2.2 Nominal GDP and Real GDP Growth Rate





According to Minsky, the inherited debt reflects the history of the economy, which includes the period in the near past in which the economy did not do well. However, if there are some certainties that imply economic growth in future due to a innovation and so on, it is expected cash flow through economic activities (Minsky, 1982: 65).

After 1986, the economy started gradually to recover, and both nominal and real GDP increased from 1987 (See Graph 3.2.2).

According to Minsky, innovations in financial markets are a feature of the economy, especially, when things go well. New instruments such as negotiable Certificate of Deposits are developed, and old instrument such as commercial paper increase in volume and new funds (Minsky, 1982: 66).

In the-mid 1980s, securitization was introduced to Japan from the U.S.. Securitization is the process of transforming assets into marketable securities, which may then be onsold to investors. For example, an individual may have difficulty buying a whole building. When an agency divides the building into small pieces or portions such as one floor or one unit, there are great possibilities for individuals to buy the portion. Japanese companies aggressively bought securitization products overseas without careful analysis of accommodated by rapid appreciation of the yen. When the Money Market Certificate was introduced to the Japanese market, it was quite successful (Higashi et al, 1990: 232). Minimum lot of CD was gradually reduced and became much more accessible. This financial innovation was reflected in the money supply (M2+CD) while increased more than 10 percent each year from 1986 to 1990 (Graph 3.2.3).





Source: The Japanese Economic White Paper, 1998, appendix 11.

Furthermore, when effective or aggregate demand is sufficient, full employment is first achieved and sustained (Minsky, 1982: 98). Figure 3.2.4 shows unemployment and the ratio of effective labour supply and effective labour demand. The figure indicates that from 1986 to 1990 unemployment decreased gradually and it reached almost 2 percent. In contrast, the ratio of effective labour supply and effective labour demand effective labour demand increased and it reached almost 1.5 percent. Therefore, Japan achieved almost full employment in the late 1980's to the early 1990's.

**Graph 3.2.4: The Unemployment Rate and The Ratio of Effective Labour Supply and Effective Labour Demand** 



Note: A: unemployment; B: the ratio of effective labour supply and effective labour demand Source: The Japanese Economic White Paper in 1997: Appendix-5.

Once there is an increase in growth, multiplier process works to increase production and which leads to a "speculative" investment and financial boom (Minsky, 1982: 98). Minsky (1982: 66-67) distinguishes between hedge and speculative finance. According to him, hedge finance occurs when the cash flows from operations are expected to be large enough to meet the commitments on debts. Speculative finance takes place when cash flow from operations are not expected to large enough to meet payment commitments, although the present value of expected cash receipts is greater than the present value of payment commitments. Speculative finance expects to be fulfil payment commitment by raising new debt. In this case, a "bank" with demand and short-term money deposits engages in speculative finance. Hedge and speculative finance are the normal function of financial markets. However, speculative finance must continuously refinance their position. Higher interest rate will raise their costs of money as the return on assets may not increase. Table 3.2.1 shows comparison of PER (Price Earning Ratio) and yield between Japan and the U.S..

YEAR	PRICE EARNIN	NG RATIO	YII	ELD
	Japan	U.S.	Japan	U.S.
1985	32.92	12.43	1.03	3.74
1986	49.05	16.45	0.71	3.42
1987	55.03	18.70	0.63	3.57
1988	66.47	12.55	0.48	3.50
1989	46.26	13.65	0.43	3.13

 Table 3.2.1 Comparison of PER and Yield between Japan and the U.S.

Note: All share listed on Tokyo Stock Exchange's First Section U.S. Standard & Poor.

Source: Japan's Financial Market: p. 123.

PER represents the amount investors are willing to pay for each yen or dollar of the firm's earnings. The level of the PER ratio indicates the degree of confidence (or certainty) that investors have confidence in the firm's future performance. The higher

PER, the greater the investor confidence in the firm's future (Gitman et al., 1996: 128). For example, in Japan's case in 1988, to earn one dollar, investors paid 66.47 dollars. In contrast, in the U.S., investors paid 12.55 dollars for each one dollar. In terms of yield, yield in Japan was mush smaller then that of U.S. This implies that in Japan during 1985-88, stock could be used to refinance, and not for having interest. In 1989, PER decreased from 66.47 to 46.26 dramatically, which shows that investors have lost their confidence to the firms completely

Also, land investment shows that speculative finance was ongoing from 1985 to 1990. Ito and Hirono (1993) complied with the rents and purchase prices of high rise condominiums in Tokyo Metropolitan area. They calculated the standardised prices and rents, controlling for such factors as the floor space of the unit and commuting time (walking time to rail station and rail time to the core of Tokyo). Table 3.2.2 shows the prices and rents in Tokyo.

Table 3.2.2: The Prices and Rents In Tokyo from 1985-1992

	1985	1986	1987	1989	1990	1991	1992
Price	3176.4	3210.9	8663.9	6487.4	6323.0	6949.1	6101.5
Rent	15.115	15.093	15.940	17.201	16.705	18.425	19.045
Yield (%)	0.48	0.47	0.33	0.27	0.26	0.27	0.31

Note:1. Unit for prices and rents 10,000 yen

- 2. Price and rents are estimated from the hedonic price (rent) equations for 60 square- meter condominium unit built in 1980
- 3. Location: a 5 minutes walk from Mitaka station, on a second floor above with no parking lots. Rent s are in annual payments

Source: Ito and Hirono, 1993 From The Political Economy of Japanese Monetary Policy (Cargill et al., 1997:100).

According to Table 3.2.2, if one purchased such a unit for investment purpose, the direct yield was 0.48 perfect in 1985. During asset-inflation period, the yield declined to only 0.26 in 1990.

Once process of the asset inflation starts, expectations may become self-fulfilling. In the Japanese case, this self-fulfilling process is more complicated because of the close connections among real-estate, corporations, the stock market and financial institutions. As many corporations own land, rising prices increase corporate liquidation value. This is not reflected on corporate balance sheets, however, it will generally increase stock prices. Corporations also can benefit from enhanced borrowing potential, since these more highly valued may be used as additional collateral. Furthermore, the Japanese banks possess a significant equity in nonfinancial corporations. Hence, as equity prices rise their capital base increases and allows an expansion of lending. The linkages among land prices, corporate value, the stock market and bank lending created a strong co-movement between land prices and stock prices, banks were main players in the "speculative bubble".

## CHAPTER IV STRUCTURAL CAUSES OF THE BANKING CRISIS - MINSKYAN ANALYSIS

According to the previous section on application of Minsky's "financial instability hypothesis" to the Japanese economy, the "bubble and burst economy" in Japan seemed to fit Minsky's financial instability hypothesis. During the "speculative bubble", bank lending created a strong co-movement between land prices and stock prices and caused the present banking crisis after the bubble burst. However, from 1985 until today, the Japanese financial market has changed dramatically such as in a liberalization, bailing out of distressed banks (a safety net system), the unique relationship between banks and corporations (main bank system) and international coordination of policies. Therefore, it is necessary to examine application of Minsky's financial instability hypothesis to the Japanese banking crisis carefully in terms of these aspects. The four sections show more close examination of the Japanese banking crisis applying Minsky's theory to find out the structural causes of the banking crisis. These four sections include financial liberalization, main bank system, the monetary policy and the safety net in Japan.

## **4-1 FINANCIAL LIBERALIZATION**

Minsky (1982: 82-83) says that institutional changes such as deregulation and central bank behavior encourage available financing to expand rapidly, hence, an inflationary boom occurs. In Japan, financial liberalization has taken place since 1985, which has caused a significant change in the financial market, especially, banking business. So this section examines whether such institutional changes caused "speculative bubble and burst economy" which inherited the present banking crisis.

#### 4-1-1 BACKGROUND OF FINANCIAL LIBERALIZATION IN JAPAN

The Japanese financial market were under strong capital control and closed off from the rest of the world before the mid 1970s. Virtually no entry into banking was allowed except for a few foreign banks. Within the financial sector, long-term and short-term banking were separated. Also, trust banking services provided only by trust banks (Ueda, 1994: 89). After adopting a flexible exchange rate system, Japan started to liberalize its financial market gradually for several reasons. Firstly, exporters, importers and investors in foreign assets needed to hedge and speculate against exchange rate fluctuation. Hedging and speculating require comparable investments, and restrictions on the purchase and sale of investments of financial instrument (capital control) become an obstacle to smooth foreign trade and investment. Second, under a floating exchange rate system, the Bank of Japan (BOJ) did not need to purchase the foreign currencies brought back due to current account surplus. Likewise, those companies in the private sector that increased foreign exchange wanted to diversify their kinds of assets in denominations (Ito, 1994: 316-317).

Furthermore, after the oil shock recession took hold in 1970s, for the first time the government faced a large budget deficit. As a result, the government needed to sell large amounts of government bonds. The BOJ was no longer able to absorb all government bonds. In addition, it was impossible to force the public to increase savings for purchasing bonds like in the war period. Thus, Japan was forced to change its financial market (Ueda, 1994: 105).

#### **4-1-2 PROCESS OF FINANCIAL LIBERALIZATION IN 1980s**

In 1984, the Finance Minister Takeshita and the Secretary of U.S. Treasury Regan announced a report prepared by the US-Japan Ad Hoc Group on the Yen/Dollar Exchange Rates Financial Market Issues. This called for Japan to internationalize of the yen, restructure the financial market, and decontrol interest rates. The liberalization embraced the market process, so innovative financial instruments such as new types of Certificates of Deposit (CDs), and Money Market Certificates (MMCs) were introduced and interest rates were freed. Among them, MMC's was a quite successful (Higashi et al, 1992: 237). Table 4.1.1 shows growth of balance in open market. As can see, CDs increased rapidly from 1985 to 1988. Also, commercial papers increased significantly from 1.7 percent in 1987 to 9.3 percent in 1988. As a result, investors and borrowers had a much wider range of deposit available to them and to invest with liquidity (Higashi, et al, 1990: 231).

Table 4.1.1: Growth of Balance in Open Market

	THE END OF 1985	THE END OF 1986	THE END OF 1987	THE END OF 1988
Financing Bills	0.0	0.9	0.9	1.0
Bonds Gensaki	4.6	4.1	3.3	4.4
Certificate of Deposits	8.9	9.8	10.7	15.9
Treasury Bills	-	2.1	2.7	2.0
Commercial Paper	-	1	17	93

Source: Ministry of Finance, Monthly Financial and Monetary Statistic Report from Japan's Financial market in 1992: p.109.

Also, securitization developed very quickly in the U.S.. Hence, from overseas, many people tried to sell securitization products to Japan such as building, arts, golf courses and hotels.

#### **4-1-3 THE INTERNATIONALIZATION OF THE YEN**

Japan has made greater strides in making the yen internationally more stable, attractive and convenient under the non-inflationary economy of the 1980s. In 1984,

Spot Position Control (yen conversion quotas) on foreign banks was abolished, which gave the banks total freedom in borrowing in foreign currency and investing in the local yen founds. To become comparable with New York and London, it was necessary to implement special financial and tax measurement on offshore transactions and institutions. In 1986, the Japanese Offshore Market was established. Offshore transactions between banks and non-residents (deposit, borrowing and loan) were separated from domestic market, so transactions were exempt from reserve requirements, interest rate control, deposit insurance and withholding tax (Ito, 1994: 320). The rules governing resident issues of Euroyen bonds were liberalized and issues of short term Euroyen CDs permitted. Also, non-resident Japanese Corporations were allowed to issue Euroyen bonds in Euromarket under the same rules as apply to issue of *Samurai bond*<sup>2</sup>.

Table 4.1.2 shows the internationalization of the yen. According to this table, Euroyen's share of Euromarket increased steadily, and it reached to 5.8 percent in 1987. However, it started to decrease slightly from 1988 to 1989. In contrast, Yendenominated foreign bonds issues decreased considerably from 1985 to 1987, but then started to increase again. Yen-denominated export did not change much from 1985 to 1989, however, that of import increased steadily at the same time period.

#### Table 4.1.2: The Internationalization of the Yen

	1985	1986	1987	1988	1989
Euroyen's share of	3.4	4.5	5.8	5.5	5.3
Euromarket (%)					
Total yen denominated foreign	12,725	7,850	4,975	7,983	9,990
bonds (in 100 million yen)					
Yen denominated trade					

<sup>2</sup> Yen-denomination bonds issued by foreigners in Japan

- Export	35.9	35.3	33.4	34.3	34.7
-Import	7.3	9.7	10.6	13.3	14.1

Source: Japan's Financial Market, 1990: p.297.

Furthermore, the Bank of International Settlements (BIS) data indicated that the yen's ratio in the total of major industrialized jumped from 13.0 percent in 1986 to 20.3 percent during the first nine month of 1987 alone. This trend was caused by the introduction of Euroyen loans (Higashi, et al., 1990: 232). According to Higashi et al, (1990: 232) argue that global use of the yen reduces exchange risks, which encourages people to use the Euroyen, especially for importers.

In 1988, the major industrialized countries agreed with the new BIS standard capital requirements which had to be set for banks as international banks. This standard required a new capital adequacy ratio, which mean that banks should have at least 8 percent of capital adequacy ratio. Capital adequacy ratio consists of tier-I capital which is real equity such as shareholders funds and retained earnings, and tier-II capital such as loan-loss reserves, subordinated debt and unrealized capital gain (Wood, 1993: 25). Therefore, city banks had to carry out a large scale expansion to change lending policy to meet the BIS requirements (Higashi et al, 1990: 256). However, small banks and financial institutions such as *sogo* bank (regional II now) and *shinkin* (credit union type depositories) banks were not covered by this requirement (Horiuchi, 1996: 12).

## 4-1-4 INSTITUTIONAL RESTRUCTURING OF THE FINANCIAL INSTITUTIONS

Traditionally, Japanese firms did not use corporate bonds as a major borrowing mechanism because of limits on interest rates, restrictions on the eligibility to issue

such instruments and the collateral required. Before 1985, the Japanese firms were raising more money in foreign market. However, a new set of rules relaxed issuance of unsecured corporate bonds so that many companies started to finance internally by issuing corporate bonds (Higashi et al, 1992: 254-5). Issuance of corporate bonds increased significantly from 23.847 trillion yen in 1984 to 96.414 trillion yen in 1989 (Japan's Financial Market, 1991: 170).

In 1988, the MOF announced the Revised Security and Exchange Law and, shortly after, Financial Futures Trading Law. Both banks and securities houses could now trade freely on either of the exchanges and with few exception, they could deal with most instruments such as stocks, bonds, currencies and interest rate futures. Also, the Japanese banks were allowed large issues of privately placed corporate bonds. In 1989, the Japanese government permitted banks to take 10 and 20 year government bonds on behalf of individuals, companies or other institutions (Higashi et al, 1990: 252-253). Separation of the banking and securities, of long term and short term banking, and of ordinary and trust banking service was supposed to relax in 1990 (Ueda, 1994: 92).

In 1987, The MOF allowed *sogo* (mutual loan and savings) banks to become commercial banks. As a result, *sogo* bank could overcome financial regulations that previously limited them to only any other small and medium size companies. Previously, because of restrictions, *sogo* banks had a less positive image than commercial banks. This change resulted not only in the revitalization of the financial markets, but also enhanced the confidence of the public in these markets (Higashi et al, 1990: 267-268).

#### **4-1-5 DECONTROL OF INTEREST RATES**

Before 1985, interest rates were heavily regulated because of restrictions of competition, which provided a stable financial market (Ueda, 1994: 89). The government took a low interest rate policy so that this policy reduced the cost of funds to investors (Patrick, 1994: 374). However, the deposit interest rates started to be decontrolled, which caused increase in the cost of funds for banks and forced them to look for higher lending rates (Ueda, 1996: 6). This movement created an environment where cost of borrowing caused strained relations between banks and corporations. As a result, corporations tended to raise money from other markets. Also, MOF's progress in decontrolling of interest rates on small savings caused the problem of keeping a balance of the strong postal savings. Postal saving deposits were controlled by the Ministry of Post and Telecommiuncaion (Higashi et al, 1990: 261-262). If interest rates were freed, postal saving would have a strong competitive advantage, including complete government deposit guarantees. This problem is still unsolved (Cargill et al., 1996: 137).

#### 4-1-6 EFFECTS OF LIBERALIZATION ON THE BANKING CRISIS

As Minsky says, institutional changes, such as financial deregulation and corporate finance, caused asset inflation and showed typical speculative bubble. In Japan, innovative financial instruments were introduced and market participants had more portfolio flexibility than before. Small depositories, such as credit cooperatives are not directly supervised by the MOF or the BOJ but by local prefectural authorities which do not have high quality of supervision. Also, BIS standards did not apply to them. Therefore, small depositories such as *shinkin* banks (credit union type depositories) have great flexibility to expand their business and they could aggressively lend to speculative real-estate ventures during the bubble, which caused the present non-performing loans (Cargill et al., 1996: 104). Real estate investment credit analysis was relatively easy because it essentially amounted to forecasting future land and equity prices. A similar thing happened in the U.S., when the financial market liberalized. In the early 1980s, American saving and loan institutions gathered deposits with high interest and invested high in return portfolios like realestate, which caused the credit union financial debacle (Kaizuka, 1996: 4). Real estate investment attracted not only small depositories but also larger banks. For long-term credit and trust banks, the problem is much more serious.

Table 4.1.3 shows shares of loans to real estate and financial institutions in 1980 and 1991. According to this table, all types of financial institution increased their real estate investment significantly and the growth rate of real estate loan was more than 40 percent compared to these of 1980s. Among them, trust banks and long-term banks increased 40.5 million yen and 37.1 million yen respectively, which caused a more serious situation than other type of banks. Trust and long-term banks do not have as many branches or loan offices as city banks and regional banks, which led them to increase land and equity loans to compete with other banks (Ueda, 1994: 105-7).

Financial Institutions	1980	1990	growth (%)
City banks	8.1	18.9	42.9
Regional banks	6.9	15.8	43.7
Trust banks	17.5	40.5	43.2

 Table 4.1.3: The Shares of Loans to Real Estate and Financial Institutions

Long-term banks	16.7	37.1	45.0
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Source: Bank of Japan, Economic Statistics Annual, various years in the Main bank system in Aoki and Patrick, 1994; p. 107.

Table 4.1.4 shows bad loans at smaller banks. *Shinkin* banks failed loans were 1,169 billion yen and non-performing loans become 1,989 million yen in 1998. A significant indicator is the ratio of provision of bad loans which was 40.5 percent, which shows the present serious situation. Also, credit cooperatives also possessed a large amount of non-performing loans which was 1,628 billion yen.

#### Table 4.1.4: Bad Loans at Smaller Banks (1998)

Banks	Failed loans*	Non- performing Loans*	Restructured Loans*	Ratio of Bad Loans to Total Loans (%)	Ratio of Provision of Bad Loans
Shinkin Banks	1,169.0	1,989.0	81.0	4.6	40.5
Credit Cooperatives	474.0	1,628.0	13.0	13.3	11.2

\* in billion yen

Source: Ministry of Finance; Japan Economic Almanac, 1998: p. 21.

Secondly, BIS's new capital adequacy ratio required city banks to expand their business. The Japanese banks successfully negotiated that to be allowed to count 45 percent of their equity holding as a part of their tier-II capital (Cargill, 1997: 111). Usually, Japanese banks possess a large amount of stocks. As these stocks contain unrealized capital gains, in Japanese accounting practice, unrealized capital gains are not reported on balance sheet. This latent capital gain (the differences between the current market value and the low book value) becomes a huge buffer in the capital position when price of stocks increases. Therefore in late 1980s, Japanese banks aggressively expanded their business as international banks strongly supported by the

high value of stocks. Minsky (1982: 74-5) points out that such an unrealized capital gain involves risks when a change in liquidity preference occurs. As Minsky predicted, after the bubble burst, stock price dropped dramatically, banks had to face a shortage of capital because latent capital gain had reduced their value remarkably. As a result, city banks have to limit their business (Cargill et al, 1996: 134).

Finally, with the change in corporate finance, banks had to look for new markets and often higher risks with little previous experiences dealing with new financial instruments. The period from 1960s to 1970s, banks' lending to manufacturing industries played a pivotal role to the rapid economic growth. Table 4.1.5 shows structural change for the major companies. According to this table, the period 1975 to 1974, bank borrowing reached 41.6 percent and was a main source of financing. However, as gradual liberalization took place, the rate of bank borrowing started to decrease. During the "bubble", bank borrowing was only 6.4 percent so banks had to look for new markets. In contrast, the rate of internal fund increased rapidly from 1970s because of success of manufacturing sectors. They did not need to rely on bank borrowing any more. Also, rate of issuing stocks increased significantly while 1980s and the rate of stocks reached to 15.8 in the period of 1985-1989. Hence, the Japanese banks had to look for new markets such as stock and real-estate due to decrease in corporate finance.

 Table 4.1.5: The Structural Change of Finance for the Major Companies (average over five years period %)

Period	Internal Fund	Borrowing	Bonds	Stocks	Trade Credit
1960-64	22.9	33.8	6.8	10.8	16.2
1965-69	37.5	36.9	5.2	3.8	22.7
1970-74	35.1	41.6	5.1	3.2	21.9

1975-79	45.8	26.5	10.6	8.0	17.7
1980-84	55.3	16.4	8.5	10.4	9.6
1985-89	45.2	6.4	17.4	15.8	5.0
1990-94	87.3	5.2	11.1	4.8	-7.1

Source; Bank of Japan in Financial Fragility and Recent Developments in Japanese Safety Net 1996; by Horiuchi. A. 1996.

According to these observations, Japanese banking crisis is deeply related to liberalization of financial market. In the past, a variety of regulations such as non-competition policy and interest control enabled banks to channel funds into targeted industries. Regulation was heavier for the larger banks, which was one of the reasons for the superb performance of Japanese banks (Ueda, 1994: 89).

#### **4-1-7 CONCLUDING REMARKS**

As Minsky says, innovation of financial instruments and institutional change such as deregulation causes an inflationary boom economy. Innovations or institutional changes have been in response to profit opportunities and these have resulted from changing interest rate differentials due to demand for financing at a faster pace than the supply of financing from traditional sources (Minsky, 1982: 77). Financial market liberalization with financial instruments innovations in Japan forced a change in the way of doing banking business to meet market response. The reduction of binding portfolios constraints allowed banks and other depository institutions to adopt riskier investment and loan portfolios, including the adoption of high loan value ratio. Also, banking industry became more competitive than before so banks had to find out new markets.

However, when change in liquidity preference occurs, the economy goes to assets deflation and further economic turmoil. Japan was in the right situation early in the 1990s. Minsky (1982: 110) says the once asset-deflation occurs, government policy *does* matter. The next three sections examines the Japanese government policies and banks behavior to response the "speculative bubble burst".

#### **4-2 MAIN BANK SYSTEM**

#### **4-2-1 BACKGROUND OF MAIN BANK SYSTEM**

There are three major types of financial institutions in Japan: the central bank, privatesector institutions and government institutions (see Appendix-2). Private-sector financial institutions comprise ordinary banks, various types of banks and other depository institutions specializing in particular areas of finance, securities companies, life and non-life insurance companies, and money market dealers. Therefore, the government financial institutions supplement the activities of privatesector institutions by providing financing in areas that would be difficult for the private sector. In addition, there is a postal savings system, managed by the Ministry of Posts and Telecommunications (Zenginkyo, 1989: 10).

Therefore, the Japanese firm and its partner bank relationship, according to a survey conducted by *Shukan Daiyamondo* (1987) shows that almost every Japanese company has what it calls a main bank relationship. The term "main bank system" refers to a system of corporate financing and governance involving an informal set of practices, institutional arrangements, and behavior among industrial and commercial firms, banks of various types, other financial institutions, and the regulatory authorities.

However, the strongest main bank relationships are the relationships between large firms and large banks (Aoki and Patrick, 1994: 6).

These corporate forms, known *kigyo shudan* (enterprise group) or financial *keiretsu* (affiliated group), are groups of major corporations from diverse industrial, commercial and financial sectors, connected by interlocking shareholdings a common main bank relationship and a certain degree of (reciprocal) business transactions. One example is the Sanwa Group, one of the more cohesive members of *keiretsu* (see Appendix-3). A common approach has been to define the main bank as the bank that has the largest share of loans to the firm, assuming that this position is relatively stable over time. Consequently, it is not rare for a firm to borrow more from the bank that would be regarded among practitioners (including the firm itself) as the firm's main bank (Aoki and Patrick, 1994: 6).

Being the main bank, however, involves other obligations and responsibilities, which may necessitate bearing extraordinary costs in certain circumstances, especially when client firms or financial institutions were financially, distressed (Sheard, 1982: 15). There are some certain incentives for both the bank and the firm to comply with the conventions of the main bank relationship.

By concentrating its banking business with the main bank and allowing the main bank to hold a stable block of its share, the firm is effectively submitting itself to the bank's monitoring (a form of voluntary disclosure). By so doing the firm obliges the main bank to render assistance in adversity (Aoki and Patrick, 1994: 26). The consequence was "a convoy system" in which all incumbent city banks grew at about the same pace with sufficient rents, the interest rate spread was substantial, and there were no financial institutions failures (Aoki and Patrick, 1994: 29-30).

Since the post World War II, the Japanese government never let one single financial institutions went bankrupt. The former president of Sumitomo Bank, Isoda Ichiro (Sheard, 1981: 19) says that:

"We are always prepared to help out whenever group member companies are in trouble. We won't allow any group member companies to go into business failure."

On the other hand, main banks in some cases let companies go bankrupt, particularly small unlisted companies. Packer and Ryser (1992: 59) note that in 1990, 73 percent of corporate bankruptcies involved companies with 50 million-yen or less paid-in-capital and a further 25 percent were incorporated enterprises, only 27 companies with more than 100 million-yen paid-in-capital. However, bankruptcies among listed firms are more unusual, although unknown such as in the 12 years 1971-1982, 31 listed companies went bankrupt. These bankruptcies appear as a result of less prominent firms that are seen as having a weak main bank relationship.

In order to ensure that main bank can effectively play its role as corporate-ensuring, main bank is responsible for screening and monitoring its affiliated firms, and plays an important role in signaling information about the firm to the capital market. The main bank has privileged access to the internal information of the firm compared to the external capital market. The firms draws up its business and finance plans in close communication with its main bank and provides regular reports on its performance and prospects. Sheard (1985: 16-17) finds that in many cases, the main bank has

level management of the firm, giving the bank strategic access to the firm's internal information and decision-making processes. However, the special relationship between the main bank and the large firms restricts the screening and monitoring roles of banks.

### 4-2-2 CHARACTERISTICS OF MAIN BANK SYSTEM

#### 1. Interlocking Shareholding

Most of the financial institutions and all of the city banks shareholders extend a significant portion of loans to the *keiretsu* members. This network characteristic has become institutionalized throughout Japanese industrial organization and they share three features: they are reciprocal, they are embedded in other ongoing business relationships, and they are long-term. Gelarch (1993: 89-95) in his research found that the *keiretsu* and its main banks relationship was extremely stable over period by citing the Sumitomo case. Table 4.2.1 shows that the composition of leading lenders in 1985 had not changed from 1970, and the proportion of loans accounted for by most of these financial institutions also had not changed. The corporate shareholders are bound in durable relationships with the companies they hold.

% EQU COM	ITY SHAF PANY'S	% OF ST TOTAL BOR	EEL RROWING	
1970	1985	SHAREHOLDER	1970	1985
3.9	5.5	Sumitomo Trust & Banking	10.5	10.0
4.4	4.5	Sumitomo Mutual Life	6.7	2.9
3.7	4.2	Nippon Life	2.9	1.6
5.3	3.9	Sumitomo Bank	15.8	12.6
2.3	2.6	Industrial Bank of Japan	8.6	9.2
2.3	2.4	Long-term Credit Bank	6.7	7.8

 Table 4.2.1: The Stability of External Capital Structures: Sumitomo Metal

 Industries in 1970-1985

	2.1	Taiyo Mutual Life	2.3	1.3
2.2	1.8	Sumitomo Corporation		
1.3	1.7	Nippon Credit Bank <sup>1</sup>	4.8	6.4
	1.5	Bisch Company		

Note: <sup>1</sup> Nippon Credit Bank was called Nippon Fudosan Bank until 1977. Source: *Keiretsu no kenkyu* (Tokyo: *Keizai Chosa Kyokai*, 1971 and 1987); *Kigyo keiretsu soran* (Tokyo: *Toyo Keizai Shinposha*, 1973) in *Twilight of the Keiretsu*?, Gerlach, 1993: p.91. Banks of a narrowly defined enterprise group are naturally the main bank to each of the member firms, but a bank at the center of an enterprise group also serves as the main bank for many other firms loosely affiliated with the group. Accordingly, banks are allowed to own equities, so a bank can act both as a lender and a shareholder, although the ratio of equity holdings to lending is small. Ito (1993: 183) defines the fraction of each company owned by another company by showing a case of intra-group loans in Mitsubishi group (see table 4.2.2).

The table shows how much Mitsubishi-group companies borrow from their financial institutions. Many of the manufacturer firms in this group did anywhere from a quarter to a half of their total borrowing from the group's financial institutions.

	Share	Loan	<b>Ratio From</b>	
	Interlocking			
	Ratio (Total)			
		M. Bank	M. Trust	Total <sup>1</sup>
M. Trading House	31.75	6.46	4.40	13.13
Kirin Beer	118.77	35.79	2.80	41.56
M. Rayon	25.52	19.78	8.34	30.56
M. Paper	33.65	21.54	12.12	39.66
M. Kaisei	22.75	14.61	8.40	26.54
M. Gas & Chemical	26.55	16.08	12.95	30.66
M. Yuka	34.36	17.80	9.50	29.83
M. Jushi	59.93	19.53	16.94	38.61

Table 4.2.2: Intra-Group Loan in Mitsubishi Group in 1987

M. Oil	45.63	23.65	6.12	30.38
Asahi Glass	28.60	5.52	0.18	7.12
M. Mining & Cement	35.02	19.13	19.14	47.20
M. Seiko (Steel)	35.92	16.66	13.63	43.48
M. Metal	21.37	15.91	9.63	28.46
M. Densen Kogyo	52.10	15.30	16.05	32.63
M. Kakoki	35.77	14.63	13.55	33.34
M. Electric	17.65	18.66	13.03	36.67
M. Heavy Industry	20.76	12.92	6.73	21.18
Nikon	27.73	21.22	11.00	38.79
M. Real Estate	25.06	18.21	16.25	44.06
Nihon Yusen	25.07	6.79	2.78	11.81
M. Storage	41.08	22.56	10.24	36.25
Group Average	27.80	10.69	6.63	20.17

Note: <sup>1</sup> Includes loans from M. Bank, M. Trust Bank, Meiji Life, Tokyo Marine and Fire Nihon Trust Bank. The Nihon Trust Bank is not a member of the Mitsubishi President's Club.

Source: *Toyo Keizai, Kigyo Keiretsu Soran,* 1989: 30-31 in the Japanese Economy, Ito, 1993: p. 184.

This circumstance leads to "overborrowing", which describes the corporate sector's dependence on bank loans rather than on equity to raise funds. On the other side, the Bank of Japan provides credit on the term of loans, which allows the city banks to "overloan" (liabilities greater than assets). Correspondingly, Ito (1993: 115) depicts that what was unusual in Japan was the chronic nature and the relatively large magnitude of such lending. Furthermore, he comprises the imbalance of funds that exists within the Japanese banking system as seen at the table 4.2.3 below.

Tuble Hales Can Flatnes Benang and Borrowing
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CITY BANKS						
	LENDING	BORROWING				
1950	0.4	0.3				
1955	0.3	2.3				
1960	0.0	3.0				
1965	0.0	4.9				
1970	0.0	5.5				
1975	0.2	2.9				
1980	1.7	3.7				
1984	2.9	4.7				

Source: Ito, Takatoshi, 1994: p. 117.

In most countries, if a central bank wants to keep money and credit growing at a non-inflationary rate, it must see to it that the monetary base (central bank liabilities) grows appropriately. In Japan, however, most of the monetary base supplied is absorbed into currency (Wallich et al, 1976: 286). Banks reserves in the form of deposits with the Bank of Japan are negligible, thereafter they approximately composite their share in the bank's total liabilities. Likewise, Bank of Japan lends these liabilities to the banking system. Wallich et al (1997: 287) argue that it would probably not have been altogether impossible in the past to supply the required monetary base through open market purchases, even though the supply of the monetary base was via rediscount.

However, after the liberalization of Japanese financial market in 1985, these features have changed. Most large companies tend to borrow cheaper loans from other market rather than rely on their main bank. This circumstance has discussed in the liberalization section.

#### 2. Convoy System

The corporate-insuring role of the main bank is manifest in a number of ways (Sheard, 1985: 12). In times of corporate distress, the main bank is expected to play the leading role in overseeing or organizing a financial rescue, restructuring, or dismantling of the firm (depending on the severity of the problem and its future prospects). It is also expected to bear a disproportionate share of the costs of associated financial assistance (interest deferrals and/or exemptions), loan losses

and new funding requirements relative to the syndicate as a whole (Aoki and Patrick, 1994: 25).

Sheard (1985: 198) distinguish five different aspects of financial distress. First, when a firm cannot meet its contracted obligations, meaning that decisions need to be made about whom will receive the available returns. Second, what happens to the firms as a collection of physical, human and intangible assets. The firm may continue as a going concern, usually after some restructuring, or it may be liquidated. Third, what happens to the existing management of the firm. Fourth, how the firm raises new funds either for bridging purposes or for new investments. Finally, the concerns of the choice of governance regime between corporate failure and asset reorganization.

The characteristics of corporate failures and the nature of the main bank's role differ from period to period, but the commonalties outweigh the differences (see Appendix to distinguish the different of some cases). Main banks provide a flexible, informal alternative to bankruptcy proceedings for managing the problems of financial distress and asset reorganization. There are some ways for main banks to help large firms from bankruptcies, including renegotiations of claims, supply of new capital, dispatch of managers, formulating of a recovery plan and removal of top management, merger and acquisition (Sheard, 1985: 193-204).

With regard to renegotiation of claims, main banks play pivotal role as the package arranger or the financial assistance to the firms depending on the need of

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each case. But generally, there are two kinds of debt reorganization: deferral, either of principal or interest repayments, includes forgiveness, either a reduction in the required interest rate or, in extreme cases, forgiving of loans. Therefore, supplying emergency funds for distresses firms is the other alternative of main banks' role. However, Sheard (1985: 196) argues that incremental finance is the riskiest kind of bank financing because there is little prospect of securing collateral, and the lending is presumably the most junior claim on the firm. It will lead the main bank to be trapped in the firm repayment schedule because as the most junior claim, the repayment will mature in a long time.

In other cases of bankruptcies, the main bank dispatches executives into senior managerial position in the firm to obtain better audit of the firm's financial position and to monitor the progress of restructuring and implement various measures. The main bank intervention might imply the firm's prospects to improve and gradually, the main bank withdraws its finance assistance. *Saiken Keikaku* (a recovery plan) is the other alternative in order to recover from financial problems. The main banks play proactive roles in formulating and implementing the plan through the directors and trouble-shooting team. A recovery plan covers many aspects of delegated monitoring, and task of negotiation to commit better action. Furthermore, a common feature of main bank intervention is the removal of incumbent managers, such as the president, chairman or senior directors. The main purpose of doing so is to remove them from the front line of decision making.

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The other main bank role in order to help firms in distress is to remove the problem assets to an off-balance sheet liquidation company. This procedure has a number of dimensions closely related to the renegotiation of debt. Accordingly, the main bank will finance the transfer of assets. Therefore, in attempting to secure the longer-term viability of the firm, the main bank arranges a tie-up or combination with another, usually larger firm. This can take many forms: a loose association involving production sharing, or technical or marketing assistance in order to achieve better outcome.

#### 3. Screening and Monitoring

There are three kinds of monitoring (1) *ex ante*, refers to the investor's assessment of the credit-worthiness of investment projects proposed by corporate firms and their screening. (2) *Interim*, refers to an investor checking the ongoing behavior of management and the operation of the firm in general, and the use of funds in particular, after the funds are committed. (3) *Ex post*, refers to the verification of performance outcome (the financial state) of the firm, judgement in the long run viability of the firm in case of financial distress, and the use of that information for possible corrective or punitive action. Table 4.2.4 summarizes the three stages of monitoring function of main banks.

**Table 4.2.4: Three Stages of Monitoring** 

STAGES OF MONITORING	FUNCTION	ASSOCIATED PROBLEMS
Ex ante	Project evaluation credit analysis	Adverse selection, co- ordination failure
Interim	Watching the management operation of the firm	Moral hazard
Ex post	Verification of financial state and applying punitive and correction action contingent on the state	Commitment

Source: Aoki, Masahiko, 1994: p.112.

These three roles are highly integrated and exclusively delegated to the main bank of the firm. In contrast, the Anglo-American system separate the three stages to different specialized intermediaries in order to reduce information costs and the costs of duplicating monitoring, and avoid subjective judgement in giving appropriate company's figure to capital market.

The decision of the main bank regarding any aspects of the firm's activities becomes a signal to the capital market. The signal of the main bank, as the "delegated monitor" in the capital market, is a low cost way of collecting and transmitting information about the firm and its management to other banks (Douglas, D., 1984: 393). The signal of the main bank may take the form of direct approaches to other banks, but in normal times is typically indirect: the firm approaches the other banks only after having received the approval of its main bank for its plans. Sheard (1985: 18) stresses that this screening procedure allows a degree of direct *ex ante* intervention by the capital market in that main bank may effect modifications in the firm's plans at the initial screening stage.

In order to take appropriate action in the case of financial distress, information plays a critical role. The main bank as the firm's key financier and *ex ante* monitor has already collected some vital information of what sort problems that the firm is facing. Having good information about the firm's situation and prospects leads the main bank to be able to make the right decision. For instance, should the firm be refinanced, and possibly reorganized by using merger or acquisition (see Appendix- 4 for some detailed examples).

# 4-2-3 IMPACTS OF MAIN BANK SYSTEM ON THE JAPANESE BANKING CRISIS

#### 1. Unrealized Capital Gain

The interlocking shares, firstly results in the capital gains in the firms belonging to the banks and not to their depositors, and these should therefore count towards bank's reserve assets. When Japanese banks went under the BIS (Banks for International Settlements) Standard, it was agreed that Japanese banks could count 45 percent of their unrealized capital gains as part of their reserve assets (tier-II-capital under the BIS agreement). Consequently, the growth of bank credit henceforth depended on the size of banks' reserves; the size of banks' reserves depended on their unrealized capital gains; which depended on the rise in share prices; while the rise in share prices depended on the growth of bank credit to finance speculation. The more main banks expanded credit, the more they were able to expand credit; and vice versa.

In the past, Japanese banks have frequently relied on unrealized gains of their stock portfolios to offset extraordinary losses. But the sharp drop in the Nikkei average has cut into those unrealized gains and made the balance of bad loans much more difficult to bear. Cargil et al (1997: 105) show the danger of unrealized capital gain on share holding of 21 major banks at the table 4.2.5 below.

Table 4.2.5 : The Estimate Unrealized Capital Gain on Share holding of 21Major Banks at Selected Values of Nikkei as March 1995 (Million Yen)

	NIKKEI INDEX						
Institutions	18,000	16,000	14,000	12,000	10,000		
City Banks	8.66	5.17	1.67	-1.82	-5.12		
Long-term Banks	2.32	1.36	041	-0.54	-1.49		
Trusts Banks	2.60	1.36	0.41	-0.54	-1.49		
Total 21 Major Banks	13.58	8.21	2.84	-2.52	-7.69		
Eight Largest Insurance Cos.	8.05	4.19	0.33	-3.54	-7.40		

Total 2	0 Insurar	ice Cos.		10.	.31	5.65		0.99	-3.	.67	-8.33
Source:	Banks'	Financial	Stat	ement,	which	data	on	Japan's	Life	Insu	rance
a		<u> </u>		. 1	D 11.1			ст			

Companies gives Comparison in the Political Economy of Japanese Monetary Policy, Cargill et al, 1997: p. 105.

The table shows that estimated unrealized capital gains on share holdings of major 21 banks at selected values of Nikkei 225 Index in March 1995 that when Nikkei Index went up to 18,000 yen, eleven city banks gained 8.66 million-yen, and the total 21 major banks gained 13.58 million-yen. This condition gave banks great lending capacity. Thus, during the bubble economy, it is not difficult to imagine how much banks enjoyed a great number of unrealized capital gain when the Nikkei reached about 38,000 yen in 1989. However, when the Nikkei Index went down below 12,000 yen, the total 21 major banks lost 7.69 million-yen, which limits banks lending capacity.

Wood (1994: 24-28) depicts that to allow banks to use any of their unrealized gains as capital was always a controversial point in the BIS discussions. Since BIS gave banks leeway to go on acting irrationally by not passing the cost of deregulated interests on to their borrowers, with the resulting adverse impact on their own underlying profitability.

With regard to this condition, relying on unrealized share gains made the banks' capital dependent on the fluctuation of the Nikkei Index. This is fatal flow of Japan's financial system.

#### 2. Booming in Property Investment

Minskyian "financial instability hypothesis" (1982) furthermore describes the another effect of accelerating investment during the bubble economy (tranquil years) when government intervened market through monetary contraction policy. The ratio of plan investment demand to expected-internal funds will fall dramatically; the thrust toward ever higher profits due to increasing investment reflecting ever higher leverage ratios will cease (Minsky, 1982: 84). Once the price of capital assets reflects inflationary expectations, an end to those expectations will lead to a sharp fall in investment. The upward instability of capitalism is a necessary precondition for the possibility of a deep depression (Minsky, 1982: 76). In situation, banks carry huge non-performing loans and consequently, the capital adequacy ratios are eroded.

In the Japanese bank practices, they promoted companies to invest heavily on real estate domestically and overseas during the bubble economy due to easy money policy (see the Monetary Policy for detail). The practice of "overborrowing" and "overloan" lead large firms and financial intermediaries to became too closely involved with banks, resulting in uncontrolled risks. In turn, banks began to rely increasingly on collateral as their security for repayment. A traditional and well-accepted collateral among the Japanese banks is real estate (Miller, 1997: 6).

Companies investment rose by nearly 40 percent in real terms between 1987 and 1990 whilst, the share of total investment in GDP increased from 31 percent to 37 percent (Reading, 1992: 112) (detailed shares of loans to real estate and financial intermediaries are described in the financial liberalization chapter).

This real estate lending accelerate the bubble process because the flood of new credit into real estate development increased the prices of the underlying assets. However, when the speculative bubble burst in early 1990, the investment in property went on so, investment continued to rise long after the conditions, which supported it, had change. However, amazingly, domestic demand growth did not slow down significantly until the early 1991 (Reading, 1992: 112). The supported reason behind that was because the monetary authorities continued their easy monetary policy for a year after the bubble burst in order to stimulate domestic demand.

But, when the Nikkei was down to 20,222 in September 1991, the collapse of property market was transparent. Investors and speculators unstuck with large debts to their banks, which they could not repay back. Hence, loan losses and falling share and property prices have eroded banks' capital adequacy ratios.

#### 3. Scams and Scandals

Due to the main bank being not neutral -it is one of the main parties affected by the whole process- conflict of interest occurs is the main banks' monitoring and screening roles. Sheard (1985: 191) describes the conflict of interests are acute and lead to inefficiencies in the reorganization process. Conflicts of interests are likely to exit between different classes of security holder, usually debt and equity holders, between security holders and incumbent management, and between security holders and the general work force. One merit of the legal solution is that the supplier of the public good is, ostensibly at least, neutral in the bargaining and settlement process.

In keeping the "convoy system" as one role of main bank and its role as corporate monitor results that the main bank will normally shoulder a proportionally larger share of the assistance burden. It means the main bank must bear the costs of sending what *ex post* turn out to be "poor" signals to the capital market (Sheard, 1985: 38). Consequently, the main banks have to provide insulation from market forces, but at the same time facilitates rationalizations in the direction of competitive market pressures. The disposal of assets to generate a cash flow and offset operating losses has been a major component of corporate rationalization and an important aspect of the reallocation of capital resources in the process of structural adjustment (Sheard, 1985: 43).

This accumulated failure burden eventually reduces the main banks profitability. During the high growth period, large firms rely heavily on their main bank relationship to help them in providing cheap loans with a great number of amounts. On the other hand, after the liberalization process of the Japanese financial market, these firms switched to other market to obtain cheaper loans than from banks. Accordingly, banks' profitability had reduced, on one hand, but the "convoy system" obligated main banks to take responsible when firms in financial distressed -in particular, the financial institutions- on the other hand. This circumstance led to moral hazard. The "convoy system" had been spoiling large firms and financial institutions to expand their business "out of scope" because they knew the "convoy system" was protecting them from bankruptcy. As a result, main banks gave a burden on their profitability and, hence, reduced their capability for lending.

One of the famous cases of financial institution distressed is Yamaichi -one of the Japanese security house. Yamaichi was at the point of bankruptcy in the-mid 1960s, but the MOF (Ministry of Finance) and the BOJ (Bank of Japan) rescued Yamaichi and in the 1980s, Yamaichi became the number fourth of Japanese security house (Hamada, 1994: 5). However, Yamaichi went bankrupt again in 1997.

The other consequence is the lack of transparency in administrative guidance system in Japanese banks allowed a great deal of wrongdoing to go undetected and unpunished, for example, the practice of the safety net (as has mentioned at the last section) and *amakudari system*<sup>3</sup>. Interestingly, Horiuchi (1997: 12-13) in his research shows that banks which accept such *amakudari* people are likely more to have higher bad loans ratio rather than banks which do not accept *amakudari* people. Consequently, scams and scandals come to light. The heavily government guidance into the banking system, involved leading politician into scandal. Recruit Cosmos, Nomuragate and Fuji Bank fraud are examples of politicians involvement. Furthermore, *yakuza*<sup>4</sup> also contributed their roles in terms of their open dealings with legitimate business and their increasingly overt role as principals making investment (Wood, 1992: 133). Hamada (1994: 15) points out

<sup>&</sup>lt;sup>3</sup> The system, which obligated banks to accept, retired people from the MOF and the BOJ to maintain stable human relationships and to obtain regulatory information quickly.

the economic asymmetric information sheds light on the trade-off relationship between the *ex ante* incentive mechanism to maintain credit discipline and *the ex post* salvage operation to relieve the system.

#### **4-2-4 CONCLUDING REMARKS**

In sum up, the unique features of main bank system such as the interlocking shareholding and the "convoy system" were put on place to protect large firms and financial institutions from overseas take over and also to support large firms in order to compete globally in international market. However, these features according to our observation led to moral hazard that crippled banks' capability to function banking business. Minskyian "financial instability hypothesis" fits in explaining today's banking crisis is due to banks changed their behavior during the bubble economy. As a result, banks' profitability had been eroded to insulate financial institutions and large companies from bankruptcy and to promote companies adopted risky assets in property.

Moreover, Iwao (1997: 400) points out that the bubble of the late 1980s was, in part, caused by the main bank system under which banks were unable to deny further loans as long as firms could provide collateral. He emphasis that the main bank system's emphasis on indirect (loan) capital is antithetical to the rising need for venture capital and to the indisputable desirability of replacing a bureaucracy-dependent, protected system (and a mode of corporate governance reflecting the protected environment) with a transparent system based on a free capital market guided by the principles of competition and transparency.

<sup>&</sup>lt;sup>4</sup> Japanese Mafia.

### **4-3 MONETARY POLICY IN JAPAN**

In retrospect, Minsky's "financial instability hypothesis" can apply to the rise and fall of asset inflation in Japan. According to Minsky, to stop asset inflation, the monetary authority should raise interest rate. However, monetary constraint works effectively only when it forces a sharp break in asset values caused by market pressure to liquidate financial position. Therefore, there is a great possibility that monetary constraint will lead stagflation or depression (Minsky, 1982: 77). In practice, the BOJ started to raise the discount rate in the middle of 1989. However, it could not stop excess asset-inflation. Finally, the BOJ raised the discount rate to 6 percent on August 1990 and the bubble burst. Hence, serious banking crisis occurred. According to previous observation, the monetary policy did not seem to work efficiently, as Minsky says. Many economists explain that the reason of the current banking crisis was caused by wrong timing of the BOJ's monetary expansions and constrain. Therefore, in this study, it is important to examine whether the BOJ made policy error or not in terms of economic monetary perspective. Also, the "bubble" occurred after the Plaza agreement which involved politics including the U.S. and Japan, so it is necessary to examine the BOJ's monetary execution in terms of political influence on the asset inflation and deflation.

#### 4-3-1 BACKGROUND

In 1985, at Plaza Hotel in New York, ministers of the Group of Five (G5) - the United States, Japan, Germany, the United Kingdom, and France talked about a plan to push down the value of the US dollar due to a serious trade deficit of the U.S.. G5 regarded

the US dollars as overvalued (the Plaza Agreement), which encouraged strong selling pressure on the US dollar (Ito, 1994: 345).

Even though the yen continued to appreciate, there was not much difference of trade surplus. On the contrary, Japan's trade surplus was likely to increase. Despite the effort on reduction of current surplus, it seemed difficult to achieve external balance solely through exchange rate adjustment. So, the government had to change its policy from export-oriented to one led by domestic demand-oriented. Also, the government emphasized stabilizing the exchange rate because the exchange rate reflects economic fundamentals to formulate long range economic plans and to proceed smoothly with economic restructuring. Furthermore, Japan was required to take initiatives in promoting restructuring policies, including appropriate and flexible fiscal and monetary policy to achieve economic growth led by domestic demand (Mayekawa et al, 1987: 124-125).

#### 4-3-2 JAPAN'S MONETARY ACTION FROM 1985 TO EARLY 1990s

The appendix-1 shows the relationship between the exchange rate and the discount rates from 1985 to 1998. The appendix-1 illustrates that the yen started to appreciate rapidly, from 22nd of the September (the Plaza agreement) to December in 1985. On January 30 1986, the BOJ first reduced the discount rate from 5 percent to 4.5 percent since the Plaza Agreement. However, the yen had appreciated at 180 yen by February in 1986 (see Appendix-1: point A). This sudden appreciation caused export decline and uncertainty about further appreciation made the business outlook pessimistic, and this process was called *Endaka* (high value of the yen) recession (Ito, 1994: 348).

The BOJ conducted monetary expansion twice on March 30 and on April 21 in 1986 and the discount rate was cut from 4.5 percent to 4 percent and to 3.5 percent respectively. Nevertheless, the yen continued to appreciate. On September 1986, the interest rate reached at 153.63 yen and the rate of appreciation was 128.88 percent compared to the rate of September in 1985 (See Appendix-1: point B). This situation caused the third reduction of the discount rate, which dropped from 3.5 percent to 3.0 percent in November 1986.

According to many news reports, there was an agreement about the exchange rate between the U.S. and Japan in October 1986 to stabilize the exchange market. The Ministry of Finance Miyazawa and the U.S. Treasury Secretary Baker set up a "suitable" exchange rate (the target zone policy), which was about 155 - 170 yen per \$US1 (Ito, 1994: 351). Since October in 1986, the market seemed to move in the way they expected (see Appendix-1: point C). Nevertheless, this situation did not last long.

On January 8 1987, Baker announced that the depreciation of the dollar depended on a logical consequence of developments in the world economy (Ito, 1994: 351). After this announcement, the yen started to appreciate heavily, despite the BOJ's intervention, and the exchange rate of the yen reached 150 yen (see Appendix-1: point D).

In February 1987, the Group of Seven (G7; the U.S., the U.K., Japan, Germany, France, Canada, Italy (absent) had a meeting at Louvre in France to establish a reference range for the exchange rate. The G7 declared again its willingness to

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stabilize the exchange rate around the current rate while avoiding any mention of a specific number for the range. The market interpreted that the target zone was 150-160 yen per \$US 1 (Nihon Keizai Shinbum: 1987) based on the announcement of Louvre agreement. However, the yen went under 150 yen in March 1987 (Ito, 1994: 351). Again, the BOJ cut the discount rate 3 percent to 2.5 percent (see appendixpoint E). After this discount rate, the exchange rate stabilized until September 1987 with only small range of fluctuation (see Appendix-1: point F).

On October 19th, 1987, the Yew York market suddenly collapsed: this day is known as "Black Monday". At the beginning of October, the BOJ and the Federal Reserve wanted to keep the interest rate high as a precautionary measure against inflation. However, when it became obvious that stock price would not recover quickly, the BOJ and the Federal Reserve expected that the lower interest rate would give a lift to the U.S. stock market (Ito, 1994: 353). This stock market crashed and many economists persuaded the U.S., Japan and other countries that monetary expansion was best to employ. Monetary expansion created a cushion of liquidity to absorb the financial stock and prevent the trauma from being transmitted to other parts of economy (Hartcher, 1997: 74). This news convinced the market that the target zone would have gone (Ito, 1994: 353). The policy was successful. Nevertheless, in the U.S. and Germany, this policy was a only short-term response. Within five months after Black Monday, the U.S. raised the official interest rates and Germany followed four months after that (Hartcher, 1997: 74). In contrast, Japan continued to keep the interest rate low. In December 1988, the yen appreciated more than 140 percent compared with that of September (See Appendix-1: point G).

Many economists warned of the danger of asset-inflation. Also, the BOJ started to worry about an overheated asset-inflation and gradually increased the discount rate from 2.5 percent to 3.25 on May, to 3.75 on August, to 4.25 on October in 1989 and to 5.25 in March 1990. Finally, the BOJ increased the discount rate to 6 percent on August 30 1990 and as a result, the Japanese "bubble economy burst" (see Appendix-1 point F).

The MOF took into account this overheated asset inflation, and introduced several measures to slow land price rises. Firstly, the banks' real-estate lending were limited in April 1990, because the banks lending to real-estate and non-banks specializing in real-estate lending (such as *Jusen*) were identified as one of sources of asset-inflation. Table 4.3.1 shows lending real-estate and non-bank companies. The bank's investment to real-estate and non-banks increased gradually from 1984 to 1989.

 Table 4.3.1: Lending to Real-Estate and Non-Bank (All Banks include Trust Banks)

	1984	1985	1986	1987	1988	1989
Total lending outstanding	299.3	249.6	273.3	299.3	249.6	356.8
(%)	(100)	(100)	(100)	(100)	(100)	(100)
To real-estate*	17.4	22.2	30.2	33.5	37.5	43.3
(%)	(7.5)	( 8.9)	(11.1)	(11.3)	(11.7)	(12.1)
To non bank companies*	32.3	29.6	39.6	45.1	50.9	59.6
(%)	(10.2)	(11.9)	(13.5)	(15.2)	(15.8)	(16.7)

Note: \* trillion yen, \*\*Number of parentheses denote parentage of total lending Source: Bank of Japan Economics Statistics Annual; Cargill et al, 1997: p. 104.

Secondly, MOF raised the capital-gain tax on land transactions, which are taxed separately in Japan. Thirdly, the MOF tried to slow the corporate demand for land.

## **4-3-3 ECONOMIC PERSPECTIVE OF THE JAPANESE MONETARY EXECUTION**

#### 1. Monetary Policy

Monetary policy includes changes in the country's money supply and is conducted by its central bank. There are two ways to stabilize the economy using monetary policy: expansion and contraction. Monetary policy is fully effective under a floating rate exchange rate. Table 4.3.2 shows the effects of monetary policy on the economy. Monetary expansion increases aggregate spending and output by raising the supply of money. As a result, output rises and interest rate decline, leading to outflow of funds and downward pressure on the currency (Kreinin, 1998: 391).

 Table 4.3.2: The Monetary Effects on the Market, Interest Rate and the Exchange Rate

POLICY	THE MARKET	INTEREST RATES	EXCHANGE RATE
Expansion	money supply rises	decline	depreciates
Contraction	money supply declines	rise	appreciates

Source: International Economics : A policy approach, Kreinin 1998 : 273

Figure 4.3.1 shows monetary policy under a floating exchange rate. It shows that Monetary expansion shifts from LM1 to LM2 and equilibrium from a to b. As a consequence, the decline in interest rate causes outflow of funds and deprecation. In turn that raises X-M (export - import) and shifts IS1 to IS2. Therefore, output expands further to point c.

#### Graph 4.3.1: Monetary Policy under the Floating Exchange System





Source: International Economics ; A policy approach Kreinin 1998 : 414 In contrast, monetary contraction reduces output and raises the interest rates. The resulting appreciation of currency causes a further shrinkage of output (Kreinin, 1998: 391).

The BOJ executed monetary expansion five times from 1986 to 1987. When the yen was appreciated to 180 yen against the US dollar, Japan faced an uncertainty on the economy. The BOJ should have taken some approaches to stabilize the economy. According to monetary economic theory, Japan made the right decision, because Japan employed the floating exchange rate system. So monetary policy should have been effective. However, the yen continued to aggressively appreciate against the US dollar despite several monetary expansions. Even though the yen depreciated a little, it happened in a very short time. Therefore, there was not a positive effect of monetary expansion during 1986-1987 (See Appendix-1).

#### 2. Domestic Policy Requirement

Every economic policy taken by the government influences both balance of payments and domestic conditions. It is, therefore, necessary to examine the economy not only to external but also to internal situations. Table 4.3.3 shows a combination of economic conditions and policy requirements (Kreinin, 1998: 343).

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INTERNAL	DOMESTIC POLICY RESPONSE	BALANCE OF PAYMENT	DOMESTIC POLICY RESPONSE	NATURE OF SITUATION
Unemploymen t	expansion	surplus	expansion	consistent
Inflation	contraction	deficit	contraction	consistent
Unemploymen t	expansion	deficit	contraction	inconsistent
Inflation	contraction	surplus	expansion	inconsistent

 Table 4.3.3: Combination of Economic Condition and Policy Requirements

Source; The policy approach Kreinin, 1998: 345

The first two situations, unemployment and trade surplus, and inflation and deficit, are consistent situations. Either case, the policy should work effectively according to economic theory. For example, when a country has in recession and trade surplus (the first case), the country should take monetary and fiscal expansion. Executing monetary policy lowers the interest rate and the currency should depreciate. On the fiscal side, fiscal expansion leads to tax cut or increase in government expenditure aimed at purchasing power into the economy. Then, income and lower price of goods have the effect of increasing import and decreasing export. As a result, unemployment and the balance of payment should be reduced. Therefore, the same set of policies can work effectively (Kreinin, 1998: 354).

However, the last two cases are inconsistent situations. They offset monetary and fiscal policy effectiveness. For instance, in the third case, a country faces unemployment and trade deficit at the same time. Suppose the country takes fiscal expansion for their unemployment problem, and takes monetary contraction to reduce trade deficit. Monetary contraction has dual effects on the balance of

payment. It not only improves the current account balance but also attracts short term capital from overseas. The fiscal expansion can more than offset its monetary contraction in its effect on the domestic economy. Thus, the country can obtain a net expansion but this leads to current account deficit. As a result, the situation does not change effectively (Kreinin, 1998: 354-5).

In terms of Japan's domestic situation from 1985-1987, Japan had low unemployment and low inflation rate. Partly because yen appreciation kept import price low, even though monetary expansion took place (Ito, 1994: 82). Figure 3.3.2 (Chapter III) shows unemployment and the ratio of effective labor supply and effective labor demand. Figure 4.2.2 shows consumer price index (1995=100). From 1985 to 1988, the inflation rate was almost 1 percent and after this period, it increased rapidly. The unemployment rate between 1985-88, was about 2.5 percent which was quite low unemployment rate compared with the U.S., France and so on. According to Figure 3.3.2 (Chapter III) and Figure 4.2.2., the Japanese domestic situation was quite a good one and there was no policy requirement for domestic objectives. However, Japan had a large trade surplus so Japan seemed to be executing its monetary policy targeting on external objectives.

## **4-3-4 POLITICAL PERSPECTIVE OF THE JAPANESE MONETARY EXECUTION**

The BOJ executed monetary expansion five times during 1986-7. After the Plaza Agreement, the yen appreciated aggressively and Japan faced an uncertain economy. In early 1986, the small 'yen appreciation induced recession' occurred. Therefore, it is understandable the BOJ executed monetary expansion three times. However, by

contrast, Germany reduced the official discount only once from 4 percent to 3.5 percent (Hartcher, 1997: 59).

After the middle of 1986, the economy started to grow, However, the BOJ cut the discount rate twice, in October 1986 and on January 1987. Many economists argue that these two monetary expansions caused asset inflation which led to the present banking crisis (Cargill, et al, 1997: 111). After "Black Monday", many economists recommended Japan, the U.S Germany to adopt monetary expansion. This created a cushion of liquidity to absorb financial shock and prevent the trauma from being transmitted to other parts of economy (Hartcher, 1997: 74). The U.S. and Germany and Japan kept the interest low, nevertheless they raised the interest rate within one year after Black Monday. Only Japan kept its interest rate low (Cargill, et al., 1997: 113; Hartcher, 1997: 56)

Monetary easing was evident in the money supply (M2 + CDs). The Figure 3.2.3 (Chapter III) shows the growth rate of supply from 1985-1998 (1985=100). According to this graph, the growth rate of money supply was about 8 percent. From 1986 to 1990, the growth rate was more than 10 percent every year. This rapid money supply may have fueled expectation of asset inflation. Much more sufficient liquidity and low interest rate encouraged banks and other institutions to adopt risky investment accommodating with financial liberalization (Cargill et al., 1997: 113). Also, CPI (see Graph 4.3.2) started to increase rapidly from 1988, and the MOF should have noticed the occurrence of Minsky type of asset-inflation because speculative finance must refinance their positions (Minsky, 1982: 67). Therefore, many economists blamed the government for keeping the low interest rate too long.

### Graph 4.3.2: The CPI Growth Rate from 1985-1996

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Source : The Japanese Economic White Paper : Appendix -7

Furthermore, Hamada (1992), Hartcher (1997) and Cargill et al (1997) argue that the monetary policy was executed to focus on the exchange rate blinding domestic objectives. At the end of 1985, G5 had the second meeting to adjust economic growth rates to lock in the new currency value. The U.S. and other members of G5 wanted Japan to stimulate its economy domestically and it was totally dependent on Japan's choice which policy it had to take, monetary or fiscal. Indeed, the U.S. implied to Japan that it would prefer that Japan choose fiscal policy. However, Japan had a huge budget deficit so the MOF did not take fiscal policy (Hartcher, 1997: 54-6). Unlike Germany's Bundesbank which has autonomy, the BOJ is not an independent institution and subject to the supervision by the MOF. Therefore, the MOF had an authority on decision of monetary policy. The monetary policy 1986-7 was taken targeting the exchange rate. The monetary policy can not be directed toward domestic objectives (Hartcher, 1997: 72-73). Although the decision to target the exchange rate was designed to help domestic industry, especially the export sector, other domestic objectives became secondary. Also, Ito (1994) questions the effectiveness of target zone from 1986 early 1987. If the target zone was unrealistic and did not reflect the real market situation, this might be one of the reasons to mislead the market and policy execution (Ito, 1994: 351).

#### **4-3-5 CONCLUDING REMARKS**

As Minsky mentions, monetary constraint works only when it forces the economy to the brink of asset deflation. Therefore, there is always the danger of leading to financial crisis. The Japanese speculative bubble burst in 1990 and caused a serious banking crisis as Minsky says. However, observation of execution of the Japan's monetary expansion and constrain, shows that it seems to be deeply related to international policy coordination and domestic politics. These elements made the current banking crisis much worse.

Due to the serious trade surplus with the U.S., Japan had to take some policy to fix the trade balance problem. However, the MOF did not want to take fiscal policy because of a huge government deficit. The MOF has stronger initiative on policy coordination than the BOJ so the BOJ had to follow the MOF's order. From 1985 to 1987, unemployment rate and inflation rate were quite low so that there were no reason to take monetary expansion. Even though monetary policy could protect exporters from aggressive appreciation of the yen, export sectors were strong enough. In addition, the BOJ kept its discount rate low too long although the U.S. and Germany raised their official rates within one year after Black Monday. Minsky says (1982: 83) that a raise in investment will itself lead to rise in investment rates. However, Japan kept its discount rate low which accelerated the speculative bubble. These evidences show that the monetary policy was executed focusing on the exchange rate, oblivious to the blinding domestic situation. Therefore, the Japanese speculative bubble economy was

accelerated by monetary expansion during 1986-7 and long period of low discount rate during 1988-1989.

However, it is difficult to say that the BOJ made a policy mistake because the BOJ did not have an independent control on policy makings. The real problem seems to lie in the Japanese pre-modern bureaucratic system which centralized the power to the MOF.

## CHAPTER V THE LIQUIDITY TRAP

#### **5-1 BACKGROUND**

In August 1992, the government turned to an expansionary macroeconomic policy as an emergency relief measure in order to restore investors confidence and stimulate domestic demand. This time the government was going to rely on a fiscal expansion package. The government set up special budgets to stimulate a stagnant economy through what is called "construction<sup>5</sup>" bonds for about 62 trillion-yen in 1993 and 14.224 trillion-yen in 1995 (Isono, 1992: 16). Also, in 1994 the government reduced

<sup>&</sup>lt;sup>5</sup> Bonds issued for public construction in order to stimulate domestic economy.

tax significantly. The amount of government issued was 25.56 trillion-yen, which included 9.3 trillion yen of "construction" bonds (Hartcher, 1997: 60).

According to Isono (1992: 17), the huge economic stimulus package was unique in that it not only contained measures to boost domestic demand but also effort to stabilize the financial system and to bolster stock prices. In contrast, Hamada (1994: 8) was pessimistic with the long run consequences of this emergency measure. He argues that to examine whether the government was doing the right thing by executing the "late fiscal policy", only can be measured after several years of implementation. In spite of the fact that the Nikkei Stock Average recovered from 14,309. 41 points posted that day to 18,908.47 on September 10<sup>th</sup> in 1992, the rebound was short-lived. The temporarily stock market rebounded by this fiscal packages could not be an encouraging signal for future economic activities.

Today's Japanese economic crisis is the answer for Hamada's argument in 1994. Despite the expansionary fiscal policy after the bubble burst, the Japanese economy has deepened into further serious recession. On the other hand, monetary policy is powerless to stimulate aggregate demand because the interest rate has already low - 0.25 percent. If the government wants to lower the interest rate, it will have little impact on the whole economy. Looking at this phenomenon, many economists (Gittins, 1998; Katz, 1998; and Krugman, 1998) portray the Japanese economy as apparently in a "liquidity trap". According to economic theory, the economy is caught in a liquidity trap when interest rates cannot be reduced by any action of the monetary authorities (Black, 1997: 274). This is liable to arise if bond prices are expected to fall. In other words, the "liquidity trap" is the minimum floor to the rate of interest (Donald, 1992: 270).

#### **5-2 KEYNESIAN "LIQUIDITY TRAP" THEORY PERSPECTIVE**

Under Keynes's "theory of liquidity preference", people have three different motives for holding money rather than spending it on consumption or investment, or using it to buy an interest-bearing financial assets, for example, government bond (Gittins, 1998). They are the transaction motive, precautionary motive and speculative motive. Therefore, the central bank controls the rate of interest rates and uses it to manage the pace of spending in the economy. When the economy is overheating and the central bank wants to discourage spending on consumption and investment, it increases interest rates. Whilst, when demand is weak and it wants to encourage consumption and investment, the central bank lowers interest rates (Gittins, 1998).

However, if interest rates are extraordinarily low, there comes a point where the central bank cannot lower them any further (Galbraith and Darity, 1994: 150). The underlying reason is because the increase in the supply of money prompts an equivalent increase in the demand of money, which derived from the Keynes's speculative motive for holding money taking its place. The speculative demand for money may become indefinitely large.

That is, everyone expects that interest rates will soon rise and therefore bond prices will fall, inflicting huge capital losses on anyone foolish enough to hold bonds or other interest-bearing financial assets. Market participants are seized with an inordinate fear of taking these capital losses, and equally inordinate hopes of taking advantages of an imminent fall in bond prices (Galbraith and Darity, 1994: 151). Under these circumstances, new money that may be created is snapped up and

hoarded by speculators in the anticipation of increases in interest rates and declines in bond prices (Gittins, 1998).

### Graph 5.1: IS-LM Liquidity Trap





The LM curve above will then assume a horizontal slope, as shown in the figure. When this happens, it becomes impossible, simply by creating money, either to reduce interest rates and stimulate investment or to stimulate transactions. Such policy shifts, which ordinarily produce an outward movement of the LM curve, now simply map the new curve directly over the old one. In other word, the economy is going nowhere.

Therefore, monetary policy is impotent because lowering the interest rate is ineffective in stimulating demand, on the other hand, fiscal policy is extremely effective, since an outward shift in the IS curve along a horizontal LM curve can raise income without affecting interest rates (Galbraith and Darity, 1994: 151). However, the "Liquidity Trap" according to Keynes, only occurs in extreme circumstances.

### **5-3 APPLICATION TO THE JAPANESE ECONOMY**

Minsky (1982: 84) says that government needs to employ huge government spending to stimulate business activity. Consequently, the banking sector is able to validate its non-performing loans because investors will be able to sustain their investment. With regard to the government expansionary fiscal policy since 1992, the Japanese government also spent a great deal in fixed capital formation in order to stop asset deflation which decreased further after the bubble burst in 1990s. However, according to Sato (1998: 73), the government budget led to moral hazard problem rather than restoring the economy. He describes this investment in economic overheads as "location-specific". That is carried on by local governments out of revenue transfers from the national government.

Sato (1998: 73) adds that the practice leads to a high degree of pork-barreling. *Zokugiin* (the ruling party) played an important part in government-fund allocation to local districts. One of the notorious cases was a public construction project where the fixed capital formation was given to contractors in "real money" (cash) to invest in real estate market (mamizu).

In fact, the purpose of *mamizu* was to restore investors' confidences in the falling property market. However, the *mamizu* proportions were open to public bidding but there is a scope for special favors to some big contractors. Consequently, corruption is prevalent in Japan's politics, as a number of economic scandals which became public over the last decade clearly indicate (Sato, 1998: 74). As a result, the economy has not rebound after the bubble burst because the contractors did not use the money for investments in the property sector that could accelerate the business cycle. Likewise, Krugman (1998) comments that the Japanese economy has been going nowhere for most of the 1990s and now it is actually going backwards.

In today's Japanese economy, many economists view that Japanese consumers are too anxious to permit them to spend, particularly in the stock market even though the interest rate is low. They do not buy bonds from their surplus liquidity because they fear that the next move in interest rates will be up. If interest rates rise while they were holding bonds, they will suffer a loss on the capital value of those bonds, which would outweigh the interest they would earn. This phenomenon is derived from the slumping economy due to the acute banking crisis which has wiped out investors' confidences in the domestic market.

However, the central bank is powerless to stimulate domestic spending through its expansionary monetary policy because the interest rate is already low -0.25 percent. Therefore, the central bank cannot reduce the interest rate below zero (Black, 1997: 274). The monetary authorities are thus unable to promote investment by cutting real

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interest rates, even if investment would be responsive to a real interest rate cut if one should occur (Black, 1997: 274). Hence, in 1997, the fearful consumers actually raised their rate of household savings from 13 percent to 14 percent of their total income (Katz, 1998: 7). In addition, with consumers spending so little and profits down, companies see little need to invest. Consequently, the decline in investment rate will lead to slow growth of the business cycle. Finally, this trend will lead the Japanese economy into deep recession.

As a result of this chain-reaction of the slumping of the economy, many economists portray Japan as caught in a "liquidity trap" which demand is weak, but the central bank is powerless to do anything about it (Gittin, 1998). In order to escape from the "liquidity trap", according Keynes (1973) and the Hicksian model, the government should execute expansionary fiscal policy. The policy will stimulate domestic spending which then generates growth and creditworthiness, which will improve accordingly. Therefore, the Japanese government recently was working to pass a supplementary budget for Fiscal Year 1997, which ended March 31, and a regular budget for Fiscal Year 1998. These bills include a 2 trillion-yen income tax cut, a 30 trillion-yen plan to assist troubled banks, and measures to boost the stock market before the march settlement period (Katz, 1998).

On the other hand, as Hamada has questioned the effectiveness of the government expansionary fiscal policy in long-term, some other economists also raised their doubtness. Kartz (1998), for example, points out the absence of deregulation and other reforms, fiscal stimulus will be like economic steroids, artificially boosting the economy for a while, but in ways that cannot be sustained. In the absent of major economic reforms, the only way to keep the economy afloat and to avoid more huge bankruptcies and rising unemployment is to increase the government budget. In a fundamentally sound economy, a few more years of rising budget deficits would not be a problem such as the government faced during the high growth years. However, in today's recession, Kartz says that the fiscal stimulus will become a permanent crutch rather than a spark to growth.

### **5-4 CONCLUDING REMARKS**

It is true that Japan is in the dreaded "liquidity trap", in which monetary policy is crippled under depression conditions. Despite the interest rates being already low - 0.25 percent-- the lowest that world has ever seen, and the yield on the long-term benchmark bond is less than 1.2 percent, Japanese people prefer to hold cash rather than invest in bonds. Therefore, Japan is supporting expansionary fiscal stimulus to help the economy move again. But, the underlying problem of today's crisis lies on the chain-reaction of banking crisis after the bubble burst in 1990s which has wiped out the investors' confidence.

In dealing with the current situation, the fiscal stimulus has to be effectively employed to restore the economy as a whole. The government also needs to consider a comprehensive and transparent system that would leverage the use of fiscal stimulus to ensure the underlying problem is restored. There are bad debt problem and the lack of sound capital of banking system. The lack of transparency in the financial sector has allowed this problem to linger until today's economy crisis.

## CHAPTER VI CONCLUSION

The Japanese banking crisis was a result of a "speculative bubble and burst economy," as Minsky's financial instability hypothesis describes it. Innovative financial instruments were introduced. A significant financial market liberalization took place, which released the banks from strong financial institutional pressure. Banks had to compete not only with peer banks but also with other financial sectors such as security houses. In addition, the banks had to look for new markets due to a dramatic decrease in corporate finance. Therefore, the banks tended to adopt riskier investments such as stocks and land. More importantly, the unique relationship between banks and corporations, that is their interlocking shareholding, encouraged investment in these capital assets. Furthermore, easing monetary policy affected indirectly the tendency towards speculative financing. The safety net offered by the "convoy system"

exacerbated the unsustainable lending practices of bank and non-bank financial institutions.

However, the real problem of the banking crisis seems to be in the structure of the Japanese monetary system itself, which centralized power to the Ministry of Finance (MOF). After the Plaza Agreement in 1985, Japan had to take some actions to fix the serious trade surplus. The MOF wanted to initiate monetary expansion instead of fiscal policy. As a result, monetary expansion from 1986-1987 made suitable conditions for speculative finance. In addition, the BOJ kept the interest rate low, targeting the exchange rate, even though the U.S. and Germany raised interest rates within one year after "Black Monday". Minsky says that monetary constraint works effectively, only when it forces the economy to the brink of asset-deflation after the "speculative bubble". Therefore, a long period of low discount rate could accelerate assets inflation and made the situation much worse after the "bubble burst". Furthermore, the slow and non-transparent government intervention delayed response to the banking crisis and increased the costs of the inevitable bailing-out. Also, the government's safety net which was designed within a system of tight regulations lead to moral hazard problems. Minsky's financial instability hypothesis implies the importance of government intervention. However, the Japanese monetary authorities themselves failed to change their attitude to meet the needs of a globalized economy, which made the Minsky style financial crisis much more serious. The Japanese economy has been in a "Liquidity Trap": people would not invest even with the interest rate cut to 0.25 percent. People completely lost their confidence in the economy and the government.

According to our observations, the Japanese government should undertake strong initiatives to solve the huge non-performing loans problem. According to Minsky, the pace of investment is dependent on expectations. Post-Keynesian economics deeply is related to people's psychological aspects. From this point of view, it is very important for the government to make policies to give confidence, or maintain expectations. We, now recommend some solutions based on our research.

Firstly, the Japanese monetary authorities and politicians should abandon the old institutional relationship such as the "convoy system". Many analysts recommend that Japan abandon "convoy system" which made stronger banks prop up weak ones (Sydney Morning Herald, 19, Sept. 1998). Because "convoy system" have no explicit rules to rescue distressed banks so this system has made the relationship among the MOF, the BOJ and banks unclear, and tends to give opportunities to have fraudulent behavior.

Secondly, the government should disclose the real figure of non-performing loan and make clear the process of bailing-out distressed banks. Deposit insurance have been utilized since 1992, but non-performing loans are too big to be absorbed by the Deposit Insurance Cooperation and other institutions. Hence, the government will have to rely on public money to solve the non-performing loan problem. To use public money, the government definitely needs a consensus from the people. However, now the Japanese people no longer trust the government because they have tried to avoid taking responsibility and have not showed any clear ideas to solve the problem. To meet the people's expectations government should make clear the system of bailing-out and disclose the real number of non-performing loans. Then, let

the people know how serious the banking situation is. Just as the Korean government has asked its people to rescue the economy, so Japan truly needs such strong collaboration between the government and the people to solve its problems.

Moreover, the government should break down the power networks of the monetary authorities. Monetary expansion during 1986-7 contributed to make an ideal conditions for the speculative bubble. This monetary expansion was authorized by the Finance of Ministry, not the Bank of Japan. Unlike the central bank in Germany, the Bank of Japan did not have independent power to execute monetary policy. As a result, monetary policy was executed targeting the exchange rate, not domestic objectives. The Ministry of Finance centered power system could not a provide proper monitoring system. Therefore, a decentralized and independent monastery authorities is very important to strengthen the monitoring system.

Now what is really needed to in Japan is the government's strong initiative to solve the problem. The current Japanese situation is quite serious and many well-known companies such as Yamaich security and Hokkaido Hakushoku bank have gone bankrupt. The myth of "no-failure" of financial institutions have been broken down. Fortunately, in Japan, some industries have maintained their strong position, which can sustain the Japanese economy for a while. The Japanese government must have strong initiatives to solve the banking crisis before this serious disease has its effect on the real economy. Otherwise, Japan's banking crisis will trigger another Great Depression in the 21st century.