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Banking in Japan: Will "Too Big To Fail" Prevail?

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Abstract

This paper reviews the evolution of the Japanese banking sector and the development of the banking crisis in Japan in the context of "too big to fail." It describes the deterioration of the Japanese financial sector caused by the bad loan problems and the failure of policymakers to get a grip on the underlying problems. Even at the start of the new century, Japanese policymakers still continue to struggle to find the right policy response to tackle the banking problems and how to avoid moral hazard behavior intertwined with "too big to fail" concerns. The increasing concentration in the Japanese banking industry, which is now dominated by five huge financial conglomerates, should make it more difficult to definitely end "too big to fail" in Japanese prudential policy. In this respect, we believe that the "too big to fail" policy in Japan will prevail.

JEL classification: G21; G33; G38
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1. Introduction

Since the beginning of the nineties, the Japanese economic success story has lost to a considerable extent its appeal. As a result of the collapse of the "Bubble" economy, Japanese banks became saddled with huge amounts of non-performing loans and a significant number of them failed. In addition, the stability of the financial system was further jeopardized by many scandals, which often implicated the monetary authorities themselves and resulted in major administrative and financial reforms. Increasingly, international monetary authorities and economic organizations showed their concern about the situation in Japan, in particular regarding the banking crisis and deflationary spiral (see for example Ahearne et al. 2002).

The purpose of this contribution is to review the evolution of the Japanese banking sector and the development of the banking crisis in Japan in the context of "too big to fail," which we shall characterize as "supervisory ad-hoc pragmatism." It describes the deterioration of the Japanese financial sector caused by the bad loan problems and the failure of policymakers to get a grip on the underlying problems. The latter aspect of the banking crisis in Japan is reflected in the policy shifts of the supervisory authorities, who sometimes seemed to be willing to end "too big to fail," but at other times seemed rather unwilling to let problem banks fail and instead tried to bail them out by injecting public funds in the major banks only. In general, the ruling political parties, which were concerned about possible negative economic consequences emanating from bank failures and often also maintained close connections with the banking industry, preferred a policy of "muddling through" instead of taking swift and decisive action. All in all, also at the start of the new century, Japanese policymakers continue to struggle to find the right policy response to tackle the banking problems and how to avoid moral hazard behavior intertwined with "too big to fail"

concerns. In any case, the increasing concentration in the Japanese banking industry, which is now dominated by five huge financial conglomerates, should make it more difficult to definitely end "too big to fail" in Japanese prudential policy. In this respect, we believe that it can be argued that "too big to fail" in Japan will prevail.

The issue of "too big to fail" has been widely discussed in the literature, in particular after the debacle with Continental Illinois National Bank in Chicago in the US (see Roth 1994; FDIC 1997; Stern 1997; Gup 1998; Kaufman 2002; for an earlier analysis see Hetzel 1991) As regards a definition of "too big to fail" (TBTF), we agree with Kaufman (2002) that it is often a much misunderstood term, and that in practice – at least in the US – it implies that a bank is "too big to liquidate" (Kaufman and Seelig 2000, p.1). In this contribution, we speak of "too big to fail" if supervisory authorities provide financial support, for example in the form of capital injections, or take other action that prevents that a problem bank actually goes bankrupt. This is in line with Gup (1998), p.69, who states that "… the TBTF doctrine means that the organization may continue to exist, and insured depositors will be protected; but stockholders, subordinated debt holders, managers, and some general creditors may suffer losses." If a bank is actually allowed to fail and goes bankrupt, we believe this is a clear case of ending "too big to fail," or an example of "let fail." Finally, when problem banks are being nationalized by the government, we will interpret this as "too big to liquidate," as the banks have actually failed but are continued under the same charter and a different name.

The outline of this contribution is as follows. Section 2 describes the evolution of the Japanese banking system, from the post-war situation to the current banking sector, and pays attention to the process of financial reform. Section 3 reflects on the banking crisis, analyzes its

causes and discusses the policy response to this crisis. Section 4 addresses the issue of "too big to fail" in Japan and defines our interpretation of "supervisory ad-hoc pragmatism." It also presents a case study of "let fail," showing the consequences of the failure of the Hokkaido Takushoku Bank. Finally, section 5 concludes.

2. The evolution of Japanese banking

2.1 The pre-reform Japanese financial system and the regulation of banking

The financial system during the post-war period until around the mid of the 1980s is well known as a bank-based system. The stock and bond markets were deliberately suppressed by various regulations. The banking system was heavily regulated as well, and the status quo was protected under the so-called "convoy system" (Patrick 1999 and Spiegel 1999). Under the "convoy system," banks were ensured that de-facto there would be no competition, and they would grow roughly at the same rate. This was achieved via regulatory measures of controlling interest rates, fees and financial products, dividing business lines and branch restrictions (Hoshi 2002 and Van Rixtel 2002). So-called administrative guidance, or "moral suasion," by the Ministry of Finance (MoF) was often used to make sure that all the banks would move together. Most importantly, until 1995 when the Hyogo Bank was liquidated, no bank would be allowed to fail (Cargill et al. 1997 and Hoshi 2002). Bank failures were prevented by mergers between banks – or more precisely take-overs of weaker banks by stronger ones – encouraged by the Ministry of Finance. The maintenance of the "convoy system" was logical from the perspective of Japanese regulators, given that the main source of corporate finance was lending through banks. This predominance of indirect finance (intermediation) resulted mainly from the underdevelopment of the capital

markets, which was caused by the low level of issuance of government bonds, the use of interest rate and foreign capital controls, and the reduced level of asset accumulation after the Second World War. Additionally, the preference for indirect finance can be explained partly by the domination of transactions based on customer relationships rather than on funding through the capital markets (Cargill and Royama 1988, p.44).

The evolving structure of the post-war financial system was expected to fulfill three important requirements (Teranishi 1990, pp.5-6; Teranishi 1993). Firstly and most importantly, the system had to supply sufficient long-term funds to realize economies of scale for developing industries, using borrowed technology (the 'catch-up' process). The second role assigned to the financial system was enhancing the availability of funds in low productivity and traditional areas. Thirdly, the financial system was required to be safe and stable.

The post-war financial system was segmented according to functions and types of clients. Competition was restricted between various business areas, as each financial institution was not permitted to enter the business areas of other financial institutions. As a result, a functional segmentation of financial institutions was established, for example between securities and banking business. Furthermore, by formal regulation and informal guidance, banking and trust business were separated and financial intermediaries established a specialization of lending. Some financial institutions specialized in long-term finance, while others became occupied with short-term lending activities. Moreover, specialization of lending areas could be found in special financial institutions for small and medium-sized firms and agricultural business. This system of functional segmentation of various kinds of financial institutions was strengthened further by various interest rate regulations.

As a result, this heavily regulated financial system became categorized into banks, *shinkin* banks, credit unions and associations, co-operatives, securities firms, life and non life insurance companies, the postal savings system, and government financial institutions for specific functions. The banking industry was divided into three groups: commercial banks, trust banks and long-term credit banks. Commercial banks were segregated by location and client size into city banks and regional banks. Their focus used to be on short-term lending, but in practice this orientation was blurred into long-term lending as well. City banks (*toshi ginkō*) have been headquartered in the major cities, with nationwide operations, and became the main financiers of "Japan, Inc.". Regional banks (*chihō ginkō*) have their headquarters in smaller cities and, as their name suggests, have a largely regional function. Regional banks are classified into regional banks and Second Tier regional banks. The latter were former *sogo* or mutual savings banks, and reclassified in 1989 into commercial banks, which became member of the so-called Second Association of Regional Banks (*Dai-ni Chihō Ginkō Kyōkai*). Traditionally, regional banks have been experiencing problems in competing with other regional banks, as well with city banks, since their branch network (number and places) has been restrained by administrative guidance.

Furthermore, during the post-war period, long-term financing was provided by trust banks (*shintaku ginkō*) and long-term credit banks (*chōki shinyō ginkō*). As regards the former, besides operating in the trust business, they have been conducting banking activities which include accepting deposits and make long-term loans. As regards the latter, originally three of these banks (Industrial Bank of Japan, Long-Term Credit Bank of Japan and Nippon Credit Bank) were set up in 1952 to provide long-term funds to large manufacturing firms, but, as will be discussed later, two of them failed in 1998 – their activities were continued in two new banks. The long-term credit

banks raised funds through specific deposits and the issuance of bank debentures. As of 1991, there were 12 city banks, 64 regional banks, 68 Second Tier regional banks, seven trust banks, and three long-term credit banks (see Table 1). These major banks held 61.9 percent of the total deposits of all financial institutions.

In addition to the commercial banks and banks for longer-term finance, smaller financial institutions were created to provide financing services for special groups of customers. Financial institutions for small businesses comprise three groups, i.e. credit associations (*shinyō kinko*) or *shinkin* banks, credit co-operatives (*shinyō kumiai*) and the Central Co-operative Bank for Commerce and Industry (*Shōkō Kumiai Chūō Kinko*) or *Shōkō Chūkin* Bank. Financial institutions for agriculture (*nōgyō*), forestry (*ringyō*) and fishery (*gyogyō*) are organized on national, prefectoral and municipal levels, and provide financial services to farmers, foresters and fishermen on a mutual base.

TABLE 1 HERE

Financial institutions in Japan in 1991 and 2002

2.2 The process of financial reform: financial innovations, liberalization and globalization[1]

Most of the restrictions regarding the business activities of Japanese financial institutions, however, were gradually liberalized during the latter half of the 1990s. By 2000, the barriers to enter each others line of business had almost completely disappeared. The process of financial reform in

[1] For a more elaborate analysis of the process of financial reform see: Feldman (1986); Suzuki (1986) and (1987);

Japan started around the late 1970s, when Japan began to deregulate its financial system mainly due to the pressure from macro economic factors, in particular the shift to lower economic growth, higher levels of public debt, the increasing accumulation of financial assets and internal reserves by individuals and companies, respectively. The reform process was very gradual during the 1980s until the mid of the 1990s in order to maintain the "convoy system" and avoid disruption of the status quo in market shares and business territories between financial institutions.

Financial reforms consisted mainly of three interrelated processes, i.e. financial innovations, financial liberalization and financial globalization. As part of financial innovations, a number of new financial instruments and markets were introduced and developed. Examples are certificates of deposits (1979), investments in medium-term government bonds (1980), and money market certificates (1985). New markets that were developed are for example the markets for banker's acceptances (1985), treasury bills (1986), a financial "off-shore" market (1986), and commercial paper (1987). The second reform process, that is financial liberalization, included reforms that eased and abolished existing financial regulations. This process changed the regulatory structure of the Japanese financial system drastically. For example, bond issuance restrictions were first eased around 1975 when issuance of unsecured bonds was allowed for the first time. In 1990, all accounting criteria related to debt securities issuance were abolished, and firms were able to issue rated bonds. Bond issuance was fully liberalized in 1996. Furthermore, interest rate regulations for large bank deposits were lifted in October 1985. By the end of 1980s, all interest rates were fully liberalized except deposit rates. Deposit rate controls were completely abolished in 1993. The third process related to financial reform that has been identified here, i.e.

Cargill and Royama (1988); Eijffinger and van Rixtel (1992).

financial globalization, can be described as the process that exposed Japan (firms as well as individuals) to the international financial markets and vice versa. There were at least two important reforms in this respect. The first was the removal of the so-called “yen conversion limits,” which restricted the amount of foreign currency to be converted into yen by financial institutions. The second was the abolition of the so-called “real demand doctrine,” which allowed forward exchange transaction only for trade (or real) finance. This reform gave firms the opportunity to get away from some of the restrictions imposed in the domestic market. Larger firms started to issue bonds in the international financial markets, where the issuance rules were much more relaxed.

In sum, the process of financial reform increased the competition not only between banks in the same banking category but also between various banking categories. The traditional segmentation of the activities of financial institutions became increasingly blurred, as banks and securities companies started to operate more and more on each other’s business territories. Furthermore, the city and major regional banks diverted their operations towards smaller- and medium-sized companies, forcing the smaller banks and credit co-operatives to look for new business opportunities. Also the traditional segmentation between short – and long-term lending by respectively commercial banks and long-term financial institutions was in practice not followed anymore. All in all, the Japanese financial system started to move slowly but steadily towards a universal banking system.

The process of financial reform also turned out to be one of the major causes of the creation of the “Bubble” and subsequently the banking crisis (see section three). It undermined the “convoy system” as it eliminated regulatory rewards that the Ministry of Finance used to give to banks as incentives to rescue troubled banks. The process of financial reform, in parallel with the evolving

banking crisis, resulted also in a major change in the structure of the banking sector. The situation of this sector at the turn of the century will be discussed in the next section.

2.3 The present Japanese financial system: importance of indirect finance, increased concentration and universal banking

To conclude the overview of the Japanese financial system and banking sector, this section presents a statistical overview of their main characteristics at the start of the 21st century. In sum, these are the importance of indirect finance, particularly through banks, the increased concentration of financial institutions, and the trend towards a universal banking system.

As was discussed in section 2.1, the Japanese corporate sector depended heavily on bank lending as source of finance. Table 2, which compares bank borrowing patterns of firms in Japan and the US and Japan by firm's size in 1990, 1995 and 2000, shows the importance of bank debt as of total assets of Japanese manufacturing firms compared with those in the United States. The figures show that indeed these Japanese firms have been much more reliant on bank financing than their US counterparts. While the average ratio of bank debt to total assets for all manufacturing firms in the US was about 10% during the 1990s, the similar average ratio for all Japanese manufacturing firms was between 21%-24% during the same period. The table also shows the impact of the process of financial reform and the banking crisis, as in percentage terms the reliance of Japanese manufacturing firms – both small and large firms – on bank debt decreased from 1990 to 2000. However, it is clear that Japanese firms are still not using the capital markets, through the issuance of equity and debt securities, for financing purposes to the same extent are similar American firms.

TABLE 2 HERE

Bank debt as a percentage of total assets of manufacturing firms

The lesser dependence on securities in Japan compared with the US can also be found in the composition of the assets of households. As is shown in Table 3, which presents an overview of the allocation of household financial assets as of March 2001 for Japan, Germany and the US, the financial assets of Japanese households consisted for more than 54% of deposits and cash, whereas holdings of bonds, shares and equities remained rather limited at almost 11%. Even in a country with a universal banking system like Germany, households held only 34.5% of their financial assets in cash and deposits, and almost 23% in bonds, shares and equities. The exception here is the US, where only 11.9% of household financial assets were held in the form of cash and bank deposits, whereas 42.5% percent of their financial assets consisted of bonds, shares and equities. The importance of bank deposits in Japanese households' financial assets becomes even clearer if one takes into account that cash holdings constitute only a very limited part of these assets. For example, as of end-March 2002, 54.5% of the financial assets of Japanese households were held in cash and deposits, of which only 2.7% were in cash. Thus, as of end-March 2002, more than a half of household financial assets in Japan were held in deposits.

TABLE 3 HERE

Financial assets held by households: An international comparison

The second characteristic of the present Japanese financial system and banking sector is the

increased concentration, which has resulted in a significant reduction in the number of financial institutions during the last 10 years. This was mainly the result of the consolidation process among financial institutions and the relatively large number of bank failures resulting from the banking crisis. The consolidation in the banking sector was in response to both the increased competition resulting from the process of financial reform, as well as to the mounting bad loan problems. Often, it crossed the traditional lines of business, namely involving short- and long-term banking, trust banking, securities business and life and non-life insurance activities. In fact, this consolidation process was made possible by the financial reform program that eliminated the traditional functional segmentation between various financial institutions.

Table 4 shows that the increased concentration affected in particular the city and Second Tier regional banks among the major banks, and smaller financial institutions such as *shinkin* banks, and credit, agriculture and forestry co-operatives. For example, the number of city banks decreased from 12 in 1991 to seven in March 2002, which was mainly the result of mergers, as only one city bank actually failed during this period (the Hokkaido Takushoku Bank in 1997). The most significant merger was the one between the Fuji Bank, the Industrial Bank of Japan and the Dai-Ichi Kangyo Bank in September 2000, to form a mega bank group called Mizuho Financial Group. This was followed by three other mega mergers involving its main competitors in April 2001. The Bank of Tokyo-Mitsubishi, the Mitsubishi Trust and the Nippon Trust merged to form the Mitsubishi-Tokyo Financial Group. The second merger was between the Sakura Bank and the Sumitomo Bank which established the Sumitomo Mitsui Banking Corporation (SMBC). The third merger involved the Sanwa Bank, the Tokai Bank and the Toyo Trust to set up the United Financial of Japan (UFJ) group. The most recent consolidation was in December 2001 when the Daiwa Bank,

the Kinki Osaka Bank and the Nara Bank merged. In March 2002, the Asahi Bank joined them to form another financial group that was tentatively named Resona in October 2002. Table 5 shows that, as of end-March 2002, the Mizuho Financial Group was the largest banking conglomerate in Japan with total assets of about Yen 151.3 trillion (30.2% of GDP), deposits of Yen 74.1 trillion (14.8% of GDP) and loans of Yen 84.6 trillion (16.9% of GDP). At that time, the Mizuho Financial Group was also the largest banking group in the world. The second largest group was the Sumitomo Mitsui Financial Group with total assets amounting to Yen 108 trillion (21.6% of GDP).

TABLE 4 HERE

The number of financial institutions in Japan

TABLE 5 HERE

Universal banking: Financial groups in 2002

Finally, the process of financial concentration in general and the mega mergers described above in particular have led de-facto to the emergence of a universal banking system in Japan, where financial conglomerates operate in various financial activities, including traditional banking, securities business, asset management and insurance. As of October 2002, there are five banking conglomerates in Japan which have the character of universal banks, including six commercial banks (see also Table 5).[2] The combined total assets, loans and deposits of these mega banks in terms of GDP are truly impressive. Their total assets account for almost 97% of GDP; their

[2] The Mizuho Financial Group has two commercial banks, namely the Mizuho Bank and Mizuho Corporate Bank,

deposits and loans combined are almost 57% and 55% of GDP, respectively. It is important to note that these figures were estimated by summing up the figures of the individual banks before the mergers. Whether they will shrink after the process of consolidation and restructuring is finished, however, remains to be seen. The importance of the five banking giants in Japan is even more striking when one makes a comparison with the US: these five banks combined are much larger than all commercial banks taken together in the US. It also suggests that if one of these banking groups would fail, the repercussions and implications for the Japanese financial system and economy would be enormous, most likely to a much greater extent than in other countries. Thus, as the big banks in Japan have become even bigger, "too big to fail" concerns may have become even more important. This aspect will be investigated in more detail in the next sections.

3. The Japanese banking crisis and the policy reaction

3.1 The causes of the banking crisis

Japan experienced a strong surge in asset prices during the eighties, in particular in the second half. This situation of excessive asset price inflation gave rise to the terminology of the "Bubble" economy. To a large extent, this development was caused by the process of financial reform, which was described in the previous section (Ministry of Finance 1993; Nakajima and Taguchi 1995; Okina et al. 2000). This process increased the competition not only between the banks in the same banking category but also between banks and other private financial institutions. The increased competition put heavy pressure on the banks' profit margins. As a result, banks started to look for more profitable, less traditional, but riskier projects: they expanded their lending to real estate and

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which both focus on different types of clients.

construction companies and non-bank financial institutions such as consumer credit institutions and leasing companies. Furthermore, Japanese banks extended considerable amounts of credit to the corporate sector for investment in stocks and other financial assets. In the end, Japan experienced a rather classic credit-induced real estate boom and financial assets' bubble, fuelled by a vicious spiral of rising asset prices, higher collateral value and increasing bank credit. However, as inflationary pressures started to mount, the Bank of Japan changed its policy stance, and started to tighten its policy in May 1989. This change would mark the start of the collapse of the "Bubble."

Unfortunately, the burst of the "Bubble" in the early 1990s caused severe problems to banks (Takeda and Turner 1992; Hamada 1995). First, a significant number of real estate companies and other non-banks found it increasingly difficult to service loans. Furthermore, the decline of asset prices diminished the value of the collateral of extended loans, in many cases below those of the loans they secured. Consequently, banks became saddled with non-performing loans. Second, the collapse of the 'Bubble' and the subsequent deflation of asset prices caused problems for Japanese banks in meeting the BIS solvency requirements, as the unrealized profits on their securities holdings, 45% of which could be counted as Tier II capital, eroded. All in all, the situation in the banking sector deteriorated, and slowly but steadily the problems of Japanese banks started to take the dimension of a real banking crisis. This will be described in the next section.

3.2 The banking crisis

The development of the banking crisis can be shown on the basis of three indicators, i.e. the

increasing amount of bad loans, the "Japan premium" and the number of failed institutions. Table 6 provides the amount of non-performing loans (NPLs) of Japanese depository institutions according to two definitions, i.e. firstly projections by the supervisory authorities – from 1998 based on the so-called "self-assessment" results of banks – and secondly "risk management loans," which are published by individual banks on their financial statements.

TABLE 6 HERE

Bad loans of "All deposit-taking financial institutions" in Japan

The amount of bad loans using the "self-assessment" definition increased from Yen 7 – 8 trillion (1.5% – 1.7% of GDP) at end-March 1992 to Yen 87.1 trillion (16.75% of GDP) at end-March 1998, which was around 11% of total private lending. The big jump in the figures for 1998 is to a large extent caused by the shift to the definition of bad loans based on "self-assessment" results. The amount of bad loans then dropped to Yen 80.6 trillion (15.7% of GDP) in the next year – basically due to bankruptcies of some large banks – but rose steadily to a record of Yen 87.5 trillion (17.5% of GDP) as of end-March 2002. In terms of risk management loans, the maximum amount of bad loans was Yen 53.0 trillion (10.6% of GDP), also at end-March 2002. It is worth noting that the non-performing loans figures estimated by independent international organizations and private sector institutions were higher than the figures based on both definitions. For example, the estimation of the IMF on the amount of non-performing loans in the Japanese financial industry in 1998 was almost Yen 60 trillion higher (12% of GDP) than the official government figures.

An alternative way to investigate the development of the Japanese banking crisis is by

analyzing the trend in the so-called "Japan premium." This premium is the difference between the interest rates quoted by major Japanese banks for their interbank Eurodollar and Euroyen borrowing and those quoted by large American and European banks (in Chart 1 it is the difference between the interest rate quoted by the Bank of Tokyo-Mitsubishi and the interest rate quoted by the Barclays Bank in the three-month Eurodollar market concentrated in London) (Peek and Rosengren 1998, p.1; Saito and Shiratsuka 2000, p.3).

CHART 1 HERE

The "Japan Premium"

As shown in Chart 1, the "Japan premium" peaked during the last months of 1997, when a number of large Japanese financial institutions collapsed. Subsequently, it came down but increased again sharply towards the end of 1998 when two long-term credit banks failed. Thus, the emergence and increase of the "Japan premium" were a clear indication of the severe nature and magnitude of the Japanese banking crisis, and showed the damaged confidence of the international financial community in the Japanese banking sector. A closer look at the movement of this premium over the past few years reveals two things. First, it is interesting to see that the Japan premium has been close to zero since the beginning of 1999, which is a clear indication that the financial markets believed that Japanese financial institutions would be bailed out in times of financial trouble. Thus, there has been a strong belief in the markets that at least some elements of "too big to fail" have been in place in Japan during this period. Second, the premium came back from time to time, reflecting continued bad economic news and uncertainty concerning a possible public bailout of Japanese problem banks (Spiegel 2001, p.3); however, it always stayed below 0.1%.

Finally, the development of the banking crisis in Japan can be shown by the yearly number of failed depository institutions since 1990. This is shown in Table 7 (see Hanazaki and Horiuchi 2002).

TABLE 7 HERE

The number of failed depository institutions

The seriousness of the banking crisis is reflected in a total number of 176 depository institutions that collapsed over a period of 12 years. The figures indicate that the failures of banks – the most important group of financial institutions in the table – were concentrated in the period 1997 – 1999, when eight of them went bankrupt. Thus, during these years, it seems that "too big to fail" concerns in prudential policy were at least temporarily lifted, allowing some of the largest financial institutions to fail. It is also clear that since 1999 mostly small depository institutions went bankrupt, suggesting that either the problems among the banks – i.e. the largest institutions – had become less severe or that the government re-adopted certain elements of "too big to fail" in its policy response. This aspect of the banking crisis will be discussed in the next section.

3.3 The policy response

The collapse of the 'Bubble' and the resulting problems in the Japanese banking industry prompted the Japanese supervisory authorities to take action, which, however, was often '"too little, too late." Their response can be typified as a combination of regulatory forbearance and financial reform, often hoping that the problems would disappear by themselves (see for example: Hoshi and Kashyap 1999; Kanaya and Woo 2000; Van Rixtel 2002). The policy response also included

sequences of the use of "too big to fail" elements and then followed by abandoning these elements, at least temporarily.

The policy response to the banking crisis can be separated in seven phases During the first phase, which started after the collapse of the 'Bubble' economy until the enactment of the financial reform laws in June 1996, the monetary authorities often denied that there were significant problems in the banking sector and maintained a general policy of non-disclosure, but implemented some measures to solve the bad loan situation and related collateral problems, while maintaining a general policy of "too big to fail." In addition, some smaller financial institutions were allowed to go bankrupt, such as credit co-operatives and Second Tier regional banks.

The second phase that ended around the end of 1996 was characterized by the implementation of reform legislation, which aimed in particular at the bail-out of the collapsed housing loan companies (*jūsen* resolution package) and strengthening of the Deposit Insurance Corporation (*Yokin Hoken Kikō*), and the related establishment of public institutions such as the Resolution and Collection Bank (*Seiri Kaishū Ginkō*). The *Diet* passed legislation which aimed at improving the transparency of bank supervision through the introduction of so-called "prompt corrective actions" (PCA), following similar initiatives by the US supervisory authorities in the early nineties. All in all, the policy of "too big to fail" was basically kept unchanged.

The third phase started after the administrative reform proposals adopted by the Hashimoto Administration in December 1996 that formed the start of the process to break up the Ministry of Finance. The magnitude of banking crisis was revealed to the general public and international financial community in "Black" November 1997, when two banks and two securities houses collapsed. It was clearly the most important erosion of the "convoy system" such as maintained in

the post-war Japanese financial system. That is, it became clear that the era of unrestricted "too big to fail" had ended. However, this did not imply an immediate and definite end to the "convoy system" as well. Finance Minister Mitsuzuka publicly stated that the government did not intend to consider the implementation of a new framework for using public funds to restore the stability of the financial system. In other words, it was clear that the government was not ready for massive injections of public money yet.

During the fourth phase – from January until June 1998 – initially developments in the Japanese financial system were dominated by major scandals. In March, public funds were injected in the banking sector and later on major financial reforms such as the "Big Bang" financial reform package were implemented. The injections of public money in March were the first in this kind and aimed only at the major bank categories such as commercial banks, long-term credit banks and trust banks. Thus, this clearly involved elements of "too big to fail," as the measures were basically aimed at avoiding collapses among the biggest banks. Funds in total of Yen 30 trillion (6% GDP) were to be distributed through the Deposit Insurance Corporation.

The fifth phase (June – October 1998) was characterized by the establishment of a new supervisory authority, i.e. the Financial Supervisory Agency (*Kinyū Kantoku Chō*) (FSA). However, this phase also showed embarrassing signs of political impotence to adopt adequate measures, which resulted in a near collapse of national and international confidence in the Japanese banking sector. Clearly, to many observers, "too big to fail" seemed to be as important as ever before. In the meanwhile, it became clear that the Long-Term Credit Bank of Japan (LTCB), the second largest long-term credit bank, needed substantial financial assistance. Merger talks with the Sumitomo Trust & Banking, one of the largest trust banks, were started, with full support from

the government. Finance Minister Kiichi Miyazawa declared that public funds should be used; however, the opposition opposed a government plan involving substantial capital injections into the LTCB in August.

In the next phase (October 1998 – June 2000), important legislation aimed at solving the banking problems was implemented, including the establishment of the Financial Reconstruction Commission (*Kinyū Saisei Iinkai*] (FRC), and at least some degree of stabilization and control of the crisis was achieved. The new legislation made it possible to use the method of temporary nationalization, which was used for the first time in October in the case of the failed Long-term Credit Bank of Japan (LTCB) (see section 4 for a detailed discussion). It was followed by the insolvency and subsequent temporary nationalization of the Nippon Credit Bank (NCB), another long-term credit bank, in December. However, both banks continued their business under different names and the same bank charter. Thus, paradoxically both elements of "too big to fail" (i.e. de facto the two banks were kept alive under new names) and an end to "too big to fail" (i.e. the banks did actually fail) were adopted. All in all, it seemed a clear case of "too big to liquidate," or the interpretation of "too big to fail" followed in practice by the US supervisory authorities (see section 1; Kaufman and Seelig 2000, p.1). A general sense of careful optimism started to emerge in the first months of 1999, which was strengthened by the injection of around Yen 7.5 trillion in 15 of the largest banks in March, which seemed a clear case of "too big to fail." The positive developments in the Japanese financial system were reflected in a decrease of the "Japan premium" (see Chart 1). After having stabilized the situation at the largest banks, the supervisory authorities turned to the regional and Second Tier regional banks and other smaller financial institutions, followed by the insurance industry.

Finally, in the seventh and final phase (July 2000 –), further consolidation of bank supervision was achieved. At the same time, it seemed that a flexible policy of "too big to fail" was followed regarding the banking sector, whereas other financial institutions such as certain insurance companies were allowed to go bankrupt. However, this phase saw a gradual deterioration of the renewed optimism that had characterised the start of 1999. Evidence mounted again that the real amounts of bad loans in the banking sector were substantially larger than the official figures showed and that they were still not fully recognised and provisioned, that the government was increasingly reluctant to pursue further financial reform and that the problems in the banking and insurance industries could exacerbate each other in the years to come. Furthermore, as stock prices continued to decline and the outlook for the Japanese economy deteriorated further at the beginning of 2001, the "Japan premium" slightly increased with about five basis-points in the course of January (see Chart 1), which received considerable attention in the Japanese media in particular, despite being considerably lower than in both 1997 and 1998 when major banks failed. All in all, a number of developments underlined a renewed sense of concern about the situation in the Japanese financial system and banking sector, which continued to dominate the economic headlines about Japan in the course of 2002 as well.

From this summarized overview of the policy response to the banking crisis it is clear that the Japanese supervisory authorities followed a rather flexible and pragmatic interpretation of "too big to fail," which we will typify as "supervisory ad-hoc pragmatism." This will be discussed in depth in the next section.

4. "Too big to fail" in Japan: "Supervisory ad-hoc pragmatism"

4.1 The banking crisis and "Too big to fail"

We believe that the policy of "too big to fail" in Japan can most aptly be described as "supervisory as-hoc pragmatism." By this we mean that the policy response to the banking crisis included sequences of the use of "too big to fail" elements, followed by a temporary halt to this policy, and then a re-introduction of "too big to fail elements." It seemed that the Japanese supervisory authorities were sometimes convinced that in order to restore confidence in the Japanese banking system, some large banks had to fail. It is also clear that the injection of public funds in the major banks, which can be interpreted as "too big to fail" – a better description most likely would be "too big to liquidate" – was often delayed because policymakers in general and politicians in particular were concerned about a electoral backlash, as this financial support was (and is) not very popular among the Japanese people. On the other hand, it can equally be argued that indeed, at other times, public support was given, because of international pressure, fear for the economic consequences of bank failures, political considerations or the existence of close links between certain banks and policymakers. This ad-hoc pragmatic element, i.e. the switching back and forward in the use of "too big to fail" elements in the policy response to the banking crisis, which was also due to a lack in expertise on the side of policymakers and in transparency and public disclosure, is in our view a notable characteristic of "too big to fail" in Japanese supervisory policies over the past decade (see also Nakaso 2001).

The evolution of "too big to fail" in Japan or supervisory as-hoc pragmatism can be summarized as follows. Until 1995, a policy of "no bank failures" was pursued under the "convoy system," under which the MoF intervened by merging a troubled bank with a larger or healthier one. This policy was publicly ended when Hyogo Bank was allowed to collapse in August 1995. It

was the first collapse of a Japanese bank in post-war Japan, which, however, was not interpreted as a definite end to "too big to fail," as at the same time some much larger problem banks were allowed to continue their business, mainly by disguising and understating the size of their actual problems (lack of transparency and disclosure). A new framework to resolve bank failures, established under legislation that passed parliament in June 1996, was adopted for the first time with the failure of the Hanwa Bank in November. Contrary to the past, the MoF did not attempt to arrange a "rescue merger" with a healthier organization but simply ordered Hanwa to close. However, this bank was not one of the largest commercial banks, thus its closure should not be interpreted as a clear end of "too big to fail" as well. But it is clear, that since the failure of the Hanwa Bank, the government appeared to have allowed some banks to fail as far as their collapse would not affect overall financial stability (Choy 1999).

When the banking crisis reached its peak at the end of 1997, as can be seen from the development of the "Japan premium" in Chart 1, and the situation became almost uncontrollable, the Japanese government terminated its traditional policy of "too big to fail" and used a "hard-landing" or "let fail" approach, in order to restore confidence and trust in the Japanese banking sector. As a result, several "big" financial institutions such as the Hokkaido Takushoku Bank and Yamaichi Securities were allowed to go bankrupt in November 1997. The Hokkaido Takushoku Bank, which despite restructuring attempts earlier in the year, announced its failure on November 17th, the first city bank to shut its doors since the end of the Second World War. This announcement was widely interpreted as the end of the unrestricted "too big to fail" policy of the Japanese supervisory authorities, who in previous years had allowed only the smaller financial institutions to close down.

After the series of failures of financial institutions at the end of 1997, the pubic opinion quickly turned against Prime Minister Hashimoto.[3] People started complaining that the series of financial failures and the subsequent turmoil in the financial system were more than what they were willing to bear, and demanded that the government had to take action. To reverse the "let fail" policy, which the Hashimoto Administration had initiated with the collapse of the major financial institutions in November 1997, and to go back to the old "too big to fail" policy would have been political suicide. The Administration tried to soften the adverse economic effects emanating from even more bank failures by widening the financial safety net. In February 1998, it introduced another package of emergency measures for stabilizing the financial system that included substantial injections of public money into the major banks for the first time in the history. Obviously, Japan still was within the general framework of the "convoy system" that did not allow for a failure of major financial institutions. The measures clearly included the elements of "too big to fail" as it appears that the aim of the measures was basically to avoid collapses of the biggest banks. The amount of Yen 30 trillion (6% of GDP) were distributed through the Deposit Insurance Corporation (DIC).

The public fund was to be used for the following purposes. First, Yen 13 trillion was for the establishment of an "Account for Financial Crisis Management," which aimed to strengthen the capital base of viable banks and broadening of the financial basis of the DIC. Second, Yen 17 trillion was for the establishment of one unified "Special Account," which would have to ensure the full protection of deposits and could be used to finance the consolidation of the banking industry. By March 1998, however, only Yen 1.8 trillion of the Yen 13 trillion had been distributed

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[3] The December 1997 opinion poll of the *Nihon Keizai Shimbun* showed that only 35% of those questioned supported

to 18 major and 3 regional banks, mainly because of the strict restructuring conditions attached and the stigma of taking public support. It was clear that the major banks preferred to abstain from public capital injections out of fear of losing their independence and having to accept some form of government control. All in all, it can be concluded that this recapitalization attempt failed.

In the middle of 1998, the situation at the Long-Term Credit Bank of Japan (LTCB) deteriorated. It was placed on credit watch by some credit rating agencies and its share price started to plummet. The ruling Liberal Democratic Party (LDP) came up with additional schemes (the so-called "Total Plan") to resolve the banking crisis, which consisted of building "bridge banks" that would assume the credit lines of failed banks while the banks were being reorganized. This plan, however, was not materialized.

Since the government could not solve the banking and economic problems, the LDP lost badly against the Democratic Party in the Upper House election that took place in July 1998. Hashimoto had to resign. He was succeeded by Keizo Obuchi.[4] The new government had to come up with more decisive measures to end the banking crisis, since the opposition (i.e. the Democratic Party) offered a "nationalization" plan to counter the LDP's bridge bank plan.

In the meantime, the crisis in the banking sector worsened when in September, Japan Leasing, the largest of three leasing companies affiliated with LTCB, applied for court protection. National and international confidence in Japan's financial system dropped significantly, as reflected in the rise of the "Japan premium" to almost 70 basis points (see Chart 1).

In October, the government and opposition party finally reached an agreement on the

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Hashimoto, versus 45% who disapproved him.

[4] The Prime Minister is practically elected by the majority vote of the Lower House, so that the LDP continued to be in power, since it maintained its majority in this House.

injection of substantial amounts of public money in the banking industry and the establishments of several new institutions to solve the banking problems. Among them, the Financial Reconstruction Commission (*Kinyū Saisei Iinkai*) (FRC) was the single most important (Milhaupt 1999; Kanaya and Woo 2000; Nakaso 2001; Van Rixtel 2002). This FRC was established on October 12, 1998 when the "Financial Reconstruction Law" was passed. This law sets the framework on how to deal with failed or insolvent financial institutions. This law also contained some elements of the "Bridge Bank" scheme.

Furthermore, on October 16, the "Financial Function Early Strengthening Law" was enacted, which developed measures to rescue weak but in principle healthy financial institutions. To finance successor banks, public "Bridge Banks" and nationalized banks, the *Diet* approved the establishment of a "Financial Revitalization Account" with Yen 18 trillion (3.6% of GDP) at the DIC. The parliament also passed another law, "The Financial Function Early Strengthening Law," in October. This law provides a framework for the recapitalization of weak banks through stock purchasing by the government using funds provided by the DIC. To facilitate this measure, a new "Financial Function Early Strengthening Account" with Yen 25 trillion (5% of GDP) was established at the DIC. In combination with the Yen 17 trillion "Special Account" established in February 1998, the DIC had at the moment a total amount of Yen 60 trillion (12% of GDP) of public money in its accounts to solve the bad loan problems.

In fact, the enactment of the "Financial Reconstruction Law" was immediately followed by the LTCB's application to be nationalized in October 1998. In December 1998, another long-term credit bank bank, the Nippon Credit Bank (NCB), was also nationalized. The NCB failed even though it was given substantial bailout packages including management dispatching

from the Bank of Japan and capital injections of Yen 290 billion (in July 1997). The DIC became a shareholder of these two failed banks and was involved in the management and resolution of these banks. These two banks were eventually sold to new investors. A group of investors led by the American investment fund Ripplewood purchased the LTCB in March 2000, and a consortium of Softbank, Orix and Tokio Marine and Fire Insurance bought the NCB in September 2000. One could argue that the nationalization of the LTCB and NCB included elements of both the re-enactment of "too big to liquidate" (i.e. capital injections and practical continuation of the banks under different names but the same bank charter) and an end to "too big to fail" (i.e. the banks were allowed to go bankrupt and actually failed). The emphasis was on the former element, however. Practically, it is clear that the public takeover of these banks with continuation of most of their business was an example of "too big to liquidate."

Regarding other financial institutions than banks, in particular the insurance sector, several large life insurance companies – although not among the top five – went bankrupt in the course of 2000. It appeared that the government ended "too big to fail" in the insurance sector, although one may possibly argue that these failures involved less important insurance companies and that the government could reinstate the "too big to fail" policy once a "big" insurance firm would threaten to collapse.

In conclusion, the Japanese government adopted a rather flexible approach to "too big to fail," a policy stance that we have defined as "supervisory ad-hoc pragmatism." When it deemed necessary to restore confidence, the government sent clear signals to financial markets by allowing specific "big" financial institutions to fail, thus ending its policy of unrestricted "too big to fail" and basically adopting a "let fail" policy. At other times, however, it provided public support, often

because of political considerations or instigated by demands from specific interest groups, in the form of purchasing preferred stocks and subordinated bonds from specific problem financial institutions, thus de-facto re-instating elements of ”too big to fail.” As examples the capital injections in the biggest banks in 1998 and 1999 could be mentioned. The total amount of public funds injected for the banks belonging to the five financial groups in Japan are shown in Table 8.

TABLE 8

THE AMOUNT OF PUBLIC FUNDS RECEIVED BY THE FIVE MAJOR FINANCIAL GROUPS

Further to “too big to fail” in Japan, there have been also clear cases of “too big to liquidate,” as the nationalization of the Long-Term Credit Bank of Japan and Nippon Credit Bank demonstrated. In any case, the absolute guarantee of the Japanese government, in place since the end of WWII, that no bank would be allowed to go bankrupt is at present clearly no longer valid in Japan, after the collapse of some of the largest financial institutions in the second half of the nineties. In this respect, the strong version of ”too big to fail,” that is the unrestricted guarantee that large banks and other financial institutions cannot fail, does no longer exist in Japan. One could argue that a more softer and flexible approach of “too big to fail” exists as of today in Japan, at least some elements of it, given the ongoing discussions of public bailouts of banks and the continuing sense of crisis that overshadows the Japanese banking industry. It can only be regretted that because of this pragmatic and ad-hoc “too big to fail” approach, the government stopped to implement serious measures to solve the underlying causes of the banking crisis. For example, the government should

have improved the quality of public disclosure of the major banks, particularly concerning the quality of bank assets and the amount of bad loans, which could have minimized the future contagion effects of a bank failure through lower costs resulting from information asymmetries. That is, unless market participants can trust the quality of bank disclosure and distinguish between "good" and "bad" banks, once a bank fails, no bank will be trusted to be of good quality: a typical adverse selection problem. This could spread contagion fears and undermine financial stability. Thus, one may argue that the Japanese version of "too big to fail," which we have interpreted as "supervisory ad-hoc pragmatism," and its ongoing continuation in the new century, have undermined the stability of the Japanese financial system and banking sector.

4.2 The costs of ending "too big to fail": A case study

To have a balanced approach, we present in this section what actually happens if supervisory authorities do end a policy of "too big to fail." The bankruptcy of the Hokkaido Takushoku Bank (HTB) provides the natural research laboratory for investigating the impact of a bank failure on its corporate clients. It is the first and only failure of a city bank since the end of WWII. Among some other reasons, it is widely thought that the lessons from the bankruptcy of HTB made the government reaffirm the importance of "too big to fail" in the late 1990s and convinced it to maintain the policy of "supervisory ad-hoc pragmatism." Also, the collapse of HTB is a more relevant case study than the failures of the two long-term credit banks (LTCB and NCB), as HTB's clients included all sizes of firms, while the LTCB and NCB specialized on providing long-term finance to large firms.

The Hokkaido Takushoku Bank tried to outgrow its competitors by focusing on loans to

ventures in the Hokkaido area. In the 1980s, synchronizing itself with the lending spree to real estate sectors spread all over Japan, the bank extended its credit actively to local real estate firms. After the collapse of land and share prices in Japan, HTB was left with a large amount of non-performing loans. As of end-March 1997, its ratio of non-performing assets to total loans was around 13.4%, the worst among the major city banks. In fact, this ratio was substantially larger than those of the other two major bank failures, i.e. LTCB and NCB, with ratios of 6.1 percent and 13.9 percent, respectively.

On November 17, 1997, the bank declared insolvency. In the aftermath of the bankruptcy, many borrowers of HTB rushed to find new lenders. The Hokuyo Bank, the second largest regional bank in the (same) Hokkaido area, agreed with the Ministry of Finance to take over only high quality clients of HTB that were classified as Category I grade. However, following an outcry of the local community to request a more "generous" succession of loans, the Hokuyo Bank was encouraged by the government to succeed loans to lower quality companies that were classified as Category II grade.

According to the *Nikkei Kinyuu Shimbun*, which published the results of a survey conducted by Tokyo Shoko Research in 1998, interviewing former client firms of HTB that survived after the bank's failure, 84.5% of these firms switched to the Hokuyo Bank, while 14.4% of them switched to other banks where they also had borrowed form along with HTB. Only 1.1% of the firms were able to obtain loans from new lenders.

Not surprisingly, the adverse effects of the failure of the Hokkaido Takushoku Bank on the performance of its client firms appear to have been significant. To date, quantitative analyses of the impact of bank failures are still limited in Japan as bank failures are only recent experiences. To

our knowledge, there are three empirical studies that address this issue. The first study is the 2000 "White Paper of Small and Medium Enterprises" (*Chusho Kigyo Hakusho*) which reports the results of a survey conducted by the "Regional Bureaus of International Trade and Industry of Hokkaido" (*Tsusho Sangyo Kyoku*). In the survey, the Bureau asked small- and medium-sized firms in the Hokkaido area several questions regarding their perception of the impact of the HTB bank's collapse on their business and the Hokkaido economy. One of the main questions was whether the firms felt that they were "affected" by the HTB failure. It is important to note here that the definition of being "affected" is not clearly defined anywhere in the survey. Hence it is not clear if the answers can be objectively compared. Regarding the sample firms, 19% of the firms had HTB as their main bank, 23% of the firms had some business relations with HTB, and the rest 48% of the firms had no transaction with HTB (10% did not respond).

Not surprisingly, firms having strong ties with HTB appear to be affected most severely. Specifically, about 57% of the firms that had HTB as their main bank reported that they were affected moderately to strongly, whereas only 27% of overall firms felt the same degrees of the impact. The adverse effects were mainly due to tougher credit assessments in particular poor quality firms. Out of the companies that reported losses, 50% of them indicated that they felt a negative impact. Nineteen percent of the firms that had HTB as their main bank revealed that they faced tough credit line assessments from new lenders. In 11% of these firms, the maturity of their loans was indeed shortened.

The survey also reported the total number of corporate bankruptcies that occurred in the Hokkaido area between November 1997 and December 1998, one year after the failure of HTB. The results are in line with the other survey that a significant number of firms that had HTB as their

main bank were negatively affected and became insolvent following the collapse of the bank. Statistically, 78 firms that had HTB as their main bank went bankrupt within one year after the bank failed. These firms accounted for about 7% of the overall bankrupt firms in Hokkaido. Further, out of the defaulted debt in Hokkaido, 25% belonged to HTB former client firms, and 80% belonged to HTB affiliated firms. We think that the failure of HTB might even have had a stronger impact on its client firms, in particular those who had the bank as their main bank, if some of the firms could not have switched to the Hokuyo Bank as discussed earlier. In addition, special loans were made available from public financial institutions and/or through government guarantees to (private) financial institutions, as well as emergency liquidity support from the Bank of Japan to help ease their liquidity problems. In fact, the White Paper reveals that these measures did help the firms survive and mitigated the negative consequences of HTB's failure.

The findings of an event study by Yamori and Murakami in 1999 are also consistent with the survey results that firms that had HTB as their main bank were hurt the most strongly when the bank failed. They find that companies that had HTB as their main bank showed significant negative abnormal returns (–5% to –6% depending on the definition of main bank) after it failed. Another study, i.e. Hori and Takahashi (2001) who examined the same issue but used accounting data of both publicly listed companies and private companies, find similar results. Consistent with the survey by the "Regional Bureaus of International Trade and Industry," they find that low quality firms with a poor credit rating suffered the most from the HTB failure. Otherwise, there is no significant difference between the performance (according to accounting standards) of companies whose main bank was HTB and other companies. As argued earlier, we suspect that the alternative sources of financing might have eased the impact of HTB's failure.

As shown in section 2.3, Japanese firms, particularly smaller firms, have been heavily dependent on bank borrowing. In such a bank-based economy, the government had good reasons to worry that a negative impact similar to the negative consequences of HTB's collapse would occur in the event of a failure of other major banks. Political reasons also appear to have been more important. In Japan, traditionally owners of small firms have been one of the most important constituencies of the LDP. They might have put pressure on the LDP to continue bail out banks.

In addition to the empirical evidence, it is also believed – at least in Japan that the collapse of HTB reinforced the economic slowdown in Japan. In fact, certain macro economic data, such as the manufacturing index (*kokogyo seisan shisuu*) presented in Table 9, seems to support this argument. The nationwide manufacturing index (1995=100) plummeted from 106.0 in 1997 to 98.4 in 1998, while that for the Hokkaido area dropped from 103.1 in 1997 to 96.5 in 1998.

TABLE 9 HERE

MANUFACTURING INDEX

5. Conclusions

In this paperr, we have presented an overview of "too big to fail" in Japan, which in our view can be described most aptly as "supervisory ad-hoc pragmatism." This can be summarized as follows. First, at certain times, the problems at specific banks had become so severe and outrageous that the Japanese public demanded action. In some cases, which however were (and are) still rather exceptional, the ruling parties complied with these demands and let certain "big" banks fail. The most famous cases are the Hokkaido Takushoku Bank, the Long-term Credit Bank of Japan and

the Nippon Credit Bank. We have typified the latter two cases as “too big to liquidate.” Second, at other times, the supervisory authorities decided to provide public financial support to specific banks, for example through capital injections. This was typical “too big to fail” behavior, as the money was pumped into the big banks, i.e. the commercial (city and regional) banks, trust banks and long-term credit banks.[5] However, these cases were also rather exceptional, due to lack of political support (these bailouts were not popular with the general electorate) and resistance by banks, as the capital injections would imply some degree of government control of their business and possibly some bank executives would even loose their jobs. Third, most of the time, however, the policy stance of the Japanese supervisory authorities was characterized by inaction and regulatory forbearance. In other words, a “wait and see” attitude, which could be a rational approach for supervisory authorities who are confronted with a situation of political paralysis, and can do no better than react pragmatically on a case by case basis. We believe that this attitude of “supervisory ad-hoc pragmatism” can only be changed by political reform, which, however, will be difficult to materialize relatively soon. Longer delays in solving the banking problems could turn out to be costly: for example, the savings and loan crisis in the US cost taxpayers approximately USD 124 billion and the thrift industry another USD 29 billion, totaling USD 153 billion (Curry and Shibut 200, p.33). The Japanese regulators could learn from the experiences of addressing other banking crises and existing know-how in this field (see for example: Stern 1997; Dziobek and Pazarbaşıoğlu 1998; Woo 2000; Bennett 2001; Chicago Fed Letter 2001; Enoch et al. 2001).

In the autumn of 2002, it seemed that Japanese supervisory authorities were finally getting

[5] As Fukao (2001) has observed, it could be very costly to keep these – in his terminology – “zombie” banks alive.

serious in solving the banking problems when Heizo Takenaka was appointed to the joint posts of State Minister for Financial Services and for Economic and Fiscal Policy on 30 September 2002. In an interview with Newsweek magazine, he declared that banks should no longer be considered to be "too big to fail," implicitly admitting that up to then Japan was indeed following this policy line, and set up a Task Force charged with the task to devise recommendations to solve the bad loans situation (Standard & Poor's Ratings Services 2002). The proposals included stricter accounting methods to assess banks' assets and the converting of preferred shares held by the government into common shares, which would have given the state voting rights in the banks. With the benefit of hindsight, we can conclude that Takenaka had been too ambitious. The measures that he proposed were rather drastic – too drastic for both the political and banking communities – and some believed that they, if implemented, would have led to acute financial difficulties at certain banks, requiring further injections of public funds. Most likely, some problem banks would have collapsed and possibly nationalized, and hence incumbent management would have been removed. Consequently, this plan was opposed strongly by not only the management of the five "big" financial groups but also by members of the ruling Liberal Democratic Party, who were afraid that this plan would damage their political support among owners of firms in the construction, retailing and real estate industries. All in all, Takenaka had to water down his plan substantially, and the end-result was deemed ineffective by many observers.

Finally, it is clear that the high and increasing concentration in the Japanese banking industry had made "big" banks even bigger, which makes it quite likely that "too big to fail" in Japan is now for Japanese regulators as actual and relevant like never before. As discussed in the chapter, the Japanese financial system is now dominated by five financial groups. To bailout these

mega banks would require enormous amounts of funds. For example, to stop a bank run when the failure of a bank is announced, an injection of additional capital of at least 30% of total deposits might be necessary. This figure is based on the experience with the failure of the Hokkaido Takushoku Bank. Statistically, 15% of its total deposits were withdrawn in the first week after the announcement of its collapse, and by the first month after the failure 28% of all deposits were withdrawn (Nakaso 2001). Based on this experience, a failure of the biggest financial group, i.e. the Mizuho Group, might need at least Yen 22.23 trillion of liquidity support from the Bank of Japan.

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Table 1 Financial institutions in Japan in 1991 and 2002

Category	1991			2002		
	Number	Share in total deposits (in %)	Total assets (in yen trillion)	Number	Share in total deposits (in %)	Total assets (in yen trillion)
City banks	12	31.1	376.6	7	23.9	363.1
Long-term credit banks	3	1.4	76.6	3[1]	1.0	53.1
Trust banks	7	2.8	59.3	8	3.4	64.5
Regional banks	64	19.5	187.9	64	18.8	205.7
Second Tier regional banks	68	7.1	68.8	53	5.8	61.9
Shinkin banks	451	10.3	96.0	349	10.7	112.1
Credit co-operatives	407	2.8	24.1	247	1.6	18.3
Labor co-operatives	47	0.9	7.5	39	1.3	13.4
Agricultural co-operatives	3,600	7.0	58.4	1,264	7.6	75.2
Securities companies[3]	272		27.0	290		19.4
Life insurance companies	26		130.3	42		184.4
Non-life insurance companies	24		26.2	35[2]		33.5
Postal life and annuity			51.8	24,778[2]		124.8
Postal savings		17.1		24,778[2]	25.9	
Government institutions	11		92.9	11		159.4

Sources: Bank of Japan, *Economic Statistics Annual* and *Financial and Economic Statistics Monthly*. Federation of Bankers Associations of Japan, *Analysis of Financial Statements of All Banks*. Ministry of Finance, *Statistics Monthly*. Economic Planning Agency of Japan, *Economic White Paper,* 1995. Japan Securities Dealers Association, *Annual Report*, 2002. Postal Services Agency, *Statistics of Postal Service Agency*. The numbers of financial institutions for each category in 2002 are from the website of their respective associations.
Note: Figures are as of March 1991 and March 2002 (the end of the fiscal year).
1. Long-term credit banks include the Industrial Bank of Japan, Shinsei Bank and Aozora Bank.
2. The number is as of March 2001.
3. These numbers include 52 and 49 foreign securities companies as of March 1991 and March 2002, respectively.

Table 2 Bank debt as a percentage of total assets of manufacturing firms

	All firms		Small firms		Large firms	
Year	US	Japan	US	Japan	US	Japan
1990	0.103	0.237	0.201	0.361	0.098	0.152
1995	0.086	0.260	0.193	0.403	0.081	0.161
2000	0.096	0.216	0.208	0.334	0.092	0.140

Sources: The US data is from the Bureau of Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporation (QFR)*. The Japanese data is from Ministry of Finance, *Hojin Kigyo Tokei.*

Note: The US large firms are defined as firms with total assets of more than USD 10 million, while the Japanese large firms are defined as firms with a book value of more than yen 1 billion.

Table 3 Financial assets held by households: An international comparison (December 2001; percentage of total assets, except as otherwise indicated)

Assets	Japan	Germany	US
Cash and deposits	54.3	34.5	11.9
Bonds	3.7	9.8	8.4
Investment trusts	2.3	11.9	12.9
Shares and equities	7.2	13.0	34.1
Insurance and pension reserves	28.7	30.8	29.9
Others	3.9	0.0	2.8
Financial assets (in trillion Yen, Euro and USD)	1,420	3.6	32.1
Financial assets as a percentage of the GDP	282.1	176.4	318.4

Sources: The data for US and Japan is from Bank of Japan, *Flow of Funds.* The data for Germany is from Deutsche Bundesbank, *Monthly Report*.

Table 4 The number of financial institutions in Japan

	1991	1995	1999	2002	Change since 1991
City banks	12	11	9	7	-5
Long-term credit banks	3	3	3[1]	3[1]	0
Trust banks	7	7	7	8	1
Regional banks	64	64	64	64	0
Second Tier regional banks	68	65	60	53	-15
All major banks	154	150	143	135	-19
Shinkin banks	451	416	392	349	-102
Credit co-operatives	407	368	298	247	-160
Agriculture and forestry co-operatives	3,634	2,461	1,606	1,303	-2,331
Insurance companies	50	55	80	77	27
Securities companies	272	285	288	290	18

Sources: Group of Ten (2001), Bank of Japan, *Economic Statistics Annual*, Federation of Bankers Associations of Japan, *Analysis of Financial Statements of All Banks*. The data for *shinkin* banks, credit co-operatives, agriculture and forestry co-operatives, insurance companies and securities companies are obtained from the respective association's web sites.
Note: The data are as of the end of the year except for 2002, which is as of March (i.e. the end of fiscal year 2001).
1. Long-term credit banks include for 1999 and 2002 Shinsei Bank and Aozora Bank, which are the successor banks of the two long-term credit banks that failed in 1999.

Table 5 Universal banking: Financial groups in 2002
(Ranked by total assets; as of March 2002)

Unit: Yen trillion

Group name	Date of establishment	Major financial institutions in the group	Assets	Deposits	Loans
Mizuho Financial Group	September 29, 2000	Mizuho Bank, Mizuho Corporate Bank, Mizuho Securities, Mizuho Trust & Banking	151.3 (30.2%)	74.1 (14.8%)	84.6 (16.9%)
Sumitomo Mitsui Financial Group[1]	December 2, 2002	Sumitomo Mitsui Bank	108.0 (21.6%)	65.0 (13.0%)	63.6 (12.7%)
Mitsubishi Tokyo Financial Group	April 2, 2001	The Bank of Tokyo – Mitsubishi, Mitsubishi Trust and Banking Corporation	99.5 (19.9%)	59.9 (12.0%)	49.1 (9.8%)
UFJ Group	April 2, 2001	UFJ Bank, UFJ Trust Bank, UFJ Tsubasa Securities	79.8 (15.9%)	50.8 (10.1%)	46.0 (9.2%)
Resona Group[2]	December 12, 2001	Daiwa Bank, Kinki Osaka Bank, Nara Bank, Asahi Bank, Resona Trust & Banking	45.0 (9.0%)	33.8 (6.8%)	30.0 (6.0%)

Source: Each Group's financial statements for the Fiscal Year 2001.

Note: Assets and deposits are based on consolidated accounts as of March 2002 for each holding company. The data for the Sumitomo Mitsui Financial Group are those of Sumitomo Mitsui Bank's consolidated accounts, because this group does not have a holding company yet. Figures in parentheses are percentages of the GDP.

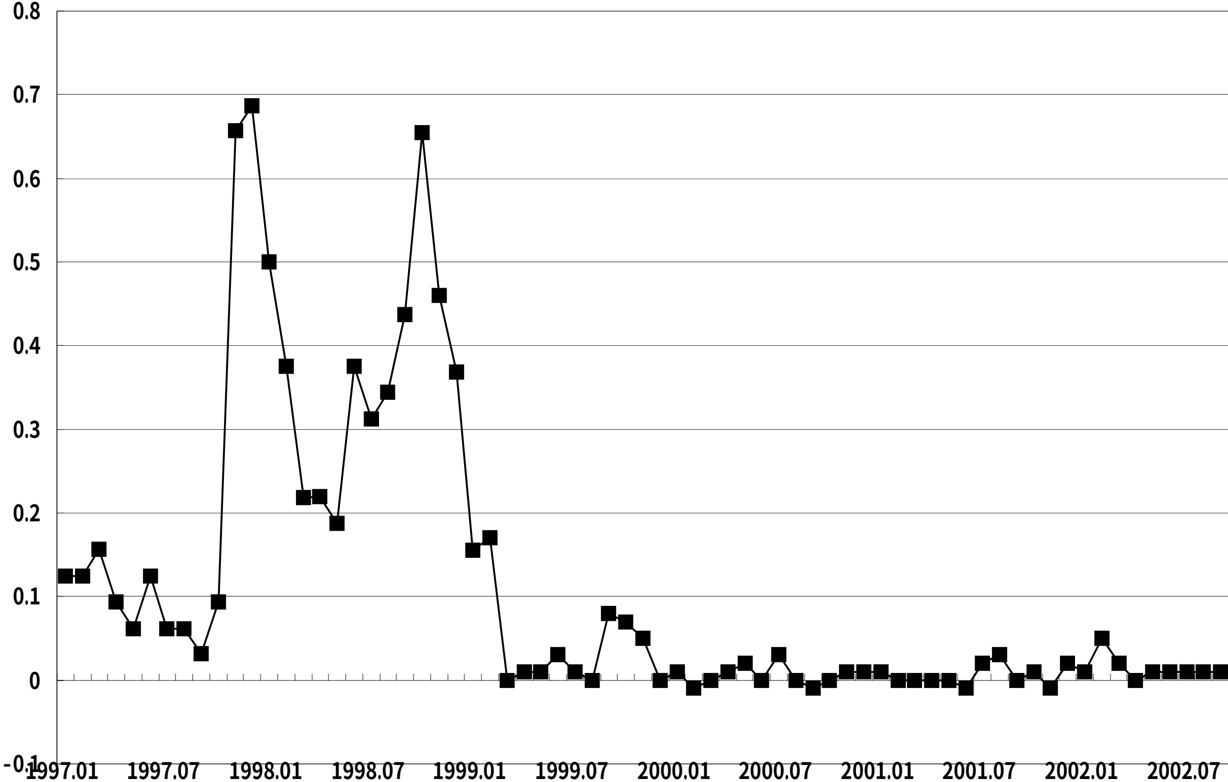
1. This establishment is scheduled on December 2, 2002.
2. The current name of this financial holding company was renamed from Daiwa bank Holdings Inc. on October 1, 2002.

Table 6 Bad loans of all deposit-taking financial institutions in Japan (Yen trillion; within brackets as a percentage of GDP)

	Amount of bad loans ("self-assessment")	Amount of bad loans ("risk management loans")
End March 1992	7〜8 (1.5%〜1.7%)	—
End March 1993	8.4 (1.7%)	12.8 (2.6%)
End March 1994	10.5 (2.2%)	13.6 (2.8%)
End March 1995	11.6 (2.4%)	12.5 (2.5%)
End March 1996	34.8 (6.9%)	28.5 (5.7%)
End March 1997	27.9 (5.4%)	21.8 (4.2%)
End March 1998	87.1 (16.7%)	38.0 (7.3%)
End March 1999	80.6 (15.7%)	38.7 (7.5%)
End March 2000	81.7 (15.9%)	41.4 (8.0%)
End March 2001	82.7 (16.1%)	43.4 (8.5%)
End March 2002	87.5 (17.5%)	53.0 (10.6%)

Source: Ministry of Finance; Financial Supervisory Agency/Financial Services Agency; Hall (1998).

Chart 1 The "Japan Premium"



Source: Bank of Japan.
Note: The "Japan premium" is the interest rate quoted by the Bank of Tokyo-Mitsubishi less the interest rate quoted by the Barclays Bank in the three-month Eurodollar market (London).

Table 7 Number of failed depository institutions[1]

	Banks[2]	*Shinkin* banks	Credit co-operatives	Total
1990	0	0	0	0
1991	1	0	0	1
1992	0	1	0	1
1993	0	1	1	2
1994	1	0	4	5
1995	1	0	5	6
1996	2	3	3	8
1997	5	0	7	12
1998	3	1	31	35
1999	5	6	15	26
2000	1	5	27	33
2001[3]	1	9	37	47
Total	20	26	130	176

Source: Hanazaki and Horiuchi (2002), p.23.

Notes:

1. This table contains not only the cases of bank failures dealt with by the government, but also those privately disposed of. For example, in October 1994, Mitsubishi Bank rescued Nippon Trust Bank at the brink of bankruptcy. The government did not provide any financial support in this case. This case is included in this table.
2. This column includes city banks, regional banks, Second Tier regional banks, trust banks and long-term credit banks.
3. Until November 2001.

Table 8 Amount of public funds received by the five major financial groups

(Unit: Yen trillion)

Group name	Banks that received funds	Total equity of the Group	Total amount of public funds received by each Group, of which in the form of:	
			Preferred stocks	Subordinated bonds
Mizuho Financial Group	Dai-Ichi Kangyo Bank, Fuji Bank, Industrial Bank of Japan	4.73	1.95 (41.2%)	0.85 (18.0%)
Sumitomo Mitsui Financial Group	Sakura Bank, Sumitomo Bank	2.91	1.30 (44.7%)	0.20 (6.9%)
Mitsubishi Tokyo Financial Group	Bank of Tokyo Mitsubishi, Mitsubishi Trust and Banking Corporation	3.32	0.00 (0.0%)	0.00 (0.0%)
UFJ Group	Sanwa Bank, Tokai Bank, Toyo Trust and Banking Corporation	2.60	1.40 (53.9%)	0.35 (13.5%)
Resona Group	Daiwa Bank, Asahi Bank, Kinki-Osaka Bank	1.29	0.87 (67.3%)	0.30 (23.3%)

Sources: Own calculations based on the data obtained from the Deposit Insurance Corporation of Japan, *Annual Report*, 2001.

Note: Figures in the parentheses represent the percentage of the respective public funds of each group's total equity. Public funds were injected into the banks under provisions in the Financial Function Stabilization Law and Financial Function Early Strengthening Law in 1998, 1999 and 2001. Total equity is based on consolidated accounts of each holding company as of March 2002. The data of the Sumitomo Mitsui Financial Group, however, is from the Sumitomo Mitsui Bank's consolidated accounts, as this group does not have a holding company (yet). The current portion of the public funds held by the Mitsubishi Tokyo Financial Group is zero because it repurchased all stocks bought by the government and paid back the bonds on 28 February 2000, 22 December 2000, 22 December 2001 and 24 January 2001.

Tabel 9: Industrial production index during 1996-2001 (1995=100)

	Nation Wide		Hokkaido Area	
Year	Index	Change	Index	Change
1995	100.0	-	100.0	-
1996	102.3	2.3	103.8	3.8
1997	106.0	3.6	103.1	-0.7
1998	98.4	-7.2	96.5	-6.4
1999	99.2	0.8	98.0	1.6
2000	105.0	5.8	100.9	3.0
2001	96.8	-7.8	94.6	-6.2

Sources: Hokkaido Local Finance Bureau, *Hokkaido Syuyo Keizai Sihyo* (Main Economic Indicators in Hokkaido). The figures are after seasonal adjustment.