

## **Political Influence and Declarations of Bank Insolvency in Japan\***

April 7th, 2008

### Abstract

This paper investigates how politics affect bank supervision by examining determinants of bank failures in Japan during 1999-2002, period during which bank regulators were called upon to resolve insolvent banks in preparation for the lifting of a blanket deposit guarantee. The empirical results suggest that Japan's bank regulators had tendency to delay declarations of insolvency in prefectures that supported senior politicians of the ruling Liberal Democratic Party (LDP). This result, which is robust to a host of bank-level and prefecture-level controls, suggests that bank supervision is prone to political influence that delays efficient resolution of insolvency.

Masami Imai  
Department of Economics  
Wesleyan University  
PAC123  
238 Church Street  
Middletown, CT 06457-0007  
860-685-2155  
860-685-2301 (fax)  
mimai@wesleyan.edu

JEL Classifications: G21, G28, O53, P16

Key Words: Bank Regulation and Supervision, Political Capture, Japan

---

\* This research is funded by the Henry Luce Foundation and research grants from Wesleyan University. The author is grateful to Jun Saito, Richard Grossman, Amyaz Moledina, Donato Masciandaro, Pierre Siklos, Geoff Miller, Steven Ongena, Carlos Ramirez, Ed Kane, anonymous referees, and participants in Eastern Economic Association Annual Conference (2007), World Meeting of Public Choice Society (2007), and Second European Conference on Financial Regulation and Supervision (2007) for valuable comments. I also thank Jun Saito for generously providing the data on Japan's general election outcomes and the characteristics of political candidates, and Yurie Nagashima and Yashan Zhou for excellent research assistance. The author is responsible for all errors and omissions.

*We're now most worried about credit associations and cooperatives. Government financial inspectors will audit them between July and next March. If you think audits on your institutions are too strict, please inform us about it. Please tell Mr. Hasumi about it. If you give related documents to him, and he will in turn pass it over to me, I'll give the utmost consideration.* —A speech by Financial Reconstruction Minister Michio Ochi at a gathering of regional bankers and credit associations and cooperatives officials in Tochigi prefecture hosted by Susumu Hasumi, a senior Lower House member of the ruling Liberal Democratic Party on February 19th, 2000.

## **1. Introduction**

Economists have long claimed that a great deal of government regulation stems from political pressures applied to legislatures by private interest groups (Olson 1982, Stigler 1971, Peltzman 1976, Becker 1983). Bank regulation is no exception to this principle. Many studies have found that the historical restrictions on branching and universal banking and the adoption of the deposit insurance system in the United States resulted from the dominance of politically influential small unit banks (White 1981, 1982, Economides, Hubbard, and Palia 1996, and Kroszner and Strahan 1999, Ramirez and De Long 2001). Similarly, a careful examination of the design and adoption of deposit insurance in different countries reveals strong presence of political forces: generous deposit insurance schemes tended to be adopted in countries where the banking sector was dominated by weak banks that would benefit from weak market discipline and regulatory forbearance (Laeven 2004, Demirgüç-Kunt, Kane, and Laeven forthcoming).

Furthermore, the desired regulatory outcome is not guaranteed even if a country somehow overcomes political obstacles and adopts the so-called “best practice” that is often promoted by multinational organizations (e.g., the Basel Committee on Banking Supervision). In a recent book, *Rethinking Bank Regulation: Till Angels Govern*, Barth, Caprio, and Levine (2006) show that the traditional regulatory approach of raising capital

adequacy requirements and empowering bank supervisory agencies to enforce risk-reducing regulations did not always lead to an efficient and stable banking sector in many countries. Rather, this government-led bank regulation and supervision is associated with small and weak banking sectors and an increase in corrupt lending practice, suggesting that regulatory agencies themselves might be “politically captured” in many countries. In other words, bank regulatory agencies might be pursuing the narrow private interests of politically connected bankers, politicians, and their supporters, rather than public interests. Because of the politicization of bank regulation and supervision, some economists also make a normative argument that the promotion of market discipline through uninsured debt requirement and systematic public disclosure of information is more likely to foster a robust banking sector than government-led bank regulation and supervision alone (Barth, Caprio, and Levine 2006, Calomiris 2004, Herring 2004).

For this paper, I combine balance sheet and failure data from Japan’s regional banks and credit associations and cooperatives from 1999 to 2002 with matched data on political and economic characteristics of prefectures where these banks were located. I use these data to investigate the potential politicization of bank supervision in Japan and to illuminate the mechanism through which political incentives influenced the behavior and performance of Japan's bank regulatory agency. More specifically, I perform survival analysis to examine the statistical pattern of bank failures, which in this paper refers exclusively to government takeover of ownership and management of insolvent banks, and to investigate whether there was any tendency to delay bank failures in prefectures that supported the ruling political party and/or the senior influential politicians of the ruling party.

Japan's experience with the resolution of bank insolvency during this period offers an informative setting in which the performance of its regulatory agency can be analyzed. Being concerned about systemic banking crisis, the Japanese government provided a blanket guarantee of bank deposits, which substantially minimized the role of market discipline in weeding out insolvent banks from the financial system (Imai 2006). This blanket guarantee, however, was scheduled to expire on March 31st, 2002, necessitating bank regulators to resolve weak banks before this date in order to prevent bank runs.<sup>1</sup> Consequently, during the period of this paper's analysis (1999-2002), bank regulators were given clear mandate and authority to clean up banking sector.

Hence, if public interest view of bank regulation and supervision is correct, then the data should show that the regulatory agency was effective in monitoring banks, and that its behavior should mimic that of well-informed market participants. That is, bank failures (i.e., government takeovers of ownership and management) should have been determined solely by bank health and local economic conditions that would affect bank health and depositors' confidence. If, on the other hand, political capture view is correct, then bank regulators might have taken the private interests of bankers and the ruling political party and influential politicians into account, which in turn might have distorted bank regulators' action. Specifically, bank regulators might have been reluctant to take over promptly insolvent banks that were located in areas that supported the ruling political party and/or its senior members that can effectively influence the actions of bank regulators.

---

<sup>1</sup> Note that a partial deposit guarantee up to 10,000,000 yen (approximately, \$100,000) and conjectural guarantee of deposits at large banks (too-big-too-fail policy) were still in place even after the removal of deposit guarantee (Imai 2006).

The main result of this paper shows that banks that were located in the prefectures that supported the senior member of the ruling Liberal Democratic Party (LDP) tended to survive longer than those located in the prefectures that supported junior politicians. This result is broadly consistent with political capture view of bank supervision articulated by Barth, Caprio, and Levine (2006), casting some doubt on the practical merit of relying heavily on regulatory discipline in a politicized environment.

Although the aforementioned statistical result suggests the presence of “political effects”, it is also possible that banks in LDP strongholds might have been relatively healthy. If that is the case, it would not be surprising to see that these banks survived longer than their counterparts in other prefectures. Nonetheless, the correlation between bank failure hazard and the seniority of the LDP politicians is found to be quite robust to the inclusion of bank characteristics such as capital-to-asset ratio, return on assets, and the type and size of banks in the survival analysis. Another potential concern might be that the extent of support for the LDP politicians might plausibly be determined endogenously by the economic conditions of prefectures, which in turn have some effects on the health of the financial sector and bank failure hazard rates. The political effects on bank supervision, however, remain strong and statistically significant even when I control for observable prefecture-level characteristics such local income growth, local labor market conditions, and local business bankruptcy rates.

Two papers are directly relevant to this paper. Bongini, Claessens, and Ferri (2001) estimate the effects of political connections on regulators’ closure of banks in Indonesia, Malaysia, Korea, Thailand, and the Philippines. Somewhat surprisingly, given the allegations of “crony capitalism” in these countries, they find that political

connections played virtually no role in the bank closure decision of governments while bank risk-profile has strong explanatory power. Looking specifically at the timing of bank failures in emerging market economies, Brown and Dinç (2005) find that bank failures were clustered after elections, suggesting that bank regulators had a tendency to delay the politically costly resolution of banking problems during elections. This paper differs from these previous papers in that it exploits variation in political characteristics across Japan's prefectures to shed some light on whether the ruling political party or influential politicians can potentially distort the bank supervisory agency's decisions in their favor. This type of microeconomic study is helpful in understanding how bank supervision can be politicized and more importantly what kind of institutions is necessary to provide adequate incentives and constraints to bank regulators and to achieve better bank supervision. This is also the first study to examine empirically the politics of bank insolvency resolution in the context of Japan's severe and painfully long banking problem.

The rest of this paper is organized as follows. Section 2 briefly describes the background of Japan's banking problem, bank resolution policy, and politics. Section 3 quantitatively examines whether political influence distorted bank failure decisions. Section 4 presents concluding remarks.

## **2. Background**

### **2.1. Banking Problem**

Japan's decade-long banking problem started with the collapse of the asset market in 1990-93, which developed into one of the severest banking problems of the 1990s.

According to Caprio and Klingebiel (2003), the fiscal cost of resolution of the banking problem in Japan is estimated as much as 24 percent of GDP, making it among the costliest banking crisis ever. Additionally, if one takes into account the economic costs of the well-documented credit crunch and “ever-greening” of bad loans by insolvent banks (Motonishi and Yoshikawa 1999, Woo 2003, Peek and Rosengren 2005, Caballero, Hoshi, and Kashyap 2006, Sekine, Kobayashi, and Saita 2003, Watanabe 2006, Okada and Horioka 2007), the total cost of the 1990s banking crisis to the Japanese economy might even be higher than the Caprio-Klingebiel estimate. Additionally, Japan’s banking problem distinguishes itself from other episodes as it lasted more than a decade (Fukao 2003, Hutchison and McDill 1999).

The causes of Japan’s banking problem are well-documented in the literature. The starting point is a poorly designed deregulation of the financial market during the 1970-80s that expanded the access of high quality bank borrowers to bond and stock markets while not allowing savers (i.e., households), the same access to these markets. This lopsided deregulation led to disequilibrium in which banks were left with excess funds, which, in turn, were allocated to unfamiliar and risky borrowers such as small businesses and the real estate sector (Hoshi and Kashyap 2000). With profit margins dangerously low and balance sheets vulnerable to macroeconomic shocks, the collapse of Japan's asset market in 1990 and the ensuing recession led to a large scale banking problem.

## **2.2. Bank Insolvency Resolution**

To the extent that Japan’s banking problem resulted from a structural imbalance between the demand for bank loans and supply of deposits, the shrinkage of bank deposits and assets and/or the closure of unprofitable banks were imperative (Hoshi and

Kashyap 2000). Nevertheless, the Japanese government and the ruling Liberal Democratic Party (LDP) were initially quite reluctant to close down promptly insolvent banks and to use taxpayers' money to recapitalize banks that were under-capitalized yet still viable (Corbett 1999, Milhaupt 1999, Amyx 2004). Instead of decisively dealing with problem banks, the government used the reserves of the Deposit Insurance Corporation (DIC) to encourage large banks to acquire insolvent banks via so-called convoy scheme (Hoshi 2002). The government also allowed a private solution in which banks and affiliated insurance companies simply purchased equity and subordinated debts from one another to artificially raise their solvency ratio (Fukao 2003). Moreover, the government decided in 1996 to remove the cap on the amount that the DIC was allowed to pay to assist mergers and the acquisition of problem banks, thereby weakening depositor monitoring (Cargill, Hutchison, and Ito 1996, Imai 2006).

A turning point in bank resolution policy came in 1997 and 1998, when market participants lost confidence in the government's accommodating approach to resolving problem banks, and as a result, began punishing Japan's weak banks (Peek and Rosengren 2001, Spiegel and Yamori 2004). Moreover, as voters became increasingly discontent with the ruling Liberal Democratic Party (LDP)'s handling of financial and economic affairs, the LDP lost its majority in the July 1998 Upper House election. This political development forced the LDP to make a compromise with the largest opposition party, the Democratic Party of Japan (DPJ), which had long advocated the immediate closure and nationalization of insolvent banks. As a result of these economic and political events, the government finally decided to move ahead and undertake institutional reforms designed to resolve problem banks in October 1998, three months after the LDP's

massive electoral loss and eight years after the initial collapse of asset markets (Amyx 2004).

More specifically, the Diet enacted two important laws, the Rapid Recapitalization Act (RRA) on October 12, 1998 and the Financial Reconstruction Act (FRA) on October 16, 1998. The FRA created the Financial Reconstruction Commission (FRC) and stipulated a formal mechanism under which the FRC could determine whether a failed bank should be nationalized and reorganized or put into receivership and reorganized as a bridge bank. The RRA provided a legal basis to inject public capital into under-capitalized yet viable banks. These two laws created a concrete framework and provided fiscal resources to deal decisively with insolvent banks, and allowed the newly created Financial Supervisory Agency (FSA) to commence aggressive bank examinations in 1999. By 2000, these policy reforms in turn led to the failure and government takeover of two large insolvent banks, Long-Term Credit Bank (LTCB) and Nippon Credit Bank (NCB), as well as five regional banks.

The FSA and the FRC, however, were not politically neutral institutions. As the banking crisis subsided in 1999, the government began to lose its zeal for pressuring banks to reveal their problem loans and to restructure. In particular, the chair of the FRC, Hakuo Yanagisawa, who was widely credited for his aggressive approach to take over insolvent banks, was sacked on October 5, 1999 and replaced by Michi Ochi, a former MOF bureaucrat and consummate LDP insider. During the next 14 months, the FRC had no fewer than four different chairmen and did not close any major banks (Hoshi and Ito 2004). In January 2001, Yanagisawa was brought back to serve as the head of the Financial Services Agency, which took over the tasks of the FRC and the FSA, but by

this time, he was no longer the same reformer that he had been during his earlier tenure: he continued the policy of denying the presence of large nonperforming loans and insisted that there was no need for another round of capital injection.

In August 2002, the government replaced Yanagisawa with non-politician Heizo Takenaka, who called for a strict accounting standard, the resolution of problem loans, and the end of existing “too-big-to-fail policy” as soon as he was appointed. His ambitious proposal was greatly watered down in the face of strong opposition from LDP politicians, but Takenaka was more successful in forcing the write-off of nonperforming loans and nationalizing two insolvent banks, Ashikaga Bank and Resona Bank (Hoshi and Ito 2004).<sup>2</sup> By 2005, Japanese banks had reduced their nonperforming loans to below 4 percent, the target specified by Takenaka, and had become profitable again.

### **2.3. Politics**

Japan is a parliamentary democracy. Members of both the lower House of Representatives and the upper House of Councillors are directly elected. The key to understanding Japan’s politics, however, is that the LDP has been in power almost continuously since 1955.<sup>3</sup> During the period of this study, the LDP and its coalition partners, the New Komeito Party and the New Conservative Party, were in power while the Democratic Party of Japan (DPJ) was the largest opposition party as shown by Figures A1 and A2.

Anecdotal evidence suggests that the LDP and its senior members have used their power to maintain political supremacy by bringing “pork” and favorable economic

---

<sup>2</sup> Ashikaga was explicitly nationalized in November 2003 while in the case of Resona, the government purchased more than a 50% voting share in May 2003, a de facto nationalization.

<sup>3</sup> The only exception is 1993 when a coalition government briefly formed the majority in the Diet. This coalition government consisted of eight parties that excluded the LDP and the Japan Communist Party (JCP). It only lasted 11 months.

regulation to their supporters. The most notable example is the liberal use of distortionary tax systems, regulation, and trade barriers to protect the relatively inefficient service and agricultural sectors as well as small businesses that generally support the LDP (Ramseyer and Rosenbluth 1993, Lincoln 2001). Within the banking sector, support for the LDP comes from small rural banks, credit associations and cooperatives, and post offices that offer postal savings and insurance (Rosenbluth 1989). Several recent empirical studies find that the central government tends to allocate more subsidies and government loans to areas that are represented by the influential and/or electorally vulnerable members of the ruling LDP (Kawaura 2003, Meyer and Naka 1998, Hirano 2006, and Imai forthcoming).

### **3. Investigation of Political Influence in Bank Failures**

#### **3.1. Empirical Methodology**

A delay in the resolution of insolvent banks promotes excessive risk-taking and even fraud, thereby imposing substantial costs on society and, particularly, on taxpayers, as illustrated by the Saving and Loan (S&L) Crisis in the U.S. (Kane 1989, Barth 1991, and Brumbaugh and Carron 1987, Akerlof and Romer 1993, Kroszner and Strahan 1996) and the banking/financial crises in other countries (Honohan and Klingebiel 2003, and Dziobek and Pazarbasioglu 1997, La Porta, Lopez-de-Silanes, Zamarripa 2003). Therefore, a welfare-maximizing government should attempt to enforce bank supervisory policies that allow prompt resolution of insolvent banks in order to minimize the economic costs associated with excessive risk-taking and fraud. Under such policies, bank failures should be strictly determined by bank health and economic conditions.

However, the prompt resolution of insolvent banks may not materialize in the presence of the scheme of mutual support between three players: banks, bank regulators, and politicians. Banks and their various stakeholders such as bank equity holders, managers, and borrowers have a lot to lose from prompt resolution. For bank equity holders, the costs of insolvency resolution comes simply from the fact that when an insolvent bank is closed, bank equity will typically be written down. Perhaps more importantly, the prompt resolution of insolvent banks deprives them of the opportunity to economically gain from “gambling from resurrection” and/or “looting” strategy (Kane 1989, Barth 1991, and Brumbaugh and Carron 1987, Akerlof and Romer 1993). Bank managers and employees might also resist early resolution of insolvent banks as they face the possibility of job losses. Furthermore, borrowers who rely heavily on relationship-based bank lending might have difficulty finding new lenders after their related banks go under (Petersen and Rajan 1994, Berger and Udell 1995, and Slovin, Sushka, and Polonchek 1993, Bonin and Imai 2007).

These bank stakeholders might attempt to politically obtain special regulatory treatment in two ways. First, they can collude directly with bank regulators. They can offer bank regulators monetary compensation for special treatment (i.e., bribe). If bribe is too risky, then they can offer bank regulators post-retirement job for above-market wages, which might be harder to detect.<sup>4</sup> The second and more indirect way is that they might be able to pressure government and/or local politicians who rely on their electoral supports in terms of votes and campaign finance into influencing bank regulators

---

<sup>4</sup> This phenomenon, called *Amakudari* (or descent from heaven), is indeed prevalent in Japan although it is declining in importance. Recent empirical studies suggest that *Amakudari* undermined bank supervision and led to poor bank performance (Yamori 1998, Horiuchi and Shimizu 2001, and van Rixtel and Hassink 2002).

Not every party or every local politician, however, has the ability, or is equally able, to influence bank regulators. In Japan, the LDP and its leaders might be the only one to have political power to directly influence the bank supervisory agency. Hence, if any bias exists in the treatment of banks by the supervisory agency, one would expect to observe preferential treatment for banks in important prefectures for the LDP and its influential members.<sup>5</sup> On the other hand, if political concerns did not enter into the calculation of bank regulators' decisions to intervene in insolvent banks, then there should be a strong relation between the timing of bank failures and the financial health of banks while political factors should play no role.

Thus, the basic empirical strategy of this paper is to examine whether political factors affected the timing of bank failures while controlling for bank financial health and regional economic conditions which would potentially affect bank health and depositors confidence. More specifically, I estimate the following semi-parametric hazard model (i.e., Cox proportional hazard model):<sup>6</sup>

$$h_i(t) = h_0(t) \exp(\beta' x_{it})$$

where  $h_i(t)$  represents the hazard rate (i.e., the instantaneous probability of bank  $i$ 's failure in time  $t$  given that bank  $i$  survived until time  $t$ ) and  $h_0(t)$  is the baseline hazard rate that is estimated non-parametrically. The data begin on April 1, 1999, and ends on

---

<sup>5</sup> Ideally, it would be more compelling to examine a relationship between the characteristics of local politicians in the prefectures where bank shareholders, managers and borrowers reside and the regulatory treatment of banks that these individuals have stakes in. Although it is not feasible to empirically identify the location of these bank stakeholders, there are some compelling reasons to expect that the shareholders of small banks such as the ones in this data set reside near their banks. For example, the shareholders might reside close to their banks if geographical distance raises the cost of monitoring bank managers. Moreover, in the case of credit associations and cooperative, these small banks typically finance local small and medium size enterprises who themselves are the members of these banks as shareholders.

<sup>6</sup> I also try parametric model in which the baseline hazard rate follows the Weibull function. The parameterized model yields smaller standard errors and raises statistical significance of covariate, including the key political variables, and thus providing stronger support for political capture view. These results are available from the author upon requests.

April 1, 2002, or the dates when banks were taken over by the government (i.e., bank failure) or acquired by other private banks.

This type of survival analysis has been widely used in recent studies to examine the causes of bank failure (Calomiris and Mason 2003, Carlson 2004, Wheelock and Wilson 2000, Cole and Gunther 1995, Lane, Looney, and Wansley 1986, DeYoung 2003, Carree 2003, Dabos and Sosa 2004, Brown and Dinç 2005, Carlson and Mitchener 2007).<sup>7</sup> Unlike more commonly used discrete-outcome models, hazard models make more-efficient use of the data by explicitly incorporating information about the timing of bank failure, which might turn out be of importance in this paper when comparing two similar failed banks if one bank failed much later because of political consideration than the other. In addition, hazard models are shown to generate more accurate forecast of bankruptcy than static discrete outcome model (Shumway 2001).

A set of covariates,  $x$ , includes bank-level balance sheet variables and prefecture-level politico-economic variables.<sup>8</sup> Bank-level variables include capital-to-asset ratio and return on assets, which capture the overall financial health of bank  $i$ .<sup>9</sup> I also include the natural log of bank assets to control for size since large banks might be better diversified than small ones and/or implicitly protected by government via “too-big-to-fail” doctrine. Finally, I also include dummy variables for credit associations and credit cooperatives since these “banks” might be intrinsically different from regional banks in terms of supervisory procedures and business orientations. These bank-level data are available

---

<sup>7</sup> Kiefer (1988) and Lancaster (1990) provide an excellent review of survival analysis.

<sup>8</sup> Table A1 shows the definitions and sources of the variables used in the survival analysis.

<sup>9</sup> I do not include nonperforming loans because problem banks in Japan tended to hide the amount of nonperforming loans in their balance sheet by “ever-greening” these loans (Peek and Rosengren 2005, Caballero, Hoshi, and Kashyap 2006). The inclusion of nonperforming loans in survival analysis does not qualitatively change the main results except that it substantially reduces sample size due to reporting problems at some banks.

annually, and thus the values of these variables are allowed to change on the beginning date of every fiscal year in the data, April 1st.<sup>10</sup> If bank regulators took the financial viability of banks into account when recognizing insolvency and determining the fate of insolvent banks, financially weak banks should be more likely to fail. Thus, I expect the coefficients on capital-asset ratio and return on assets to be both negative.

Prefecture-level economic variables include income growth, active job opening rate (the ratio of job offers to job applicants), and business bankruptcy rate (the ratio of business bankruptcies to total establishments). These economic variables capture local economic conditions in the prefecture where bank *i* operates. As with the bank-level variables, prefecture-level economic variables are annual and thus are allowed to change on April 1st. To the extent that surrounding local economic conditions affect the viability of banks, banks might be more likely to fail when local economic conditions deteriorate. Hence, I expect the coefficients on income growth and active job opening rate to both be negative and the coefficient on business bankruptcy rate to be positive.<sup>11</sup>

Prefecture-level political factors are the key covariates in the survival analysis. I construct two variables based on the data derived from the results of elections in the Lower House and the profile of each Lower House member in order to quantify the interest of the ruling party in each prefecture and the amount of influence that each politician can potentially exert on bank supervision. To proxy for political influence, I look at the profile of LDP politicians in the Lower House and add up the number of election victories during their political careers, based on the assumption that senior

---

<sup>10</sup> Dummy variables for credit associations and cooperatives are time-invariant as all banks in the data set remained in the same category during the sample period.

<sup>11</sup> Alternatively, if bank regulators were sufficiently concerned about the potential credit crunch that bank failure can cause, they might be more averse to failing banks in an area where economic conditions were poor.

members of the LDP are in a better position to influence the strictness of bank failure policy. Using these politician-level data, I calculate the average number of election victories of these LDP members (*LDP Incumbent Seniority*) in each prefecture to match up with the location of each bank in the data set. If senior LDP members could put more pressure on the bank regulatory agency for lenient treatment in their prefectures than junior members, then the coefficient on this political factor should be negative.

To measure the interest of the ruling party and to investigate the possibility that the LDP influenced bank supervision in prefectures that supported the LDP, I include the share of LDP votes (*LDP Vote Share*) in the covariates of survival model. A negative coefficient on the LDP vote share is consistent with the hypothesis that the LDP strategically influenced bank supervisory policy to avoid bank failures in the prefectures where their supporters were concentrated. During the sample period, there was one election on June 25<sup>th</sup>, 2000, and thus the values of these political variables are allowed to change on that date in my duration data. For those observations before June 25<sup>th</sup>, 2000, I use the data on the results of the previous election, held on October 20<sup>th</sup>, 1996.

### **3.2. Data**

I assemble data on the characteristics of banks and prefectures from various sources. I use *Nikkin Shiryo Nenpo* (Annual Report of Japan's Financial Institutions) to find the identity of failed banks and the exact dates of bank failures, which are used to construct bank survival duration.<sup>12</sup> In this study, bank failures refer to cases in which banks were declared insolvent by the FSA and their management and ownership were

---

<sup>12</sup> The bank failure information can also be obtained from the website of the Financial Services Agency (<http://www.fsa.go.jp/en/index.html>), which I use for verification.

temporarily taken over by the government.<sup>13</sup> In addition, *Nikkin Shiryō Nenpō* provides annual balance sheet data on all 849 banks. I construct two financial ratios to measure the financial health of banks in the sample: (1) capital-to-assets ratio, equity (assets minus liabilities) divided by total assets, and (2) return on assets, after-tax profit divided by total assets. I also use this data source to calculate the log of bank assets to capture bank size.

Since each bank in the data must match up with prefecture-level politico-economic variables, I exclude 19 large banks from the data which have extensive branch networks across Japan.<sup>14</sup> The remaining 830 banks are regional banks, credit associations, and credit cooperatives that have at least 90 percent of their branches in one prefecture and thus operate locally. Since some of these banks did not report key accounting information during the sample period necessary to construct their capital-to-assets ratio and/or return on assets, 18 banks drop out, and I am left with 812 banks, 98 of which failed during my sample period of 1999-2002. The geographical distribution of these banks across 47 prefectures in Japan is somewhat skewed. Namely, they are concentrated in large and urbanized prefectures such as Tokyo, Hokkaido, Osaka, and Aichi. Each prefecture, however, is represented by at least 4-5 banks in the data (Table A2).

With respect to the types of banks in the data, 124, 394, and 294 out of these 812 banks are regional banks, credit associations, and credit cooperatives, respectively. Credit associations are mutuals. That is, their depositors are equity holders, and they are allowed to lend only to their own members (mostly small businesses) by law. Credit cooperatives are very much like credit associations except that they tend to be smaller. As of 2002,

---

<sup>13</sup> The government did not choose to liquidate any of the banks in these cases. Such bias against bank liquidation is also observed in emerging economies (Brown and Dinc 2005)

<sup>14</sup> These are 9 city banks, 3 long-term credit banks, and 7 trust banks. The main empirical results remain virtually unchanged even when I include them in the survival analysis by matching these banks with the prefectures where their headquarters are located.

regional banks, credit associations and cooperatives comprise approximately 51 percent and 47 percent of Japan's total bank deposits and loans (Figures A3-A4). Although these small financial institutions do not represent the entire financial system in Japan, they play an important role in financing opaque small and medium size enterprises that large city banks and/or individual small investors might not be willing to finance (Stein 2002, Berger, Miller, Petersen, Rajan, and Stein 2005, Degryse, Laeven, and Ongena 2007, Uchida, Udell, and Watanabe forthcoming).

Prefecture-level political variables -- the LDP vote share and the average number of electoral victories for LDP incumbents -- are constructed from Asahi Shinbun's CD-ROMs (*Sousenkyo no Subete*) that contain the results of the Lower House elections held on October 20<sup>th</sup>, 1996 and on June 25<sup>th</sup>, 2000 and the characteristics of political candidates for these elections.<sup>15</sup> Prefecture-level economic variables -- income growth (growth rate of prefecture income), active job opening rate (ratio of job offers to job applicants), and business bankruptcy rate (ratio of business bankruptcies to total establishments) -- are taken and calculated from *Kenmin Keizai Keisan Nenpo* (Annual Report of Economic Statistics in Prefectures), *Rodo Shijo Nenpo* (Annual Report of Labor Market), and *Kigyo Tosan Hakusho* (Business Bankruptcy White Reports). Summary statistics and correlation coefficients of these variables are reported in Table 1 and Table 2, respectively.

Notice in Table 1 that the characteristics of surviving banks are quite different from those of failed banks. As expected, surviving banks, on average, had a much stronger balance sheet (i.e., a higher capital-to-assets ratio and higher return on assets) relative to failed banks. In addition, consistent with prior expectation, the surviving banks

---

<sup>15</sup> These political data are graciously provided by Jun Saito who has manually compiled them.

tended to be located in prefectures in which economic conditions were more favorable (i.e., higher active job opening rates and lower business bankruptcy rates). Finally, in support of the “political capture” view of bank regulation, surviving banks tended to be located in those prefectures that strongly supported the LDP.

The correlation coefficients reported in Table 2 are also consistent with my priors. For example, banks with low capital ratio, on average, had low return on assets. Prefecture-level economic variables are correlated with one another in a sensible fashion; e.g., prefectures with a high active job opening rate tended to have high income growth and a low business bankruptcy rate). I also find that the prefectures with strong labor market and low bankruptcy rates tended to have financially healthy banks with high capital-to-asset ratio and high return on assets. One noteworthy correlation is between the LDP vote share and bank capital-to-asset ratios. It shows that those prefectures that strongly supported the LDP tended to have relatively strong banks. Thus, this observation might explain a part of the reason why Table 1 shows that the banks that survived tended to be located in LDP prefectures.

### **3.3. Results of Survival Analysis**

The results of my survival analysis are shown in Table 3.<sup>16</sup> The standard errors, which are reported in parentheses, are adjusted for clustering of failure hazard within each bank (Lin and Wei 1989).<sup>17</sup> Column 1 reports the results of a simple specification in which bank failure hazard rate is a function of only bank characteristics (capital-to-assets

---

<sup>16</sup> I also estimate simple panel probit/logit model with bank annual data. The results are qualitatively similar (Table A2). Panel probit/logit with random effects yield similar results although they are not reported.

<sup>17</sup> I use *robust* option in STATA. I find that the standard errors tend to be larger with this *robust* option.

ratio, return on assets, bank size, and bank type) and non-parametric baseline hazard. These results show that banks tend to fail when their capital-to-assets ratio and return on assets are low.

Column 2 shows the results of a specification that includes prefecture-level variables (income growth, active job opening rate, and business bankruptcy rate) that capture local economic conditions. The coefficient on bankruptcy rate is positive and statistically significant, suggesting that banks were likely to fail when the economy in their prefecture experienced a wave of business bankruptcies. The coefficients on income growth and active job opening rate have the expected signs (i.e., banks were more likely to fail when the local economy grew more slowly and when the local labor market was relatively weak), but they are not statistically significant.

In order to examine whether the supervisory agency's bank intervention was influenced by the private interests of the ruling party and influential politicians, column 3 adds two political factors, *LDP Vote Share* and *LDP Incumbent Seniority*. These two political variables have negative coefficients, although only *LDP Incumbent Seniority* is statistically significant at 10 percent. As reported in Table 2, however, these political variables are closely and positively related (i.e., prefectures that strongly support the LDP tend to be represented by senior LDP politicians). Hence, a multicollinearity problem is likely to be present, raising the standard errors of these coefficients. To verify this, I perform a likelihood ratio test that compares the log-likelihood of the restricted model (column 2) with that of the unrestricted model (column 3) to test whether these two additional political variables are jointly significant. The p-value associated with the test

statistic turns out to be 0.07, suggesting that I can reject the null hypothesis that these political variables do not matter at a 10 percent significance level.<sup>18</sup>

I also drop one of these political variables (columns 4 and 5). The results show that the statistical correlation between bank failure hazard and the seniority of LDP incumbents is negative and statistically significant (column 5). Bank failure hazard and LDP vote share are also negatively correlated, although the correlation is only marginally significant (column 4). These results are thus consistent with the view that the bank supervisory agency was reluctant to recognize bank insolvency in the prefectures that offered strong support for the senior members of the ruling LDP. Moreover, not only are the “political effects” statistically significant, but also they are economically important. The coefficient estimates of hazard models (column 3, Table 3) imply that as *LDP Incumbent Seniority* increases by a 1 standard deviation (i.e., 1.6), the hazard rate of bank failure falls by 0.19.

### **3.4. Robustness Check**

I address six econometric issues in robustness check. First and foremost, although I control for the observable conditions of banks and local economies, the unobserved conditions of local banking sector might be driving both bank failure hazard and the values of political variables that are constructed based on election results in 1996 and 2000. For example, such spurious correlation can emerge if voters in the prefectures with weak banks might have lost confidence in the LDP’s ability to clean up banking sector and chose to oust their local LDP politicians from the Lower House. In particular,

---

<sup>18</sup> I also perform a Wald test, which turns out to generate essentially the same result, rejecting the null at 10 percent significance level. I perform this log-likelihood ratio test in the subsequent robustness checks to examine the joint significance of two political variables, *LDP Vote share* and *LDP Incumbent Seniority*. The results of these log-likelihood ratio tests consistently show that these two variables matter jointly in other specifications.

although the 1996 election results are plausibly orthogonal to banking condition during the sample period (1999-2002), the results of the 2000 election which took place right in the middle of sample period might not be.

I sliced the data in different dimensions to shed some lights on the seriousness of this endogeneity problem. First, I used lagged political variables as instruments to examine how the results change.<sup>19</sup> The results remain qualitatively unchanged as shown in column 1 of Table 4. Second, I use the values of LDP vote share and seniority that came out of the 1996 election without letting these variables change throughout the sample period. Again, the results remain qualitatively unchanged (column 2, Table 4). Of course, the main problem with both of these approaches is that time-invariant component of bank failure hazard might be correlated with time-invariant component of political variables. The results of these two robustness checks, however, indicate that the correlation between bank failure hazard and political variables is not driven entirely by possible reverse causation in which banking conditions somehow influenced the 2000 election results in the middle of sample period.

Second, the main results of this paper suggest that the LDP and its senior members are in a powerful position to influence bank regulators. It might, however, be the case that senior opposition party members have similar power. To address this issue, I include the seniority of opposition party (the Democratic Party of Japan, or the DPJ) members in the survival analysis to test this hypothesis.<sup>20</sup> This robustness check is useful also because if the seniority of opposition party members is found to matter just as much as that of the LDP members, then such results will undermine the validity of the proposed

---

<sup>19</sup> Probit is used here instead of survival analysis since survival analysis with instruments is not as well-established.

<sup>20</sup> The data source of this variable is *Sousenkyo no Subete*.

mechanism through which political variables affect bank failure hazard rates. The results, however, show that their seniority, unlike LDP members' seniority, does not have strong explanatory power and that the inclusion of this variable does not alter the qualitative results on the statistical association between bank hazard rate and LDP members' seniority (columns 3 and 5, Table 4). These results are consistent with the notion that the supervisory agency was under the control of the ruling party, not the opposition party.

Third, recent empirical studies (Yamori 1998, Horiuchi and Shimizu 2001, van Rixtel and Hassink 2002) show a negative correlation between bank performance and the presence of former bank regulators in the board of directors (so-called *Amakudari* practice). If *Amakudari* practice directly affects the timing of bank failures and is positively correlated with my political variables, then omitting this factor would overstate the importance of political factors in bank failure hazard. To address this issue, I collect the data on the number of former officials in Ministry of Finance, the predecessor of FSA, employed by the banks and add this variable to survival analysis.<sup>21</sup> This *Amakudari* variable turns out to be negatively correlated with bank failure hazard, which is consistent with regulatory capture view, but it is statistically insignificant (columns 4 and 5, Table 4). Note that the inclusion of this variable does not qualitatively change the main results on political variables.

Fourth, even though the data cover the period 1999-2002, credit cooperatives did not come under the direct supervision of the FSA until 2000. To make sure the results were not driven by a small sub-sample on credit cooperatives during 1999-2000, I ran the same survival analysis, excluding this sub-sample period to ensure that all of my banks

---

<sup>21</sup> The data source of this variable is *Nippon Kinyu Meikan*.

were under the same regulatory authority during the period that I analyze. The results remain qualitatively unaffected (column 6, Table 4).

Fifth, although I include the observable factors that are related to local economic conditions, there might be some unobservable prefecture-specific economic factors that affect the probability of bank failure. If these unobservable prefecture specific factors are large components of variation in the failure hazard of individual banks, then the estimation of hazard model must take such heterogeneity into account.<sup>22</sup> To address this issue, I estimate the same hazard model and adjust standard errors for clustering within each prefecture. The results show that the coefficient on the seniority of LDP politicians remains robust to such adjustment of standard error (columns 1 and 3, Table A4).

Sixth, all banks in the sample share the same baseline hazard function in the baseline model, which means that regional banks and credit associations and cooperatives have the same hazard rates, *ceteris paribus*. This assumption might be unrealistic since regional banks and credit associations and cooperatives face different economic shocks, and moreover the FSA actually started aggressive examinations of credit associations and cooperatives in the summer of 2000 after the extensive examinations of commercial banks were completed.<sup>23</sup> Thus, it might not be reasonable to assume that these two types of banks have the same conditional probability of failure as regional banks at any point in time even if bank size is controlled for.

---

<sup>22</sup> Of course, if these unobservable factors are correlated with regressors, I will need to include prefecture fixed effects in the hazard model to obtain consistent estimates. But since there were not enough within-prefecture variations in political variables (i.e., there was only one election during the sample period), I could not precisely estimate the hazard model with prefecture fixed effects.

<sup>23</sup> Such an assumption can potentially bias the results on the estimated “political effects” if small credit cooperatives that were examined later than regional banks happened to be located in the prefectures that strongly supported the LDP or senior LDP politicians. Of course, it is conceivable to think that the supervisory agency delayed the examination of small credit cooperatives because of political pressures from the LDP and LDP senior members that tend to derive support from small financial institutions and small businesses.

To deal with this potential criticism, I allow regional banks and credit associations and cooperatives to have different baseline hazard functions in order to capture differential timing of bank examinations among these three types of banks. An additional advantage of this approach is that these “type-specific” baseline hazard functions will also capture time-varying economic shocks that affected different types of financial institutions differently. As shown in columns 4-6 of Table A4, the results of this specification are similar to those of the baseline specifications, and moreover, the statistical relation between bank failure hazard and political factors is quite robust. The only major differences are that when baseline hazard is allowed to follow a different path for different types of financial institutions, (1) dummy variables for bank types drop as they are captured by type-specific baseline hazard, and (2) the likelihood ratio rises dramatically as expected. Columns 7-9 show the results in which different types of banks are allowed to have different baseline hazard like in columns 4-6 and standard errors are adjusted for clustering within prefectures like in columns 1-3. The results remain qualitatively the same here as well.

#### **4. Conclusion**

This paper tests whether government takeover of insolvent banks is susceptible to political influence by examining the statistical pattern of bank failures in Japan between 1999 and 2002. The results of various survival analyses show that the government tended to take over weak banks with low capital-asset ratio and low return on assets. The paper also shows, however, that the government tended to delay bank failures in prefectures

that supported the senior and influential politicians of the LDP. This statistical correlation is robust to a host of bank-level and prefecture-level controls.

This finding is consistent with the theory that the LDP and some of its senior members exerted political influence on a supposedly politically autonomous bank supervisory agency. It should be also noted that this paper's findings mirror those of Brown and Dinç (2005), which indicate a widespread politicization of bank insolvency resolution in emerging economies. Taken these two pieces of evidence as a group, politicization of bank insolvency resolution might be one of the fundamental problems that one must take into account when designing bank regulation and supervision. This paper also casts some doubt on the efficacy of the popular regulatory approach that relies exclusively on a timely bank intervention by supervisory agencies and lends some support to a policy of creating institutions that are conducive to the operation of market discipline (Barth, Caprio, and Levine 2006).

## References

Akerlof, George A, and Paul M. Romer. (1993) "Looting: The Economic Underworld of Bankruptcy for Profit." *Brookings Papers on Economic Activity*, 0, 1-60.

Amyx, Jennifer A. (2004) *Japan's Financial Crisis: Institutional Rigidity and Reluctant Change*. Princeton, NJ.: Princeton University Press.

Barth, James R. (1991) *The Great Savings and Loan Debacle*. Washington, D.C.: AEI Press. 1991.

Barth, James R, Gerard, Jr. Caprio, and Ross Levine. (2006) *Rethinking Bank Regulation: Till Angels Govern*. Cambridge, MA.: Cambridge University Press.

Becker, Gary S. (1983) "A Theory of Competition among Pressure Groups for Political Influence." *Quarterly Journal of Economics*, 98, 371-400.

Berger, Allen N, and Gregory F. Udell. (1995) "Relationship Lending and Lines of Credit in Small Firm Finance." *Journal of Business*. 68, 351-81.

Berger, Allen N, Nathan H Miller, Mitchell A Petersen, Raghuram G Rajan, and Jeremy C Stein. (2005) "Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small Banks." *Journal of Financial Economics*, 76, 237-69.

Bongini, Paola, Stijn Claessens, and Giovanni Ferri. (2001) "The Political Economy of Distress in East Asian Financial Institutions." *Journal of Financial Services Research*, 19, 5-25.

Bonin, John, and Masami Imai (2007) "Soft Related Lending: a Tale of Two Korean Banks." *Journal of Banking and Finance*, 31, 1713-1729.

Brown, Craig O, and I. Serdar Dinç. (2005) "The Politics of Bank Failures: Evidence from Emerging Markets." *Quarterly Journal of Economics*, 120, 1413-44.

Brumbaugh, R. Dan, Jr, and Andrew S. Carron. (1987) "Thrift Industry Crisis: Causes and Solutions." *Brookings Papers on Economic Activity*, 0, 349-77.

Caballero, Ricardo J., Takeo Hoshi, and Anil K. Kashyap. (2006) "Zombie Lending and Depressed Restructuring in Japan." *NBER Working Papers*: 12129.

Calomiris, Charles W. (2004) "Reestablishing Market Discipline as Part of Bank Regulation." In *Market Discipline across Countries and Industries*, edited by Borio, Claudio, et al., pp 407-16. Cambridge, MA.: MIT Press.

- Calomiris, Charles W, and Joseph R. Mason. (2003) "Fundamentals, Panics, and Bank Distress during the Depression." *American Economic Review*, 93, 1615-47.
- Caprio, Gerard, and Daniel Klingebiel. (2003) "Episode of Systemic and Borderline Financial Crises."  
<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20699588~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html>
- Cargill, Thomas F., Michael M. Hutchison, and Takatoshi Ito. (1996) "Deposit Guarantees and the Burst of the Japanese Bubble Economy." *Contemporary Economic Policy*, 14, 41-52.
- Carlson, Mark, and Kris Mitchener. (2007) "Branch Banking as a Device for Discipline: Competition and Bank Survivorship During the Great Depression." *NBER Working Papers*: 12938.
- Carree, Martin A. (2003) "A Hazard Rate Analysis of Russian Commercial Banks in the Period 1994-1997." *Economic Systems*, 27, 255-69.
- Cole, Rebel A, and Jeffery W. Gunther. (1995) "Separating the Likelihood and Timing of Bank Failure." *Journal of Banking and Finance*, 19, 1073-89.
- Corbett, Jenny. (1999) "Crisis? What Crisis? The Policy Response to Japan's Banking Crisis." In *Why Did Japan Stumble? Causes and Cures*, edited by Freedman, Craig, pp. 191-224. Northampton, Mass.: Elgar Press.
- Dabos, Marcelo, and Walter Sosa Escudero. (2004) "Explaining and Predicting Bank Failure Using Duration Models: The Case of Argentina after the Mexican Crisis." *Revista de Analisis Economico*, 19, 31-49.
- Degryse, Hans, Luc Laeven, and Steven Ongena. (2007) "The Impact of Organizational Structure and Lending Technology on Banking Competition." *CEPR Discussion Paper*: 6412.
- Demirgüç-Kunt, Asli, Edward J. Kane, and Luc Laeven. (forthcoming) "Determinants of Deposit-Insurance Adoption and Design." *Journal of Financial Intermediation*.
- Dziobek, Claudia Helene, and Ceyla Pazarbasioglu. (1997) "Lessons from Systemic Bank Restructuring: A Survey of 24 Countries." *International Monetary Fund Working Papers*: 97/161.
- DeYoung, Robert. (2003) "The Failure of New Entrants in Commercial Banking Markets: A Split-Population Duration Analysis." *Review of Financial Economics*, 12, 7-33.
- Economides, Nicholas, R. Glenn Hubbard, and Darius Palia. (1996) "The Political Economy of Branching Restrictions and Deposit Insurance: A Model of Monopolistic

Competition among Small and Large Banks.” *Journal of Law and Economics*, 39, 667-704.

Fukao, Mitsuhiro. (2003) “Financial Sector Profitability and Double-Gearing.” In *Structural Impediments to Growth in Japan*, edited by Blomstrom, Magnus, et al., p 9-35. Chicago, IL.: University of Chicago Press.

Fukao, Mitsuhiro. (2003) “Japan's Lost Decade and Its Financial System.” *World Economy*, 26, 365-84.

Herring, Richard J. (2004) “How Can the Invisible Hand Strengthen Prudential Supervision? And How Can Prudential Supervision Strengthen the Invisible Hand?” In *Market Discipline across Countries and Industries*, edited by Borio, Claudio, et al., pp 363-79. Cambridge, MA.: MIT Press.

Hirano, Shigeo. (2006) “Do Individual Representatives Influence Government Transfers? Evidence from Japan.” *Mimeo*.

Honohan, Patrick, and Daniela Klingebiel. (2003) “The Fiscal Cost Implications of an Accommodating Approach to Banking Crises.” *Journal of Banking and Finance*, 27, 1539-60.

Horiuchi, Akiyoshi, and Katsutoshi Shimizu. (2001) “Did Amakudari Undermine the Effectiveness of Regulator Monitoring in Japan?” *Journal of Banking and Finance*, 25, 573-96.

Hoshi, Takeo. (2002) “The Convoy System for Insolvent Banks: How It Originally Worked and Why It Failed in the 1990s.” *Japan and the World Economy*, 14, 155-80.

Hoshi, Takeo, and Takatoshi Ito. (2004) “Financial Regulation in Japan: a Sixth Year Review of the Financial Services Agency.” *Journal of Financial Stability*, 1, 229-243.

Hoshi, Takeo, and Anil Kashyap. (2000) “The Japanese Banking Crisis: Where Did It Come from and How Will It End?” *NBER Macroeconomics Annual*, edited by Bernanke, Ben S., and Julio J. Rotemberg, pp. 129-201. Cambridge, MA.: MIT Press.

Hutchison, Michael, and Kathleen McDill. (1999) “Are All Banking Crises Alike? The Japanese Experience in International Comparison.” *Journal of the Japanese and International Economies*, 13, 155-80.

Imai, Masami. (2006) “Market Discipline and Deposit Insurance Reform in Japan.” *Journal of Banking and Finance*, 30, 3433-3452.

Imai, Masami. (forthcoming) “Political Determinants of Government Loans in Japan.” *Journal of Law and Economics*.

- Kane, Edward J. (1987) "Dangers of Capital Forbearance: The Case of the FSLIC and 'Zombie' S&Ls." *Contemporary Policy Issues*, 5, 77-83.
- Kane, Edward J. (1989) *The S&L Insurance Mess: How Did it Happen?* Washington, D.C.: Urban Institute Press.
- Kawaura, Akihiko. (2003) "Public Resource Allocation and Electoral Systems in the U.S. and Japan." *Public Choice*, 115, 63-81.
- Kiefer, Nicholas M. (1988) "Economic Duration Data and Hazard Functions." *Journal of Economic Literature*, 26, 646-79.
- Kroszner, Randall S, and Philip E. Strahan. (1999) "What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions." *Quarterly Journal of Economics*, 114, 1437-67.
- Kroszner, Randall S, and Philip E. Strahan. (1996) "Regulatory Incentives and the Thrift Crisis: Dividends, Mutual-to-Stock Conversions, and Financial Distress." *Journal of Finance*, 51, 1285-1319.
- Laeven, Luc. (2004) "The Political Economy of Deposit Insurance." *Journal of Financial Services Research*, 26, 201-24.
- Lancaster, Tony. (1990) *The Econometric Analysis of Transition Data*. Cambridge, MA.: Cambridge University Press.
- Lane, William R., Stephen W. Looney, and James W. Wansley. (1986) "An Application of the Cox Proportional Hazards Model to Bank Failure." *Journal of Banking and Finance*, 10, 511-31.
- La Porta, Rafael, Florencio Lopez-de-Silanes, and Guillermo Zamarripa. (2003) "Related Lending." *Quarterly Journal of Economics*, 118, 231-68.
- Lin, D. Y., and L. J. Wei. (1989) "The Robust Inference for the Cox Proportional Hazards Model." *Journal of the American Statistical Association*, 84, 1074-78.
- Lincoln, Edward J. (2001) *Arthritic Japan: The Slow Pace of Economic Reform*. Washington DC: Brookings Institution Press.
- Meyer, Steven A, and Shigeto Naka. (1998) "Legislative Influences in Japanese Budgetary Politics." *Public Choice*, 94, 267-88.
- Mian, Atif. (2006) "Distance Constraints: The Limits of Foreign Lending in Poor Economies." *Journal of Finance*, 61, 1465-1505.

Milhaupt, Curtis J. (1999) "Japan's Experience with Deposit Insurance and Failing Banks: Implications for Financial Regulatory Design?" *Bank of Japan Monetary and Economic Studies*, 17, 21-46.

Motonishi, Taizo, and Hiroshi Yoshikawa. (1999) "Causes of the Long Stagnation of Japan during the 1990s: Financial or Real?" *Journal of the Japanese and International Economies*, 13, 181-200.

Okada, Tae, and Charles Yuji Horioka. (2007) "A Comment on Nishimura, Nakajima, and Kiyota's 'Does the Natural Selection Mechanism Still Work in Severe Recessions? Examination of the Japanese Economy in the 1990s'." *NBER Working Papers*: 13298. 2007.

Olson, Mancur. (1982) *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven, CT.: Yale University Press.

Peltzman, Sam. (1976) "Toward a More General Theory of Regulation." *Journal of Law and Economics*, 19, 211-40.

Peek, Joe, and Eric S. Rosengren. (2001) "Determinants of the Japan Premium: Actions Speak Louder Than Words." *Journal of International Economics*, 53, 283-305.

Peek, Joe, and Eric S. Rosengren. (2005) "Unnatural Selection: Perverse Incentives and the Misallocation of Credit in Japan." *American Economic Review*, 95, 1144-66.

Petersen, Mitchell A, and Raghuram G. Rajan. (1994) "The Benefits of Lending Relationships: Evidence from Small Business Data." *Journal of Finance*, 49, 3-37.

Ramirez, Carlos D, and J Bradford De Long. (2001) "Understanding America's Hesitant Steps toward Financial Capitalism: Politics, the Depression, and the Separation of Commercial and Investment Banking." *Public Choice*, 106, 93-116.

Ramseyer, J Mark, and Frances McCall Rosenbluth. (1993) *Japan's Political Marketplace*. Cambridge, MA.: Harvard University Press.

Rosenbluth, Frances McCall. (1989) *Financial Politics in Contemporary Japan*. Ithaca, NY.: Cornell University Press.

Sekine, Toshitaka, Keiichiro Kobayashi, and Yumi Saita. (2003) "Forbearance Lending: The Case of Japanese Firms." *Bank of Japan Monetary and Economic Studies*, 21, 69-92.

Shumway, Tyler. (2001) "Forecasting Bankruptcy More Accurately: A Simple Hazard Model." *Journal of Business*, 74, 101-24.

Slovin, Myron B., Marie E. Sushka, and John A. Polonchek. "The Value of Bank Durability: Borrowers as Bank Stakeholders." *Journal of Finance*, 48, 247-66.

Spiegel, Mark M, and Nobuyoshi Yamori. (2004) "The Evolution of Bank Resolution Policies in Japan: Evidence from Market Equity Values." *Journal of Financial Research*, 27, 115-32.

Stein, Jeremy C. (2002) "Information Production and Capital Allocation: Decentralized versus Hierarchical Firms." *Journal of Finance*, 57, 1891-1921.

Stigler, George. (1971) "The Theory of Economic Regulation." *Bell Journal of Economics and Management Science*, 2, 3-21.

Uchida, Hirofumi, Gregory F. Udell, and Wako Watanabe. (forthcoming) "Bank Size and Lending Relationships in Japan." *Journal of the Japanese and International Economies*.

Yamori, Nobuyoshi. (1998) "Bureaucrat-Managers and Corporate Governance: Expense-Preference Behaviors in Japanese Financial Institutions." *Economics Letters*, 61, 385-89. December 1998.

van Rixtel, Adrian A. R. J. M, Wolter H. J. Hassink. (2002) "Monitoring the Monitors: Are Old Boys Networks Being Used to Monitor Japanese Private Banks?" *Journal of the Japanese and International Economies*, 16, 1-30.

Watanabe, Wako. (2006) "Does a Large Capital Loss Cause Evergreening? Evidence from Japan" *Mimeo*.

Wheelock, David C, and Paul W. Wilson. (2000) "Why Do Banks Disappear? The Determinants of U.S. Bank Failures and Acquisitions." *Review of Economics and Statistics*, 82, 127-38.

White, Eugene Nelson. (1981) "State-Sponsored Insurance of Bank Deposits in the United States, 1907-1929." *Journal of Economic History*, 41, 537-57.

White, Eugene Nelson. (1982) "The Political Economy of Banking Regulation, 1864-1933." *Journal of Economic History*, 42, 33-40.

Woo, David. (2003) "In Search of 'Capital Crunch': Supply Factors behind the Credit Slowdown in Japan." *Journal of Money, Credit and Banking*, 35, 1019-38.

### Table 1: Sample Statistics

The table provides sample statistics for variables used in my survival analysis. Failed banks are those banks that government declared to be insolvent at some point during April 1999 - April 2002. \*, \*\*, and \*\*\* denote the statistical significance in a one-sided test of difference in means between the surviving banks and the failed banks at the 10, 5, and 1 % level, respectively.

<i>Variable</i>		<i>All Banks</i>	<i>Surviving Banks</i>	<i>Failed Banks</i>
Capital-Asset Ratio (%)	Mean	3.125	3.720***	-2.414
	S.D.	7.939	5.302	18.849
	Sample Size (bank-year)	2308	2084	224
Return on Assets (%)	Mean	-0.229	0.001***	-2.356
	S.D.	2.515	1.783	5.526
	Sample Size (bank-year)	2324	2097	227
Bank Size	Mean	11.852	11.964***	10.817
	S.D.	1.660	1.642	1.451
	Sample Size (bank-year)	2325	2097	228
Credit Associations	Mean	0.492	0.522***	0.216
	S.D.	0.500	0.499	0.412
	Sample Size (bank-year)	2329	2098	231
Credit Cooperatives	Mean	0.353	0.311***	0.736
	S.D.	0.478	0.463	0.441
	Sample Size (bank-year)	2329	2098	231
Income Growth (%)	Mean	0.949	-0.958	-0.869
	S.D.	1.986	2.001	1.838
	Sample Size (bank-year)	2329	2098	231
Active Job Opening Rate (%)	Mean	59.292	59.488**	57.511
	S.D.	16.210	16.300	15.288
	Sample Size (bank-year)	2329	2098	231
Business Bankruptcy Rate (%)	Mean	0.298	0.291***	0.364
	S.D.	0.198	0.186	0.281
	Sample Size (bank-year)	2329	2098	231
LDP Vote Share (%)	Mean	41.560	41.925**	38.248
	S.D.	10.798	10.871	9.509
	Sample Size (bank-year)	2329	2098	231
LDP Incumbent Seniority	Mean	4.616	4.617	4.610
	S.D.	1.624	1.596	1.857
	Sample Size (bank-year)	2329	2098	231

**Table 2: Pair-wise Correlation Coefficients of Variables**

	Capital Ratio	Return on Assets	Bank Size	Income Growth	Job Opening Rate	Bankruptcy Rate	LDP Share	LDP Seniority
Capital-Asset Ratio (%)	1							
Return on Assets (%)	0.4017*	1						
Bank Size	0.0763*	0.1024*	1					
Income Growth (%)	-0.2931*	-0.0035	-0.0095	1				
Active Job Opening Rate (%)	0.0924*	0.0219	0.0032	0.0860*	1			
Business Bankruptcy Rate (%)	0.0169	-0.0813*	-0.1379*	0.0201	-0.0587*	1		
LDP Vote Share (%)	0.1123*	0.031	-0.1011*	-0.1529*	0.2633*	-0.0613*	1	
LDP Incumbent Seniority	-0.0299	-0.016	-0.0547*	-0.0103	0.0904*	0.3831*	0.1887*	1

\* denote statistical significance at 5 %.

**Table 3: Relation between Bank Failure Hazard and Political Factors**

Bank failure hazard rates are estimated with a semi-parametric hazard model. This table reports the estimated coefficients in the exponential hazard function. The data begin on April 1, 1999, and ends on April 1, 2002, or when banks were taken over by the government (i.e., bank failure), or acquired by other private banks. Standard errors are adjusted for clustering within each bank. **Log-Likelihood Ratio Test** gives the p-value associated with null hypothesis that both **LDP Vote Share** and **LDP Incumbent Seniority** have no effects on bank failure hazard

	(1)	(2)	(3)	(4)	(5)
Capital-Asset Ratio	-0.028*** (0.005)	-0.028*** (0.005)	-0.027*** (0.005)	-0.028*** (0.005)	-0.026*** (0.005)
Return on Assets	-0.055*** (0.017)	-0.053*** (0.017)	-0.056*** (0.018)	-0.048*** (0.017)	-0.061*** (0.018)
Bank Size	-0.085 (0.093)	-0.032 (0.097)	-0.070 (0.101)	-0.063 (0.100)	-0.049 (0.098)
Credit Association	-0.129 (0.468)	-0.017 (0.462)	-0.140 (0.467)	-0.102 (0.464)	-0.087 (0.465)
Credit Cooperative	1.165** (0.523)	1.339*** (0.519)	1.143** (0.540)	1.205** (0.530)	1.230** (0.530)
Income Growth		-0.075 (0.067)	-0.098 (0.069)	-0.088 (0.065)	-0.089 (0.069)
Active Job Opening Rate		-0.003 (0.007)	-0.001 (0.008)	-0.000 (0.008)	-0.003 (0.008)
Business Bankruptcy Rate		0.719* (0.427)	1.147** (0.496)	0.729 (0.445)	1.163** (0.480)
<b>LDP Incumbent Seniority</b>			<b>-0.131*</b> <b>(0.072)</b>		<b>-0.142**</b> <b>(0.069)</b>
<b>LDP Vote Share</b>			<b>-0.009</b> <b>(0.010)</b>	<b>-0.013</b> <b>(0.010)</b>	
Log-Likelihood Ratio	-580.95	-578.75	-576.14	-577.91	-576.52
<b>Log-Likelihood Ratio Test</b>			<b>0.073</b>		
Number of Failed Banks	98	98	98	98	98
Total Number of Banks	812	812	812	812	812

Robust standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 4: Robustness Checks 1**

Column 1 shows the results of instrumental variable probit model on annual panel data where **LDP Vote Share** and **LDP Incumbent Share** are instrumented with the lagged values. Columns 2-6 show the results of hazard model. Column 6 shows the results with sub-sample that exclude credit cooperative during April 1999-March 2000. The data begin on April 1, 1999, and ends on April 1, 2002, or when banks were taken over by the government (i.e., bank failure) or acquired by other private banks. Standard errors are adjusted for clustering within each bank. **Log-Likelihood Ratio Test** gives the p-value associated with null hypothesis that both **LDP Vote Share** and **LDP Incumbent Seniority** have no effects on bank failure hazard

	(1)	(2)	(3)	(4)	(5)	(6)
	Probit (IV)	Hazard Model	Hazard Model	Hazard Model	Hazard Model	Hazard Model
Capital-Asset Ratio	-0.036*** (0.010)	-0.027*** (0.005)	-0.024*** (0.006)	-0.027*** (0.005)	-0.024*** (0.006)	-0.079*** (0.028)
Return on Assets	-0.096*** (0.017)	-0.056*** (0.018)	-0.076*** (0.022)	-0.057*** (0.018)	-0.077*** (0.022)	-0.022 (0.045)
Bank Size	-0.078 (0.053)	-0.070 (0.101)	-0.013 (0.119)	-0.066 (0.101)	-0.011 (0.119)	-0.090 (0.122)
Credit Association	-0.109 (0.240)	-0.141 (0.467)	-0.205 (0.486)	-0.443 (0.526)	-0.527 (0.555)	-0.124 (0.509)
Credit Cooperative	0.370 (0.280)	1.142** (0.540)	1.026* (0.591)	0.764 (0.601)	0.628 (0.658)	1.428** (0.592)
Income Growth	-0.192*** (0.033)	-0.102 (0.069)	-0.101 (0.084)	-0.098 (0.069)	-0.100 (0.084)	-0.027 (0.076)
Active Job Opening Rate	0.008* (0.004)	-0.000 (0.008)	0.001 (0.009)	-0.001 (0.008)	0.001 (0.009)	-0.002 (0.008)
Business Bankruptcy Rate	1.323*** (0.460)	1.158** (0.525)	1.426*** (0.534)	1.142** (0.487)	1.403*** (0.522)	0.666 (0.775)
<b>LDP Vote Share</b>	<b>-0.021*</b> <b>(0.011)</b>		<b>-0.005</b> <b>(0.012)</b>	<b>-0.009</b> <b>(0.010)</b>	<b>-0.006</b> <b>(0.012)</b>	<b>-0.011</b> <b>(0.011)</b>
<b>LDP Incumbent Seniority</b>	<b>-0.245**</b> <b>(0.106)</b>		<b>-0.200**</b> <b>(0.084)</b>	<b>-0.133*</b> <b>(0.072)</b>	<b>-0.203**</b> <b>(0.084)</b>	<b>-0.122*</b> <b>(0.076)</b>
<b>LDP Vote Share (1996 Election)</b>		<b>-0.010</b> <b>(0.010)</b>				
<b>LDP Incumbent Seniority (1996 Election)</b>		<b>-0.131*</b> <b>(0.075)</b>				
DPJ Incumbent Seniority			0.058 (0.084)		0.051 (0.082)	
Amakudari				-1.209 (0.759)	-1.188 (0.765)	
Log-Likelihood Ratio		-576.11	-740.97	-574.05	-468.99	-460.39
<b>Log-Likelihood Ratio Test</b>		<b>0.071</b>	<b>0.025</b>	<b>0.063</b>	<b>0.020</b>	<b>0.101</b>
Number of Failed Banks	98	98	84	98	84	80
Total Number of Banks	812	812	676	812	676	781

Standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

## Appendix

**Table A1: Definitions and Data Sources of Variables**

<i>Variables</i>	<i>Definition</i>	<i>Source</i>
Bank Characteristics, Measured Annually (4/1/1999 - 4/1/2002)		
Capital-to-Asset Ratio (%)	Book value of equity (assets minus liabilities) divided by total assets	<i>Nikken Shiryo Nenpo</i> (Annual Report of Japan's Financial Institutions)
Return on Assets (%)	Before-tax profit divided by total assets	<i>Nikken Shiryo Nenpo</i> (Annual Report of Japan's Financial Institutions)
Bank Size	Log of assets	<i>Nikken Shiryo Nenpo</i> (Annual Report of Japan's Financial Institutions)
Credit Association	Dummy variable for credit associations	<i>Nikken Shiryo Nenpo</i> (Annual Report of Japan's Financial Institutions)
Credit Cooperatives	Dummy variable for credit cooperatives	<i>Nikken Shiryo Nenpo</i> (Annual Report of Japan's Financial Institutions)
Prefecture-Level Economic Environment, Measured Annually (4/1/1999 - 4/1/2002)		
Income Growth (%)	Growth rate of total income (sum of wage income, interest income, and profit)	<i>Kenmin Keizai Keisan Nenpo</i> (Annual Report of Economic Statistics in Prefectures)
Active Job Opening Rate (%)	Ratio of job offers to job applicants	<i>Rodo Shijo Nenpo</i> (Annual Report of Labor Market)
Business Bankruptcy Rate (%)	Ratio of business bankruptcies to total number of establishments	<i>Kigyo Tosan Hakusho</i> (Business Bankruptcy White Reports)
Prefecture-Level Political Characteristics, Based on Results of Lower House Election on 10/20/1996 (4/1/1999 - 6/24/2000) and Results of Lower House Election on 6/25/2000 (6/25/2000 - 4/1/2002)		
LDP Vote Share	Ratio of votes for LDP to total number of votes	Asahi Shinbun's CD-ROM ( <i>Sousenkyo no Subete</i> )
LDP Incumbent Seniority	Average number of election victories for lower house member of LDP	Asahi Shinbun's CD-ROM ( <i>Sousenkyo no Subete</i> )

**Table A2: Geographical Distribution of Banks in the Data**

Prefecture	# of banks	# of failed banks			
		4/1999-4/2000	4/2000-4/2001	4/2001-4/2002	4/1999-4/2002
Hokkaido	47	1	1	3	5
Aomori	10	1	0	0	1
Iwate	15	0	0	1	1
Miyagi	16	1	0	1	2
Akita	12	0	0	1	1
Yamagata	17	0	0	0	0
Fukushima	17	0	0	0	0
Ibaraki	13	0	1	1	2
Tochigi	21	0	0	6	6
Gunma	20	0	0	0	0
Saitama	10	1	0	0	1
Chiba	19	1	0	3	4
Tokyo	86	5	2	12	19
Kanagawa	19	1	1	1	3
Niigata	29	2	1	0	3
Toyama	18	1	0	0	1
Ishikawa	22	1	2	4	7
Fukui	16	1	0	1	2
Yamanashi	10	0	0	0	0
Nagano	13	1	0	1	2
Gifu	19	0	1	1	2
Shizuoka	22	0	0	1	1
Aichi	33	1	0	1	2
Mie	13	0	1	1	2
Shiga	9	0	0	1	1
Kyoto	12	2	0	1	3
Osaka	35	3	1	2	6
Hyogo	24	1	1	2	4
Nara	5	0	0	0	0
Wakayama	7	0	0	0	0
Tottori	4	0	0	0	0
Shimane	8	0	0	0	0
Okayama	18	0	1	1	2
Hiroshima	18	0	0	0	0
Yamaguchi	14	0	0	0	0
Tokushima	5	0	0	0	0
Kagawa	8	0	1	0	1
Ehime	11	0	0	0	0
Kochi	7	1	0	0	1
Fukuoka	29	1	0	1	2
Saga	12	0	0	0	0
Nagasaki	17	2	0	2	4
Kumamoto	9	0	0	0	0
Oita	17	0	0	5	5
Miyazaki	11	1	0	0	1
Kagoshima	10	0	0	0	0
Okinawa	5	0	0	1	1
<b>Total</b>	<b>812</b>	<b>29</b>	<b>14</b>	<b>55</b>	<b>98</b>

**Table A3: Probit/Logit Results of Relation between Bank Failures and Political Factors**

This table shows the coefficient estimates of an annual panel probit and logit model of bank failure incidents during 1999 - 2002. All standard errors are adjusted for clustering within banks. **Log-Likelihood Ratio Test** gives the p-value associated with null hypothesis that both **LDP Vote Share** and **LDP Incumbent Seniority** have no effects on bank failure hazard.

	<i>Probit</i>				<i>Logit</i>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Capital-Asset Ratio	-0.026 (0.017)	-0.027 (0.018)	-0.025 (0.017)	-0.028 (0.018)	-0.080* (0.043)	-0.086* (0.045)	-0.080* (0.043)	-0.087* (0.045)
Return on Assets	-0.102*** (0.039)	-0.098** (0.040)	-0.101** (0.040)	-0.098** (0.039)	-0.230 (0.147)	-0.228 (0.152)	-0.236 (0.152)	-0.222 (0.147)
Bank Size	-0.023 (0.049)	-0.043 (0.051)	-0.042 (0.051)	-0.028 (0.049)	-0.068 (0.103)	-0.117 (0.108)	-0.113 (0.107)	-0.077 (0.104)
Credit Association	0.057 (0.208)	0.004 (0.212)	0.012 (0.209)	0.039 (0.211)	0.033 (0.490)	-0.063 (0.489)	-0.053 (0.483)	0.013 (0.496)
Credit Cooperative	0.610** (0.251)	0.524** (0.260)	0.535** (0.256)	0.585** (0.254)	1.218** (0.567)	1.012* (0.577)	1.045* (0.567)	1.169** (0.576)
Income Growth	-0.154*** (0.034)	-0.166*** (0.036)	-0.163*** (0.034)	-0.159*** (0.035)	-0.350*** (0.079)	-0.388*** (0.085)	-0.376*** (0.081)	-0.365*** (0.083)
Active Job Opening Rate	0.001 (0.004)	0.002 (0.004)	0.002 (0.004)	0.001 (0.004)	0.005 (0.008)	0.010 (0.008)	0.009 (0.008)	0.006 (0.008)
Business Bankruptcy Rate	0.593*** (0.215)	0.793*** (0.270)	0.569*** (0.217)	0.837*** (0.265)	1.385*** (0.369)	1.930*** (0.574)	1.324*** (0.373)	2.014*** (0.555)
<b>LDP Vote Share</b>		<b>-0.007</b> <b>(0.005)</b>	<b>-0.008</b> <b>(0.005)</b>			<b>-0.018</b> <b>(0.014)</b>	<b>-0.021</b> <b>(0.014)</b>	
<b>LDP Incumbent Seniority</b>		<b>-0.062</b> <b>(0.041)</b>		<b>-0.070*</b> <b>(0.040)</b>		<b>-0.156</b> <b>(0.097)</b>		<b>-0.170*</b> <b>(0.094)</b>
Constant	-2.245*** (0.724)	-1.567* (0.811)	-1.744** (0.801)	-1.952*** (0.737)	-4.166*** (1.529)	-2.533 (1.751)	-2.985* (1.713)	-3.534** (1.569)
<b>Log-Likelihood Ratio Test</b>		<b>0.087</b>				<b>0.043</b>		
Observations	2306	2306	2306	2306	2306	2306	2306	2306

Robust standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table A4: Robustness Checks 2**

Bank failure hazard rates are estimated with a semi-parametric hazard model. This table reports the estimated coefficients in the exponential hazard function. The data begin on April 1, 1999, and ends on April 1, 2002, or when banks were taken over by the government (i.e., bank failure) or acquired by other private banks.

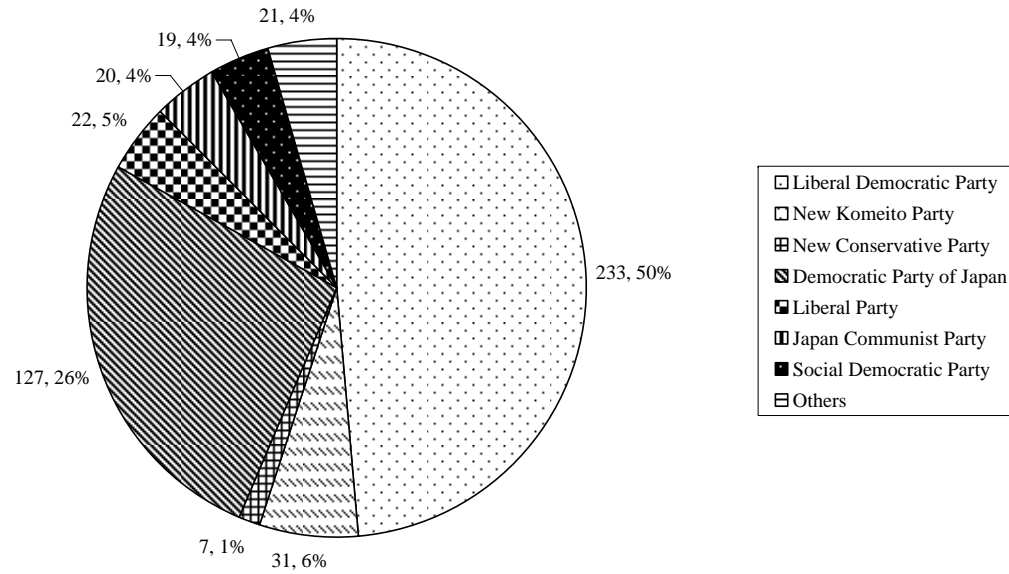
**Log-Likelihood Ratio Test** gives the p-value associated with null hypothesis that both **LDP Vote Share** and **LDP Incumbent Seniority** have no effects on bank failure hazard

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	SE are adjusted for clustering within prefecture			Different baseline hazard functions are allowed for credit associations and cooperatives			SE are adjusted for clustering within prefecture, and different baseline hazard functions are allowed for credit associations and cooperatives		
Capital-Asset Ratio	-0.027*** (0.005)	-0.028*** (0.004)	-0.026*** (0.005)	-0.028*** (0.006)	-0.029*** (0.005)	-0.027*** (0.006)	-0.028*** (0.005)	-0.029*** (0.005)	-0.027*** (0.005)
Return on Assets	-0.056*** (0.018)	-0.048*** (0.016)	-0.061*** (0.019)	-0.055*** (0.018)	-0.048*** (0.017)	-0.060*** (0.018)	-0.055*** (0.018)	-0.048*** (0.017)	-0.060*** (0.019)
Bank Size	-0.070 (0.111)	-0.063 (0.113)	-0.049 (0.104)	-0.088 (0.100)	-0.084 (0.099)	-0.060 (0.097)	-0.088 (0.108)	-0.084 (0.109)	-0.060 (0.101)
Credit Association	-0.140 (0.496)	-0.102 (0.490)	-0.087 (0.463)						
Credit Cooperative	1.143** (0.502)	1.205** (0.494)	1.230*** (0.451)						
Income Growth	-0.098 (0.065)	-0.088 (0.067)	-0.089 (0.073)	-0.100 (0.069)	-0.091 (0.066)	-0.087 (0.070)	-0.100 (0.062)	-0.091 (0.064)	-0.087 (0.071)
Active Job Opening Rate	-0.001 (0.008)	-0.000 (0.008)	-0.003 (0.008)	-0.000 (0.008)	0.000 (0.008)	-0.003 (0.008)	-0.000 (0.008)	0.000 (0.008)	-0.003 (0.008)
Business Bankruptcy Rate	1.147*** (0.357)	0.729** (0.288)	1.163*** (0.351)	1.126** (0.488)	0.794* (0.439)	1.138** (0.471)	1.126*** (0.341)	0.794*** (0.297)	1.138*** (0.339)
<b>LDP Vote Share</b>	<b>-0.009</b> <b>(0.012)</b>	<b>-0.013</b> <b>(0.012)</b>		<b>-0.011</b> <b>(0.010)</b>	<b>-0.014</b> <b>(0.010)</b>		<b>-0.011</b> <b>(0.011)</b>	<b>-0.014</b> <b>(0.011)</b>	
<b>LDP Incumbent Seniority</b>	<b>-0.131*</b> <b>(0.071)</b>		<b>-0.142**</b> <b>(0.070)</b>	<b>-0.109</b> <b>(0.069)</b>		<b>-0.125*</b> <b>(0.066)</b>	<b>-0.109*</b> <b>(0.066)</b>		<b>-0.125*</b> <b>(0.065)</b>
Log-Likelihood Ratio	-576.14	-577.91	-576.52	-501.87	-503.11	-502.46	-501.87	-503.11	-502.46
<b>Log-Likelihood Ratio Test</b>	<b>0.0736</b>			<b>0.097</b>			<b>0.097</b>		
Number of Failed Banks	98	98	98	98	98	98	98	98	98
Total Number of Banks	812	812	812	812	812	812	812	812	812

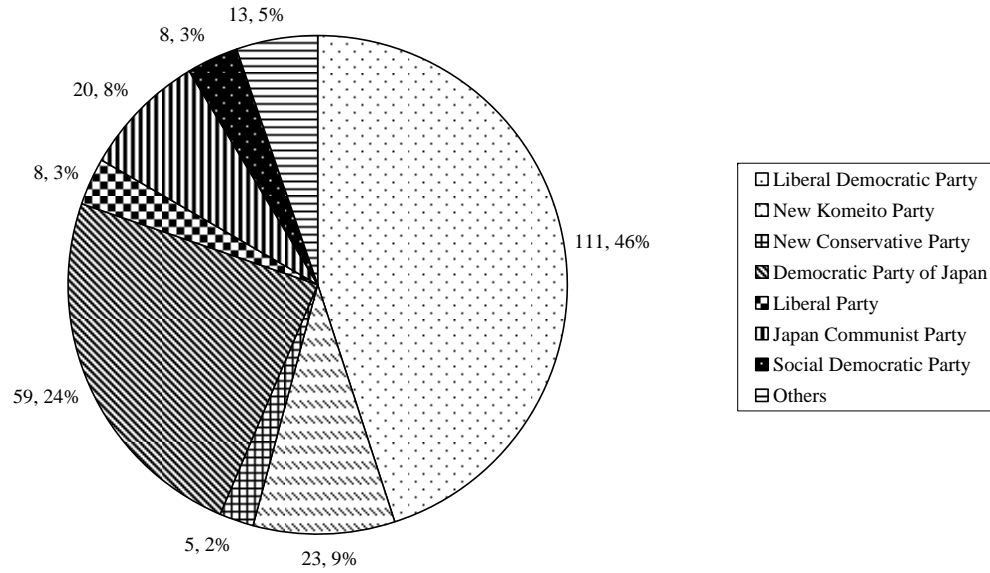
Robust standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

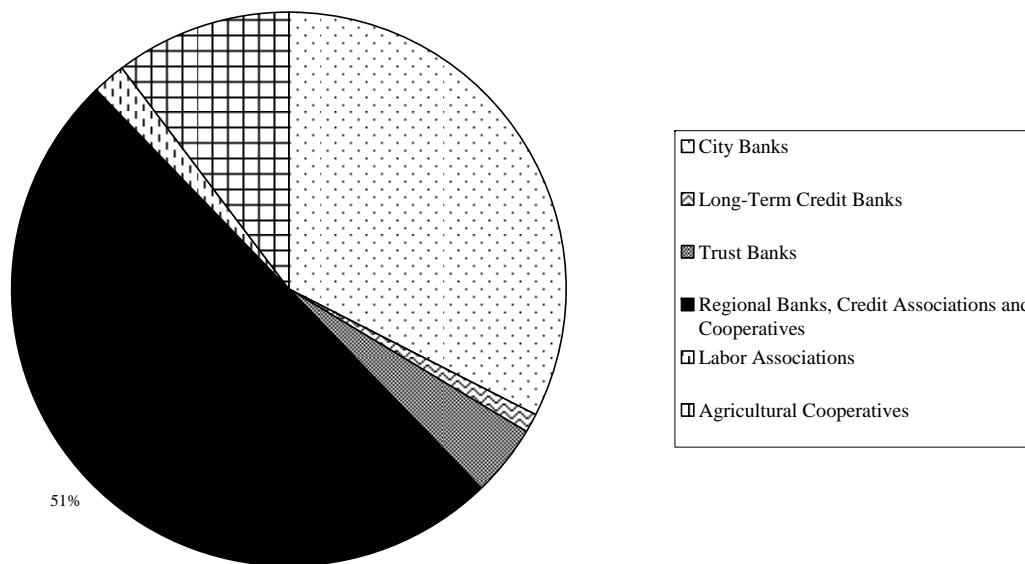
**Figure A1: Party Size in Lower House in 2000**



**Figure A2: Party Size in Upper House in 2001**

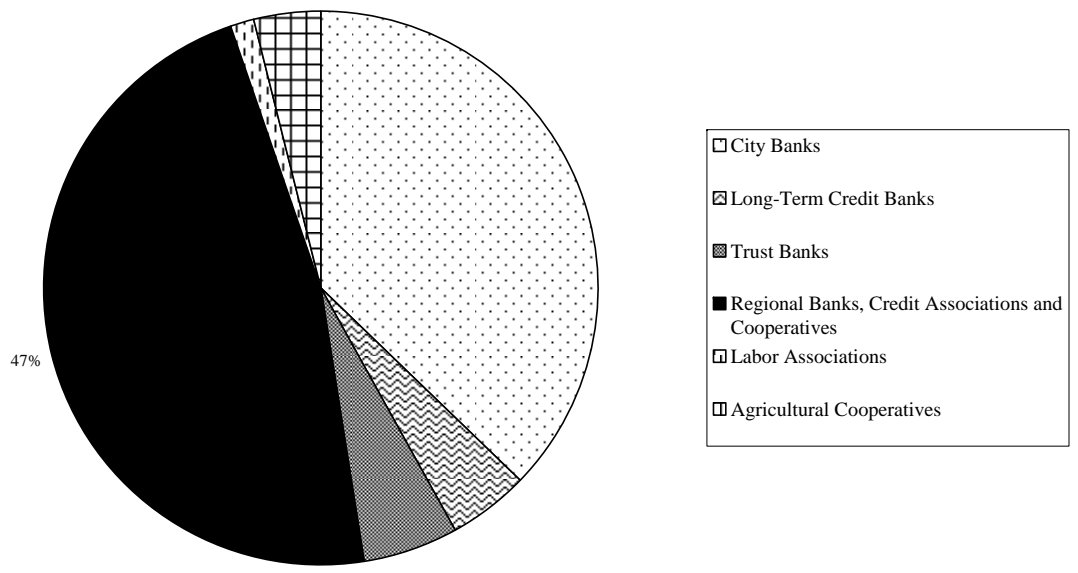


**Figure A3: Share of Bank Deposits (2002)**



Source: *Nikkin Shiryō Nenpo (Annual Report of Japan's Financial Institutions)*

**Figure A4: Share of Bank Loans (2002)**



Source: *Nikkin Shiryō Nenpo (Annual Report of Japan's Financial Institutions)*