

CENTER ON JAPANESE ECONOMY AND BUSINESS

日本経済経営研究所

Working Paper Series

February 2009, No. 272

Changes in Corporate Restructuring Processes in Japan, 1981-2007

Takeo Hoshi, Satoshi Koibuchi, and Ulrike Schaede

This paper is available online at www.gsb.columbia.edu/cjeb/research/ac

C O L U M B I A U N I V E R S I T Y I N T H E C I T Y O F N E W Y O R K

“Changes in Corporate Restructuring Processes in Japan, 1981-2007”

Takeo Hoshi
Satoshi Koibuchi
Ulrike Schaede[†]

ESRI Research Program: “Japan’s Bubble, Deflation and Long-Term Stagnation”

November 2008

Abstract:

We analyze a large database collected from newspaper articles that report on major episodes of corporate restructuring in Japan between 1981 and 2007. By linking this database with financial data on public firms, we identify changes in the likelihood that a distressed firm undergoes restructuring, as well as in some measures adopted during restructuring. We find that the way distressed Japanese firms are restructured has changed during this period. The likelihood that a large distressed firm with high levels of debt undergoes restructuring has declined. Those firms that undergo restructuring continue to adopt more aggressive measures in terms of layoffs and cutbacks than other distressed firms, suggesting that “restructuring”, when it happens, involves real adjustments. Banks continue to be important for firms with a clearly identified main bank, and the main bank is more likely to push for more drastic reductions in debt and bank loans than other entities leading a restructuring event.

[†]Hoshi and Schaede: School of International Relations and Pacific Studies, University of California, San Diego, NBER, and TCER. e-mails: thoshi@ucsd.edu, uschaede@ucsd.edu; Koibuchi: Faculty of Commerce and Economics, Chiba University of Commerce (CUC), Japan, e-mail: koibuchi@cuc.ac.jp. We received helpful comments from Noriyuki Yanagawa and participants of the ESRI conference in New York in March 2008. We thank Emi Fukuda, Kanako Hotta, Masafumi Iino, Akifumi Irie, Yuichiro Kawai, Yoshikazu Kuki, Kuni Nemoto, Masashi Osakada, Mary Shiratori, Christopher Syling, Kunio Takeda, and Koki Yoshida for research assistance.

1. Introduction

It is well-known that restructuring of troubled companies in Japan used to be based on bailout processes initiated by the distressed company's main bank or major trading partners. In a typical case, the main bank, being a large shareholder and usually the largest lender, intervened in a distressed borrower by dispatching executives and restructuring debt (often with the help of other lenders) with an eye toward turnaround so that the company would recover and resume debt repayment. Most bailouts were informal in nature: rarely were courts involved, and law-based bankruptcy procedures were exceedingly rare for large public companies.

Given its large exposure in both debt and equity, the main bank had a clear economic interest in the recovery of the customer. Moreover, it also strove to maintain its reputation as a dependable monitor on behalf of other lenders. Sheard (1989) argues that this type of reciprocal delegated monitoring reduced costs by eliminating duplication of the monitoring effort. Under delegated monitoring, the main bank was responsible for rescuing a client in financial trouble. Politics may occasionally have played a role, as the government had set strong priorities toward supporting Japan's largest companies, in order to uphold employment.¹

During the 1990s, Japan's political economy, and with it the incentives and constraints faced by banks and large companies, began to change. One important factor was gradual financial deregulation that began in the late 1970s, and the subsequent disintermediation. As large firms diversified their sources of financing, banks started to lose their largest customers. As this happened, they looked for other (smaller) clients, especially those with land to be used as collateral for loans. Many of these new clients found themselves in trouble after asset prices collapsed in the early 1990s. The non-performing loan problem escalated into a full blown crisis in the late 1990s, and continued into the early 2000s.

The banking crisis led to great changes in Japan's banking industry. The severity of the crisis invited important legal change, partially in order to help banks reduce their nonperforming loans, and partially help companies restructure and reorganize their business in new ways (as explained in detail in Section 2). A 2001 law mandated the reduction of banks' shareholding in other companies, thereby reducing the banks' equity stake in clients. The 2002 Financial Revival Program, pushed by Heizo Takenaka (Minister of Financial Affairs in the Koizumi government),

¹ There is a large literature on Japan's main bank system in general, and main bank interventions in particular. See, for example, Aoki and Patrick (1994); Hoshi, Kashyap, and Scharfstein (1990); Hoshi and Kashyap (2001); Hirota and Miyajima (2001); Kaplan and Minton (1994); Kang and Shivdasani (1995); Morck and Nakamura (1999); and Sheard (1989, 1994).

put great emphasis on non-performing loan cleanup and was associated with a new political push toward direct loan write-offs, even for companies that might previously have been considered “too big to fail”. New bankruptcy legislation and court processes introduced in the early 2000s afforded companies a choice between bank-led informal workouts and formal, court-based procedures. Changes in corporate law also introduced new options for corporate reorganization.

This paper looks at whether and how these changes have affected processes of corporate restructuring in Japan. Based on a database of major corporate restructuring cases between 1981 and 2007, combined with financial data for large Japanese firms, we study the incidence and content of restructuring. We identify changes over time in what triggered the onset of corporate restructuring, who led corporate restructuring (i.e., the role of banks), and how restructuring effected employment, capital growth, bank loan growth and total debt growth of the distressed company. We find that the likelihood that a large distressed firm undergoes restructuring has decreased over time, especially in the early 2000s. Moreover, firms under restructuring show lower growth in employment, capital, and debt than other distressed firms. Finally, we find that restructuring measures are more pronounced when a bank or a private equity fund leads the effort.

The paper is organized as follows. Section 2 sets the background by highlighting a few important changes related to corporate restructuring in Japan. Section 3 introduces the database and offers overview statistics. Section 4 contains the data analysis and findings. Section 5 concludes.

2. Changes since the late 1990s

The period of 1998-2006 brought great changes to Japan’s corporate strategy-making, so much so that Schaefer (2008) has labeled this period a “strategic inflection point”. It coincides with political leadership of Hashimoto and Koizumi, who brought the 1998 “Big Bang” financial deregulation and shifted Japan toward the motto “leave it to the market”.

The Big Bang reforms marked a final stage of gradual financial deregulation that began in the late 1970s. As Hoshi and Kashyap (1999, 2001) point out, this long process was skewed because deregulation that expanded financing options for large companies proceeded more quickly than deregulation expanding options for banks or savers. As a result, banks started to lose corporate customers while savers continued to hold large portions of their assets in bank deposits. The banks searched for new clients among small- and medium-sized companies,

especially those in the real estate business. But whereas those new clients had looked promising during the land price boom of the 1980s, loans turned sour as land prices dropped in the 1990s. Non-performing loans were a major problem for Japanese banks throughout the decade, and triggered a severe financial crisis from late 1997 to early 1999.

Rather than a reversal in banking regulation, the crisis further pushed deregulation, especially under the Koizumi government (2001-2006). As the government allowed several large financial institutions to fail, and raised pressure on banks to reduce their non-performing loans, it became clear that it was no longer blindly supporting bailouts of large firms. Partially in response to this shift, large companies called for more options in corporate reorganization, such as through labor adjustment. A first easing of layoff rules came through revised court rulings in 2000, followed by a revision of the Labor Standard Law, effective 2004 (Schaede 2008).

For our study of corporate restructuring, the following four changes are of particular importance. First, the particular process of financial deregulation changed the client base of Japanese banks. Large companies no longer needed to rely as heavily on bank financing. Yet, the relationship between banks and new smaller customers was often not as extensive or tight. Because main banks were often leaders of corporate restructuring cases, this shift in bank-firm relationships may have affected processes of corporate restructuring.

Second, among other things, Big Bang reforms brought new accounting rules that make the financial condition of public companies more transparent. Outside investors such as foreign private equity funds can now assess a company's financial health more easily than before. This has opened the possibility that new investors play a role in corporate restructuring.

Third, in terms of corporate reorganization the Commercial Code was revised literally every year beginning in 1997/98, and eventually replaced by a new Corporation Law in 2006. The gist of these revisions was to allow for greater flexibility in corporate reorganization by facilitating spinoffs, spinouts, different types of stock, stock swaps, mergers and acquisitions.² One big impact of these reforms has been an increase in hostile takeover attempts, which is a new cause for concern for executives at underperforming firms. A new wave of proactive restructuring set in, whereby large firms refocused on core businesses, spun off non-core operations and restructured their finances. Importantly for our study, these legal reforms also afforded leaders of forced restructuring – the main bank, a lead company, or a consortium of both – much more flexibility in how to restructure a distressed company (Yanagawa 2006; Schaede

² For example, one important change was to revoke the veto right of employees in case of a spin-out. Previously, corporate unions had rejected such moves on the ground that traditionally smaller firms in Japan paid lower salaries. The revocation of this rule took labor out of the restructuring equation.

2008).

A fourth major change was the complete revision of bankruptcy laws. In their old versions, these had rarely been employed because they were too cumbersome, too expensive, and overall perceived as less efficient than an informal workout, such as an intervention by the main bank. However, in 2000 the new Civil Rehabilitation Law (*Minji-saisei-hō*) replaced the old, clumsy Composition Law (*Wagi-hō*) to design new court-based bankruptcy procedures.³ In 2003, the Corporate Reorganization Law (*Kaisha kōsei hō*) was revised to allow for Chapter 11-type turnarounds. In 2004, the Liquidation Law (*Hasan-hō*) was revised to simplify legal procedures for a shutdown and fair distribution of assets. Moreover, the 2001 “Guideline for Out-of-Court Workouts” added to this a new structure for bank-led workouts by stipulating how debt forgiveness should be organized in cases with multiple lenders but uncertain claims. While Koibuchi (2007) shows that this Guideline was rarely used, it represented yet another alternative for companies in distress.

Given these changes as the background, we now examine whether and how these have affected incidence and processes of corporate restructuring in Japan.

3. Database and Overview Statistics

We have build a database of major episodes of corporate restructuring for the period 1981-2007, in two-year interval (all odd years, a set of 14 years of observation), from newspaper articles. The Japanese word for restructuring is *saiken* (再建), and we searched for this word in Nikkei Telecom 21, an electronic database that includes Japan’s leading economic and financial newspapers published by Nihon Keizai Shinbun-sha (*Nihon Keizai Shinbun*, both morning and evening editions and including the economic sections of regional editions, *Nihon Kin’yū Shinbun*, *Nihon Sangyō Shinbun*, *Nihon Ryūtsū Shinbun*). We assume that the newspapers have been consistent in their reporting and word choice on *saiken* over time. Since the newspapers probably failed to report on all restructuring cases, the number of episodes in our database is the lower bound of the true frequency. However, looking at the cases we identified, we did not find any obvious omissions of major corporate restructuring cases. Thus, we are confident that our database includes all major cases of restructuring in those years.⁴ Moreover, because episodes of

³ Another legal based procedure was “Corporate Reordering” (*Kaisha-seiri*) based on the Commercial Code. This was also cumbersome, and it was discontinued with the Corporation Law of 2006.

⁴ Also note that the Japanese language is much more consistent in word use than English. For example,

restructuring typically last longer than one year, we are confident that we have picked up most episodes generated in even years as well.

In the next step, we identified those articles that focused on corporate restructuring by publicly listed companies, because this allows us to combine our database with accounting and financial data. Upon this identification, we digitized the information in each newspaper account, to build a database that contains important characteristics of each restructuring episode. This included the coding of information on: timing; the role of the restructuring leader (such as the main bank or an affiliated company); any reliance on laws and courts; financial restructuring (such as debt forgiveness, interest concession); restructuring on the asset side of the balance sheet (asset sales or stock sales); managerial change (dispatch of directors, turnover of incumbent managers); corporate reorganization (spinoffs or exit from a business); labor adjustment (layoffs, early retirement, hiring freeze or employee dispatches); and salary adjustments (wage or bonus cuts, executive compensation reduction).

For the entire period, we observed a total of 1,610 episodes of corporate restructuring. Table 1 shows some summary statistics for the restructuring cases for the 26-year period, divided into four sub-periods: (1) pre-bubble (1981-1985); (2) bubble (1987-1991); (3) recession (1993-1997); and (4) strategic inflection (1999-2007). As one might expect, there were fewer cases of restructuring during the bubble (241 in total), and more during the strategic inflection turnaround beginning in 1999 (602). We can already see signs for change just by looking at this table. For example, in the fourth period, companies have become more active in reorganization (e.g., exiting lines of business or liquidating affiliates). In terms of financial restructuring, it appears that interest rate reduction has been in decline, whereas measures such as debt-equity swaps and new equity issues appear to be adopted more frequently.

Table 2 offers an overview of the data by type of restructuring leader; i.e., whether the effort was self-directed (or without leadership identified by the newspaper), led by the main bank or a group of banks, by a company or group of companies, by a consortium of banks and companies, or by a private equity fund (a new player beginning in the late 1990s). The table shows that the majority of restructuring cases was informal, as law and courts were used in only 5.7% (probably due to the fact that laws were revised only beginning in 2000). When using a court-based procedure, a distressed company needs to identify a sponsor, which probably

whereas an English-language article may refer to “firms”, “companies” and “corporations” interchangeably and all with the same meaning – presumably to avoid tediousness in word repetition – a Japanese-language article would use the same word, even if repeatedly. This tendency toward word choice consistency is helpful for our exercise.

explains the large role played by other companies in this category (31 cases). Bank-led restructurings were almost always conducted out-of-court. All leaders appear roughly equally likely to dispatch directors and replace the management of the distressed firm. Episodes led by a group of banks tend to have a higher incidence of corporate reorganization, labor adjustments, and salary adjustments. Overall, these data afford us great opportunity to study differences in corporate restructuring over time, and by type of leader.

For our analysis of the meaning of such differences, we also look at the financial conditions of the companies undergoing restructuring. We source this information from the Nikkei Financial Database, which contains accounting and financial data for all listed firms, as well as firms that used to be listed but ceased to exist. Overview statistics for all listed firms are presented in Table 3.

4. Data Analysis and Findings

We begin our analysis with a few graphs that highlight how distressed companies that undergo restructuring differ from distressed firms that do not. In our analysis, we use two alternative approaches to classify “distress”. First, we define a company to be in distress if its interest rate coverage ratio was below one for the previous two years. Alternatively, we classify a company to be in distress if it has just experienced two consecutive years of negative net profits.

Figure 1 shows the ratio of all distressed firms that are undergoing restructuring. There appears to be a downward trend in firms with negative net profits to undergo restructuring (Figure 1a). Figure 1b shows limited enthusiasm for restructuring firms with low interest rate coverage ratios during the bubble period (1987-1991). Overall, we can see variation across periods as well as long-term changes.

Figure 2 shows differences across firms under distress that undergo restructuring from those that do not, in terms of employment adjustment. It appears that distressed firms under restructuring reduce their labor force more than those not undergoing restructuring. Figure 3 shows that distressed firms under restructuring reduce their debt more than other distressed firms.

4.1. Changes in the Likelihood of Undergoing Restructuring Over Time

To understand the apparent decline in the incidence of restructuring by distressed firms, we estimate several probit regressions. The dependent variable is “*saiken*”, which takes the value

1 if a firm is identified to be under restructuring, and 0 if not. We examine whether the likelihood of undergoing restructuring is determined by whether the company is in financial distress or not (using both measures discussed above), and by the company's dependence on bank borrowings (measured by the ratio of total bank debt to total assets). Moreover, we look at how relations have changed over time.

The estimation results are shown in Table 4. The first column reports the minimal specification that includes the bank debt to assets ratio; (the natural logarithm of) total assets (both measured at the beginning of the period); and a 0-1 variable that identifies a company with an interest coverage ratio below one for the two previous years. The coefficient estimates on these variables are all positive and statistically significant. Thus, not surprisingly, companies with extremely low interest coverage ratios are more likely to be restructured. Companies that depend more on bank debt are also more likely to be restructured, as are larger companies.

In the specification reported in the second column, we add a two-year lag of the *saiken* variable as an explanatory variable, to see if a company under restructuring is likely to stay under restructuring for more than two years. We can also think of this as an attempt to control for the existence of chronically depressed and restructured companies. Because the lag of *saiken* is not available for the first year of our sample (1981), the number of observation drops. The coefficient estimate on the lagged *saiken* is positive and statistically significant, suggesting that a company under restructuring is indeed more likely to continue being restructured, even after two years. The coefficient estimates on the other variables are now a bit smaller but still positive and statistically significant.

The third specification controls for industry effects, by adding industry dummies. While there is variation across industries, no industries stand out as driving the results. All the coefficient estimates that we report remain positive and statistically significant.

Finally, in the last column, we add "main bank dependence" as an independent variable. This is measured as the amount of loans from the largest lender divided by total bank loans to the company. This variable was originally calculated by one of the authors for a different research project that covered fewer industries and ended in 2002. In a future version of this paper, we plan to calculate this variable for all companies in our sample, and for all years. While limits on this variable reduce the sample size, we still have 17,800 observations. We find that "main bank dependence" has a positive association, but the finding is not significant.

We repeated estimation of all these specifications by using net profits instead of interest coverage ratio to classify "distress". The results (not reported) are essentially the same.

Next, we examine possible changes over the four periods – pre-bubble, bubble, 1990s

recession, and strategic inflection. We do this by adding period dummy variables for these sub-periods and interacting them with some key explanatory variables. Table 5 reports the results. The specification in the first column adds the interaction between the period dummy and the distress variable. The estimated coefficients on the interaction terms suggest that the impact of “distress” on the likelihood of restructuring has faded over time. Compared with the 1983-1985 period, in each subsequent period the likelihood that a distressed company will undergo restructuring has declined. While this finding is not statistically significant for the 1987-1991 period, it is significant for the subsequent two periods.

In the second column, we add an interaction term between the bank debt to total assets ratio and the period dummies. We find that the impact of dependence on bank debt by a distressed company on the likelihood of restructuring also declines over time. Even though companies with higher bank debt dependence continue to be more likely to be restructured, the difference between companies with high levels of bank debt from those with low levels of bank debt becomes much smaller in later periods. The estimated coefficients suggest that the impact of bank debt declined monotonically over time.

Finally, we examine changes in the importance of main bank dependence over time. Again, the number of observations is reduced now, due to temporary data constraints. Recall that in Table 4 we estimated the impact of main bank dependence without considering possible changes over time, and found the coefficient estimate to be positive but statistically insignificant. When we now allow the coefficient estimate to be different for the four periods, we find a positive, statistically significant impact for the first period (1983-1985). The interaction terms are all negative, and the point estimate is negative and grows over time. In fact, for the last sub-period the sum of the coefficient estimates on the interaction term and main bank dependence is negative, suggesting that higher main bank dependence reduced the likelihood of restructuring, although this result is probably not statistically significant.

Overall, the results provide some new insights into the changes in determinants for restructuring events over time. Clearly, distressed firms with more bank debt are more likely to be restructured, but over time this tendency has declined. The well-established practice whereby large firms in distress, with a high debt to assets ratio, would undergo restructuring, especially if they had a strong main bank, seems to have weakened over time.

4.2. Differences in the Processes of Restructuring

In addition to changes in the likelihood of a distressed firm undergoing restructuring over time, our second question is whether restructuring content has changed as well.

We first look at employment adjustment, measured as growth in the number of employees over the previous year. From Figure 2, we already know that on average, distressed companies undergoing restructuring reduce their labor force more than distressed companies not under restructuring. Regression analysis confirms this result. Here we use the *saiken* variable as an explanatory variable for employment growth. The regression also includes a one-year lag of employment growth, to capture persistence at the firm level. We also include year dummies and industry dummies to control for any time-specific or industry-specific fixed effects. Finally, all regression specifications also include the distress dummy as an explanatory variable.

Table 6 reports the results. To mitigate problems caused by a few extreme observations, in this and all following regressions that use growth variables as the dependent variable, we drop all observations where either the growth rate or the lagged growth rate is below -50% or above 100%. The regression is estimated by OLS, and robust standard errors suggested by White (1980) are reported in parentheses. The basic specification in the first column shows that distressed companies in general have lower employment growth, which is not surprising. When we control for the general effect of distress on employment growth, the regression result shows that companies under restructuring reduce employment even more. The point estimate suggests that employment growth in firms undergoing restructuring is 3.5% lower.

The specification in the second column adds the interaction term between the distress variable and *saiken* to examine whether being under restructuring further reduces employment growth for distressed firms. The negative and statistically significant coefficient estimate on the interaction term confirms that this is indeed the case. The point estimate suggests that restructuring by distressed firms lowers employment growth by 5.3%, while it reduces employment growth in non-distress firms by 3.0%.

In the third column, we introduce interaction terms between *saiken* and the period dummies to see whether the employment impact of restructuring changed over time. The estimated coefficients on all interaction terms are tiny and not significantly different from zero. Thus, we conclude that restructuring consistently led to lower employment growth throughout the entire period.

Table 7 reports a similar regression analysis with capital growth (growth in depreciable assets, a proxy for investment rate) as the dependent variable. Similar to employment growth, distressed firms experience reduced capital growth. Firms under restructuring reduce capital growth even more. However, in contrast to employment, the coefficient estimates on the interaction terms are large. The coefficient estimate is positive and statistically significant for the 1993-1997 period. This suggests that firms under restructuring did not reduce capital growth as

much as have in recent years, and this is especially true for the mid-1990s.

Similar regressions reported in Table 8 examine the growth of bank loans during restructuring. For the stereotypical bank rescue case, one may expect the lead bank to increase loans to help the troubled client – with debt forgiveness being the extreme example - while in some cases reducing the debt burden may be more effective for the turnaround effort. There is no empirical evidence that the average firm under bank rescue increased its loans, as pointed out by Miwa (1985) and Hoshi, Kashyap and Scharfstein (1990). Our results confirm this finding, as bank loan growth is not higher for firms undergoing restructuring.

Looking at the basic specification in column 1 of Table 8, we find that distressed companies tend to reduce bank loan growth. It is not clear whether this is demand-driven (the company refrains from borrowing more) or supply-driven (the bank refuses to lend more). The estimated coefficient on *saiken* is essentially zero, suggesting that restructuring does not affect bank loan growth. We add the interaction between *saiken* and the distress dummy in the second column, and the interaction between *saiken* and period dummies in the third column. In none of these specifications do we find *saiken* to have any significant impact on bank loan growth.

In contrast, the results for total debt reduction differ. Recall that Figure 3 suggests that distressed firms under restructuring reduce their debt more than other distressed firms. Table 9 shows regression results for the growth rate of total debt. Distressed firms tend to have lower total debt growth in all specifications. Again we cannot be sure whether this is driven by demand or supply. But unlike for bank loans, we find that firms under restructuring tend to reduce the growth rate of total debt, although this result becomes insignificant when we interact *saiken* with the period dummies in the specification shown in the last column.

Overall, we find that firms under restructuring tend to reduce their growth of employment, capital, and total debt. We do not find evidence for any change in this tendency over time, with a weak evidence for reduced impact of restructuring on capital growth during the mid-1990s.

4.3. The Role of the Restructuring Leader

We now turn to the question whether there are differences in process, depending on who leads the restructuring episode. Table 2 showed preliminary data on such differences, as well as six categories of leaders of restructuring: the main bank, a group of banks, a company or group of companies, a combination thereof, or a private equity fund.

First, we examine whether growth of employment, capital, bank loans or total debt differ depending on the identity of the leader(s). To do this, we regress the growth variable on its

lag and six dummy variables, each taking the value 1 for a particular type of leadership. Since our regression includes a constant term, the excluded category self-leadership (including cases where the restructuring leader is unidentified). Results reported in column 1 of Table 10 show no differences across restructuring leadership in terms of employment growth. Likewise, capital growth rates do not differ greatly, with one exception: when a group of companies leads the restructuring, capital growth is reduced more than with other leaders (column 2)

In contrast, in terms of bank loan growth we find some interesting differences (column 3). Loans are reduced more when either one bank or a fund are the leaders. Results for both of these leaders are strong and significant, suggesting that these two leadership forms may ask for more aggressive measures of financial restructuring. A similar finding, though slightly weaker for funds, can be seen for total debt growth.

The apparent differences between bank leadership and other types of leadership prompt us to look at the factors that make a bank-led restructuring more likely and how those changed over time. To examine this issue, we estimate a series of probit models similar to those above regarding the determinants of restructuring events and changes over time. Here, the dependent variable, “bank-led”, takes the value 1 if a restructuring episodes is led by a single bank (probably the main bank), and 0 otherwise. Note that the bank-led variable is defined only for those firms under restructuring that we coded for our database, and the sample size for this analysis is at most 1,610. Industry dummies are included in all specifications, as are period dummies when we add interaction terms with periods.

The results in Table 11 suggest that large size and a high bank debt to assets ratio increase the probability of bank-led restructuring. As shown earlier, restructured firms tend to be larger and have a higher dependence on bank debt. The results here suggest that – even in this limited sample of firms under restructuring – firms under bank-led restructuring stand out for having more assets and higher bank dependence. The distress dummy does not seem to matter, suggesting that bank-led restructuring does not address the level of distress, at least as measured by our classification of interest rate coverage or negative net profits.

The specification in the second column includes main bank dependence as an additional explanatory variable. As one might expect, we find that higher dependence on a main bank increases the probability of bank-led restructuring.

The third specification includes the interaction terms between bank debt to total assets ratio and the four periods, as well as those between the distress dummy and the periods. Main bank dependence is not included in this specification. The distress dummy does not matter in any period. In contrast, we find interesting changes over time for the bank debt to total assets ratio.

For the 1981-1985 period, high bank debt is associated with a higher probability of bank-led restructuring. For the 1987-1991 period, the impact is slightly negative but perhaps not statistically significant from zero, suggesting high bank debt did not increase the likelihood of the bank-led restructuring. However, for the 1993-1997 period, the impact becomes positive again, even though the magnitude is smaller than the 1981-1985 period. For the 1999-2007 period, the impact is positive and actually larger than in the 1981-1985 period.

The last column reports a specification that includes the interaction term between main bank dependence and the four periods, in addition to the interactions between the distress dummy and the periods. Again, the distress dummy does not matter in any sub-period. The point estimates on the interaction terms with main bank dependence suggest that the importance of high main bank dependence as a determinant of bank-led restructuring declined over time, although the change is not statistically significant.

5. Conclusions

Using a unique database on major corporate restructuring cases in Japan, this paper examined what type of firms are more likely to be restructured, what restructuring implies for the company's employment, investment, and debt, and how those relations changed over time.

Our analysis offers three important findings. First, the likelihood for firms in distress to undergo restructuring has apparently decreased over time. Throughout the period 1981-2007, the larger the company in distress and the higher its dependence on bank debt, the more likely it was to undergo restructuring. However, this likelihood has declined over time. This suggests that there are some large and highly bank-dependent companies that would have been restructured in the early 1980s but are not in the 2000s. The result supports the argument put forward by Caballero, Hoshi, and Kashyap (2008) that a lack of restructuring in the 1990s and the early 2000s created many zombie firms and slowed down the economy.

Second, we find that it makes a difference who leads the restructuring efforts. When a bank or a fund takes charge, the distressed firm reduces debt and bank loans more aggressively. Main bank-led restructuring continues to be effective when it happens, although it appears to happen less frequently over time.

Third, distressed firms that undergo restructuring tend to reduce expansion in employment, capital, and debt more than other distressed firms. At the most basic level, this means that restructuring is real, and not simply an announcement exercise. Whether differences in restructuring lead to differences in performance is another issue that we leave for future research.

References

- Aoki, Masahiko and Hugh Patrick (Eds.). 1994. *The Japanese Main Bank System*. Oxford, UK: Oxford University Press
- Caballero, Ricardo, Takeo Hoshi, and Anil Kashyap (2008). "Zombie Lending and Depressed Restructuring in Japan." *American Economic Review*.
- Hirota, Shin-ichi, and Hideaki Miyajima (2001). "Mein Banku Kainyu-gata Gabanansu ha Henka Shitaka? (Has Main Bank-led Governance Changed?)," *Gendai Fainansu*, No.10, 35-61.
- Hoshi, Takeo, and Anil Kashyap (2001). *Corporate Financing and Governance in Japan: Road to the Future*. Cambridge, MA: MIT Press.
- Hoshi, Takeo, Anil Kashyap and David Scharfstein (1990). "The Role of Banks in Reducing the Costs of Financial Distress in Japan," *Journal of Financial Economics*, 27, 67-88.
- Iwaisako, Tokuo (2005). "Corporate Investment and Restructuring," in Takatoshi Ito, Hugh Patrick, and David Weinstein (Eds.) *Reviving Japan's Economy*. Cambridge, MA: MIT Press, 275-310.
- Kang, Jun-Koo & Shivdasani, Anil. 1995. Firm Performance, Corporate Governance, and Top Executive Turnover in Japan. *Journal of Financial Economics*, 38:29-58
- Kaplan, Steven N. & Minton, Bernadette A. 1994. Appointments of Outsiders to Japanese Boards: Determinants and Implications for Managers. *Journal of Financial Economics*, 36:225-258.
- Koibuchi, Satoshi (2007). "Debt Forgiveness during the 'Lost Decade': Impacts of the Industrial Revitalization Corporation of Japan", Paper presented in 9th Macroeconomic Conference held at Keio University, Japan (December 1, 2007).
- Morck, Randall & Nakamura, Masao. 1999. Banks and Corporate Control in Japan. *The Journal of Finance*, 54 1:319-339.
- Peek, Joe and Eric S. Rosengren, (2005). "Unnatural Selection: Perverse Incentives and the Misallocation of Credit in Japan," *American Economic Review*, 95, 1144-1166.
- Schaede, Ulrike (2008). *Choose and Focus: Japanese Business Strategies for the 21st Century*. Ithaca, NY: Cornell University Press.
- Sekine, Toshitaka, Kobayashi, Keiichiro, and Yumi Saita (2003). "Forbearance Lending: The Case of Japanese Firms," *Monetary and Economic Studies*, 21, 69-91.
- Sheard, Paul. 1989. The Main Bank System and Corporate Monitoring and Control in Japan. *Journal of Economic Behavior and Organization*, 11:399-422.
- Sheard, Paul (1994). "Main Banks and the Governance of Financial Distress," in Masahiko Aoki and Hugh Patrick (Eds.) *The Japanese Main Bank System*. Oxford, UK: Oxford University Press, pp.188-230.
- Yanagawa, Noriyuki (2006). *Hō to Kigyō Kōdō no Keizai Bunseki (Economic Analysis of Law and Corporate Behavior)*. Tokyo, Japan: Nihon Keizai Shimbun-sha.

Table 1: Summary Statistics for 1,610 Restructuring Cases, 1981-2007

Period	1981-1985	1987-1991	1993-1997	1999-2007
Restructuring Cases	331	241	436	602
Proportion of cases for each event				
director dispatch	1.23%	0.71%	1.12%	0.75%
managerial turnover	22.05%	22.13%	26.65%	25.74%
executive bonus cut	5.14%	2.87%	4.69%	7.11%
change of restructuring plan	3.32%	2.87%	4.20%	3.31%
asset sale	26.59%	20.33%	23.39%	17.11%
stock sale	6.04%	7.47%	8.72%	9.47%
exit from a business line	10.27%	8.20%	12.58%	21.16%
new entry	8.16%	12.30%	4.26%	4.30%
spin off	17.82%	15.98%	12.37%	11.07%
liquidation of affiliated companies	9.37%	8.20%	10.66%	19.17%
new loans	2.42%	4.56%	5.05%	3.49%
interest reduction	8.46%	1.64%	5.54%	0.83%
debt forgiveness	1.51%	3.32%	1.83%	9.80%
debt equity swap	0.30%	0.00%	0.00%	3.31%
new equity issue	8.16%	8.71%	7.57%	18.60%
equity reduction	2.42%	3.28%	0.43%	6.94%
size reduction	13.90%	9.84%	15.57%	15.87%
cost reduction	20.54%	18.44%	23.45%	15.54%
sales promotion	19.03%	20.49%	15.57%	14.88%
relocation of labor	11.18%	3.69%	6.61%	4.30%
furlough	1.21%	0.00%	0.64%	0.00%
stop new hires	8.76%	2.05%	9.81%	4.96%
early retirement	38.53%	12.31%	19.43%	41.22%
layoffs	2.11%	8.20%	5.12%	2.31%
shukko (employee dispatch)	9.37%	4.51%	7.89%	4.30%
wage reduction	3.63%	1.23%	1.07%	5.12%
bonus cut	1.51%	0.41%	0.85%	1.82%
Reorganization (exit, spinoff, size reduction)	1.75%	1.00%	2.14%	1.85%
Adjustment of employment (relocation, furlough, stop new hires, early retirement, layoffs, dispatch)	1.51%	0.63%	1.76%	0.93%
Salary or bonus adjustment (wage cut, salary cut, executive bonus reduction)	0.37%	0.12%	0.30%	0.39%

Table 2: Overview Data: Differences in Restructuring, by Restructuring Leader

	Self-Directed or NA	Main Bank	Another Company	Group of Banks	Group of Companies	Group of Banks and Companies	Fund	Total
Total	968	135	286	50	41	109	21	1,610
Number of Cases based on Bankruptcy or Liquidation Laws								
NA	932	131	256	43	36	101	19	1,518
Liquidation Law	0	1	1	1	0	2	0	5
Corporate Reorganization Law (rev. 2003)	25	1	21	4	4	1	0	56
Commercial Code-based (until 2006)	0	1	2	0	0	0	0	3
Composition Law (until 2000)	1	0	0	0	0	0	0	1
Civil Rehabilitation Law (2000 onward)	10	1	6	2	1	5	2	27
Total law-based	36	4	30	7	5	8	2	92
%	3.7	3.0	10.5	14.0	12.2	7.3	9.5	5.7
Number of Executives Dispatched								
0	955	66	144	32	21	41	13	1,272
1	8	51	92	7	12	23	5	198
2	4	9	28	6	1	16	3	67
3	0	4	6	1	3	5	0	19
4	0	1	6	2	1	10	0	20
5-13	1	4	10	2	3	14	0	34
Number of Cases with Executive Replacement								
0	786	88	184	33	26	69	16	1,202
1	182	47	102	17	15	40	5	408
%	18.8	34.8	35.7	34.0	36.6	36.7	23.8	25.3
Number of Revisions in Reorganization Plans								
0	947	126	281	44	39	102	21	1,560
1	20	9	3	5	2	6	0	45
2	0	0	2	1	0	0	0	3
3	1	0	0	0	0	1	0	2
Cases with Corporate Reorganization (exit, spinoff, liquidation)								
0	583	69	210	20	20	50	13	965
1	385	66	76	30	21	59	8	645
%	39.8	48.9	26.6	60.0	51.2	54.1	38.1	40.1
Cases with Labor Adjustments (furlough, no new hires, early retirement, dispatch)								
0	688	101	234	34	31	70	21	1,179
1	280	34	52	16	10	39	0	431
%	28.9	25.2	18.2	32.0	24.4	35.8	0.0	26.8
Cases with Salary Adjustments (wage reduction, bonus cuts, executive compensation cuts)								
0	903	121	277	38	38	95	20	1,492
1	65	14	9	12	3	14	1	118
%	6.7	10.4	3.1	24.0	7.3	12.8	4.8	7.3

Table 3: Summary Statistics for Financial Data for All Listed Firms, 1981-2007
(in averages for each period; in million Yen)

Period	1981-1985	1987-1991	1993-1997	1999-2007
% of firms under restructuring	0.051	0.033	0.053	0.039
% of firms with negative net profits for 2 years	0.023	0.014	0.041	0.072
% of firms with interest coverage ratio <1 for 2 years	0.095	0.152	0.177	0.153
total assets	104,676.8	153,415.9	176,638.8	162,657.7
total bank loans	35,230.5	43,034.3	44,476.8	34,309.7
total debt	42,093.5	61,626.2	69,667.0	54,999.8
bank debt to total assets ratio	0.280	0.235	0.225	0.230
total debt to total assets ratio	0.299	0.291	0.294	0.268
employment growth	0.010	0.023	0.006	0.011
sales growth	0.082	0.088	0.058	0.277
profit rate (net profit / total assets)	0.028	0.031	0.016	0.021
net profits	1,964.2	2,741.1	1,805.1	2,071.2
interest coverage ratio	1.137	0.215	9.924	0.863
main bank dependence (proportion of loans from the largest lender)	0.256	0.273	0.277	0.294
amount of loan from the largest lender (avg per firm)	2,922.1	4,106.6	5,402.0	5,627.5

Figure 1: Restructuring and Distress

Figure 1a: Ratio of firms under restructuring to number of firms with negative net profits over the previous two years

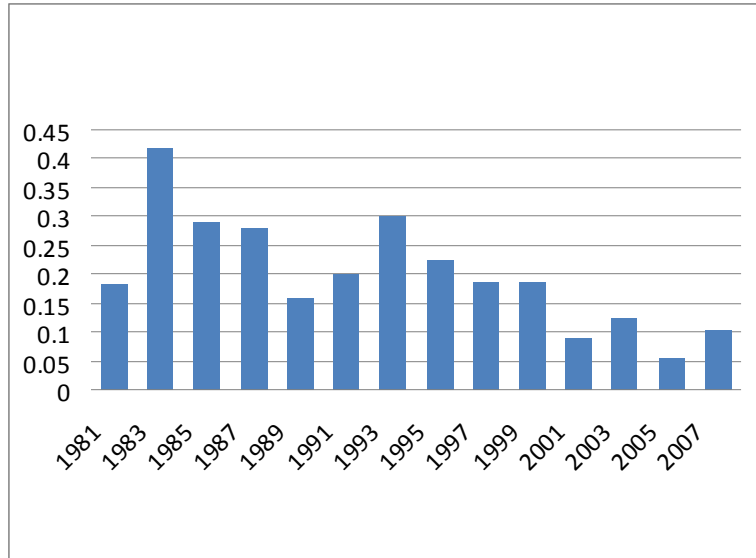


Figure 1b: Ratio of firms under restructuring to number of firms with interest coverage ratio <1 for the previous two years

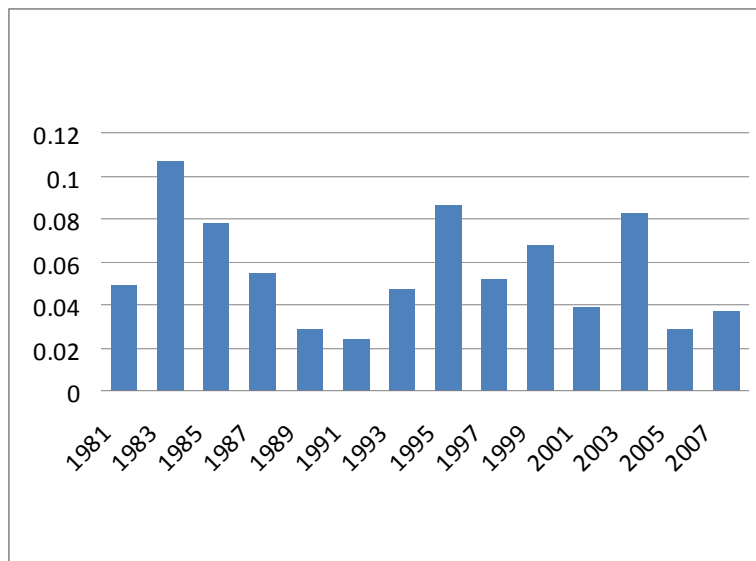


Figure 2: Employment adjustment by firms under distress, comparing firms under restructuring (solid line) with firms not under restructuring (dotted line)

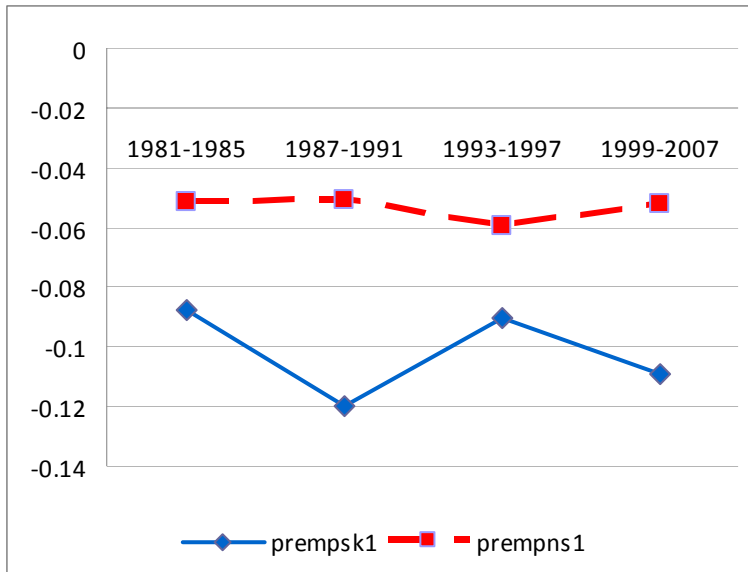


Figure 3: Debt Reduction by firms under distress, comparing firms under restructuring (solid line) with firms not under restructuring (dotted line)

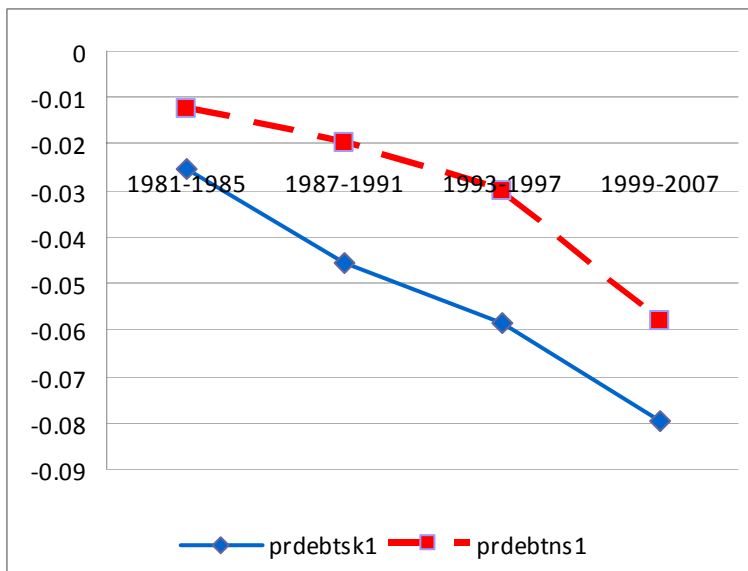


Table 4: Regression Results: Determinants of Restructuring

Variables	(1)	(2)	(3)	(4)
bank debt / total assets	1.431 (0.056)	1.201 (0.061)	1.556 (0.072)	1.692 (0.093)
ICR < 1 for 2 years	0.324 (0.030)	0.255 (0.032)	0.220 (0.033)	0.254 (0.041)
log(total assets)	0.169 (0.0074)	0.147 (0.0080)	0.185 (0.0093)	0.176 (0.113)
<i>saiken</i> 2 years ago		1.139 (0.040)	1.025 (0.041)	0.937 (0.049)
main bank dependence				0.174 (0.113)
Period dummies	No	No	No	No
Industry dummies	No	No	Yes	Yes
Number of observations	36486	33637	33307	17800

Note to Table 4: The dependent variable is *saiken* that takes 1 if the firm was under restructuring during the year (and 0 otherwise). Each column reports the coefficient estimates and standard errors (in the parentheses) for a probit model. The sample period is every odd year from 1981 to 2007. The model also includes a constant term. The rows “Period dummies” and “Industry dummies” indicate inclusion of these dummies (yes/no). The coefficient estimates for the period dummies, industry dummies and the constant term are not reported.

Table 5: Determinants of Restructuring: Changes Over Time

Variables	(1)	(2)	(3)
bank debt / total assets	1.555 (0.072)	1.967 (0.170)	1.771 (0.096)
bank debt / total assets X (1987-1991 dummy)		-0.205 (0.228)	
bank debt / total assets X (1993-1997 dummy)		-0.477 (0.205)	
bank debt / total assets X (1999-2007 dummy)		-0.599 (0.196)	
ICR < 1 for 2 years	0.422 (0.083)	0.468 (0.087)	0.485 (0.103)
ICR < 1 for 2 years X (1987-1991 dummy)	-0.179 (0.113)	-0.188 (0.119)	-0.217 (0.137)
ICR < 1 for 2 years X (1993-1997 dummy)	-0.252 (0.102)	-0.305 (0.105)	-0.340 (0.125)
ICR < 1 for 2 years X (1999-2007 dummy)	-0.250 (0.098)	-0.305 (0.101)	-0.232 (0.125)
log(total assets)	0.186 (0.0094)	0.185 (0.0095)	0.178 (0.013)
<i>saiken</i> 2 years ago	1.024 (0.041)	1.026 (0.041)	0.926 (0.050)
main bank dependence			0.715 (0.257)
main bank dependence X (1987-1991 dummy)			0.121 (0.326)
main bank dependence X (1993-1997 dummy)			-0.511 (0.308)
main bank dependence X (1999-2007 dummy)			-1.241 (0.316)
Period dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes
Number of observations	33307	33307	17800

Note to Table 5: The dependent variable is *saiken* that takes 1 if the firm was under restructuring during the year, and 0 otherwise. Each column reports the coefficient estimates and standard errors (in the parentheses) for a probit model. The sample period is every odd year from 1981 to 2007. The model also includes a constant term. The rows “Period dummies” and “Industry dummies” indicate inclusion of these dummies (yes/no). The coefficient estimates for the period dummies, industry dummies and the constant term are not reported.

Table 6: Restructuring and Employment Growth

Variables	(1)	(2)	(3)
lagged employment growth	0.311 (0.011)	0.311 (0.011)	0.311 (0.011)
ICR < 1 for 2 years	-0.007 (0.0013)	-0.005 (0.0013)	-0.007 (0.0013)
<i>saiken</i>	-0.035 (0.0030)	-0.030 (0.0033)	-0.038 (0.0057)
(ICR<1 for 2 years) <i>X saiken</i>		-0.023 (0.0077)	
<i>saiken</i>			0.0080 (0.0090)
X (1987-1991 dummy) <i>saiken</i>			0.0064 (0.0079)
X (1993-1997 dummy) <i>saiken</i>			0.0001 (0.0081)
X (1999-2007 dummy)			
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes
Number of observations	26750	26750	26750
R-squared	.188	.189	.188

Table 7: Restructuring and Capital Growth

Variables	(1)	(2)	(3)
lagged capital growth	0.142 (0.0079)	0.142 (0.079)	0.142 (0.079)
ICR < 1 for 2 years	-0.011 (0.0025)	-0.010 (0.0026)	-0.011 (0.0026)
<i>saiken</i>	-0.046 (0.0048)	-0.040 (0.0056)	-0.064 (0.0093)
(ICR<1 for 2 years) <i>X saiken</i>		-0.025 (0.010)	
<i>saiken</i>			0.010 (0.016)
X (1987-1991 dummy) <i>saiken</i>			0.037 (0.013)
X (1993-1997 dummy) <i>saiken</i>			0.015 (0.012)
X (1999-2007 dummy)			
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes
Number of observations	26750	26750	26750
R-squared	.162	.162	.162

Table 8: Restructuring and Bank Loan Growth

Variables	(1)	(2)	(3)
lagged bank loan growth	0.148 (0.0079)	0.148 (0.079)	0.148 (0.079)
ICR < 1 for 2 years	-0.011 (0.0032)	-0.0096 (0.0033)	-0.011 (0.0032)
<i>saiken</i>	-0.0025 (0.0067)	0.0018 (0.0077)	-0.013 (0.014)
(ICR<1 for 2 years) <i>X saiken</i>		-0.019 (0.015)	
<i>saiken</i>			-0.0095 (0.023)
X (1987-1991 dummy) <i>saiken</i>			0.035 (0.019)
X (1993-1997 dummy) <i>saiken</i>			0.0056 (0.017)
X (1999-2007 dummy)			
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes
Number of observations	26750	26750	26750
R-squared	.207	.207	.207

Table 9: Restructuring and Growth of Total Debt

Variables	(1)	(2)	(3)
lagged total debt growth	0.116 (0.0078)	0.116 (0.078)	0.116 (0.078)
ICR < 1 for 2 years	-0.021 (0.0032)	-0.020 (0.0033)	-0.021 (0.0032)
<i>saiken</i>	-0.019 (0.0059)	-0.017 (0.0067)	-0.023 (0.014)
(ICR<1 for 2 years) <i>X saiken</i>		-0.010 (0.014)	
<i>saiken</i>			-0.028
X (1987-1991 dummy) <i>saiken</i>			(0.022) 0.026
X (1993-1997 dummy) <i>saiken</i>			(0.017) 0.0019
X (1999-2007 dummy)			(0.016)
Year dummies	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes
Number of observations	26750	26750	26750
R-squared	.201	.201	.201

Table 10: Restructuring by Identity of Leader

Dependent Variable →	Employment Growth	Capital Growth	Bank Loan Growth	Total Debt Growth
Explanatory Variables ↓	(1)	(2)	(3)	(4)
lagged dependent variable	0.252 (0.050)	0.191 (0.041)	0.181 (0.039)	0.124 (0.037)
single bank-led	-0.011 (0.010)	-0.0079 (0.020)	-0.058 (0.020)	-0.052 (0.019)
led by a single industrial firm	0.0068 (0.0081)	-0.012 (0.013)	-0.0043 (0.021)	0.0058 (0.019)
led by a group of banks	-0.024 (0.021)	-0.0023 (0.035)	0.060 (0.045)	0.013 (0.028)
led by a group of industrial firms	-0.041 (0.022)	-0.071 (0.033)	-0.034 (0.045)	-0.072 (0.037)
led by a group of banks and industrial firms	0.0045 (0.015)	-0.028 (0.019)	0.0052 (0.024)	-0.0007 (0.022)
private equity fund-led	-0.0060 (0.033)	-0.019 (0.028)	-0.091 (0.038)	-0.063 (0.034)
constant	-0.027 (0.016)	0.046 (0.026)	0.078 (0.055)	0.040 (0.042)
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Number of observations	1173	1173	1173	1173
R-squared	.101	.155	.217	.191

Table 11: Determinants of Bank-led Restructuring

Variables	(1)	(2)	(3)	(4)
bank debt / total assets	1.234 (0.249)	1.333 (0.312)	1.345 (0.493)	1.227 (0.323)
bank debt / total assets X (1987-1991 dummy)			-1.452 (0.816)	
bank debt / total assets X (1993-1997 dummy)			-0.286 (0.656)	
bank debt / total assets X (1999-2007 dummy)			0.234 (0.652)	
ICR < 1 for 2 years	0.0002 (0.120)	-0.081 (0.144)	-0.049 (0.229)	-0.312 (0.301)
ICR < 1 for 2 years X (1987-1991 dummy)			0.304 (0.376)	0.390 (0.489)
ICR < 1 for 2 years X (1993-1997 dummy)			0.076 (0.324)	0.241 (0.400)
ICR < 1 for 2 years X (1999-2007 dummy)			0.059 (0.311)	0.508 (0.383)
log(total assets)	0.070 (0.034)	0.066 (0.046)	0.110 (0.037)	0.113 (0.049)
main bank dependence		0.947 (0.385)		1.276 (0.756)
main bank dependence X (1987-1991 dummy)				-0.227 (0.353)
main bank dependence X (1993-1997 dummy)				-0.517 (0.314)
main bank dependence X (1999-2007 dummy)				-0.659 (0.339)
Period dummies	No	No	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Number of observations	1301	929	1301	929

CENTER ON JAPANESE ECONOMY AND BUSINESS
Working and Occasional Papers

(Papers can be downloaded free of charge at: www.gsb.columbia.edu/cjeb/research/ac)

Last update: March 18, 2009

WORKING PAPERS

- 2009
- 278 **John P. Tang**, Technological Leadership and Late Development: Evidence from Meiji Japan, 1868-1912
- 277 **Kenn Ariga and Ryosuke Okazawa**, Labor Immobility in Japan: Its causes and consequences
- 276 **Robert Barsky**, The Japanese Asset Price Bubble: A 'Heterogeneous' Approach
- 275 **Robert Dekle and Kyoji Fukao**, The Japan-U.S. Exchange Rate, Productivity, and the Competitiveness of Japanese Industries
- 274 **Philip R. Lane**, International Financial Integration and Japanese Economic Performance,
- 273 **Joe Peek**, The Contribution of Bank Lending to the Long-Term Stagnation in Japan
- 272 **Takeo Hoshi, Satoshi Koibuchi, and Ulrike Schaede**, Changes in Corporate Restructuring Processes in Japan, 1981-2007
- 271 **Diego Comin**, An Exploration of the Japanese Slowdown during the 1990s
- 270 **John Muellbauer and Keiko Murata**, Consumption, Land Prices and the Monetary Transmission Mechanism in Japan
- 269 **Maurice Obstfeld**, The Yen and Japan's Economy, 1985-2007
- 268 **Ryo Kambayashi and Takao Kato**, The Japanese Employment System after the Bubble Burst: New Evidence
- 267 **David E. Weinstein and Christian Broda**, Exporting Deflation? Chinese Exports and Japanese Prices
- 2008
- 266 **Hugh Patrick**, Japan's Economic Recovery Stalled
- 265 **Richard Katz**, A Nordic Mirror: Why Structural Reform Has Proceeded Faster in Scandinavia Than in Japan
- 264 **Robert Grondine**, Observations on the Current State of Corporate Governance in Japan
- 263 **Nobuyuki Kinoshita**, The Economics of Japan's Postal Services Privatization
- 262 **Keiko Ito and Sébastien Lechevalier**, The Evolution of the Productivity Dispersion of Firms – A Reevaluation of Its Determinants in the Case of Japan
- 261 **Terutomo Ozawa**, History Repeats Itself: Evolutionary Structural Change and TNCs' Involvement in Infrastructure Overseas, Flying-Geese Style
- 260 **Sanghoon Ahn, Kyoji Fukao, and Keiko Ito**, The Impact of Outsourcing on the Japanese and South Korean Labor Markets: International Outsourcing of Intermediate Inputs and Assembly in East Asia
- 259 **Keiko Ito, Moosup Jung, Young Gak Kim, and Tangjun Yuan**, A Comparative Analysis of Productivity Growth and Productivity Dispersion: Microeconomic Evidence Based on Listed Firms from Japan, Korea, and China
- 2007
- 258 **Yasushi Hamao, Takeo Hoshi, and Tetsuji Okazaki**, Listing Policy and Development of the Tokyo Stock Exchange in the Pre-War Period
- 257 **Ryuichi Nakagawa and Hirofumi Uchida**, Herd Behavior by Japanese Banks After Financial Deregulation in the 1980s
- 256 **Jie Gan**, Collateral, Debt Capacity, and Corporate Investment: Evidence from a Natural Experiment
- 255 **Jie Gan**, The Real Effects of Asset Market Bubbles: Loan- and Firm-Level Evidence of a Lending Channel
- 254 **Christian Broda, Nuno Limão, and David E. Weinstein**, Optimal Tariffs: The Evidence
- 253 **Hugh Patrick**, Japan's Economy: The Idiosyncratic Growth Continues
- 252 **Christian Broda and David E. Weinstein**, Defining Price Stability in Japan: A View from America
- 251 **Terutomo Ozawa**, Professor Kiyoshi Kojima's Contributions to FDI Theory: Trade, Structural Transformation, Growth, and Integration in East Asia
- 250 **Hiroki Yamakawa**, A Practical Analysis of Transfer Pricing Methodologies for Bilateral Advance Pricing Arrangements
- 2006
- 249 **Hugh Patrick**, Japan's Economy: Finally Finding Its Way to Full Employment and Sustained Growth
- 248 **Ulrike Schaede**, Competition for Corporate Control: Institutional Investors, Investment Funds, and Hostile Takeovers in Japan
- 247 **Ulrike Schaede**, The Strategic Logic of Japanese *Keiretsu*, Main Banks and Cross-Shareholdings, Revisited
- 246 **Ricardo Caballero, Takeo Hoshi and Anil K Kashyap**, Zombie Lending and Depressed Restructuring in Japan.
- 245 **Zekeriya Eser and Joe Peek**, Reciprocity and Network Coordination: Evidence from Japanese Banks.
- 244 **Hugh Patrick**, Japan: Another Economic Recovery, New Political Terrain.
- 243 **Ferenc A. Sanderson**, Characteristics of the Hedge Fund Industry in Japan.
- 2005
- 242 **Mariko Fujii and Makoto Takaoka**, Forecasting Skewness in Stock Returns: Evidence from Firm-Level Data in Tokyo Markets
- 241 **Robert A. Myers**, Challenges for Japanese Universities' Technology Licensing Offices—What Technology Transfer in the United States Can Tell Us
- 240 **Takatoshi Ito**, Political Economy of Competition Policy in Japan: Case of Airline Services

- 239 **Christina L. Ahmadjian**, Stability and Change in Embedded Relationships: Broken Ties in Japanese Automotive Keiretsu
- 238 **Nada Mora**, The Effect of Bank Credit on Asset Prices: Evidence from the Japanese Real Estate Boom during the 1980s
- 237 **Koichi Hamada and Asahi Noguchi**, The Role of Preconceived Ideas in Macroeconomic Policy: Japan's Experiences in the Two Deflationary Periods
- 236 **Takatoshi Ito**, Monetary Policy Beyond the Zero Interest Rate Policy Under Deflation
- 235 **Hiroyuki Chuma, Takao Kato and Isao Ohashi**, Worker Discontent, Voice, and EI Programs in Japan
- 234 **Masami Imai**, Market Discipline and Deposit Insurance Reform in Japan
- 233 **Takatoshi Ito and Hugh Patrick**, Problems and Prescriptions for the Japanese Economy: An Overview
- 232 **Franklin R. Edwards**, New Proposals to Regulate Hedge Funds: SEC Rule 203(b)(3)-2
- 231 **Takatoshi Ito and Frederic Mishkin**, Monetary Policy in Japan: Problems and Solutions
- 230 **Hugh Patrick**, The Japanese Recovery and Growth Not Yet Assured
- 2004
- 229 Takatoshi Ito, Interventions and Japanese Economic Recovery
- 228 Christian Broda and David E. Weinstein, Happy News from the Dismal Science: Reassessing Japanese Fiscal Policy and Sustainability
- 227 Robert A. Madsen, What Went Wrong Aggregate Demand, Structural Reform, and the Politics of 1990s Japan
- 226 **Michael Smitka**, Japanese Macroeconomic Dilemmas The Implications of Demographics for Growth and Stability
- 225 **Lee Branstetter**, Is Foreign Direct Investment a Channel of Knowledge Spillovers? Evidence from Japan's FDI in the United States
- 224 **Jie Gan**, Collateral Channel and Credit Cycle: Evidence from the Land Price Collapse in Japan
- 223 **Chung I. Wang**, The financial strategies of Japanese multinational enterprises and internal capital market
- 222 **Donald Davis and David Weinstein**, A Search for Multiple Equilibria in Urban Industrial Structure
- 2003
- 221 **Christina Ahmadjian and Jaeyong Song**, Corporate Governance Reform in Japan and South Korea
- 220 **Hugh Patrick**, Evolving Corporate Governance in Japan
- 219 **Minako Fujiki**, Inflation Targeting Discussions in Japan – unconventional monetary policy under deflation: How People Have Argued; Why the BoJ Opposes Adoption
- 218 **Adam Posen and Kenneth Kuttner**, The Difficulty of Discerning What's Too Tight: Taylor Rules and Japanese Monetary Policy
- 217 **Adam Posen**, It Takes More Than a Bubble to Become Japan
- 216 **Naotaka Kawakami**, The difference in taxation on financial transactions between Japan and the United States: Can the U.S. system and theory be the model?
- 215 **Naotaka Kawakami**, What Does the Consumption Tax Mean to Japanese and U.S. Society?
- 214 **Tokuo Iwaisako**, Stock Index Autocorrelation and Cross-autocorrelations of the Size-Sorted Portfolios in the Japanese Market
- 213 **Minoru Kobayashi, Takeshi Hiromatsu, Naoki Tsubone, Manabu Kurita, and Gosei Ohira**, Economical Impacts on IT to Industries in Japan
- 212 **William V. Rapp and Mazhar ul Islam**, Putting E-Commerce to Work: The Japanese Convenience Store Case
- 211 **Mark J. Scher**, Policy Challenges and the Reform of Postal Savings in Japan
- 210 **Takao Kato and Katsuyuki Kubo**, CEO Compensation and Firm Performance in Japan: Evidence from New Panel Data on Individual CEO Pay
- 2002
- 209 **Lee Branstetter and Yoshiaki Nakamura**, Has Japan's Innovative Capacity Declined?
- 208 **David O. Beim**, Japan's Internal Debt
- 207 **Kengo Inoue**, Choices for Japanese Fiscal Policy
- 206 **Takero Doi and Takeo Hoshi**, Paying for the FILP
- 205 **Terutomo Ozawa**, Pax-Americana-led Macro-Clustering and Flying-Geese Style Catch-Up in East Asia: Mechanisms of Regionalized Endogenous Growth
- 204 **Robert Dekle and Heajin Ryoo**, Exchange Rate Fluctuations, Financing Constraints, Hedging, and Exports: Evidence from Firm Level Data
- 203 **Christina Ahmadjian and Gregory Robbins**, A Clash of Capitalisms: Foreign Shareholders and Corporate Restructuring in 1990s Japan
- 202 **David Flath and Tatsuhiko Nariu**, Parallel Imports and the Japan Fair Trade Commission
- 201 **David Flath**, Taxicab Regulation in Japan
- 200 **David Flath**, The Japanese Distribution Sector in Economic Perspective: The Large Store Law and Retail Density
- 199 **David Flath**, Distribution Keiretsu, FDI and Import Penetration in Japan
- 198 **Yasushi Hamao, Jianping Mei, and Yexiao Xu**, Idiosyncratic Risk and Creative Destruction in Japan
- 197 **Hee-Joon Ahn, Jun Cai, Yasushi Hamao, and Richard Y.K. Ho**, The Components of the Bid-Ask Spread in a Limit-Order Market: Evidence from the Tokyo Stock Exchange
- 196 **Donald R. Davis and David E. Weinstein**, Technological Superiority and the Losses From Migration
- 195 **Linda Edwards and Margaret Pasquale**, Women's Higher Education in Japan: Family Background, Economic Factors, and the Equal Employment Opportunity Law
- 194 **Andrew Carverhill and Ronald Schramm**, International Market Segmentation, and the CME Quanto Nikkei Future

2001

- 193 Terutomo Ozawa**, The hidden side of the flying geese catch-up model: Japan's dirigiste institutional setup and a deepening financial morass
- 192 Donald Davis and David Weinstein**, Bones, Bombs and Break Points: The Geography of Economic Activity
- 191 William V. Rapp**, Nationwide Financial Services
- 190 Lee Branstetter**, Is Foreign Direct Investment a Channel of Knowledge Spillovers? Evidence from Japan's FDI in the U.S.
- 189 Christina Ahmadjian and Patricia Robinson**, Downsizing and the Deinstitutionalization of Permanent Employment in Japan
- 188 Christina Ahmadjian**, Changing Japanese Corporate Governance
- 187 Kazuo Sato**, From Fast to Last: The Japanese Economy in the 1990s
- 186 Hugh Patrick**, From Cozy Regulation to Competitive Markets: The Regime Shift of Japan's Financial System
- 185 Takao Kato**, The End of Lifetime Employment in Japan? Evidence from National Surveys and Field Research
- 184 Takao Kato**, The Recent Transformation of Participatory Employment Practices in Japan
- 183 William Rapp**, Nomura Research Institute
- 182 Robert Dekle**, Demographic Destiny, Per Capita Consumption, and the Japanese Saving-Investment Balance

2000

- 181 Maria Vassalou**, The Fama-French factors as proxies for fundamental economic risks
- 180 Yasushi Hamao and Jianping Mei**, Living With the "Enemy": An Analysis of Foreign Investment in the Japanese Equity Market
- 179 Yasushi Hamao and Takeo Hoshi**, Bank Underwriting of Corporate Bonds: Evidence from Japan after the Financial System Reform of 1993.
- 178 William Rapp**, International Retail Banking: The Citibank Group
- 177 William Rapp**, Automobiles: Toyota Motor Corporation
- 176 Shingo Nakazawa**, Corporate Investment in Japan: How Important are Financial Factors?
- 175 Nobuyoshi Yamori & Narunto Nishigaki**, Electronic Money Projects in Japan
- 174 William Rapp**, Steel: Nippon Steel, K.K.

1999

- 173 Nobuhiko Hibara**, Food Retailing: Ito-Yokado Group
- 172 William V. Rapp**, Steel: Tokyo Steel, K.K.
- 171 Yasushi Hamao, Frank Packer & Jay Ritter**, Institutional Affiliation and the Role of Venture Capital: Evidence from Initial Public Offerings in Japan
- 170 William V. Rapp**, Retail Banking: Sanwa Bank
- 169 William V. Rapp**, Life Insurance: Meiji Life, K.K.
- 168 Robert Dekle & Koichi Yamada**, On the Development of Rotating Credit Associations in Japan
- 167 Kazuo Sato**, Japan at a Crossroads
- 166 Kazuo Sato**, Japanese-Style Capitalism
- 165 David Weinstein and Robert Lawrence**, Trade and Growth: Import-Led or Export-Led? Evidence from Japan and Korea
- 164 David Weinstein**, Historical, Structural, and Macroeconomic Perspectives on the Japanese Economic Crisis

- 163 Hiroshi Amari**, Pharmaceuticals: Takeda
- 162 Christos Cabolis**, Semiconductors: NEC

1998

- 161 Hiroshi Amari**, Pharmaceuticals: Merck
- 160 William V. Rapp**, Gaining and Sustaining Long-Term Advantage Through Information Technology: The Emergence of Controlled Production
- 159 Mark Tilton**, Antitrust Policy and Japan's International Steel Trade
- 158 Takao Kato**, Participatory Employment Practices in Japan: Past, Present and Future
- 157 Ulrike Schaeede**, Self-Regulation and the Sanctuary Strategy: Competitive Advantage through Domestic Cooperation by Japanese Firms
- 156 Mariko Sakakibara**, Knowledge Sharing in Cooperative Research and Development
- 155 Shigeru Asaba and Marvin Lieberman**, Why Do Firms Behave Similarly? A Study on New Product Introduction in the Japanese Soft-Drink Industry
- 154 Hiroshi Ishida, Kuo-Hsien Su and Seymour Spilerman**, Models of Career Progression in Japanese and U.S. Organizations
- 153 Hugh Patrick**, Japan's Economic Misery: What Next?
- 152 David Flath**, Japanese Technology Policy
- 151 David Flath**, A Perspective on Japanese Trade Policy and Japan-US Trade Friction
- 150 David Flath**, Japan's Labor Unions
- 149 David Flath & Tatsuhiko Nariu**, Demand Uncertainty and Price Maintenance
- 148 Frederic S. Mishkin**, Promoting Japanese Recovery
- 147 Hugh Patrick**, Why I Expect Japan to Prevail: Ruminations on Morishima
- 146 Hugh Patrick**, The Causes of Japan's Financial Crisis
- 145 Ryoichi Mikitani and Patricia Hagan Kuwayama**, Japan's New Central Banking Law: A Critical View
- 144 Koichi Hamada**, The Japanese Big Bang as a Unilateral Action
- 143 Ellie Okada**, Financial Control through Japan's Main Bank System and the Japanese Accounting System
- 142 Edward J. Lincoln**, Japan's Economic Mess
- 141 Hugh Patrick**, The Development of Studies of the Japanese Economy in the United States: A Personal Odyssey

1997

- 140 Shigeyuki Goto**, Study on the Interactive Approach between Insurance and Capital Markets for Catastrophe Risks
- 139 Patricia Hagan Kuwayama**, Postal Banking in the United States and Japan: A Comparative Analysis
- 138 Christina L. Ahmadjian**, Network Affiliation and Supplier Performance in the Japanese Automotive Industry
- 137 Christina L. Ahmadjian & James R. Lincoln**, Changing Firm Boundaries in Japanese Auto Parts Supply Networks
- 136 Fumio Hayashi**, The Main Banking System and Corporate Investment: An Empirical Reassessment
- 135 Yasushi Hamao & Takeo Hoshi**, Bank Underwriting of Corporate Bonds: Evidence from Japan after 1994
- 134 Klaus Wallner**, Implicit Contracts between Regulator and Firms: The Case of Japanese Casualty Insurance
- 133 Klaus Wallner**, Commodity Bundling in Japanese Non-Life Insurance: Savings-Type Products as Self-Selection Mechanism

- 132 **Patricia Hagan Kuwayama**, Credit Channels and the Small Firm Sector in Japan
- 131 **Terry A. Marsh & Jean-Michel Paul**, BIS Capital Regulations and Japanese Bank's Bad Loan Problems
- 130 **Yoshinobu Shiota**, Update on Japanese Bad Debt Restructuring
- 129 **Christina L. Ahmadjian**, Japanese Auto Parts Supply Networks and the Governance of Interfirm Exchange
- 128 **Takatoshi Ito, Richard K. Lyons & Michael T. Melvin**, Is There Private Information in the FX Market? The Tokyo Experiment

1996

- 127 **Yukiko Ohara**, Japan's Banking: The Darkest Hour Before Dawn. The Future is in the Hands of MoF
- 126 **Yasushi Hamao & Narasimhan Jegadeesh**, An Analysis of Bidding in the Japanese Government Bond Auctions
- 125 **Terry A. Marsh & Jean-Michel Paul**, Japanese Banks' Bad Loans: What Happened?
- 124 **Hirotaaka Yamauchi & Takatoshi Ito**, Air Transport Policy in Japan
- 123 **Shinji Takagi**, The Japanese System of Foreign Exchange and Trade Control, 1950-1964
- 122 **David E. Weinstein**, Foreign Direct Investment and Keiretsu: Rethinking US and Japanese Policy
- 121 **Masatsugu Tsuji**, Deregulation and Privatization of the Fiscal Investment and Loan Program
- 120 **Koichi Hamada**, Consumers, the Legal System and Product Liability Reform: A Comparative Perspective between Japan and the United States
- 119 **David Flath**, Japanese Regulation of Truck Transport
- 118 **C.R. McKenzie**, The Commercial Paper Market in Japan
- 117 **Hideo Taki**, The Gas Industry in Japan
- 116 **Merit E. Janow**, Policy Approaches to Economic Deregulation and Regulatory Reform
- 115 **Arthur J. Alexander**, Domestic Aviation in Japan: Responding to Market Forces Amid Regulatory Constraints
- 114 **D. Eleanor Westney**, The Japanese Business System: Key Features and Prospects for Change
- 113 **Robert Dekle**, Endaka and Japanese Employment Adjustment
- 112 **G. Andrew Karolyi & René M. Stulz**, Why do Markets Move Together? An Investigation of U.S.-Japan Stock Return Comovements
- 111 **Jun-Koo Kang & René M. Stulz**, Why is There a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan
- 110 **Takeo Hoshi**, Bank Organization and Screening Performance
- 109 **John W. Cooney, Jr., Kiyoshi Kato & James S. Schallheim**, Public Placements of Seasoned Equity Issues in Japan
- 108 **Jun Cai, K.C. Chan & Takeshi Yamada**, The Performance of Japanese Mutual Funds
- 107 **Jun-Koo Kang & Takeshi Yamada**, The Japanese Market for Corporate Control and Managerial Incentives
- 106 **Ravi Jagannathan, Keiichi Kubota & Hitoshi Takehara**, The CAPM with Human Capital: Evidence from Japan
- 105 **Schon Beechler, Michelle Najjar Kristen Stucker & Allan Bird**, Japanese-style versus American-style Human Resource Management Overseas: Examining Whether the Data Support the "Facts"

- 104 **Schon Beechler, Scott Shane & Sully Taylor**, Ware Ware Nihonjin But We're Not All Alike: How Japanese Managers Champion Innovation
- 103 **Schon Beechler & Michelle Krazmien**, The Relationship Between Expatriates, Parent Company-Affiliate Integration and HRM Control in Overseas Affiliates of Japanese and American MNCs
- 102 **Schon Beechler, Michelle Najjar, B.C. Ghosh, Sukiswo Dirdjosuparto & Sieh Mei Ling**, Influences on Affiliate HRM Systems in Japanese MNCs in Southeast Asia
- 101 **Schon Beechler, John Stephan, Vladimir Pucik & Nigel Campbell**, Decision Making Localization and Decentralization in Japanese MNCs: Are There Costs of Leaving Local Managers Out of the Loop?

1995

- 100 **Yasushi Hamao**, Living with the "Enemy": An Analysis of Foreign Investment in the Japanese Equity Market
- 99 **Yasushi Hamao**, Japanese Government Bond Auctions: The U.S. Experience
- 98 **Hugh Patrick**, Crumbling or Transforming? Japan's Economic Success and its Postwar Economic Institutions
- 97 **Peter Drysdale**, The Question of Access to Japanese Market
- 96 **Hugh Patrick**, Northeast Asia: The Role of International and Regional Economic Institutions and Regimes
- 95 **Kazuo Sato**, Bubbles in Japan's Stock Market: A Macroeconomic Analysis
- 94 **William V. Rapp**, Software Policies and Hardware Competition: The Impact of Government, Industry and Users on the Development of Japan's Software Industry
- 93 **David Flath**, The Keiretsu Puzzle
- 92 **Seymour Spilerman, Hiroshi Ishida & Kuo-Hsien Su**, Educational Credentials and Promotion Prospects in a Japanese and an American Organization

1994-1991

- 91 **Seymour Silerman, Hiroshi Ishida**, Stratification and Attainment in a Large Japanese Firm
- 90 **Yasushi Hamao & Joel Hasbruck**, Securities Trading In the Absence of Dealers
- 89 **Fumio Hayashi**, Japan's Saving Rate: An Update
- 88 **Frank Packer**, The Disposal of Bad Loans in Japan: A Review of Recent Policy Initiatives
- 87 **Anthony Iaquinto**, Can Winners be Losers? The Case of the Deming Prize for Quality and Performance among Large Japanese Manufacturing Firms
- 86 **C. Tait Ratcliffe**, Medium-Term Prospects for the Japanese Economy and for U.S.-Japan Relations
- 85 **Mark Scher & Schon Beechler**, Japanese Banking in the U.S.-From Transient Advantage to Strategic Failure
- 84 **Schon Beechler, Scott Shane & Sully Taylor**, Organizational Variation in Championship Behavior: The Case of Japanese Firms
- 83 **Schon Beechler & Tony Iaquinto**, A Longitudinal Study of Staffing Patterns in U.S. Affiliates of Japanese Multinational Corporations
- 82 **Takatoshi Ito**, Short-run and Long-run Expectations of Dollar/Yen Exchange Rate
- 81 **Edward Lincoln**, Fundamental Issues in the United States-Japan Economic Relationship
- 80 **Fumio Hayashi**, Is the Japanese Extended Family Altruistically Linked?

- 79 **Schon Beechler & Sheri Ranis**, The Prospects for Industrial Cooperation Between the United States and Japan
- 78 **Marcus Noland**, US – Japan Trade Friction
- 77 **Frank Packer**, The Role of Long-Term Credit Banks Within the Main Bank System
- 76 **John Campbell & Yasushi Hamao**, Changing Patterns in Corporate Financing and the Main Bank System in Japan
- 75 **Hugh Patrick**, The Relevance of Japanese Finance and its Main Bank System
- 74 **Michael Smitka**, Contracting Without Contracts: How the Japanese Manage Organizational Transactions
- 73 **Takatoshi Ito & Keiko Nosse Hirono**, The Efficiency of the Tokyo Housing Market
- 72 **David Flath & Tatsuhiko Mariu**, Is Japan's Retail Sector Truly Distinctive?
- 71 **Linda Edwards**, The Status of Women in Japan: Has the Equal Opportunity Law Made a Difference?
- 70 **David Flath**, Keiretsu Shareholding Ties: Antitrust Issues
- 69 **Yasushi Hamao & Joel Hasbrouck**, Securities Trading in the Absence of Dealers: Trades and Quotes on the Tokyo Stock Exchange
- 68 **Schon Beechler & Allan Bird**, The Transfer of Human Resource Management Overseas: An Exploratory Study of Japanese and American Maquiladoras
- 67 **Charles Hall, Yasushi Hamao, & Trevor Harris**, A Comparison of Relations Between Security Market Prices, Returns and Accounting Measures in Japan and the US.
- 66 **Schon Beechler & Allan Bird**, The Best of Both Worlds? An Exploratory Study of Human Resource Management Practices in US Based Japanese Affiliates
- 65 **Michael Smitka**, The Decline of the Japanese Automobile Industry: Domestic and International Implications
- 64 **Hugh Patrick**, Comparisons, Contrasts, and Implications from the Financial Development of Japan, Korea and Taiwan
- 63 **Theodore C. Bestor**, Visible Hands: Auctions and Institutional Integration in the Tsukiji Wholesale Fish Market, Tokyo
- 62 **Frank Packer & Marc Ryser**, The Governance of Failure: An Anatomy of Corporate Bankruptcy in Japan
- 61 **William Rapp**, Japanese Multinationals: An Evolutionary Theory and Some Potential Global Political Implications for the 1990's
- 60 **David Flath & Tatsuhiko Nariu**, The Complexity of Wholesale Distribution Channels in Japan
- 59 **David Flath**, Indirect Shareholding Within Japan's Business Groups
- 58 **Tatsuo Hatta & Toru Ohkawara**, Commuting and Land Prices in the Tokyo Metropolitan Area.
- 57 **John Campbell & Yasushi Hamao**, Predictable Stock Returns in the United States and Japan: A Study of Long-Term Intergration
- 56 **Hugh Patrick**, Peace and Security on the Korean Peninsula: Reflections on the Economic Dimension
- 55 **Yasushi Hamao & Ronald Masulis**, The Effect of the 1987 Stock Crash on International Financial Integration
- 54 **Anthony L. Iaquinto**, Japanese Investment in the Border Region of the United States and Mexico
- 53 **John Campbell & Yasushi Hamao**, Monetary Policy and the Term Structure of Interest Rates in Japan
- 52 **Robert Dekle**, Alternative Estimates of Japanese Saving and Comparisons with the US
- 51 **Ellen R. Auster**, Penetration Without Dependence: A Network Analysis of Japanese Economic Activity in the U.S.
- 50 **Hugh Patrick**, Japan's Financial System and the Evolving Role of Main Banks
- 49 **Anthony L. Iaquinto & Schon L. Beechler**, The Performance Implications of Asset versus Transactional Advantages of MNEs
- 1990
- 48 **Ross Garnaut**, The Market and the State in Economic Development: Some Questions from East Asia and Australia
- 47 **Kazuo Sato**, Japan's Resource Imports
- 46 **Hugh Patrick**, Section 301 and the U.S. Japan Economic Relationship: Reflections on Kuroda
- 45 **Louis K.C. Chan, Yasushi Hamao & Josef Lakonishok**, Fundamentals and Stock Returns in Japan
- 44 **Peter Drysdale**, Change and Response in Japan's International Economic Policy
- 43 **David Flath**, Shareholding Interlocks in the Keiretsu, Japan's Financial Groups
- 42 **Edward J. Lincoln**, The Controversy Over Japan's Low Manufactured Imports
- 41 **Edward J. Lincoln**, Japan's Role in Asia Pacific Cooperation: Dimension, prospects, and Problems
- 40 **Ellen R. Auster**, Bringing a Network Perspective into Research on Technological Transfers and Other Interorganizational Relationships
- 1989
- 39 **Hong W. Tan & Atsushi Seike**, Pensions and Labor Turnover in Japan
- 38 **Maurice J. Wilkinson**, Inventory Behavior and Economic Instability in Japan
- 37 **Michael J. Smitka**, American Management: Reform or Revolution? The Transfer of Japanese Management Technology to the U.S.
- 36 **Koichi Hamada**, The Causes and Consequences of Japan's High Savings Ratio
- 35 **Ellen R. Auster**, The Relationship of Industry Evolution to Patterns of Technology Linkages, Joint Ventures, and Direct Investment Between the U.S. and Japan
- 34 **Masako N. Darrough & Trevor S. Harris**, Do Management Forecasts of Earnings Affect Stock Prices in Japan?
- 33 **Phillip A. Klein & Geoffrey H. Moore**, Analyzing Leading and Coincident Indicators for Pacific Basin Countries
- 32 **Geoffrey H. Moore & John P. Cullity**, Growth Cycle Signals as Inflation Indicators for Major Industrial Nations
- 31 **Takatoshi Ito**, Foreign Exchange Rate Expectations: Micro Survey Data
- 30 **Takatoshi Ito**, Is the Bank of Japan a Closet Monetarist?
- 29 **David Flath**, The Economic Rationality of the Japanese Distribution System
- 28 **Hugh Patrick**, Declining Industries, Mechanism of Structural Adjustment and Trade Policy in Pacific Basin Economics
- 27 **Susuma Fukuda**, The Fiscal Investment and Loan System

- 26 **Shoichi Saba**, The Japanese Cooperation and its Management
- 25 **Peter Drysdale & Ross Garnaut**, A Pacific Free Trade Area?
- 24 **James Moore Jr.**, The United States and Japan: Competition and Cooperation

1988

- 23 **Akio Mikuni**, Japan's Financial Power]
- 22 **Ariyoshi Okumura**, The Future Role of Tokyo's Financial Market
- 21 **Robert Dekle**, The Relationship Between Defense Spending and Economic Performance in Japan
- 20 **Hugh Patrick**, Explaining the Japanese Financial System: A Review of the Bank of Japan's Recent Volume
- 19 **Mototada Kikkawa**, Problems of the U.S. Trade Structure
- 18 **Hugh Patrick & Frances Rosenbluth**, Japan's Industrial Structure in Crisis: National Concerns and International Implications
- 17 **David Flath**, Why are There So Many Retail Stores in Japan?
- 16 **Richard Baldwin**, Some Empirical Evidence on Hysteresis in Aggregate U.S. Import Prices
- 15 **Frances Rosenbluth**, The Political Economy of Internationalizing the Japanese Financial System: The Case of the Bond Market
- 14 **Robert Dekle**, Do the Japanese Elderly Reduce Their Total Wealth?

1987

- 13 **Yoshio Higuchi**, A Comparative Study of Japanese Plants Operating in the U.S. and American Plants:

OCCASIONAL PAPERS

2004

- 56 **Shigeyuki Goto**, A Behavioral Risk Management System

2003

- 55 **Shigeyuki Goto & Hiroshi Hayakawa**, Building the corporate risk control system with some viewpoints on the risk psychology
- 54 **Ryozo Hayashi**, Economic Reform: View from METI
- 53 **Junji Narita**, The Economic Consequences of the 'Price Keeping Operation' in the Japanese Stock Markets
- 52 **Shigeyuki Goto**, Non-Life Insurance, E-Commerce, and the Importance of Proper Risk Communication
- 51 **Hugh Patrick**, Japan's Mediocre Economic Performance Persists and Fundamental Problems Remain Unresolved
- 50 **Takao Sase**, The Irresponsible Japanese Top Management Under the Cross-Shareholding Arrangement

2002

- 49 **Naotaka Kawakami**, The Impact of the Post Cold War Crises on the Political Economy of Japan
- 48 **Yasuhisa Shiozaki**, Can Japan's Ailing Banking System Be Cured?

Recruitment, Job Training, Wage Structure and Job Separation

- 12 **Jacob Mineer & Yoshio Higuchi**, Wage Structures and Labor Turnover in the U.S. and in Japan
- 11 **Fumio Hayashi & Takatoshi Ito**, Housing Finance Imperfections and Private Saving: A Comparative Simulation Analysis of the United States and Japan
- 10 **Hugh Patrick**, The Management of the United States-Japan Trade Relationship and its Implications for the Pacific Basin
- 9 **Michael Smitka**, Japanese Labor Market and Subcontracting
- 8 **Takatoshi Ito**, The Intra-Daily Exchange Rate Dynamics and Monetary Policies after the G5 Agreement
- 7 **Yoshio Higuchi**, Labor Force Withdrawal, Re-entry and Wages by Educational Attainment in Japanese Women
- 6 **Kazuo Sato**, Savings and Investment in Japan
- 5 **Koichi Hamada & Hugh Patrick**, Japan and the International Monetary Regime

1986

- 4 **Kazuo Sato**, Econometric Models of the Japanese Economy
- 3 **Hugh Patrick & Thomas Rohlen**, Japan's Small-Scale Family Enterprises
- 2 **Richard Baldwin & Paul Krugman**, Market Access and International Competition: A Simulation Study of 16K Random Access Memories
- 1 **Hugh Patrick**, Japanese High Technology Industrial Policy in Comparative Context

2001

- 47 **Shigeyuki Goto**, E-Commerce in the Japanese Non-Life Insurance Market
- 46 **Yasushi Ueno**, Effectiveness and Importance of Leadership in the Changing Period

2000

- 45 **Yotaro Kobayashi**, Japan's Changing Corporate Structure

1999

- 44 **Shunji Fukukawa**, Japan's Challenge for Economic Revitalization
- 43 **Patricia Hagan Kuwayama**, Lessons from Bad Experience with Banking Systems: The United States and Japan

1998

- 42 **Junichi Ujiie**, Investment Banking in Japan
- 41 **Toyoo Gyohten**, The Japanese Financial System: Restructuring for the Future
- 40 **William E. Franklin**, Careers in International/Asia Pacific Business: Perspectives of an Experienced Japan Hand
- 39 **Jay W. Chai**, Wounded Asia vs. the IMF: Where do we go from here?
- 38 **Lawrence H. Summers**, The US-Japanese Stake in a Free and Open Asian Capital Market
- 37 **Yuichiro Nagatomi**, The Challenges Before Industrialized Countries

36 **Henry Kaufman**, The Yen, The Dollar and The Euro

35 **Yuji Suzuki**, Strategy Towards the “Big Bang” The Industrial Bank of Japan’s Approach

34 **Maryann Keller**, International Automobile Production: How Will Firms Compete in the 21st Century?

1997

33 **Hugh Patrick**, How the Japanese Financial System and Its Main Bank System Have Dealt with Generic Issues of Financial Banking

32 **Patricia Hagan Kuwayama**, Comments on Japanese Economic Policy

31 **Roger M. Kubarych**, The Yen and the Dollar: Irrational Exuberance?

30 **Robert Pitofsky**, Competition Policy in Communications Industries: New Antitrust Approaches

29 **Masaya Miyoshi**, Japan’s Capitalism in Systemic Transformation

28 **Yasuo Kanzaki**, Japan’s “Super” Big Bang: Hashimoto’s Make-or-Break Gamble

1996

27 **Sheldon Weinig**, Can an American Entrepreneur Work for a Japanese Company and Be Effective and Happy?

26 **Takeshi Nagano**, The History and Future of Japanese Management

25 **Isao Matsuura**, Japanese Banks in Transition: Problems and Prospects

24 **Max C. Chapman, Jr.**, A Viable Strategy for Japanese Securities Firms in the United States

1995-1991

23 **Yotaro Kobayashi**, The Japanese Corporation in Transition: Current Challenges and Outlook

22 **Hideo Ishihara**, Re-evaluating the Japanese Corporate System

21 **Yoshitaka Fujitani**, Challenges Facing Japanese Steel in Today’s Global Economy

20 **Kenichi Ohmae**, Japanese Corporate Strategy in Crisis

19 **Shijuro Ogata**, The Japanese Economy and the Aftermath of Its Unusual Recession

18 **Jeffrey Garten**, U.S.-Japan Relations:

Accomplishments, Next Steps, Future Considerations

16 **Susumu Yoshida**, Agenda for Japanese Business in the Global Economy

15 **Saburo Okita**, Japan’s Role in a Changing World Economy

14 **Takeo Siina**, Selling IBM in Japan, Selling Japan in IBM

13 **Hugh Patrick**, Some Thoughts on Japan’s Financial Mess

12 **Yoshitoki Chino**, A Monologue on Japan’s Financial Market

11 **Jeffrey Garten**, Thinking About World Order: America, Japan and Germany in the 1990’s

10 **Nobuo Ohashi**, Innovation and Technical Development in the Japanese Steel Industry

9 **Yuzaburo Mogi**, Problems and Solutions to Japanese Investment Abroad

8 **Hugh Patrick**, One World, Two Worlds or Three? Reflections on the New International Economic Order

7 **Kensuke Hotta**, Deregulation of the Japanese Financial Markets and the Role of Japanese Banks

6 **Hironobu Shibuya**, Taking Responsibility: Japanese Companies and Corporate Citizenship

5 **Sam Kusumoto**, Going Global Without Going Broke

1990-1989

4 **Yuchichiro Nagatomi**, The Financial System and Global Socioeconomic Change

3 **Yoshio Terasawa**, The M.I.G.A. and its Mission

2 **Eiji Umene**, The United States-Japan Relationship in the Rapidly Changing World Environment

1 **Nobutoshi Akao & Joseph A. Massey**, Agenda for a Pacific Partnership: A Japanese-American Dialogue

CENTER ON JAPANESE ECONOMY AND BUSINESS

Working and Occasional Papers

Order Form

All of our Working & Occasional Papers are now available for you to download for free from <http://digitalcommons.libraries.columbia.edu/japan/>.

To order hard copies of working paper(s) and/or occasional paper(s), please fill out this form and return it to the address below **with** a check made payable to the **Columbia University**. Papers are \$5 each.

Center on Japanese Economy and Business
Attn.: Jeff Lagomarsino
Columbia Business School
321 Uris Hall
3022 Broadway
New York, NY 10027

Title of paper(s) ordered: _____ (Paper #) No. of copies

..... (#) x

..... (#) x

Total Cost: \$5 x _____ = \$

Please provide the address to which the paper(s) should be mailed (please print):

Name:

Affiliation:

Address:

.....

.....

Tel:

Fax: