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The Comparative Features and Economic Role of Mergers and Acquisitions in Japan

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Abstract

The Japanese economy is in the midst of a major merger and acquisition (M&A) wave for the first time in the postwar period. This paper puts a spotlight on Japan's M&A activity, which has surged since the end of 1999, and takes a look at the factors that have contributed to the surge, and its various economic dimensions. The paper places Japan's M&As in an international context, and identify the causes of the wave and its structural characteristics (sections 2 and 3). It also examines the economic role of M&A and its pros and cons. We contend that M&As contribute to raising the efficiency of resource allocation and organizations (sections 4 and 5). The last section addresses policy implications and contains concluding remarks.

Keywords: M&A, industry shock

JEL classification: G34

1. Introduction

The Japanese economy is experiencing a major merger and acquisition (M&A) wave for the first time in the postwar era. It is well-known that the former *zaibatsu* groups, which had been dissolved in the occupation period, were reformed through M&As in the 1950s. And during the period of capital liberalization which began in the late 1960s, horizontal mergers in the steel and automobile industries in response to the rising threat of takeovers by foreign firms generated considerable attention. However, from the high-growth era of the 1960s to the mid-1990s there were, on average, only two to three M&A transactions between publicly listed firms annually, and the volume of M&A activity never reached a wave-like level.

It is also true that hostile takeovers, such as the famous case of the acquisition of *Shirokiya*, attracted public attention at the beginning of the high-growth era, when the stock ownership structure of Japanese firms was highly dispersed, and their capital composition was vulnerable as a result of various postwar reforms. However, as shareholding stabilized from the mid-1960s, hostile takeovers mostly receded into the background, though occasional takeovers by shady entities were attempted. As Kester (1991) and others have emphasized, the main features of the Japanese corporate system, such as long-term employment, the main bank system, and cross-shareholding had been impediments to M&A deals. M&As did not play a prominent role in driving Japanese economic development, reaping synergies, and disciplining management through the mid-1990s.

In a departure from the previous trend, however, from the late 1990s, M&A activity, centered on transactions between domestic corporations, has surged. Acquisitions of domestic firms by foreign corporations have also had a role to play in this surge. The total number of M&A deals annually has steadily increased from 1999, reaching a record of 2,674 deals in 2006, a nearly five-fold increase from a decade earlier.

This paper seeks to present an overview of the factors that have contributed to the rapid surge in M&A activity in recent years, and of the economic role of M&As by drawing on the existing literature and the results of my own research. The spike in M&As has recently attracted considerable public attention. While the increase in the number of deals has been favorably received for playing a key role in the rejuvenation and growth of Japanese

corporations, M&As have been criticized for amounting to nothing more than vehicles used to rescue ailing firms, or to transfer wealth between stakeholders, and hostile takeovers have been condemned for creating impediments for those who wish to manage firms for the long term, and for generating profits solely for securities houses and law firms that structure these deals. Moreover, the large-scale horizontal mergers that have occurred in recent years have raised major concerns regarding conformity with the Anti-Monopoly Law. In addition, there has been a wide-ranging debate on the pros and cons of takeover defenses, and on strategies for responding to the lifting of the prohibition on triangular mergers in May 2007, which is expected to promote acquisitions of Japanese firms by foreign corporations.

However, there has been very little empirical research on the causes of the surge in M&A transactions, and their economic function, which could serve to inform these policy debates. This survey seeks to set forth some basic information to help settle the following points of controversy raised by the current M&A wave.

The first part of this paper tries to provide answers to the following questions:

- Why did the volume of M&A deals suddenly increase at the end of the 1990s?
- What is the connection between long-term employment, the main bank system, cross-shareholding, and other institutional features of the traditional Japanese company system, and the M&A wave?
- What are the special characteristics of Japan's M&A wave when placed in an international context?

In order to answer these questions, this paper highlights the drivers of the M&A wave, and attempts to place the features of Japanese M&A transactions in an international context, drawing on the findings of Jackson and Miyajima (2007). This paper emphasizes that the recent M&A wave in Japan not only shares commonalities with the global M&A wave, which has been triggered by technological innovations that have expanded growth opportunities, and deregulatory measures, but also has been characterized by factors unique to Japan including economic shocks such as excess plant capacity and reforms to the legal infrastructure for corporate consolidation. Unlike in the other four countries in this study, stock market conditions have only had a limited effect on the M&A wave in Japan. It should also be stressed that Japan's M&A market has been characterized by the prevalence of integrations, acquisitions, and capital

participations by holding companies, and a strong tendency to preserve the independence of target firms. Though there is a growing tendency to view M&As as a contest by managers to drive up the values of corporations, there is still a preference for mutual consensual transactions between the concerned parties, and the Japanese M&A market still remains markedly different from the U.S. and British M&A markets, which are characterized by arm's-length transactions, and the preference for mergers (and integration of separate corporate legal entities). As for the relationship between the evolution of the Japanese corporate system since the mid-1990s, and M&As, it needs to be emphasized that the M&A wave has been facilitated not only by the dissolution of the traditional Japanese corporate system but also by the evolution of the Japanese corporation toward a hybrid model that has imparted unique features on the M&A activity in Japan.

The latter part of the paper highlights the economic role of M&As by asking the following questions:

- Does M&A activity enhance the value of corporations? And does the nationality of the acquiring firm (domestic or foreign) lead to differences in synergy effects? If so, what are the reasons for this?
- Does the increase in activist funds impose appropriate discipline on the management of target firms? Or, are would-be acquirers nothing more than green mailers who force managers to implement policies, which drive up the price of a stock in the short run so that it can be sold for profit?
- What role have M&As played in adjusting workforces in Japan? While M&A deals have played an important role in promoting employment adjustments, they might also breach the long-term trust that had developed between the target firm and its employees.

In attempting to answer these questions on the economic role of M&As this paper will focus on both the positive and negative effects of M&A transactions, drawing on recent research and estimations from my own collaborative studies. The following basic findings are presented: the recent M&A wave has contributed to an increase in the resource allocation efficiency of the Japanese economy, and an increase in the organizational efficiencies of corporations; the negative aspects of M&As such as the over-confidence of managers, excessive valuations by the

stock market, and the breakdown of trust between stakeholders, have still not become manifest in a systematic fashion; the activities of activist funds have had a positive effect on stock prices, and have begun to affect the financial strategies of target firms; acquisitions by overseas corporations can be expected to produce a positive effect through the transfer of technology and know-how to the target firm.

This paper is organized as follows. The next section will place the characteristics of Japan's M&A wave in international context. Section 3 addresses the features of Japan's M&A market. Section 4 focuses on the economic role, both the positive and negative aspects of M&A activity. Section 5 will examine the long-term performance effects of M&As. The last section addresses policy implications and contains concluding remarks.

2. The M&A Wave in International Perspective: Are There Factors Unique to Japan?

As seen in **Figure 1**, all five leading industrialized countries experienced M&A waves from the end of the 1990s. The number of M&A deals in all five countries, including Germany and France, which had previously experienced low levels of M&A activity, began to rise from 1998, peaking in 2000. During the boom (1998-2005), M&A activity accounted for a maximum of 20.7% of GDP in Britain, 10.7% of GDP in the U.S., 9.9% of GDP in France, and 7.5% of GDP in Germany (**Table 1**). While the total value of M&A activity as a share of GDP is still rather small, there has been a rapid rise in the level of such activity when compared to the level of activity in the early 1990s. Moreover, while M&A deals began to taper off in the other four countries since 2002, the level of activity in Japan has steadily increased. Scholars have pointed to the following factors to explain the recent M&A waves.[1]

- The emergence of excess capacity in specific sectors
- Technological innovation and the increase in new growth opportunities
- Deregulation and regional integration (e.g. economic integration of the European Union)
- Internationalization of finance (increase in institutional investors), protection of

[1] See Holmstrom and Kaplan (2001), Martynova and Ronneboog (2005).

minority shareholder rights, standardization of accounting principles, and other economic and legal changes

- Booming stock market, financial reform, and other financial factors

It is important to identify which factors in Japan's M&A wave from the late 1990s are common to other countries, and which are unique to Japan.

== Table 1 & Figure 1 about here ==

2.1 The Combination of Positive and Negative Economic Shocks

The merger wave that began in many leading industrialized countries in the late 1990s centered on growth industries tied to technological innovation, and Japan's merger wave was not an exception. The telecommunications sector accounted for the largest share of the M&A activity in terms of value in the U.S., Germany, France, and Britain, and accounted for the second largest share of such activity in Japan after the financial sector (**Table 2**). When measured in terms of numbers of deals, business services (which include advertising, placement agencies, programming, and security) accounted for 10.5% of M&A activity in Japan, 11.3% in Germany, 8.7% in France, 10.5% in the U.S., and 9.8% in Britain. The business services sector was the most active M&A sector in four out of the five countries, with the exception of the U.S., where it was the second most active sector.[2] Thus, Japan's M&A wave was centered on growth sectors, and shared commonalities with the other aforementioned industrialized countries.

== Table 2 about here ==

However, Japan's M&A wave is distinguished by the fact that transactions which aimed to consolidate and restructure mature industries were occurring in tandem with the strategic M&A implemented in the previously mentioned growth sectors. The prolonged recession of the 1990s gave rise to excess plant capacity, indebtedness, and workforces which created the conditions that triggered M&A that aimed to restructure companies. In particular, M&As that restructured the paper, ceramics, steel, and oil refining industries were intended to reduce excess plant capacity. On the other hand, the corporate group restructurings that affected companies in the electrical machinery, retail and distribution, and other industries were an

[2] The banking sector accounted for the largest share of M&A deals in the U.S. The account that follows is based on Jackson and Miyajima (2007), which draws on data from the Thomson ONE Banker database. This database includes all types of mergers and acquisitions (i.e. mergers, takeovers, capital participation).

attempt to revamp the industry portfolios of corporate groups which had expanded by establishing new companies from the late 1980s through the first half of the 1990s. The M&As that occurred in the financial sector from 1999 onward were an attempt to deal with the problem of excessive numbers of firms in the sector.

In the U.S., the M&A wave of the 1980s was motivated primarily by the desire to restructure and reorganize companies, while the strategic M&A wave that has been going on since the late 1990s has been driven by technological innovation.[3] Japan's M&A wave from the late 1990s is distinguished by a combination of two concurrent forces: the negative economic shocks that triggered corporate reorganizations similar to those seen in the U.S. in the 1980s, and the positive shocks of technological innovation and deregulation which have been felt globally since the 1990s. While the pressures from the negative economic shocks initially fueled Japan's M&A wave, the positive shocks from technological innovation have helped to sustain the M&A wave into this decade.

2.2 The Important but Relatively Limited Effect of Deregulation in Japan

Deregulation and economic consolidation have had a major impact on the global increase in M&A activity. Deregulation played a particularly important role in the U.S. M&A wave that began in the late 1990s. The deregulation of the U.S. banking sector, which opened the door to interstate transactions, prompted the consolidation of regional banks, and the deregulation of the airlines led to the consolidation of that industry (Harford 2005). While deregulation has also played an important role in Japan, the extent of its effect has been relatively limited when compared to the other four countries. Indeed, the Big Bang in the financial sector, and the elimination of barriers to entry in the telecommunications sector, were key factors that contributed to the increase in M&A activity in the Japanese financial and telecommunications sectors. Although mergers of public utilities such as electricity and natural gas were important drivers of the M&A wave in the U.S., Britain, and France, there were fewer such deals among public utilities in Japan. (**Table 2**)

On the other hand, regional consolidation was an important factor underlying the M&A

[3] Mitchell and Mullerin (1996), Andrade and Stafford (2001), and Holmstrom and Kaplan (2001) emphasize this aspect.

wave in Europe (Martynova and Renneboog 2006). From the late 1990s, Japan implemented changes in its investment policy that were designed to promote direct investment, playing a key role in increasing cross-border M&A deals (Fukao and Amano 2004). However, cross-border M&A activity has been less important in Japan, particularly when compared to Europe, and the share of cross-border M&A activity in Japan is similar to levels in the U.S. According to **Table 3**, cross-border M&A deals accounted for 20% to 25% of all deals in Germany, France, and Britain, and in terms of total value of the deals as a share of GDP, M&A accounted for 14.9% of GDP in Britain, and nearly 6% in Germany and France. By contrast, although cross-border M&A activity did increase in Japan, cross-border deals involving an overseas firm as the acquirer accounted for only 7.9% of the total number of deals, and only 0.3% of GDP.

== Table 3 Cross-Border M&A about here ==

2.3 Improving Legal Framework for Corporate Consolidation and Accounting System

It has been pointed out that changes to the legal infrastructure have played an important role in fueling the M&A wave in Europe. According to the scores for minority shareholder rights used by La Porta, Lopez, Shleifer, and Vishny (1997, 2004), on a scale with the highest score being a 6, France increased its score from 3 to 4, and Germany from 1 to 3 in the 1990s. As Japan also began to implement legal reforms from 1993, its LLSV minority shareholder rights score rose from 4 to 5, though these reforms may not have been the determining factor.[4] According to Rossi and Volpin (2004), the protection of the rights of minority shareholders serves to promote M&A activity because it reduces the potential for carving out private benefits in the corporate control arena, and makes it easier to contest control rights. Therefore, while such protections might help to explain an increase in hostile takeovers, they do not explain why the M&A wave has been driven primarily by friendly takeovers.

Instead, Japan's M&A wave has been shaped by several factors unique to this market.

[4] The rise in the LLSV minority shareholder rights score was due to the 1993 revision of the Commercial Code, which made it easier to file shareholder representative suits, and beefed up the external auditor system. Furthermore, the strengthening of the auditor system in 2001 and the introduction of a system for choosing board structure (2002) can also be interpreted as measures which bolstered protections for minority shareholders. However, since it became possible to issue regular shares without voting rights in 2001, the LLSV score decreased from 5 to 4.

First, the accounting system should be emphasized as a unique factor fueling the M&A wave in Japan. Japanese corporations often have affiliations with numerous subsidiaries belonging to the same corporate group, and often extend guarantees for the liabilities incurred by subsidiaries under their umbrella. The existence of these guarantees means that potential acquirers could be exposed to tremendous risks. The introduction of consolidated accounting and market-based accounting practices in 1999 eliminated many of the concerns regarding the lack of transparency surrounding the financial performance of target companies. Strict consolidated accounting practices made it much more difficult for corporations to manipulate the financial condition of the firms under their umbrella. The result was that incentives to sell poorly performing firms within a corporate group increased, and the supply of targets to the M&A market expanded (Higgins and Beckman, 2006).

Second, the changes in the legal infrastructure for corporate consolidation also played an important role. As pointed out in Arikawa and Miyajima (2007), the lifting of the ban on holding companies and the introduction of the stock transfer system made it possible to establish new holding companies to preside over existing corporations, and for corporations under these holding companies to preserve their independence (and corporate culture) while enjoying the benefits of consolidation. Nippon Unipac Holding, which was the first pure holding company to be established in the manufacturing sector, adopted a stock transfer scheme which smoothed the consolidation of Daishowa Paper, which possessed its own unique corporate culture. The adoption of the share swap system in 1999 was also a major change. Acquirers could now pay for their acquisitions with stock, and could compel minority shareholders to transfer their shares. The introduction of this system made it possible for an electrical manufacturing company to restructure its corporate group by converting firms under its umbrella into wholly owned subsidiaries (Miyajima 2007). On the other hand, share swaps became an important institutional change that allowed IT-related firms with high growth potential but facing severe financial constraints to resort to M&A deals as a part of a growth strategy.

Third, the adoption of the Law of Special Measures for Industry Revitalization and Rejuvenation in 1999, the Civil Rehabilitation Law, and rules clarifying how the Anti-Monopoly Law would be enforced, other legal revisions related to M&A activity, and the

implementation of the consolidated corporate tax system from 2001 were also important. The Civil Rehabilitation Law boosted the supply of target firms to the M&A market by enhancing the incentives for implementing rapid reorganizations. Moreover, the Law on Special Measures for Industry Revitalization and Rehabilitation and legal revisions made it possible for firms to receive rapid reviews with regard to whether a transaction would infringe on the Anti-Monopoly Law, and allowed firms to move forward more aggressively on merger and takeover decisions.

One could say that the recent M&A wave would not have occurred without these various revisions to the legal infrastructure. However, as noted in Arikawa and Miyajima (2007), these legal changes were not completely exogenous. Corporations which sought to reorganize or grow through M&A demanded the legal reforms, and M&A activity increased as a result of the reforms that were adopted.

2.4 Changes in the Economic System

Apart from the above-noted changes to the legal framework, economic institutional factors such as changes in the ownership structure, corporate and bank relationships, labor-management relations, and other changes to the corporate governance structure have had an important effect on M&A activity. Until the mid-1990s, the scale of the M&A market in Germany, France, and Japan was relatively small, and only began to expand after the corporate governance structures in each country began to evolve.

Germany, France, and Japan, in contrast to Britain and the U.S., had ownership structures characterized by a relatively high percentage of insider ownership (the total ownership share of managers, financial institutions and corporations with business relationships with the firm), but since the late 1990sthe share of ownership by insiders has declined in Japan, Germany, and France In 2005, the share of ownership by insiders was 33% in both the U.S. and Britain, or nearly at the same level as it was in 1999. By contrast, between 1999 and 2005, the insider ownership share fell from 69% to 60% in Germany, from 48% to 41% in France, and from 48% to 41% in Japan (Jackson and Miyajima 2007).

In tandem with the decline in the ownership share of transaction banks and affiliated corporations, there was also a rise in the ownership share of institutions, and particularly

foreign investors. Ever since the publication of the Avon Letter which lifted the ban on the exercise of voting rights by pension funds in 1988, the fiduciary responsibilities of pension funds, life insurance companies, and other institutional investors have increased, and institutional investors have attached more importance to the performance of their stock investments. These changes have created opportunities for growth, encouraging firms with extra capital to adopt aggressive M&A strategies, and firms with deteriorating profit outlooks, and unprofitable internal operations to adopt reorganization measures quickly. Consequently, the supply of potential targets for the M&A market has also increased. Furthermore, the decline in insider ownership (stable shareholders) has made it easier for activist funds to engage in M&A activities. Indeed, in Japan, activist funds have increasingly targeted firms with low stable shareholder ratios (Xu 2007).

Relationships between corporations and banks have also changed. In Germany, major banks have begun U.S. and British style investment banking operations, and banks have begun to play an important role as providers of funds for hostile takeovers (Höpner and Jackson 2001). In Japan, the unraveling of main-bank relationships, which had served as a constraint on M&A activity between domestic firms, has been important. In the past, main banks had taken the initiative in rescuing client firms undergoing financial hardship. But after the banking crisis, the main banks were confronted with their own financial crises, and thus were reluctant to undertake private workouts that forced them to assume a heavy financial burden. Instead, they became more aggressive in forcing firms with excess debt to sell off assets.[5] In addition, the consolidation of the banking sector after the banking crisis has not only made it easier to conduct negotiations between creditors, but also made it less likely that corporate group, or keiretsu, relationships would serve as an obstacle to M&A activity.[6]

Finally, changes in the employment system including the decline in the number of regular employees, and more flexible employment patterns in a number of corporations have also

[5] Of course, after the banking crisis passed, additional financing from the main banks kept collapsed firms afloat (Arikawa and Miyajima 2006), and strong main-bank relationships (as indicated by a high degree of dependence on financing from the main bank) continued to serve as a hindrance to M&A activity. However, one could say that as the banks restored their own financial health, and as the relationship between banks and their corporate clients transformed into solely a contractual one, the effect of this hindrance has been reduced.

[6] For example, one of the preconditions that facilitated the JFE merger was the fact that the main banks of Kawasaki Steel (Dai-Ichi Kangyo Bank) and NKK (Fuji Bank) respectively had already combined to form Mizuho Bank.

promoted M&A activity. Until recently, Japan's employment practices were based on long-term employment and the resulting formation of company-specific skills had served as a constraint on both the demand and supply of M&A targets.[7] Firms with a high growth potential and capable of acquiring other firms preferred to grow internally rather than by merging with other firms with different employment and salary practices (Odagiri and Hase 1989). On the other hand, firms with a great need to reorganize preferred to restructure on their own rather than enter into mergers that would require the integration of different organizations. However, in recent years, employee resistance to M&A has declined in acquiring firms due to increasingly fierce international competition, and in target firms due to the increased need for reorganization.[8]

2.5 To What Degree Have Financial Factors Promoted Mergers and Acquisitions?

The M&A wave that began in the late 1990s has been encouraged in part by financial factors. In particular, the U.S. M&A wave was fueled by a stock market boom and the frequent use of stock swaps (**Table 4**). In the late 1990s, as seen in **Figure 2**, there were stock market booms not only in the U.S., but also in Germany, France, and Britain. The global M&A wave that began in the late 1990s paralleled the stock market boom that peaked between 1999 and 2001. In Japan, however, even though the IT sector experienced a steep rise in stock prices, the stock market as a whole has been in a slump since 1998 (unlike in the other four leading industrialized countries). Of the M&A deals between 1998 and 2005, the EBTIDA (earnings before taxes, interest, and depreciation) multiple for acquisition prices exceeded 5 in both Germany and France, but was an exceptionally low 1.4 in Japan, or much lower than in the other four leading industrialized countries (**Table 4**). While a shift in the acquisition prices can be confirmed for Japan, booming stock prices have had a relatively limited effect on the M&A wave. Instead, loose monetary policies, and in particular zero interest rates, and the subsequent easing that began in March 2001, have played an important role by ameliorating the capital

[7] It is said that in Germany and France, where workers are organized along industry lines, the interests of employees had less of a constraining effect on M&A activity (Jackson and Miyajima 2007).

[8] In a 1995 survey which asked who do companies belong to, 97% of respondents replied "stakeholders." In a 2005 survey asking the same question 90% of respondents replied "companies belong to shareholders." In a survey of company employees, around 80% replied that they would welcome an M&A if it increased the value of the company (Source: Ministry of Trade, Economy, and Industry, Materials, December 2006).

constraints on acquiring firms. Arikawa and Miyajima (2007) show that the rise in the net internal funds held by corporations has increased the likelihood of those corporations becoming acquirers.

== Table 4 & Figure 2 about here ==

In sum, the Japanese M&A wave that dates from the end of the 1990s was triggered by technological innovation, a factor shared with the four other leading industrialized countries, as well as by the need to eliminate excess plant capacity. Consequently, the Japanese wave consisted of both strategic M&A deals to spur growth, and deals designed to consolidate and restructure operations. In addition, deregulation and liberalization, the legal infrastructure for corporate consolidation, and accounting standards have played a unique role in Japan. Furthermore, changes in the economic institutions which comprised the Japanese corporate system including the decline of the main bank system, and the increasing prominence of institutional investors also contributed to the M&A wave. On the other hand, a boom in stock prices has had little impact on M&A activity. From around 2000, financial factors such as the reduced reliance on interest-bearing liabilities, and the decrease in debt payments due to lower interest rates have improved the financial ability of corporations to fund M&A deals.

3. The Diversity of M&A Markets

Arm's length vs. coordinated M&A markets

Mergers and acquisitions come in various forms (mergers and takeovers) and transaction formats (negotiations or takeover bids), which in turn define the character of each country's M&A market. What are the special characteristics of Japan's M&A market as it has expanded rapidly since the end of the 1990s?

First, of the M&A deals of listed firms among the five countries, mergers in Japan were less common than acquisitions (whole, and partial, i.e. involving the purchase of less than 50% of the target) which maintained the legal independence of the target corporation, while tie-ups are relatively more frequent (**Table 5**).[9] In the U.S. and Britain, half of M&A deals take the

[9] In acquisitions, when the value of the target firm is 40% to 60% of the acquiring firm, equal mergers involving a 1-to-1 swap of stock are frequent (Hattori 2004).

form of mergers due to the high level of legal risk posed by conflicts of interest with minority shareholders, particularly in England, where there is an obligation to acquire all stock (a 'mandatory bid' rule). On the other hand, there are fewer restrictions on listed firms in Germany, France, and Japan, and a strong desire to maintain corporate cultures helps to explain the preference for acquisitions that maintain the legal independence of the target firm. Some of the special traits of Japanese corporations, such as their dependence on efficiencies reaped from skill formation developed within the firm on the basis of long-term employment, and the strong tendency to act as a community of stakeholders, have played an important role in shaping M&A activity.

== Table 5 Forms of M&A, about here ==

Second, when discussing M&A in Japan, even if we limit our focus only to the large-scale deals between listed firms, we find that the acquiring firm usually possessed a substantial prior stake in the target firm. As seen in **Table 6**, if the acquiring firm is German, French, or Japanese, it is more likely to possess a higher percentage of the shares of the target firm even before the merger/acquisition takes place than American or British acquirers. Of the 114 M&A deals between listed firms from 1990 and 2002 the acquirers held 15% or more of the shares of the target firms in 67 cases, or more than half of all cases. This indicates that the M&A wave involved more than a simple restructuring of subsidiaries within a corporate group, but rather took place between listed firms with preexisting capital tie-ups.

== Table 6 Characteristics of the M&A Market about here ==

As is often emphasized, the high percentage of a corporation's shares held by financial institutions and corporations with which it has business ties presents a formidable obstacle to hostile takeovers. However, it is important to note that given the ownership structure is concentrated, and the controlling shareholder decides to sell off its stock; when it is confronted with negative shocks such as a rapid decline in demand for its products, the emergence of a powerful rival, or rising costs, control rights can be easily transferred. Therefore, these factors can facilitate friendly takeovers. In this sense, I would like to emphasize that one of the special features of Japanese corporations – namely, the high percentage of shares held internally – has

in fact encouraged M&A transactions.[10]

Third, most M&As in Japan are effected through private negotiations, and takeover bids are still infrequent. According to **Table 6**, which compares the M&A markets of the five leading industrialized countries, 50% of the M&A deals in Japan involved private negotiations between the acquiring firm and the shareholders of the target firm. Private negotiations were more frequent in Japan than in the other four countries.[11] Conversely, there were only 44 takeover bids, accounting for 12% of the M&A deals between listed firms. Even though takeover bids have increased in recent years, they are still infrequent in Japan as compared to the other four countries. As history suggests in the takeover bids launched by Sony, Matsushita Electric, NEC, and other companies, most of these deals involved stock swaps that turned consolidated listed subsidiaries into wholly owned subsidiaries. (**Table 7**)

Moreover, there were no hostile takeovers in Japan up to the year 2000, and there have only been six hostile takeover bids since then, a much lower figure than in the U.S., which had 332 hostile takeovers, and Britain, which had 176. While the massive purchases by activist funds have generated considerable public attention, the extent of the purchases by the activist funds, and the frequency of hostile takeovers are still quite limited when compared to other countries. In addition to being few in number, most hostile takeovers cannot be described as successes.

In light of the above features, the acquirer's stock price premium is also smaller in Japan.[12] According to **Table 6**, the stock price premium offered for the target firm's shares in Japan was lowest among the five countries. The premium (which is the difference between the offered price, and the market price four weeks before the unveiling of the offer) averaged 25% to 30% in the U.S., Britain, France, and Germany, but only 10% in Japan,[13] though it has been rising in recent years, and the rise in the premium should be considered as one of the important

[10] Whether the interests of the controlling shareholder aligns with the interests of minority shareholders is a separate issue.

[11] The Thomson ONE Banker database defines private negotiations as "an acquisition of shares that was privately negotiated," in contrast to the public tenders of takeover bids. In the case of private negotiations, the bidding firm already holds a stake in the target firm prior to the M&A deal.

[12] The fees charged for mediating mergers and acquisitions are lowest in Japan among the five countries. While this issue requires more detailed study, the lower fees should be understood in terms of the characteristics of the M&A market enumerated above.

[13] In an international comparison conducted by Rossi and Volpin (2004) for the years 1990 to 1999, the premiums in Japan were abnormally low – in fact, Japan was the only country where a negative stock price premium was reported.

changes to have occurred to Japan's M&A market since 1999.

The comparison of the form of the M&A deals, and transaction format in the five countries reveals that the M&A market that is taking shape in Japan is different from the U.S. and British markets, which are characterized by arm's-length relationships, and has more in common with the coordinated German and French markets. The rapid increase in the number of M&A deals in Japan does not mean that a market for corporate control similar to those in the U.S. and Britain is developing here, but rather suggests that a qualitatively different market that emphasizes coordination and friendly takeovers is emerging.

Hybridizing Japanese Corporate System and M&A

The above international comparison suggests that the features of the Japanese corporate governance structure have not served as a constraint on the adoption of M&A strategies but rather have helped to shape the Japanese M&A market. As noted in the previous section, the features of the Japanese corporate system such as long-term employment, the main bank system, and cross shareholding had been viewed as acting to constrain M&A activity (Kester 1991), and it was believed that the dissolution of these features contributed to the M&A wave. Granted, it is possible to view the decline in the financial health of banks as leading to the unwinding of cross-shareholding, a deterioration of their capacity to launch rescues, and an increase in the proportion of shares held by institutional investors which have all played some role in promoting the M&A wave. The relationship between corporations and their capital providers has clearly moved toward more market-based arrangements. The task of evaluating the growth potential of corporations, once conducted largely through monitoring by banks which had access to private information, has now been transferred to the capital (stock and bond) markets, and the emergence of the M&A market can be seen as important part of this shift.[14] (Aoki 2007, Jackson and Miyajima 2007b)

However, it would be an oversimplification if we were to characterize the relationship between the various aspects of the Japanese corporate system and the recent M&A wave as monotonous, and to imply that the dissolution of the traditional model induced the M&A wave.

[14] Aoki (2007) develops the concept of external monitoring of internal linkage to explain how this business model (business strategy, organizational design, marketing strategy, and firm-specific compensation system) is combined with the human assets of employees.

Since the Japanese corporate governance structure is itself evolving in a hybridized direction,[15] it is important to identify the features of the Japanese corporate system that have imparted special characteristics to the Japanese M&A market.

As the Japanese corporate system has evolved toward market-based arrangements, it has promoted M&A through various pathways. First, main banks, which used to support the restructuring efforts of client firms by offering rescue packages, have spun off their restructuring departments and created rebuilding funds, and have sold nonperforming loans to them, thus sustaining the supply side of the M&A market (Yanagawa 2007). Second, the advantage of internal holdings is that when industrial shocks occur, the managers of the acquirers and target firms are in a position to arrange M&A deals through negotiation. Third, the features of Japan's corporate governance structure, which is based on long-term employment and a strong sense of shared community, helped to promote various revisions to the legal infrastructure for corporate consolidation that allowed target firms to retain their independence. This laid the groundwork for the M&A wave centered on the establishment of holding companies formed to purchase shares in other corporations. In this sense, the recent M&A wave is path dependent, and is in a mutually constraining relationship with the evolving corporate system.

4. Economic Role of M&A

4.1 M&A and Efficiency of Resource Allocation

Then, what economic role has the increase in M&As played in Japan since the late 1990s? The existing literature, which examines M&As in the U.S. since the 1980s, asserts that such activities have enhanced the efficiency of resource allocation.[16] M&A activity in Japan may have had a similar effect.

Arikawa and Miyajima (2007) show, as the standard neo-classical model predicts, technological innovation and deregulation systematically increased the frequency of M&As.

[15] See Aoki, Jackson, and Miyajima (2007) on the evolution of the Japanese corporate system in recent years.
[16] Jensen (1993), Mitchell and Mulherin (1996), Harford (2005), Mitchell and Stafford (2004).

Following Harford (2005), they estimated a model for the M&A ratio at the industry level (annual M&A cases in industry *j* / number of listed firms in industry *j*) that was regressed on both positive and negative economic shocks. They show that the M&A ratio is positively sensitive to growth opportunity, as well as to negative industry shocks (discontinuous sales decline). In addition, the analysis, based on firms' micro data, finds that a firm with high growth opportunities has a higher probability of being an acquirer in M&A deals.[17] This implies that the M&A boom since 1999 has become an important path for allocating resources from mature sectors to high-growth sectors.

On the other hand, the M&A ratio for Japanese firms, according to the analysis in Arikawa and Miyajima (2007b), is sensitive to negative economic shocks such as the unusual declines in sales or stock price changes. It also reveals that a firm with a lower Tobin's q or lower TFP, or higher leverage is a more likely target of M&A deals (Arikawa and Miyajima 2007b, Fukao et al. 2007).[18] This result implies that M&As were implemented more frequently in sectors characterized by excess plant capacity, excess indebtedness, and excess employment. **Table 7** reports the performance deterioration and weight of M&A among listed firms in the five leading industrialized countries, and shows of the probability that a listed firm would become an M&A target in the event that it performed poorly. It is clear that of firms in the five countries, Japanese firms were most likely to become targets if they had negative ROA or a PBR of less than one. These results are consistent with the view that the increase in M&A activity since 1999 was a driver of the reorganization schemes that were needed during the 1998 – 2002 period of structural adjustment.

== Table 7 about here ==

It is often pointed out that M&A activity in Japan has not played an important role in disciplining management and promoting reorganization, in light of the fact that hostile takeovers have been so rare in Japan. However, according to the estimation of Arikawa and Miyajima (2007), and **Table 7**, although the M&A market in Japan is dominated by friendly

[17] When the sample is limited to mergers, this also applies. 250 days before the merger announcement excess return (ER) of bidding firms (the difference between stock return of firm i and market return of TOPIX) are reported to be 10% in **Table 10**, showing that bidding firms have higher profitability. Moreover, when the sample is divided at 1999 when the merger cases increased, the average ER after 1999 is higher. In short, the increase in mergers after 1998 was driven by high stock prices.

[18] Fukao et al. (2007) documents that takeover attempts by foreign firms mostly target profitable firms.

takeovers and based on coordination among firms; this does not imply that M&A activity does not impose discipline on management. Certainly, M&As have begun to perform the monitoring function once performed by main banks and are starting to assume an important role in business reorganizations. In Japan, M&As have also functioned to encourage the elimination of excess capacity (Jensen 1993), Thus, M&As can serve to encourage corporate restructuring regardless of whether the intentions of the takeover are hostile or not.

4.2. Do M&As Really Enhance Firm Value?: Cumulative Abnormal Return Analysis

Has the increase in M&A activity actually enhanced firm value by improving organizational efficiency? We have attempted to answer this question by using the standard methodology for estimating cumulative abnormal returns (hereafter CAR). Needless to say, this approach assumes that the stock price response around the merger announcement exactly reflects value increases from economies of scale and scope, and other synergetic effects such as reduced indirect costs stemming from the M&A.

As M&A activity increased rapidly, empirical research on M&A using CAR analysis began to appear. Recent research on M&A using CAR analysis has been tabulated in **Table 8**. Results in Miyajima et al. (2007) are also summarized in **Table 9,** which covers the merger announcements between listed firms from 1992 to December 2005. Even though the results are still tentative; **Table 9** has the advantage of including the most recent M&A events.[19] In addition, to check whether or not the mergers within IT-related industries or mergers in sectors troubled by non-performing loans are positively related to stock price, the sample was divided into the IT-related sector (electronics, telecommunications, and software development, 19 cases), troubled sector (construction and distribution, 26 cases),[20] financial sector (banking, insurance, and securities, 25 cases), and other sectors (90 cases), and the differences between these sub-samples were statistically tested.

The CAR estimations summarized in **Table 8** reveal that:

1. The acquirer benefits from a slight positive stock price effect.

[19] Market model estimates -200 to -21 days from the event. Observations are excluded from the sample if the length of stock price data is less than 190 days.

[20] Asset prices in the real estate sector were also affected by the bursting of the bubble economy; however, there were no mergers between listed firms during the analysis period.

2. A positive stock price effect for targeted firms; is also confirmed, although the effect is quite limited.
3. The stock price effect described above has been expanding with the increase in M&A activity since 1999 (Inoue and Kato 2006, Matsuo and Tamamoto 2006, Higgins and Beckman 2006).
4. When examined by type of M&A, in the case of equal mergers, both acquirer firm and acquired firm benefit from positive stock price effects. Non-rescue mergers have significant positive stock effects while rescue mergers have insignificant stock price effects (Inoue and Kato 2006).

==Table 8 about here==

Our estimation, **Table 9**, confirms the results in 1 to 3 above. The stock price effect of mergers after 1992 was positive at about 1% with a 3-day window (day -1 to +1) and -0.1% with an 11-day window (day -5 to +5) around the announcement day for the acquirer. However, if we divide the sample at 1998, mergers after 1999 have significantly higher average CAR. Average CAR of acquirer firms was 2.5% (1% significance) with a 3-day event window after 1999. Hence, after the M&A boom in 1999, the stock market has rewarded acquirer firms with higher stock prices.

==Table 9 about here==

On the other hand, the estimated results also show the increased CAR for the target firms after the M&A boom. The average CAR of the target firms was 0.7% before 1998, while the average CAR of target firms was 4.1% (significant at the 1% level) after 1999, when a series of M&A friendly laws were enacted. The results imply that the market began to evaluate the synergetic effects of M&A since 1999 as it increased. However, it is also worth noting that a recent increase in CAR of the target firms is still lower than international standards. One interpretation of this low CAR is that Japanese M&As have little effect on improving organizational efficiency. Another interpretation is that the low CAR is a reflection of few contests between parties to M&As. At any rate, to identify the causes of low CAR is an important future research agenda.

When examined by sector, troubled sectors like construction and distribution have a slightly positive stock price effect compared to the comparison sample. Since the number of

merger events is still limited, it is hard to reach any conclusions at this point in time but it is reasonable to assume that the stock market will eventually positively evaluate the strategic mergers among IT-related firms and the mergers in the sectors troubled by non-performing loans that are primarily motivated by a desire to restructure.

Moreover, that the announcement of the establishment of mega-banks has had a positive effect on stock prices has been confirmed in Yamori et al. (2007). When the sample included mergers among securities and insurance firms, the same result was achieved. The CAR estimated with a 3-day-window for the financial sector is reported to be 4.1% and 4.5% respectively for acquirer firms and acquired firms. This result supports the interpretation that the consolidation of the financial sector boosts corporate value through synergy or management improvements.

Lastly, **Table 8** shows the estimations results of Kruse and Suzuki (2006), who measured the market response to hostile takeovers by activist funds, the Murakami Fund (M&A Consulting and MCA Asset Management), and Steel Partners Japan. Although such cases are still limited thus far, the existing analysis indicates that the market response to such hostile TOBs by activist funds has been significantly positive in Japan.

4.3 How is the negative effect of M&A?

Empire building by M&A

It is well known that M&As are a double-edged sword in the sense that they can at times enhance economic efficiency but may also have negative effects. The natural question to ask is, has Japan's M&A wave since the late 1990s been accompanied by negative effects or not?

One possibility is that managerial over-confidence (Roll 1986), or lack of effective corporate governance might lead to 'excessive' mergers by empire building managers. When this takes place, the CAR or excess returns of acquirer firms after a merger announcement (the deviation of the rate of return of the acquirer firm from the market return, hereafter ER) are expected to be negative. However, as the evidence in **Table 8** and **Table 9** shows, the CAR and ER after a merger announcement of the acquirer firms are positive; at least from the M&A boom in the late 1990s. These results do not support the argument presented above.

On the other hand, if wealth was systematically transferred from shareholders of acquirers

to those of the target firms, it is likely that either a large premium and/or large positive CAR for target firms would be observed. However, as already noted, M&A activity in Japan generates only modest premiums for the target firms (**Table 7**). Furthermore, the target firms in Japan gain only 5% to 6% in CAR, while the U.K.-based and U.S.-based research on M&As indicates that target firms gain an average of 20% to 30% CAR. Hence, the evidence presented above implies that there is little probability of transfers on a large scale of wealth from shareholders of acquirers to shareholders of target firms.

Over-valuation by the stock market

Next, let's take a look at possible over-valuations by stock market-driven acquisitions that took place in the U.S. during the 1990s.[21] As shown in **Figure 2**, the stock market in Japan was bearish compared to other countries. Hence it is less likely that booming stock prices triggered a systematic M&A wave. However, it is possible that higher prices in specific sectors such as the bubble in the IT sector promoted M&As.

Arikawa and Miyajima (2007) documented that a higher industrial or acquirer's Tobin's q was associated with the higher probability of M&As. However, this result is consistent not only with the understanding that M&As took place in growth industries or firms, but also with the fact that M&As were motivated by the over-valuation of the industry or firms in the stock market. Arikawa and Miyajima (2007) already made it clear that over-valuation across a specific industry is less likely to take place, so that the remaining problem is over-valuation of a particular firm. In this regard, Mehrotra and Morck (2006) point out that M&A activity which makes use of overvalued stocks has high ER before the merger but is accompanied by lower ED after the merger. **Table 10** reports the results of the estimated cumulative ER 250 days after the announcement of the merger and the results of the test of differences before the merger. According to **Table 10**, Panel 1, the average ER after the merger announcement is 11.8%, which is higher than prior to the merger announcement. This result is even significant when we limit the sample to mergers after 1999 when the number of mergers began to increase.

＝＝Insert Table 10 about here＝＝

[21] Shleifer and Vishney (2003), Rhodes-Kropf and Viswanathan (2004)

Table 10, Panel 2 documents ER around the announcements in different sectors. Consistent with the results of CAR, ERs after the announcements in troubled sectors like construction and distribution are significantly higher than the pre-announcement ER. The mergers in financial sectors do not produce significant differences around the announcements. Therefore, it is not likely that the increase in the number of mergers would have been triggered by overvalued stock prices.

However, the IT-related sector shows a -4.8% post-announcement ER, which is significantly lower than the pre-announcement ER of 15.4% If we only look at M&As in the IT-related sector, it is possible that bidding firms might make use of their overvalued stock to conduct M&As with overvalued firms.

The evidence thus far is mainly related to mergers cases; however, overvalued stock prices might also induce excessively frequent acquisitions. Since stock swap acquisitions were allowed in 1999, there have been 147 acquisitions using stock swaps through 2004 (65 cases took place in 2004). The stock swap acquisitions since 1999 also include the Livedoor case, a firm that boosted its stock price through stock splits. The Livedoor incident sounded the alarm that firms might be using their overvalued stock to acquire other firms. Among the 147 stock swaps acquisitions, 77 acquisitions were conducted by listed firms to privatize affiliated firms (RECOF reports). Therefore, the acquisitions that were attempted by firms using overvalued stock numbered at most 70. And most of those cases took place among firms that are listed in the emerging stock markets. Therefore, even if the acquisitions resulted from over-valuations in the stock market, the phenomenon should not characterize the market as a whole.

In short, Japan's M&A wave of the late 1990s was not triggered by overvaluations in the stock market. However, against the background of climbing stock prices and low interest rates after 2005, it is important to recognize that the Japanese economy has been entering into a stage in which excess cash holdings or overvalued stock prices of firms could lead to a stock market driven M&A or M&As that simply transfer wealth.

4.4 Possible Transfers of Wealth from M&A

Exploitation by Rivals and Business Partners

The increased value from M&As, or the booming stock prices to be specific, might be based

on the sacrifices of the acquirer or the target firms' business partners. Previous research addresses this issue by looking at the reactions of the stock prices of rivals and business partners to the merger announcements.

Analysis of such effects belongs to a future research agenda, though anecdotal facts and **Table 11** reveal the following points about some simple cases.

First, Yamori et al. (2007) show that the establishment of mega-banks has had a positive stock price effect on other banks and trust banks; however, such stock price effects can not be confirmed in local banks. Moreover, the establishment of mega-banks has had positive effects on clients especially on clients that are highly dependent on banks. Miyajima and Yafeh (2007) examine the stock market reaction to the announcement that Sumitomo and Sakura Bank would merge to form Mizuho Bank, and Sanwa, Tokai, and Asahi Bank would become UFJ Bank. The announcements that banks would combine to form mega-banks not only has had positive stock price effects on the banking sector as a whole but also on the stock prices of the banks' clients. The CAR of clients of the banks are reported to be zero; however, to those firms that have high debt ratios, firms that are debt-dependent on their main bank, firms with low R&D expenses, firms with no or low credit ratings the news of mergers has had significantly positive stock price effects.

Second, M&As induce the corporate reform of rival firms. A typical case is the effect of the recent acquisition by Softbank of Vodafone on KDDI and NTT. Facing the merger of a rival, NTT, the former telephone monopoly, launched sweeping corporate reforms including reductions in its workforce (Kamino 2007).

Table 11 summarizes stock price reactions to the major merger announcements. To those firms in excessively competitive industries (steel or papermaking), the stock price effects are roughly positive. On the other hand, in cases in which rivals expanded in size the stock price effects are slightly negative. But, the average reactions from other firms in the same industry are positive (1.4% at the 10% significance level). In addition, with limited sample size, the consolidation of the steel industry has had negative stock price effects on downstream industries. The results imply that M&As in the late 1990s did not trigger large-scale transfers of wealth from business partners.

＝＝Table 11 about here＝＝

Breach of Trust

Meanwhile, up until now, M&A activity in Japan has not generated transfer of wealth from employees, or led to a breach of trust in hostile takeovers (Shleifer and Summers 1988). Hostile takeovers are rare in Japan. After a takeover, there has been no case in which an implicit agreement not to lay off employees has not been honored. Of course, in the case of mergers for corporate reorganization, there have been employment downsides. Especially, as indicated in Kubo and Saito (2007), mergers after 1999 have involved large-scale layoffs. Also, Fukao and Amano (2004) find that layoffs occur quickly after mergers between foreign corporations.

In Japanese M&A transactions, even when motivated by the need for restructuring, the acquirer pays considerable attention to gaining the consent of the acquired firm with regard to layoffs, and foreign firms and funds in Japan have also been careful to seek such consent. Hence, layoffs have been conducted in a reasonable manner after mergers. Kubo and Saito (2006) examine the wage changes after mergers and find them to be inconsistent with the transfer of wealth from employment, per capital wage increases of about 400,000 yen after controlling for sales volumes, ROA, and average age of employees.[22] In addition, the job training expenses have been maintained after mergers, suggesting that there has been no experience loss from the mergers.

5. Long-term Performance Effects

The evidence collected thus far suggests that the stock market reacts to M&A announcements. Obviously, there is no guarantee that the market reactions are 100% right or wrong. A positive market reaction might be the result not only of an increase in firm value but also of dominant market power, or the increasing probability of government rescue (too big to fail). Hence, data on long-term performance is needed to determine whether or not M&As boosted corporate organizational efficiency.

[22] Kubo and Saito (2006) argue that such increase in wages stem from the cutting of new employment, and is the result of the weights of the decrease in young and low-productivity employment.

However, it is well known that the evidence on the effect of M&As on long-term firm performance is in essence ambiguous, and results have been contingent on the performance measures and methodology that are applied.[23] Even when we find the performance improvements post-merger as compared to pre-merger, it is still very hard to say that this improvement is not affected by other factors, because it is almost impossible to disentangle the pure effects of M&As from other factors.

In addition, to measuring the long-term performance of M&As, we need at least three years of post-merger performance data. Hence, there are a few possible empirical studies on the long-term performance effects of M&As in Japan. **Table 12** tabulates the results of research papers since Odagiri and Hase (1989). **Table 13** and **Table 14** present our own estimation results for mergers in 1990-2002 and mergers and acquisitions in the IT sector in 1996-2002 respectively.

== Table 12, 13, and 14 about here==

First, there is no study that asserts that M&As have had significant long-term performance effects, with the exception of Kruse et al. (2005). However, the case for which Kruse et al. find positive effects belongs to the period prior to the bubble economy of the late 1980s, so it is not an indication of recent trends in M&As.

Second, from the results in our own estimation where we select 87 cases from the sample of acquired firms with less than 10% of the assets of the acquirer firms,[24] we are not able to find any long-term performance effects after mergers since the 1990s. The difference between the 3-year-average pre-merger and post-merger performances is zero on average. In addition, when we regressed the post-three-year-average performance on the M&A dummy after controlling for the 2-year-average pre-merger performance, firm size, and industry dummy, we cannot find any long-term performance effects from the results either (**Table 13**). When considering various types of M&As, there is a significant 7% improvement in ROA in the related mergers, while there was no significant effect in non-related mergers. Non-group mergers improved ROA significantly by 11%, but group mergers did not have any significant effect. Both rescue and non-rescue mergers show no significant effects from the mergers. In

[23] The results will differ, depending on whether TFP, ROA, or EBITDA, or growth of sales is used in the analysis.
[24] Kubo, Miyajima, and Saito (2007)

sum, although the cross-M&A-type estimations are roughly consistent with the CAR that is reported by Kato and Inoue (2006), the effect of M&As on long-term performance is far more robust.

In the financial sector, it is well known that profitability of the banking sector has been improving after the mega-banks were established. Such improvement in profitability is the result of the write off of non-performing loans. The estimation results based on the cost function in Yamori et al. (2003) show that the cost reduction after M&As has not proceeded as scheduled.

Table 14 documents the long-term performance of mergers between listed firms in 1995-2004 within the telecommunications sector in the IT-related industries. Standardized capital efficiency (ROA) reported in **Table 14** indicates that M&As had negative effects on long-term performance after mergers.[25] Controlling for size and leverage, the three-year-average ROA after merger is -0.26% while it is -0.35% for acquisitions. This is about 10% of the 3.8% average capital efficiency in the same period.

Meanwhile, contrary to the CAR analysis, no long-term performance effect has been confirmed in the case of hostile block purchases or TOB (Kruse and Suzuki 2005). Recent block purchases or TOB by activist funds have attracted attention since 2000. Pressures from those funds have exerted financial discipline over management and made management recognize the importance of the cost of capital; however, whether or not such pressures lead to increased long-term performance is an open question (Kruse and Suzuki 2005).

The above evidence can be interpreted in two ways. First, it is plausible that neither the expected synergy from M&As nor disciplinary effect of block purchases or TOB have been realized yet. This might also apply to the cases of merger between the financial institutions and hostile block purchases or TOB and imply the importance of organizational reform after the M&A. Another interpretation is that, as Mitchell and Mulherin (1996) emphasized, if M&As were motivated by positive and negative economic shocks, and consequently M&As took place in specific industries and at specific points in time, then M&As might not necessarily be aiming at synergetic effects. In such cases, the post M&A performances have larger variance

[25] Untabulated results show that the difference between the standardized earnings ratio one period before and three periods after the merger is -0.63%, significant at the 5% level.

and show no significant improvement in average capital efficiency. This interpretation would be the case for the estimation results in the IT-related industry.

The above analysis of the performance effect of mergers is based on capital efficiency. Using another performance index such as the sales growth and TFP, the followings points are worth noting. First, Nagaoka (2005) shows that when considering post merger growth rates equal-mergers have negative effects on sales growth rates while acquisitions interestingly boost the growth rates for acquirer and target firms. According to our estimation on IT-related industry, sales growth is positively sensitive to the M&A dummy and acquisition dummy, although not at a significant level (**Table 14**, column 3 and 4). M&As as an alternative to greenfield investment do not lead to improved capital efficiency but may increase the growth rate of acquirer firms.

Lastly, when the acquirer firms are foreign, according to the analysis by Fukao et al. (2007), the ROA, TFP, and output per employee of target firms are significantly higher than those of firms that are acquired by domestic firms. This result implies that the efficiency gains after the acquisition are much clearer in the case of acquisitions by foreign firms as compared to domestic firms. In other words, the increase in the number of acquisitions by foreign firms since the late 1990s has played a significant role in transferring skills and know-how from the acquiring firms to the target firms and has boosted efficiency.

6. Policy Implications and Conclusion

To sum up, the M&A wave that began in the late 1990s had two major drivers: the pursuit of growth strategies and the need for corporate restructuring. While the M&A wave has contributed to the structural adjustment of the Japanese economy and to corporate growth, the negative aspects of M&As have still not been made visible. I would like to conclude by presenting some of the policy implications of my analysis, and to point out some of the empirical issues that will need to be addressed in future research.

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6.1. Should M&As Be Promoted? Is the Level of M&A Activity in Japan Still Too Low?

While M&As between Japanese corporations have been increasing since 1999, Japanese deals account for only a small slice – around 5%-6% – of the global M&A market, a remarkably tiny share when compared to Japan's economic position vis-à-vis the other leading industrialized countries. The value of Japanese M&As activity reached 5% of nominal GDP in 2000, a year of bank consolidations, and averaged around 2.5% of nominal GDP from 2001-2005 **(Table 1)**, so the level of M&A activity is quite low when compared to the U.S., where M&A activity has trended at around 10% of nominal GDP (Holmstrom and Kaplan 2001, Andrade and Stafford 2001). And though the number of M&A deals has increased in recent years, acquisitions by overseas corporations are still rather infrequent. While cross-border deals accounted for 42% of global M&A activity from 1998-2005, such deals accounted for only 13% of all M&A activity in Japan. So the question to ask is whether or not the current level of M&A activity in Japan is still too low.

Though M&A activity in Japan may be low compared to the size of its economy, this does not necessarily mean that the level of activity is below an appropriate level. The rise of the value of corporations involved in M&A can be attributed to the following factors: 1) the realization of economies of scale; 2) the transfer of managerial and operational know-how; and 3) the purchase of sources of competitiveness embodied in human capital and organizations including long-term relationships with users (commercial rights), product planning and design, the technology for precision manufacturing of parts, strict quality control, and mass production at overseas sites. However, whether a corporate acquirer can reap synergies from economies of scale and scope through M&As, or whether it can use M&As as a substitute for new investment by "purchasing time," depends on the organizational architectures of the corporation, and its approach to technological development. Not all corporations will be able to reap benefits from M&As. For example, as shown in chapters of Miyajima (2007), there are many industries in which the ability to realize economies of scale will be curtailed. Since there is a strong tendency to develop core technologies in-house, and if doing so is in fact the most practical approach, it is highly likely that the benefits that accrue by "purchasing time" through M&As will be quite limited. Therefore, although M&As in Japan may have an auxiliary function of increasing corporate competitiveness, few corporations will be able to pursue growth strategies centered on M&As. One may choose to conclude that the scale of M&A

activity is too small, but the same point also applies to the number of cross-border deals. In short, the benefits that will accrue to a foreign corporation which enters the market would be limited to those areas in which it has already possesses a comparative managerial advantage.

However, even if we take the above points into consideration, there is a possibility certain institutional constraints will still prevent M&As from reaching an optimum level. Since not only current managements but also the employees of target firms have often been opposed to recent M&As, we cannot rule out the possibility that some aspects of Japan's corporate governance structure, which is characterized by a high level of employee involvement, may be acting as an impediment to structural adjustments through M&As. Furthermore, bad debts have become a severe problem in the construction, real estate, retail, and distribution industries, yet many of the very same industries which have a high need for restructuring have seen very little M&A activity. It is highly likely that the lack of M&As has delayed the concentration of these sectors. The large integrated electrical manufacturers, whose managers and employees have been strongly opposed to cross-border deals, are a conspicuous example of deferred consolidation.

Since the banking crisis of 1997, Japanese corporations have divided into two types: hybrids which have formed market-based relationships with outside investors, and have undertaken an unstinting effort to innovate across various areas including corporate strategy, internal organization, the composition of a company's board of directors, and more tradition-bound firms which continue to rely on banks for financing, maintain cross-shareholdings, and have for this reason put off reforms of their internal structures (Jackson and Miyajima 2007b, Arikawa and Miyajima 2007). The tradition-bound corporations, shielded from the discipline of the capital markets, have been slow to implement managerial reforms, and their delayed reform means that their value is not highly appraised by capital markets. Since the economic recovery began in 2003, there has been a tendency to overlook the fact that many Japanese corporations continue to adhere to the conventional model, and have not begun to escape the vicious cycle imposed by the features of this model. M&As could provide an important opportunity for corporations, which are saddled with problems associated with the conventional model to promote managerial reform and to improve their organizational efficiencies. Therefore, in order to promote structural adjustment, Japan, in parallel with the

reforms of the corporate governance arrangement, needs to address the important challenge of building institutional foundations that will allow M&As to take place.

6.2. Increasing Consolidation and Monopoly

Consolidation of long-established industries such as paper and pulp, steel, shipping, and oil refining began in the mid-1990s, and concentration of these industries accelerated after 1999. The steel industry agglomerated into two major groups, the shipping industry into three major corporations, and the telecommunications industry into three mega-carriers. These horizontal mergers and the consolidation of operations of corporations in kindred industries have increased the potential for monopolistic control. Against the backdrop of global competition, economies of scale have grown more important across a broad spectrum of industries including telecommunications, air and sea transport, steel, papermaking, chemicals, and oil refining.

Given the fact that M&As have unfolded on a global scale in these industries, however, the scale of Japan's top global manufacturers — M&A activity in Japan notwithstanding — has not increased in relative terms. Furthermore, although oligopolies are forming around the world, and the Japanese steel industry has merged into two major corporate groups, Japanese steel manufacturers still wield insufficient bargaining power over price vis-a-vis upstream (iron ore) suppliers. While awaiting further more detailed studies, it is my judgment that given the integration of domestic and foreign markets in recent years, and the increasing reliance on global markets by buyers and consumers, corporations which face competition in international markets have few concerns regarding the restraints on competition that might affect M&As. In sum, the following three points should be addressed when formulating M&A policy for the future.

First, traditional merger reviews, which focused on post-merger changes in shares of the domestic market, are probably unrealistic. In particular, the more a corporation is exposed to severe competition in international markets, the more managerial challenges it faces developing strategies for international M&As, and the greater its need for clear guidelines on consolidation. In this regard, the Fair Trade Commission's recent adoption of a flexible posture on merger restrictions and its clarification of guidelines on international market factors should be considered positive trends.

Second, though standards for mergers have been relaxed, a policy which promotes M&As among domestic corporations while showing less enthusiasm for M&As by foreign corporations amounts to an unacceptable double standard. To take a position that emphasizes the importance of economies of scale and dynamic competition strongly implies that competition should be maintained through the entry by overseas corporations (and the returns to scale they could offer). Policies should be adopted which encourage overseas corporations to act as acquirers in M&A transactions.

Finally, whether the rents that accrue through consolidation will be directed toward new investment that gives rise to further innovation would depend on the capital markets and the effective internal governance of corporations. Therefore, if economies of scale are rapidly becoming more important, it will be essential to design appropriate corporate governance mechanisms that ensure that the rents that ensue from M&As will be directed toward research and development, and plant investment.

6.3. Hostile Takeovers and Takeover Defenses

Until recently, hostile takeover bids in Japan were linked to campaigns by activist funds to alter management policies in order to raise stock prices. In the future, however, hostile takeover bids are more likely to be part of a corporation's attempts to achieve synergies or implement growth strategies. Oji Paper's hostile buyout bid for Hokuetsu Paper in July 2006 was groundbreaking because it was launched by an ordinary corporation. Given the technological development and organizational structures that breed strong corporate cultures of Japanese corporations, there may be fewer opportunities to pursue strategic M&A in the form of hostile takeovers in Japan compared to the U.S. and Europe. Nevertheless, many Japanese companies have begun to formulate M&A policies and search for targets as a means of pursuing synergies and implementing growth strategies. Furthermore, the lifting of the ban on triangular mergers in May 2007 is expected to increase the potential for mergers by foreign corporations. Therefore, one point of contention in the future will be the type of policy stance that the government should adopt toward corporate reorganizations and strategic M&A that involve hostile takeovers.

If M&A are expected to play a role in increasing Japan's economic efficiency, the

government's overall M&A policy should be one that encourages deals that promote corporate value, and restrains deals that reduce value. In light of these objectives, the standards for the types of takeover defense measures that should be allowed are self-evident. In order to prevent surprise takeovers and inadequate defenses on the one hand, and excessive defense measures on the other, it is imperative to establish clear and fair rules for takeover buyouts and takeover defense measure. In fact, beginning with the release of a report by the Ministry of Economy, Trade, and Industry's corporate value research committee, various steps have been taken to set up rules for takeovers, so the institutional infrastructure for takeovers and takeover defense mechanisms is being built.

As noted in the introduction, the dual nature of M&A complicates the issues surrounding hostile takeovers. While some M&A will indeed bring benefits to the shareholders of target firms, others will cause harm to the shareholders of the acquiring firm and stakeholders in the target firm, and be socially undesirable. The M&A could be motivated by the desire to bestow private benefits on the managers of the acquiring firm, or be an attempt by the acquiring firm to reap profits by changing the rules of distribution within the target firm. Moreover, the M&A could bring about social inefficiencies if the acquiring firm is overvalued or the target firm is undervalued by the stock market. If such motivations and outcomes become prevalent in the M&A market, there would be a need to promote the adoption of takeover defense policies.

However, my analysis indicates that there is little likelihood that the M&A market will unfold in such a manner. Furthermore, the promotion of takeover defenses would have negative repercussions including the encouragement of managerial entrenchment that shields corporate managers from the discipline of the stock market. The strengthening of corporate governance should reduce the potential for private benefit, and increasing the efficiency of the stock market should reduce under- and over-valuations, and thus lower the risk that corporate values will be diminished. As M&A have increased in frequency, and the necessary legal and institutional infrastructure for M&A deals has been built, the Japanese M&A market has entered a stage in which domestic and foreign corporations and funds are beginning to launch strategic bids that aim to increase corporate value, so more of these bids can be expected to be hostile. And the hostile takeovers bids and takeover defenses that are adopted in response will give rise to issues that will require serious attention in coming years.

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Figure 1　The Trend of M&A's among Five Countries

Data includes 1) domestic deals (In-In); 2) deals with foreign buyers and domestic targets (Out-In); and 3) deals with domestic buyers and foreign targets (In-Out). Data covers all types of deals ranging from merger, acquisition, and additional purchase.

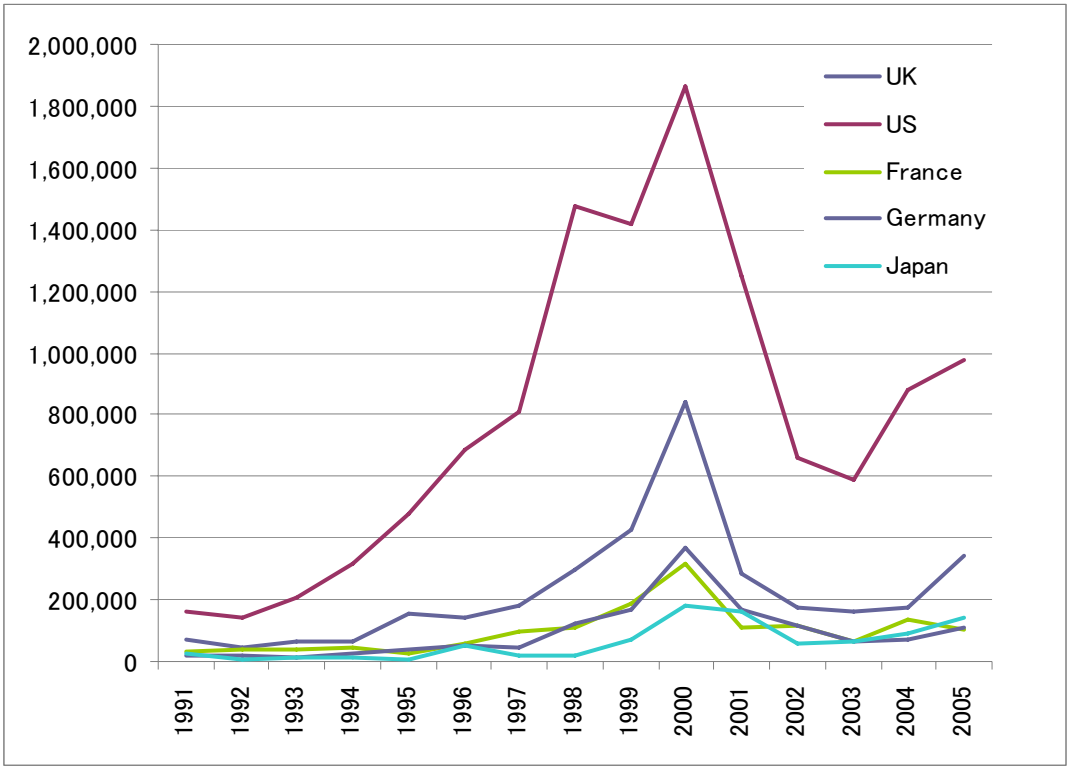

Figure 2 Stock price index among five countries

(1995 Jan. =100)

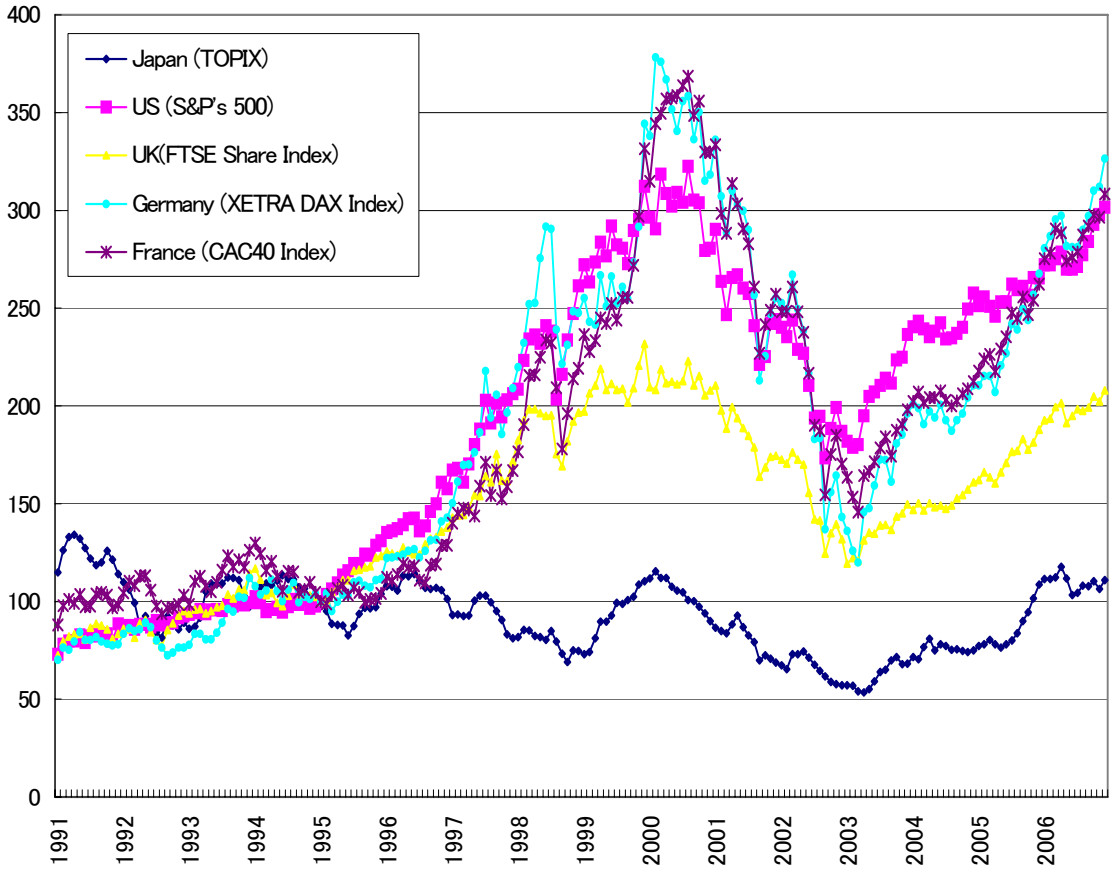

Table 1 Numbers of M&A, and M&A Value to GDP ratio.

Note: Data includes 1) domestic deals (In-In); 2) deals with foreign buyers and domestic targets (Out-In); and 3) deals with domestic buyers and foreign targets (In-Out). Data covers all types of deals ranging from merger, acquisition, and additional purchase.
Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

	Volume of M&A Deals		Deal Value as percentage to GDP. Volume of M&A Deals	
	1991-1997	1998-2005	1991-1997	1998-2005
U.S.	7,879	8,864	5.4	10.7
U.K.	2,398	3,209	9.1	21.8
Germany	1,479	1,607	1.4	7.5
France	1,207	1,263	3.4	9.9
Japan	253	1,381	0.4	2.5

Table 2 Sectors of M&A

Note: 1) domestic deals (In-In); 2) deals with foreign buyers and domestic targets (Out-In); and 3) deals with domestic buyers and foreign targets (In-Out). Data on the overall levels and industry breakdown (section 2) basically use all types of deals. Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

	Japan		**Germany**		**France**		**U.S.**		**U.K.**	
	1991-2005	**Rank**	**1991-2005**	**Rank**	**1991-2005**	**Rank**	**1991-2005**	**Rank**	**1991-2005**	**Rank**
Banking	30.90%	1	8.70%	3	11.10%	3	9.00%	2	5.10%	5
Communication	14.30%	2	30.80%	1	17.00%	1	15.30%	1	17.60%	1
Chemicals And Allied Products	5.50%	3	11.70%	2	12.50%	2	6.90%	4	7.80%	2
Nondepositary Credit Institutions	4.00%	4					2.30%	13		
Transportation Equipment	3.90%	5	5.70%	5	4.40%	10				
Electronic Equipment and Components	3.90%	5			5.30%	7	4.40%	6		
Business Service	3.30%	6	3.40%	7	5.90%	6	8.40%	3	4.40%	6
Insurance Carriers	3.20%	7	4.10%	6	7.60%	4	3.70%	8	4.00%	7
Real Estate	2.50%	8	4.10%	6	4.70%	9	2.60%	11	3.90%	8
Food And Kindred Products	2.40%	9			4.20%	11	2.30%		3.90%	8
Industrial And Commercial Machinery And Computer Equipment	2.00%	10	1.70%	8			2.90%	9		
Security and Commodity Brokers, Dealers	1.60%	11	1.20%	11	3.00%	14	2.40%	12	2.00%	11
Wholesale Trade-durable Goods	1.50%	12	1.70%	8						
Wholesale Trade-Nondurable Goods	1.00%	13								
Building Construction General Contractors And Operative Builders	0.90%	14								
Electric, Gas, And Sanitary Services			7.10%	4	4.10%	12	4.60%	5	7.80%	2
Primary Metal Industries			1.40%	9						
Transportation Services			1.30%	10						
Holding And Other Investment Offices			1.10%	12	6.20%	5				
Eating And Drinking Places					5.10%	8			2.50%	9
Printing, Publishing									2.20%	10
Oil and Gas Extraction							4.30%	7	5.60%	4
Measuring Instruments, Photographic Good							2.70%	10		
Total	80.90%		84.00%		91.10%		69.10%		66.80%	

Table 3 Cross-border M&A Comparisons

Note: 1) domestic deals (In-In); 2) deals with foreign buyers and domestic targets (Out-In); and 3) deals with domestic buyers and foreign targets (In-Out). Data on the overall levels and industry breakdown (section 2) basically use all types of deals.
Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

		Volume of Deals				Deal Value as percentage to GDP.		
		Domestic Deals (In-In)	Deal with foreign buyers and domestic targets (Out-In)	Deals with domestic buyers and foreign targets (In-Out)	Deals within foreign buyers and targets (Out-Out)	Domestic Deals (In-In)	Deal with foreign buyers and domestic targets (Out-In)	Deals with domestic buyers and foreign targets (In-Out)
U.S.	1991-1997	6,282	906	631	8.1%	4.6	0.5	0.6
	1998-2005	7,039	1,215	939	10.2%	9.8	1.3	1.7
U.K.	1991-1997	870	472	464	25.7%	5.3	2.2	1.8
	1998-2005	1,937	742	608	18.5%	8.3	8.6	6.3
Germany	1991-1997	861	215	360	25.1%	0.6	0.5	0.3
	1998-2005	781	413	406	25.4%	1.9	2.4	3.4
France	1991-1997	675	223	308	25.5%	1.5	0.8	1
	1998-2005	613	327	317	25.2%	4.2	4.3	1.3
Japan	1991-1997	90	131	33	13.0%	0.3	0.1	0
	1998-2005	1,041	126	89	7.1%	1.7	0.2	0.3

Table 4 International Comparison of the Characteristics of M&A Deals

Note: 1) Only listed target firms included. All types of deal included. 2) Merge premium estimations include only merger consisting of a 100% acquisition, which is the stock price increase ratio 4 weeks before the announcing day. 3) Acquisition Expenses / EBITD (Earnings before interests, taxes and depreciation). EBITDA is weighted by percentage of shares acquired.

Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

		Stock Only	Stock and Cash	Cash Only	Acquisition Expenses / EBITDA Ratio
U.S.	1991-1997	21.8	32.1	46.1	4.02
	1998-2005	24.4	30.1	45.5	6.80
U.K.	1991-1997	9.0	33.1	57.9	5.50
	1998-2005	12.6	31.8	55.6	6.91
Germany	1991-1997	9.2	15.4	75.4	3.80
	1998-2005	16.6	15.3	68.1	5.14
France	1991-1997	14.8	17.1	68.1	4.94
	1998-2005	12.6	22.3	65.1	5.02
Japan	1991-1997	20.7	6.7	72.6	0.96
	1998-2005	29.8	20.3	49.9	1.42

Table 5 Types of M&A (1991－2005）

Sample limited to the M&A case where target firms are listed firms. Sample included all types M&A
Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

	Japan	Germany	France	U.S.	U.K.
Merger	12%	7%	8%	45%	45%
Acquisition	13%	30%	23%	6%	6%
Partial Acquisition	68%	55%	52%	45%	46%
Acquisition of Remaining Interest	7%	8%	17%	3%	3%
Numbers of Deal	2256	1110	2000	13398	2715

Table 6 International Comparisons of M&A Markets (1998-2005)

Sample limited to the M&A case where target firms are listed firms. Sample included all types M&A
Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

	Japan	**Germany**	**France**	**U.S.**	**U.K.**
Acquirer stock ownership before M&A	10.8	14.3	26.7	3.6	4.8
Average stock ownership increased by M&A	27	34	33	75	65
Block stakes purchase from third parties	34	18	14	7	8
Weights of private negotiation	50	24	18	17	27
Numbers of average annual tender offer buying （2000-2005）	44	13	51	77	120
Weights of TOB between listed firm	12%	11%	41%	13%	43%
Hostile Takeover（1991-2005）	6	6	18	332	176
Sales to the buyers	1	5	12	73	74
Sales to other buyer	0	0	4	103	34
Failed Attempts	5	1	4	156	68

Table 7　Performance Deterioration and Weight of M&A

Note: Premium is estimated for the case of a merger and acquisition, partial acquisitions are excluded. Premium is estimated by comparing the offered price for four weeks before the announcement day.

Source: Jackson and Miyajima (2007), with data based on the Thomson ONE Banker database

		Weights of Low PBR(＜1) Targets in M&A	Weights of Earnings Decrease Firms in M&A	Merge Premium
U.S.	1991-1999	25	32	46.6
	2000-2005	6	10	52.1
U.K.	1991-1999	7	18	45.1
	2000-2005	8	11	39.9
Germany	1991-1999	2	13	-5.1
	2000-2005	2	10	20.3
France	1991-1999	4	22	47.0
	2000-2005	8	13	28.2
Japan	1991-1999	1	5	2.5
	2000-2005	20	21	10.9

Table 8 Results of Event Studies

Hostile Buying Event Study of Buy and Hold abnormal return

	Estimate Period	Event Window	Acquirer Firms	CAR	Target Firms	CAR	Source
Mergers	1977-1984	-3 to +3	154	0.90%	N.A	N.A	Kang et al.（2000）
Mergers	1989-1999	-3 to +3	128	1.62%	119	4.08%	Usui （2001）
	1990-2001	-1 to +1	137	1.51%	147	4.37	Inoue and Kato （2006）
Mergers	1990-1998	-1 to +1	49	-1.19%	48	1.08	
	1999-2001	-1 to +1	88	3.01%	99	5.97	
Domestic Deals (In-In)	1990-2000	-1 to +1	85	-0.81%	N.A		Higgins and Beckman (2006)
	1990-1998	-1 to +1	69	-1.4%	N.A		
	1999-2000	-1 to +1	16	3.2%	N.A		
Deal with foreign buyers and domestic targets (Out-In)	1990-2000	-1 to +1	67	0.48%	N.A		
Merge, Stock Swap or Transfer, Tender Offer, Seasoned Equity Offerings	1977-1998	-1 to +1	735	-0.56%	749	1.83	Matsuo and Yamamoto (2006)
	1999-2004	-1 to +1		1.13%		6.55	
Hostile Takeover	2000-2004	-1 to +1	N.A		22	3.84	Kurse and Suzuki (2005)
		+2 to+200	N.A		22	11.98	
Financial Sector	1999-2004		Mega Banks		Mergers		Yamori et. al (2007)
	1999-2004		Acquired Banks	N.A	Customer Firms	Average Zero	Miyajima and Yafeh (2007)
Manufacturing Sector	1990-2005	-1 to +1	160	1.0%	N.A		Panel 2
IT-related Sector	1990-2005	-1 to +1	19	1.7%	N.A		Panel 2

Table 9 CAR of Bidding Firms around the Announcement of Merger

1. Sample includes merges between firms listed after 1999. Bidding firms takes the value 1 if indicated in the RECOF report.
2. Market model is estimated from -250 days to +20 days from the announcement day.
3. Missing values in stock price and stock price shorter than 170 days are included from the sample.
4. Hi-tech sector includes information communication, electric machine, software, and information. Problem sector includes construction, real estate, and logistics sections. Note there is no merge event from real estate section. Financial sector includes Bank, Securities, and Insurance. Comparison groups indicate all other sectors.
5. *, **, and *** indicate variable significant at 10%, 5%, and 1% level respectively.

Panel 1: Time

	Bidder					Targett				
	N	CAR (-1 to +1)		CAR (-5 to +5)		N	CAR (-1 to +1)		CAR (-5 to +5)	
Total	160	1. 5%	*	-0.1%		112	3.7%	***	2.6%	**
Before 1998	45	-2.8%	***	-4.5%	***	28	0.7%		-3.6%	*
After 1999	115	2.5%	***	0.6%		85	4.1%	***	3.9%	***
Differences		5.3%	***	5.1%	***		3.5%	*	7.5%	***
P value		0.002		0.002			0.059		0.003	

Panel 2: Sector

	Bidder					Asker				
	N	CAR (-1 to +1)		CAR (-5 to +5)		N	CAR (-1 to +1)		CAR (-5 to +5)	
Comparison Sample	90	-0.1%		-2.1%	**	71	3.0%	**	2.0%	*
Hi-tech Sector	19	1.7%		-0.2%		8	4.6%	*	1.6%	
Differences with Comparison Group		1.8%	*	1.9%	***		1.6%		-0.4%	
P value		0.078		0.005			0.310		0.437	
Problem Sector	26	1.1%		2.1%		17	2.6%		1.2%	
Differences with Comparison Group		1.2%		4.1%	**		-0.4%		-0.7%	
P value		0.260		0.023			0.453		0.438	
Financial Sector	25	4.1%	**	4.9%	**	26	4.5%	**	3.8%	**
Differences with Comparison Group		4.2%	*	7.0%	**		1.5%		1.8%	
P value		0.073		0.012			0.273		0.234	

Table 10 Excess Returns around Merger Announcement

1. Sample includes merges between firms listed after 1999. Bidding firms take the value 1 if indicated in the RECOF report.
2. Market model is estimated from -250 days to +20 days from the announcement day.
3. Missing values in stock price and stock price shorter than 170 days are included from the sample.
4. Hi-tech sector includes information communication, electric machine, software, and information. Problem sector includes construction, real estate, and logistics sections. Note there is no merge event from real estate section. Financial sector includes Bank, Securities, and Insurance. Comparison groups indicate all other sectors.
5. *, **, and *** indicate variable significant at 10%, 5%, and 1% level respectively.

Panel 1: Time

	N	Average Cumulative Days	ER before Announce-ment		Average Cumulative Days	ER after Announce-ment	
Total	175	227.6	10.0%	***	216.8	11.8%	***
Before 1998	50	222.7	3.2%		224.4	3.0%	
After 1999	125	229.5	12.8%	***	213.7	15.3%	***
Difference			9.5%	*		12.3%	*
P value			0.053			0.075	

Panel 2： Sector

	N	ER before Merger Announcement		ER after Merger Announcement		Difference of ER before and after Announcement	P value	
	175	10.0%	***	11.8%	***	1.8%	0.366	
Comparison Sample	97	11.6%	***	6.8%	*	-4.8%	0.175	
Hi-tech Sector	20	15.4%	*	-4.8%		-20.2%	0.048	**
Differences with Comparison Group		3.9%		-11.6%				
P value		0.300		0.108				
Problem Sector	32	1.9%		31.3%	**	29.5%	0.076	*
Differences from the Comparison Group		-9.7%	*	24.5%	*			
P value		0.088		0.085				
Financial Sector	26	5.5%		18.9%	**	13.4%	0.239	
Differences with Comparison Group		-6.1%		10.9%	*			
P value		0.311		0.055				

Table 11 Stock Market Reaction to the Merge Announcement

CAR estimated -200 to -21 days from the Announcement Day. Merge of Mitsui Construction includes the Corporate Splits of Fujita Co. Values of Industrial Matched Firms are the average of the other 29 firms. Construction industry price index is excluded.

Announcement Day	**Acquirer Firms**	(-1 day to 1 day) from Announcement CAR(-1,+1)	(-5 day to 5 day) from er Announcement CAR(-5,+5)	**Acquired Firms**	(-1 day to 1 day) from Announcement CAR(-1,+1)	**Industrial Matched Firms** CAR(-1,+1)					
1996.2.3	Ford Motor Company	NA		Mazda Motor Corporation	-2.4%	Toyota Motor Corporation	0.9%	Honda Motor Co., Ltd.	-0.1%	Nissan Motor Co., Ltd.	0.1%
1999.3.27	Renault S.A.	NA		Nissan Motor Co., Ltd.	1.3%	Toyota Motor Corporation	8.4%	Honda Motor Co., Ltd.	0.8%	Mazda Motor Corporation	1.5%
1998.11.21	Mitsui O.S.K. Lines, Ltd. (MOL)	-2.4%	-0.3%	Navix Line, Ltd.		Nippon Yusen Kabushiki Kaisha (NYK LINE)	-5.0%	Kawasaki Kisen Kaisha, Ltd. ("K" LINE)	-3.1%	—	—
r	Nippon Paper Industries Co., Ltd.	r	23.9%	Daishowa Paper Manufacturing	4.9%	Oji Paper Co., Ltd.	11.5%	Hokuetsu Paper Mills, Ltd.	4.8%	Mitsubishi Paper Mills Co., Ltd.	12.0%
r	Oji Paper Co., Ltd.	-0.2%	4.8%	Hokuetsu Paper Mills, Ltd.	-1.6%	Nippon Paper Industries Co., Ltd.	0.2%	Mitsubishi Paper Mills Co., Ltd.	-7.2%	Daio Paper Corporation	-2.5%
1998.10.28	Nippon Oil Corporation	-0.4%	-5.7%	Mitsubishi Oil Company, Limited	0.5%	Tonen Corporation	3.9%	General Sekiyu K.K.	4.4%	—	—
2000.2.17	General Sekiyu K.K.	16.8%	8.3%	Tonen Corporation	-4.1%	Nippon Oil Corporation	-5.1%	—	—	—	—
2001.4.14	Kawasaki Steel Corporation	4.9%	14.1%	NKK Corporation	14.9%	Nippon Steel Corporation	2.2%	Sumitomo Metal Industries, Ltd.	11.8%	Kobe Steel, Ltd.	12.4%
					r	Toyota Motor Corporation	-0.8%	Nissan Motor Co., Ltd.	-1.3%	Honda Motor Co., Ltd.	-2.3%

2002.1.29	Mitsui Construction Co., Ltd.	21.2%	20.0%	Sumitomo Construction Co., Ltd	15.9%	Index of construction industry	1.0%	—	—	—	—
2002.12.11	Nissho Iwai Corporation	25.6%	18.7%	Nichimen Corporation	-1.0%	Mitsui & Co., Ltd.	-1.7%	Mitsubishi Corporation	0.4%	Sumitomo Corporation	-1.9%
2001.11.11	Japan Airlines Corporation	4.1%	4.5%	Japan Air System Co.,Ltd.	0.2%	All Nippon Airways Co., Ltd.	-2.4%	—	—	—	—
2006.3.17	SoftBank Corporation	2.3%	-6.1%	Vodafone K.K(Vodafone Japan)	NA	KDDI Corporation	-0.3%	NTT DoCoMo, Inc.	0.5%	—	—
	Average	9.2%	8.3%		3.1%		1.4%				
	P-value	0.008	0.017		0.094		0.081				

Table 12 Long-term Estimation of M&A in the Previous Literature

Odagiri and Hase (1989) compare the differences between t-3 to t+3.

	Estimation Period	Numbers of Target Firms	Target 2	Method/Indicator	mean	median	Estimating Results	Source
					-3 to -1 to +1to +3			
Merge, Acquisition and Partial Ownership	1980-1987	46		ROA, Sales Growth Rate	-4.30%	NA		Odagiri and Hase (1989)
				Sales Growth Rate	-3.70%	NA		
Mergers	1970-1994	84	Estimated Coefficient	TFP	-2.70%	NA		Yeh and Hoshino (2001)
				ROA、ROE	-0.70%	NA		
Mergers	1969-1999	69	Matched firm (Size 70%-130%)	operating cash flow/current asset price	1.60%	0.15%	Higher performance for merger between difference industries.	Kurse, Park, Park and Suzuki(2006)
Merge and Acquisition	1985-2003			ROA, ROE				Nagaoka (2005)
				Sales Growth Rate				
Target of Hostile Takeover	2000-2004	22	ROA	ROA	-1.04%	-0.81%	No long-term result confirmed	Kurse and Suzuki (2005)
				Compare with control sample	-2.29%	-0.97%		
Financial Sector	1990-1998		Merger	Merger	Cost Function		No clear improvement	Yamori et al.(2007)
Manufacture Industry Merger	1999-2002	87	Merge (Listed firms), book value of target firm more than 1/20 of the bidders					Table 13 - Panel 1
IT-related Sector Merger, Acquisition, and Transfer of Ownership	1997-2004	46	Merge (Listed firms), book value of target firm more than 1/20 of the bidders'	ROA standardized by Industrial Average	-4.3%		Significantly Negative	Table 13 - Panel 2
				Sales Growth Rate	-2.10%		Insignificantly Negative	
Foreign Firms VS Japanese Firms			Acquisition (private firms)	TFP,ROA			Significantly Positive	Fukao et al.(2007)

Table 13 Long-term performance Estimation Result I: Merger of Listed Firms (Non-financial firms)

Note: 1. Sample includes 114 mergers between listed firms 1990 - 2001. In which, 87 acquired firms are excluded from the sample because the assets of acquired firms are less than 0.1 of the acquirer firms. Dependent variable is ROA(t+1,t+2)-ROA(t-1), where ROA is the rate of return of asset. Related Merger indicates firms that are categorized in the same two-digit industrial code and otherwise. Group indicates dummy that takes value of 1 if acquirer firm holds more than 15% share of the target firm. Rescue indicates a dummy variable that takes a value of 1 if either the acquirer or the acquired firms report ordinary losses in the merger announcement year. Industrial Dummy and Year Dummy are included.

2. *, **, and *** indicate variable significant at 10%, 5%, and 1% level respectively.

	Dependent Variable: ROA(t)-ROA(t-1)							
Independent Variable	(1)		(2)		(3)		(4)	
Intercept	0.685	***	0.685	***	0.685	***	0.685	***
	(0.088)		(0.088)		(0.088)		(0.088)	
ROA(t-1)	-0.180	***	-0.180	***	-0.180		-0.180	***
	(0.008)		(0.008)		(0.008)		(0.008)	
Merger t	0.240							
	(0.198)							
Unrelated Mergers			-0.294					
			(0.409)					
Related Mergers			0.400	*				
			(0219)					
Non-group Mergers					0.416			
					(0.262)			
Group Mergers					0.061			
					(0.294)			
Non Rescue							0.156	
							(0.206)	
Rescue							0.505	
							(0.491)	
2-digit Industrial Dummy t	Yes		Yes		Yes		Yes	
Year Dummy t	Yes		Yes		Yes		Yes	
Adjusted R^2	0.15		0.15		0.15		0.15	
# of Observations	29856		29856		29856		29856	

Table 14 Long-term performance Estimation Result of M&A II: IT Industry

Note: 1. Sample includes Tokyo Stock Exchange 1st and 2nd section listed Information and Communications firms. ***NROA*** and ***GSALE*** indicates standardized ROA and Sales Growth Rate respectively. ***DA*** indicates debt ratio and ***SIZE*** is the natural logarithm of total assets. ***M&A 20*** is the dummy variable that takes a value of 1 if the asset of target firms has more than 1/20 assets of the acquirer firm. ***Baishu 20*** is the dummy variable that takes a value of 1 if the size of the target firm is larger than 1/20 of the acquirer firm's size.
2. Performance of Dependent Variable is 3-year average after the merger. Dependent Variables include 2-year average before the merger.
3. *, **, and *** indicate variable significant at 10%, 5%, and 1% level respectively.

Dependent Variable	**NROA t +**				**GSALEt+**			
	Coefficient		Coefficient		Coefficient		Coefficient	
Dependent Variable	t-statistics		t-statistics		t-statistics		t-statistics	
C	0.091	***	0.091	**	1.697	***	1.697	***
	(6.717)		(6.702)		（20.431）		（20.432）	
NROA t -		***		***		***		***
(GSALEt-)	0.267		0.270		0.007		0.007	
	(8.676)		(8.779)		（4.406）		（4.408）	
DA	-0.019	*	-0.019	*	0.138	**	0.138	**
	(-1.860)		(-1.862)		（2.246）		（2.264）	
SIZE	-0.009	***	-0.009	***	-0.063	***	-0.062	***
	(-7.988)		(-7.961)		（-8.979）		（-8.976）	
M&A20	-0.027	*			0.053			
	(-1.873)				（0.590）			
Baishu20			-0.034	***			0.053	
			(-2.354)				（0.590）	
Year dummy	Yes		Yes		Yes		Yes	
# of Observations	622		622		587		587	
Adjusted R^2	0.238		0.240		0.154		0.154	