THE ACQUIRER AND THE PERFORMANCE OF TARGETS IN PARTIAL ACQUISTIONS: THE CASE OF JAPANESE ACQUISITIONS IN THE U.S., 1980-2000

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We extend the existing literature on the factors explaining the value of acquired firms by examining the effect of corporate governance and other characteristics of Japanese and U.S. acquirers on the long-term post-acquisition stock and accounting performance of their U.S. targets over 1980 – 2000, a period during which both U.S. and Japanese economies experienced both superior and poor performances. In addition to analyzing the bidder – target relationship in general, focus on Japanese bidders permits us to investigate the role of unique Japanese characteristics: keiretsu membership, cross-holding and ties to a main bank.

The unresolved debate on the efficiency of the U.S. versus Japanese corporate governance system developed in the early 1990s, following the slowdown in the U.S. and boom in the Japanese economy. Critics claim that the main banks do nothing special and that the whole discussion is theory driven. In addition, the hypothesized advantages of the Japanese governance system, namely cross-holding, negligible shareholding, latitude and long-term focus of managers, may lead to greater agency problems.

For data availability reason we analyzed U.S. targets whose stock continued to independently trade for at least a year following the acquisition. To separate general and uniquely Japanese effects of bidders, a sample of U.S. targets, that independently existed following acquisition by U.S. bidders, were selected from the same industry and year in which Japanese acquired U.S. targets.

Overall results suggest that better managed bidders with more resources positively affect the performance of smaller targets in related industries. In the presence of alternative methods for managing the agency problem the targets' leverage becomes more important as a source of funds than a tool to manage agency problem.

The mixed results for the Japanese governance variables, expected positive for the main bank and unpredicted negative for the keiretsu and cross-holding, do not allow a clear-cut answer as to which governance system is dominant since the characteristics of the Japanese governance system have mixed effects on the corporate performance.

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1. INTRODUCTION AND LITERATURE REVIEW

1.1. Purpose of the Study

Although there is a large literature on the factors that explain how the value of acquired targets is affected by target and bidder characteristics,[1] it is overwhelmingly short-term, focused on explaining target stock returns surrounding the domestic acquisition announcements. This study extends the existing literature by examining how the corporate governance and other characteristics of Japanese and U.S. acquirers affect the long-term, one and three year, post-acquisition stock and accounting performance of their respective U.S. targets. We do this by studying the relationship between bidders and their targets over 21 years, 1980 – 2000, a period during which both U.S. and Japanese economies experienced reversals between superior and poor performances. In addition to analyzing the bidder – target relationship in general, our focus on Japanese bidders permits us to investigate the role of several characteristics unique to the Japanese governance system, including keiretsu membership, cross-holding and ties to a main bank.

The debate on the efficiency of the U.S. versus Japanese corporate governance system developed in the late 1980s and early 1990s, following the slowdown in the U.S. economy and noticeable decrease in U.S. foreign direct investment (FDI) outflows and simultaneous boom in

[1] Asquith, Bruner and Mullins (1983), Jensen and Ruback (1983), Jensen (1986), Roll (1986), Bradley, Desai and Kim (1988), Jarrel, Brickley and Netter (1988), Lang, Stulz and Walking (1989 and 1991), Mitchell and Lehn (1990), Morck, Shleifer and Vishny (1989 and 1990), Franks, Harris and Titman (1991), Agrawal, Jaffe and Mandelker (1992), Healy, Palepu and Ruback (1992), Berger and Ofek (1996), Denis, Denis and Sarin (1997), Agrawal and Knoeber (1998), Rau and Vermaelen (1998), Lins and Servaes (1999), Safeiddin and Titman (1999), Schwert (2000), Song and Walking (2000), Houston, James and Ryngaert (2001), Shelifer and Vishny (2003).

the Japanese economy and significant increase in Japanese FDI inflows into the U.S. As a part of this debate a large literature emerged that has both praised and criticized features of the Japanese governance mechanisms. Although the reversal in fortunes and sharply different experiences of U.S. and Japanese economies in late 1990s silenced the argument for the superiority of Japanese governance system, the role of specific features unique to the Japanese corporate governance is a subject of continuing interest.

Proponents of the Japanese corporate governance system have pointed to the potential benefits of inter-firm cooperative behavior between Japanese companies based on trust and long-term relationships cemented through vertically related cross-holdings.[2] They have also highlighted the benefits of close relationships between firms and their banks, resulting in highly leveraged[3] capital structures with rollovers of short-term loans from banks that are simultaneously significant equity-holders. In addition there is the benefit of "life-time employment" and the long-term orientation it brings about among managers, in contrast to the likely short-term outlook among U.S. managers with uncertain tenures.

These proposed advantages were deemed to be even more pronounced for the Japanese companies that belong to industrial groupings or keiretsu, organized around their main banks. Reduced information asymmetry based on the continuously rolled-over short-term bank loans and more efficient monitoring by the main banks,[4] including hands-on managing during financial difficulties, together with inter-group cooperation and continuous support to troubled members, were proposed to explain the empirical evidence of the ability of the keiretsu members to execute cheaper, easier and faster recovery from financial distress,[5] and to be less affected by the capital

[2] Sheard (1989), Aoki (1990), Gilson and Roe (1993) and Berglof and Perotti (1994).
[3] Prowse (1990), Stulz (1990) and Kang, Shivdasani and Yamada (1999).
[4] Aoki, Patrick and Sheard (1994).
[5] Hoshi et al (1990a).

rationing and illiquidity.[6]

Although some economists praise the Japanese governance system, others claim that the main banks in practice do nothing special and that the whole discussion is merely theory driven.[7] In addition, some of the hypothesized advantages of the Japanese governance system, namely cross-holding, together with negligible shareholding, latitude and long-term focus of managers, may lead to greater agency problems. Potential agency problem may also be linked with the huge cash reserves of large Japanese corporations[8] and their subsequent wasteful acquisitions in the U.S. in the late 1980s.[9] The less than stellar performance of the Japanese economy since early 1990s, the highly publicized problems of their U.S. targets, and the willingness of Japanese to pay more for their U.S. targets than U.S. bidders and other foreign acquirers[10] suggest that the Japanese acquisitions in the U.S. were driven by agency problems rather than by shareholders' value maximization motives.

Previous analyses of Japanese mergers and acquisitions activity in the U.S. were largely restricted to stock price reaction at the announcement during the Japanese shopping spree that ended in the 1990. Several studies documented that the U.S. target shareholders' returns at the acquisition announcement by Japanese bidders were similar to, but higher than, the corresponding reactions to announcements by U.S. or other foreign bidders. Although large wealth gains for the U.S. targets' shareholders are consistent with both superior Japanese governance and the agency problem hypothesis, positive returns to Japanese bidders' shareholders suggest that announcement effects were mainly driven by the expected synergies

[6] Hoshi, Kashyap and Scharfstein (1991).
[7] Ramseyer (1993).
[8] Jensen (1989) reports that in 1987 Toyota's cash hoard of $10.4 billion exceeded 25% of its total assets.
[9] Jensen (1989), Kester (1991), Atwong, Lange and Dubas (1995).
[10] Cakici, Hessel and Tandon (1991), Harris and Ravenscraft (1991) and Pettway (1991).

and benefits of superior governance characteristics.[11] However, these market expectations at the announcement may either be overstated or may not be realized at all. In this study, in addition to reexamining targets' stock price reactions at the announcement, we examine the realized long-term performance of targets and how it is explained by bidder characteristics. In the latter case, we control for a variety of factors, besides bidder characteristics, that have been recognized in the prior literature to affect targets' returns in both domestic and international acquisitions.

In addition to changes in the exchange rate, a traditional determinant of FDI, these factors include target and bidder characteristics such as previous performance, asset size, growth opportunities, leverage, free cash flow, block holding, bidder's toe-hold, method of payment, related or diversified acquisition, and attitude of targets' management toward acquisition. Once these factors have been controlled for, we focus on the governance features unique to Japanese acquirers by studying the effect of cross-holdings, membership in keiretsu and relationship with the main bank.

The difficulty in analyzing long-term post-acquisition targets' performance is the lack of available data, due to the fact that the overwhelming majority of firms is completely acquired and ceases to exist as independent entity. We solve this problem by forming a Type 1 sample of partially, and a few fully, acquired U.S. firms whose stock continued to independently trade following the Japanese acquisition. In order to separate bidder characteristics that affect targets' long-term performance in general from those unique to the Japanese governance, a Type 2 sample was carefully identified. U.S. firms, that continued to exist as independent entities after being acquired by U.S. bidders, were selected from the same industry and year in which Japanese acquired U.S. targets. In order to calculate the long-term performance and to be able to separate

[11] Significant difference between CAR (-1,0) of 0.59% for Japanese and -0.29% for U.S. bidders, and even more significant difference of 9.07% for U.S. targets of Japanese bidders and 6.84% for U.S. targets of U.S. bidders during 1975-1988, reported by Kang (1993), were largely driven by the late 1980s announcements.

the importance of general bidders characteristics from those unique to the Japanese governance mechanism, only acquisitions where all four firms in matched Type 1 and Type 2 bidder-target pairs were publicly traded and where each firm met several data requirements, whose detailed description is provided in the next section, were included in the sample, resulting in 41 Type 1 and Type 2 matched acquisitions.

Several authors and empirical evidence on how Japanese firms entered U.S. markets suggest that both Japanese shareholders and managers, already recognized to have a long-term focus, are more interested in market share and income sufficient to service debt than in stock value maximization. If that is indeed true, than long-term accounting performance measures are more appropriate than the ones based on the price of stock data.

Overall results suggest that better managed bidders with access to more resources positively affect the performance of their smaller targets in related industries. In the presence of alternative methods for managing the agency problem, especially those provided by the bidders, the targets' leverage becomes more important as a source of available resources than a tool to align the shareholders' and managers' interests.

While the main bank ties had the expected, although delayed, positive effect on the long-term post-acquisition performance of targets, contrary to our predictions the impacts of the keiretsu and cross-holding or mochiai persisted as strongly negative suggesting that cross-holding by friendly stakeholders is primarily used to insulate managers from outside scrutiny leading to higher agency problem.

The mixed results for the Japanese governance variables do not allow a clear-cut answer as to whether Japanese governance system dominates the one in the U.S., suggesting that the ongoing discussion about which governance system is better has not been resolved due to the

fact that the characteristics of the Japanese governance system have mixed effects on the corporate performance. While some provide superior monitoring and control leading to improved performance, others are used for entrenchment and insulation of incumbent management, resulting in an increased agency problem.

The rest of the Introduction and Literature Review is organized in the following way. Following the review of the value creating motives and most important characteristics of FDI inflows from the rest of the world and Japan into the U.S. during the period of this analysis, we discuss the proposed advantages of Japanese over U.S. corporate structure and governance system. The value destroying motives for FDI associated with the agency problem and characteristics of Japanese governance system are discussed at the end of the section.

1.2. Foreign Direct Investment Inflows into the U.S.

FDI is a long-term capital movement in which the owner of the assets has operating control over the investment. This type of capital flow, subdivided into greenfield and acquisition investments, generally consists of corporations setting up foreign branches, foreign subsidiaries or buying substantial shares of foreign firms. In U.S. statistics, ownership of at least 10% of voting shares constitutes FDI. Ownership of less than 10% is classified as portfolio investments.

Economic theory identifies several macro and microeconomic motives for FDI. Macroeconomic factors such as imperfections in product and factor markets [Kindleberger (1969), Caves (1971) and Hymer (1976)], currency and capital markets [Froot and Stein (1991)], differences in tax codes [Scholes and Wolfson (1990)], differences in savings and investments that reduce cost of capital and the discount rate making the same stream of future cash flows

more attractive [Aliber (1970), Froot and Stein (1991)], and import restrictions can motivate firms to explore FDI. According to microeconomic, transaction-based, motives for FDI, multinational companies overcome disadvantages in operating in a foreign setting through economic rent from intangible assets such as technological, organizational or goodwill innovations [Horst (1971), Caves (1971)].

Between 1970s and late 1980s the U.S. reversed its FDI balance and became a net recipient. Harris and Ravenscraft (1991) report that the total FDI inflow into the U.S. increased from $15 billion, or less than 20% of the U.S. FDI outflows, in 1972 to $400 billion, or 107% of the U.S. FDI position abroad, in 1989. Foreign corporations spent almost $20 billion to buy the U.S. firms in 1985 comparing to $16 billion in 1981. Chang (1995) reports that FDI inflow into the U.S., measured as a percentage of the total net worth of all non-financial U.S. corporations, more than quadrupled from 1977 to 1989.

One common explanation for the observed reversal in the U.S. FDI is the depreciation of the dollar[12] which made U.S. assets appear cheaper to foreigners with wealth denominated in other currencies. A counter argument is that in a world with perfect capital mobility risk-adjusted expected returns on assets denominated in all currencies will be equalized. However, the argument that the exchange rate is irrelevant to FDI is at odds with empirical evidence. Froot and Stein (1991) report that a regression of de-trended FDI, measured as percentage of the U.S. GNP, against the exchange rate indicates that a 10% dollar depreciation results in an additional $5 billion inflow of FDI.

[12] Financing Vietnam War and Great Society programs in mid-1960s by expansionary fiscal policies produced significant inflation. Subsequent run on the dollar forced President Nixon to terminate convertibility of one ounce of gold for $35 on August 15, 1971, causing the break down of Bretton Woods International Monetary System of relatively fixed exchange rates. Except for the 1980-1985 (President Reagan's first term) and late 1990s dollar non adjusted for inflation has been sliding since then.

The observed change in FDI inflow was mainly the result of a notable increase in the acquisition of the U.S. firms by foreign corporations in 1980s. According to Cebenoyan, Papaioannou and Travlos (1992) the number and value of foreign acquisitions of the U.S. firms increased from 199 and $6.3 billion in 1978 to 326 and $41.9 billion in 1987.

Positive and significant wealth gains, i.e. abnormal returns, to the U.S. targets in foreign acquisitions were found to be in line with evidence from domestic takeovers, but the magnitude of wealth generated in foreign acquisitions was significantly larger. Shaked, Michel and McClain (1991) show that for period between 1975 and 1983 the targets' cumulative abnormal returns for seven days centered on the announcement date were significantly higher for foreign acquirers, especially when grouped by industry.

1.3. Japanese Foreign Direct Investment Inflows into the U.S.

The 1985 Plaza Agreement[13] led to the deregulation of Japanese financial markets and institutions. Elimination of foreign exchange controls in Japan helped the yen to double its value relative to the U.S. dollar in late 1980s. Caves (1993)[14] indicates that the inflow of Japanese FDI in the U.S increased twenty-five-fold from 1980 to 1987. Kester (1991) reports that in 1984 Japanese firms spent about $1.4 billion to acquire 39 U.S. targets, while in 1988 they spent $12.6 billion for 132 targets. Pettway, Sicherman and Spiess (1993) observe that while in the 1970s and early 1980s most foreign acquisitions were from Canada, Britain and Netherlands,[15] by 1987

[13] In the September of 1985 the Group of Five (France, Japan, West Germany, UK and U.S.) pledged to appreciate major currencies vis-à-vis the U.S. dollar through intervention in foreign exchange market.
[14] Japanese net long-term capital outflows, of which foreign direct investments is a component, increased from $10 billion in 1981 to $137 billion in 1987.
[15] Shaked, Michael and McClain (1991) report that between 1981 and 1984 Canadian investors acquired $12.1 billion worth of U.S. firms, followed by British ($7.1 billion), Dutch ($6 billion), French ($5.3 billion) and

Japanese owned or controlled more U.S. assets than any other foreign investors. Kogut and Chang (1991), Hennart and Park (1992), and Drake and Caves (1992) found a positive relationship between quantitative restrictions on imports from Japan and Japanese share of FDI inflows into the U.S.

In addition to increased acquisition activity in the U.S., Japanese firms paid more than other foreign bidders in order to acquire U.S. firms. According to Cakici, Hessel and Tandon (1991) the U.S. targets earned the highest abnormal returns when bidders were from Japan, followed by Canadian, British and German acquirers. Pettway (1991) argues that until 1990 Japanese acquirers were paying a higher price for the U.S. targets than the U.S. or other foreign bidders because of their lower cost of capital, based on the lower cost of debt and higher leverage. Atwong, Lange and Dubas (1995) claim that the lower cost of capital in Japan was due to the unique banking structure and historically high savings rate.

Kim and Lyn (1990) conclude that motives for FDI in the U.S. differ by country of origin, and observe that Japanese firms are more homogeneous in motive and performance, advertisement intensity, leverage and liquidity than investors from other countries. Atwong, Lange and Dubas (1995) suggest that because Japanese firms maintain a lower operating profit margin and dividend pay-out and a higher ratio of advertising to sales and R&D to revenues relative to other foreign and U.S. bidders, their horizontal acquisitions in U.S. expand their market share rather than attain the profit margin or rate of return expected by local competitors.

Australian investors ($3.7 billion).

1.4. Corporate Structures and Governance System in Japan and the U.S.

The Japanese economic boom[16] and the increased acquisition activity of Japanese firms in the U.S., occurring simultaneously with the difficulties that the U.S. economy experienced during the late 1980s, motivated investigations of the differences between Japanese and the U.S. corporate structures, governance systems and managerial practices.[17] Numerous authors stipulate that (a) the dominance of low cost short-term bank debt and high leverage, (b) monitoring by the main bank, (c) extensive cross equity and debt holding, intra-firm trading and information sharing, especially within keiretsu, and (d) the long-run non-stock price maximizing focus make Japanese firms more competitive than short-run focused U.S. firms where managerial decision are exclusively driven by the stock market goals. Sheard (1989) and Kester (1991) argue that by efficiently dealing with the trading hazards of the marketplace and the agency problem, Japanese corporate governance has obliterated the need for an expensive and disruptive external market for corporate control.

1.4.1. Dominance of the Low Cost Short-Term Bank Debt and the High Leverage

Dismantling of the Japanese war economy by the U.S. Occupation Authorities and the need to quickly rebuild war damages radically changed Japanese corporate finances from an equity-dominated to a bank debt-dominated capital structure. According to Nakamura (1981)

[16] French and Poterba (1991) report that between 1984 and 1989 the Nikkei Index rose 27.5% on average, annually. Kang and Stulz (2000) point out that from the beginning of 1986 to the end of 1989 average (median) wealth gain for Tokyo Stock Exchange firms was 238% (208%).

[17] To determine the extent to which the competitiveness of American industry is undermined by a short time horizon and to assess the relative effectiveness of American corporate governance Harvard Business School and Council on Competitiveness sponsored "The Project on Capital Choice" [Porter (1992)].

67% of total assets in Japan's manufacturing industry in 1935 were financed by equity. Kurosawa (1981) points out that 4% of external funding during 1931-36 was from banks and 96% from stock and bonds. In the post-war period Aoki, Patrick and Sheard (1994) report that, except during late 1980s asset boom, loans from banks and insurance companies consistently exceeded 70% of total external financing sources, while the bond market was dominated by the government which accounted for 75% versus 6.5% of corporate sector.

Since banks were not permitted to issue medium and long-term liabilities in the post-war period, short-term (90 to 120 days) continuously rolled over loans dominated debt market. In 1983 only 34% of the outstanding bank loans had a maturity longer than a year.[18]

Key reasons for bank dominated corporate financing after WWII were:

a) *Young post-WWII Japanese firms.* To dismantle the economic bases of Japanese militarism, the U.S. Occupation Authorities dissolved the pre-WWII zaibatsu (combined banks and industrial firms with interlocking shareholding under family ownership which accounted for 70% of war procurement orders in 1945), dismissed all senior management, disposed of original owners and redistributed shares widely. The firms that emerged, even under old names, were new organizations without reputation which, according to Diamond (1984), preferred to issue debt through intermediaries instead of arms length arrangements, since it is cheaper to buy delegated monitoring by intermediaries than to pay a premium in the bond markets.

b) *Strict government control of corporate bond issues* replaced the monitoring function of capital markets. The Bank of Japan and the Ministry of Finance monitored and sometime selected corporations qualified to issue bonds, specifying terms including the size of the float. Warrant and unsecured bonds were prohibited until 1981 and 1983, respectively.

[18] Kurosawa (1981).

Isolation of the Japanese market from the international capital market was crucial for sustaining repression in domestic market. Prior to the amended Foreign Exchange and Foreign Trade Control Law of 1980, overseas borrowing required approval by the Ministry of Finance. Access of foreign banks to the Japanese market was also strictly controlled (at the end of 1983 they accounted for 3% of total bank lending).

c) *The Government imposed ceilings on loan and deposit rates* to preempt the bond market for itself, public firms, railways and utilities, and to promote development and competitiveness. The government channeled cheap funds to major banks, which lent to large firms, which then lent to subsidiaries, affiliates and suppliers. Firms with access to below market loan rates, constantly borrowed up to the credit limits in order to preclude recurring periods of tight money, further driving leverage up.

1.4.2. Monitoring By the Main Bank

Although there is no formal definition of the main bank, the one proposed by some academics – as the long-term relationship between a keiretsu firm and a particular bank from which it borrows the most – is too narrow. According to Aoki, Patrick and Sheard (1994) the main bank and the keiretsu organized around it, is a system of corporate financing and governance involving an informal set of practices, institutional arrangements, behaviors (reciprocal shareholdings, supply of management resources and the dispatch of directors), and the provision of various financial services (loans, credits, trustee administration, guarantee, underwriting bond issues, operation of payment settlement accounts, foreign exchange dealings, and investment banking and M&A advisory). The main bank, as one of the largest long-term

lenders with up to 5% equity stake in the firm[19] and the manager of hierarchical loan consortium with monitoring responsibilities, has the pivotal role in corporate oversight and governance[20].

Consistent with Diamond's (1984) solution to minimizing monitoring cost by delegating monitoring to financial intermediaries who bare the cost of becoming informed and ensuring that borrowers make efficient business decisions, Sheard (1994) reports that monitoring in the non-financial sector is exclusively and reciprocally delegated among main banks. On the other hand lending is not exclusive and it is not rare that a firm borrows more from a trust or a long-term bank than from the main bank.

The main bank has enormous power because its refusal to rollover short-term loans, followed by other lenders, results in insolvency. General Business Conditions, which have to be accepted by client in order to receive loan, give banks the rights to take assets, seize collateral or offset holdings to counter possible losses in the event of threatened insolvency even though there is no literal default.

Aoki, Patrick and Sheard (1994) suggest that the capacity of main bank to monitor and intervene is based on:

a) *Bank loans*, *bond issue services*, *stockholding* (even after the legal limit was reduced from 10% to up to 5% in 1987, the main bank was among the top five shareholders for 72% of firms on the First Section of the Tokyo Stock Exchange in 1980 [Sheard (1989)] and normally top among banks[21]).

[19] Flath (1993) and Gibson (1995) point out that Trust Banks, as trustee for another party, and insurance companies are allowed to hold up to 10% of firm's stock.

[20] Stiglitz (1985) argues that control is more likely to be exercised by banks than through takeovers.

[21] Sheard (1989) reports that the average loan share of the main bank for all and for the largest firms listed on the first section of the Tokyo Stock Exchange was 25% and 10-15% in 1980. Simultaneously, main bank was the largest, the second and the third largest shareholder for 124, 172 and 113 firms, respectively.

b) *Supply of management resources* (5% of all directors in Japanese firms in 1992 were from banks; Hoshi, Kashyap and Scharfstein (1990a) report that 8% of firms had at least one current and 34% of firms at least one former main bank executive as director in 1981).

c) *Payment settlement account* (through which firms perform daily cash flow transactions).

Consistent with Lyland and Pyle's (1977) solution to the free rider problem in information asymmetry, the well-informed main bank, which bears a disproportionate cost as a penalty for "bad" or economic rent as incentive for "good" monitoring,[22] plays a leading role in monitoring and prompt surgical intervention in firms experiencing financial distress.[23]

Nakatani (1984) argues that the economic rent that the main bank extracts is an insurance premium against business adversity, since it is extremely difficult for the bank to default on its obligations if it received information in advance about potential troubles.

The strong relationship and considerable aid from the main bank and keiretsu members in a time of crisis lowers the cost of financial distress [Hoshi, Kashyap and Scharfstein (1990a)] and reduces the dependence of investment on liquidity even for distressed firms [Hoshi, Kashyap and Scharfstein (1991)].

Prowse (1990) shows that the threat of equity holders taking risky projects in order to expropriate wealth from debt holders is eliminated in Japan due to large equity position of financial institutions, and especially of the main bank. This solution to the Jensen and Meckling (1976) agency problem, associated with asset substitution in the presence of information

[22] Suzuki and Wright (1985) report that DKB bank voluntarily repaid all debt of bankrupt Kojin Corporation. Sheard (1991) describes how following Itoman's financial failure in 1990 Sumitomo Bank (the largest loan provider among 50 banks) transferred Itoman's bad assets to its own books and sent in managers who restructured Itoman's assets, business activities, organizational and managerial structure.

[23] Pascale and Rohen (1983) report that Sumitomo Bank sent its executive to top positions at Mazda in 1974, announcing that it will guarantee other lenders' loans and that Sumitomo Trust (2nd largest lender) will provide new loans. Not one of 71 lenders called a loan off or refused to rollover existing credits. Kang and Shivdasani (1995) state that Sanwa Bank replaced Hitachi Zosen's president with bank's vice chairman of the board and provided substantial new capita, organized asset sales and large layoffs.

asymmetry, increases debt capacity and allows Japanese firms to have empirically documented higher leverage.

Stulz (1990) and Kang, Shivdasani and Yamada (1999) argue that continuously rolled over short term debt and the management of payment settlement accounts allows banks in general, and especially main banks, to constantly acquire confidential information about firms' prospects and investment opportunities, permitting financial institutions to intervene quickly and overcome the cost of financial distress associated with high leverage.[24] This ability of banks reduces Myers' (1977) underinvestment problem linked to high leverage and allows firm to increase their debt capacity.

1.4.3. Extensive Cross Equity and Debt Holding (or Mochiai Effect), Inter-Firm Trading and Information Sharing, Especially Within Keiretsu

Japanese enterprises, and especially keiretsu members, are part of complex network of customer, supplier and financial institutions. Extensive inter-firm trade and information sharing, reciprocal debt and equity holding among corporations and an additional strong domination of main bank as creditor and shareholder for keiretsu members, provide internal discipline and protects outside investors.

As a part of pacification process, the U.S. Occupation Authorities closed the Japanese stock market from 1945 until 1949. Uekusa (1977) reports that in 1948 The Supreme Commander Allied Powers, after imposing regulations similar to Glass-Steagall Act in the U.S., transferred stock from dissolved zaibatsu to the government and then distributed it widely to the

[24] Contrary to the ability of Japanese banks to constantly acquire firms' confidential information, 400 banks that extended credit to near bankrupt Chrysler in 1979 were not aware of the magnitude of the problem.

pubic, separated commercial from investment banking and prohibited banks from owning big blocks of stock in firms.

The increase of banks' shareholding maximum in firms to 10% in 1951 and the organization of firms into presidents' clubs following the Peace Treaty in 1952 were instrumental for re-grouping of ex-zaibatsu firms into keiretsu. During 1960's cross-holding accelerated for two reasons. Afraid that U.S. firms would have used joint ventures to gain controlling ownership, a lot of stock was reciprocally placed in safe, friendly Japanese hands. Fear that the Japanese government would sell stock of financially distressed brokerage houses following the stock market crash in 1965 and that depressed stock prices would result in U.S.-style takeovers led to the creation of cross-ownership as a takeover deterrent.[25]

Graven (1989) reports that more than 60% of publicly traded Japanese companies think that it is desirable to have 60-70% of shares held by stable and management friendly shareholders: "By not having to bend to uppity shareholders, Japanese executives say that they have more time to concentrate on business goals rather then wasting time plotting takeover defense strategies." According to Sheard (1989), Aoki (1990), and Gilson and Roe (1993), cross-ownership lowers the cost of information transfer and increases the incentive to monitor and intervene in order to save a stock investment and to assist a long-term trading partner. Berglof and Perotti (1994) suggest that debt and equity crossholding is a governance mechanism for sustaining internal discipline, which in financial distress shifts to more efficient enforcement led by the main bank.

[25] Morck, Nakamura and Shivdasani (1999) report two instances of Mitsui Bank orchestrating keiretsu members to bay out corporate raiders with substantial stakes in member firms during 1970s: when Hong Kong Investor Group acquired 13% of Oji Paper and when Osano obtained 30% of Mitsui Mining.

1.4.4. Long-Run, Non-Stock Price Maximizing Focus

According to Aoki (1984) protecting access to future loan-able funds is often more important than shareholders' wealth maximization for Japanese firms. Nakatani (1984) finds firms' goals of prosperity for the company and its employees, and stable corporate performance over time, rather than higher profitability, to be consistent with the survey response of Japanese CEOs that placed shareholders fourth in importance after employees, customers and banks. Kester (1991), Porter (1992), and Kang and Stulz (1996) conclude that Japanese governance system and management emphasizes business growth and long-term performance measures, such as market share, more than short-run stock price maximization in the interest of shareholders.

1.4.5. Reality Check

The performance of Japanese investments in the U.S. raised questions about unique advantages possessed by Japanese bidders. The populist anxiety of the early 1990s over the Japanese becoming owners of the U.S. economy has eased as many publicized acquisitions, including the Pebble Beach golf course, Rockefeller Center and Columbia Pictures prove to be unprofitable. The collapse of the Japanese real estate and stock markets in the early 1990s[26], the ensuing economic slowdown, the unresolved Japanese banking crisis, and the depreciation of the Japanese yen have further decreased nationalistic tensions towards Japanese corporations.

Based on the empirical evidence, some researchers are questioning whether the Japanese corporate structure and governance system are indeed superior to the one in the U.S. Ramseyer

[26] In 1990 the Nikkei Index declined 39%, French and Poterba (1991). Kang and Stulz (2000) report that typical firm on the Tokyo Stock Exchange lost more than half of its value (57%) from 1990 to 1993.

(1993) quotes the cynical response of a Japanese economist on monitoring models and main banks:

> "Bag the main bank stuff. The reason there're all these main bank papers doesn't have anything to do with what Japanese banks do. They don't do anything special. Instead, this whole discussion is theory-driven. There are all these fancy signaling, monitoring and principal-agent models out there in status economics journals, but until people thought up the Japanese banking story no one had any facts to apply them to. So my friends started dreaming up this main bank stuff. Now these stories about main bank monitoring give them a great set of anecdotes to apply their high-tech models to." (page 2012)

Caves and Uekusa's (1976) finding that main banks charge client firms higher than market interest rates are consistent with Rajan's (1992) theory that an information monopoly and a potential hold-up problem[27] allows banks to appropriate surplus from client firms.

Consistent with the main bank story, high debt costs are attributed to an "agency fee" for bank monitoring by Aoki (1988) and to an insurance premium for bailing out by the main bank in the case of financial distress by Hoshi, Kashyap and Scharfstein (1990a).

Weinstein and Yafeh (1995) argue that main banks historically try to pressure client firms to engage in sales and not profit maximization. Since banks want to maximize profit from loans, they try to influence firms to use more capital and expand output in order to take on more debt, causing firms to appear as if they had a lower cost of capital. According to Hodder (1991) the evidence against the Japanese cost of capital advantage includes aggressive overseas borrowing and the declining importance of debt in capital structure in late 1980s.

[27] It might be prohibitively costly to switch single lender, especially for borrowers with substantial growth opportunities (high market to book value and high R&D expenditures) and intangible assets.

1.5. Characteristics of Japanese Bidders and Agency Problem

In contrast to macroeconomic and transactional value-creating motives for FDI, agency theory [Jensen (1986) and (1989), Stulz (1990), and Morck, Shleifer and Vishny (1990)] stipulates that the pursuit of individual over shareholders' interest by managers results in value destroying acquisitions.

In the U.S. the incentives for managers to maximize shareholder wealth are provided by several internal and external governance mechanisms associated with the objective and observable performance measure in the form of the stock price. Examples of these mechanisms include managerial ownership, higher leverage and lower free cash flow, monitoring by institutional and block shareholders, outside directors and the takeover threat. In contrast, Japanese managerial equity ownership is considerably smaller, large shareholders are viewed as passive, the frequency of outside directors is lower[28] and takeovers are rare.[29] Some of the characteristics of the Japanese corporate structure and governance system associated with the potential agency problem and managerial excess (the low priority of stock price maximization, negligible managerial and substantial friendly cross ownership, and less monitoring due to bank oversight failure among other things) are the same as the hypothesized reasons for the proposed dominance of the Japanese over the U.S. governance.

[28] Ballon and Tomita (1988) state that 43.5% of Tokyo Stock Exchange manufacturing firms had no outside directors.

[29] Lichtenberg and Pushner (1994) point out that between 1980 and 1990 merger rate in Japan was only 0.3%, compared to 7.8% in U.S.

1.5.1. The Low Priority of Stock Price Maximization

Shimizu (1980) reports that none of the 894 Japanese firms surveyed ranked increase in the share price as the most important objective and only 0.2% ranked it as the second most important goal. Sato and Hoshino (1984) and Abegglen and Stalk (1985) indicate that both managers and labor believe that the company belongs to them, and that managers rank the market share as the most and stock price as the least important of nine corporate objectives. Kester (1986) argues that managers have an incentive to maximize the value of the nexus of trading and financial contracts between firms, not necessary shareholders' wealth. Aoki (1990), Kester (1991), Porter (1992) and Kaplan (1994) argue that Japanese executives manage firms in the interest of debt-holders, and that, conditional on sufficient earnings to satisfy banks and meet debt payments, managers can run firms in their and their employees' interest without interference from the main bank.

1.5.2. Negligible Managerial Ownership

Consistent with the notion that managers pursue objectives other than stock price maximization is the report by Kaplan (1994) that stockholdings of presidents and directors of large Japanese firms in 1980 were roughly one half (one quarter after inclusion of stock options) of those held by their U.S. counterparts. The fortunes of Japanese executives are more sensitive to low income and the firms' ability to service loans but less to stock returns than those of the U.S. executives. In addition Lichtenberg and Pushner (1994) report that Japanese directors' ownership declined from 8 to 5% between 1975 and 1989.

1.5.3. Cross Ownership (Mochiai Effect)

McDonald (1989) reports that in response to the Ruling of 1970, which required banks to reduce stock holdings in client firms to not more than 5% by 1987, banks quietly put at least 25% of Japanese capitalization in other institutional hands and corporate cross-holdings accounts in 1987.

Lichtenberg (1992) concludes that friendly cross ownership, developed to insulate management and deter external takeovers, seems to be successful in protecting even management engaged in unprofitable practices.

1.5.4. Less Monitoring

Jensen (1989) and Pettway, Sicherman and Yamada (1989) argue that Japanese managers in late 1980s were becoming increasingly unconstrained and unmonitored due to corporate collectivism, lifetime employment, lack of effective internal controls in under-utilized managerial market, little control from the product market dominated by the Japanese firms, lower leverage and higher free cash flow and fewer controls from the banking system. Jensen (1989) predicts that unless shareholders and creditors discover ways to efficiently monitor and control managers, Japanese firms will make "uneconomic acquisitions and diversification moves, generate internal waste, and engage in other value-destroying activities." (page 73)

The rapid growth in total assets of major Japanese manufacturing firms slowed during 1974-82, allowing greater internal funding, which together with new equity issues and conversions increased equity by 40% during 1977-83 and lowered leverage. Jensen (1989),

Kester (1991), and Atwong, Lange and Dubas (1995) observe that many Japanese companies were flooded with free cash flows far in excess of profitable internal investment opportunities. In 1987 more than 40% of large Japanese public companies had no net bank borrowing. Substantial free cash flow, which in the late 1980s freed many Japanese firms in mature product markets from bank financing and monitoring, is identified by Roe (1993) as one of the reasons for Japanese economic turmoil in 1990s.

Hoshi, Kashyap and Scharfstein (1990b) report that following the relaxation in bond (lifting interest rate ceiling, legalizing unsecured debt, warrants and convertible bonds) and foreign exchange markets (government permission was no longer required for issuing bonds on foreign markets), bank loans as percentage of all external financing shrunk from 80% during 1976 – 1980 to 57% over 1981 – 1985 period.

In addition to the reduced importance of bank financing, the remaining financial ties between firms and banks were drawn along lines different from the ones that were praised as sources of bank centered governance system superiority over the market based systems. Kang and Stulz (2000) attribute the collapse of the Japanese economy to the soft budget constraints of banks and over-lending to declining firms in need of reorganization. In addition, Morck and Nakamura (1999) suggest that instead of facilitating governance, banks colluded with firm managers to deter external threats to their control and to collect rents on bank loans.

The rest of the study is organized in the following way. Testable hypothesis associated with the empirical question of whether the wealth-maximizing characteristics of bidders, in general, and those resulting from Japanese governance system, in particular, overcome agency problems of managers pursuing their personal goals over shareholders' interest, are developed in the next section. The selection of the sample firms, their financial and accounting characteristics

and the methodology used to measure their short- and long-term stock and accounting performance are described in section 3. We present the short- and long-term wealth effects of Japanese and domestic acquisitions in the U.S. in section 4. Determinants of the long-term wealth gains for the U.S. targets of the Japanese and domestic acquisitions are analyzed in section 5. The concluding remarks are presented in the last section.

2. TESTABLE HYPOTHESIS

In this section, we offer three broad hypotheses that explain how bidder characteristics affect target performance. We are particularly interested in the corporate governance characteristics of bidders in general (our *Bidder's Governance Characteristics*), and the special features of the Japanese corporate governance system in particular (*Japanese Governance Hypothesis*). In addition, we consider other aspects of bidders that are not primarily related to the governance characteristics of bidders but are expected to impact target performance (*Bidder's Operations*). These four hypotheses help identify variables that are useful in our subsequent tests of how bidder characteristics are related to target performance. In some cases, there is an overlap in the variables suggested by the different hypotheses, as well as contrasting predictions for the same variable under different hypotheses. Finally, we note several variables from a substantial prior literature to control for other factors that affect target performance.

2.1. Bidder's Governance Hypothesis

We expect that the nature of corporate governance in place for the bidder will carry over to the target as well, as bidder shareholders extend their reach to protect their investment in the target.

Bidder's Governance Hypothesis: A target's long-term performance is positively affected by the superior corporate governance of the acquirer.

There are a large number of components that comprise the corporate governance of a firm. Citing representative work from a large literature relevant for the variables with available

data, we expect the following: Higher leverage and lower free cash flows ensure that bidders do not waste resources [Jensen (1986)]. Bidders with more block holdings [Shleifer and Vishny (1986) and Bolton and von Thadden (1998)] are better monitored. The toe-hold literature suggests that bidders who have already gained familiarity with the target and its governance system are likely to win a multi bidder auction at the lower bid premium [Bulow, Huang and Klemperer (1999) and Betton and Ecbo (2000)].

To the extent that we relate bidder firm characteristics in this and the other hypotheses to performance of targets, we avoid endogeneity problems [Demsetz and Lehn (1985)].

2.2. Japanese Governance Hypothesis

During the Japanese economic boom of 1980s, the bank-centered governance system was regarded by some authors as superior to the market-oriented one. This was explained in terms of the firms' long-run investment focus because of extensive intra-keiretsu trading and holding, as well as the hypothesized superior monitoring by the main bank. As one of the largest equity holders and the largest provider of revolving, cheap, short-term debt, a well-informed main bank was expected to deliver capital to healthy firms facing liquidity problems, thus avoiding costly financial distress and eliminating asset substitution problems. The main bank's quick and surgical intervention in borrowing firms where management had underperformed, eliminated expensive and disruptive takeovers.

If a bank-centered governance system dominates market-oriented governance, then the U.S. targets should benefit from the Japanese management. Hence, in addition to the typical or

universal governance characteristics of the acquirer associated with value creating acquisitions, the unique characteristics of Japanese governance system are expected to create additional value.

Japanese Governance Hypothesis: Japanese bidders with keiretsu membership, greater cross-holdings and financial ties to a main bank are expected to positively impact the targets' long-term performance.

It has also been argued in the agency problem literature that the above features of Japanese corporate governance may not yield benefits, and may even have adverse effects. The superiority of a bank-centered governance system became a question for debate following the collapse of Japanese economy in the 1990s. The literature supporting the beneficial effects of the Japanese governance system was challenged with other evidence showing the negative effects of main banks: charging keiretsu firms higher than market interest rates, pressuring firms to disregard profit and to pursue sales maximization to induce over-lending even to firms in need of radical reorganization, and colluding with firm managers to deter external threats to their control in order to continue collecting rents on bank loans.

Below, we discuss individually each of the three aspects of corporate governance covered by the hypothesis.

2.2.1. Keiretsu Membership

Since keiretsu membership and a relationship with a main bank generally go together, a finding that keiretsu membership does not help the target may imply that the main bank story is not valid. Managers insulated from external control by crossholding and collusion with banks

seeking rent on bank loans are then more inclined to pursue value destroying investments than management in independent firms.

2.2.2. Cross-holding (Mochiai Effect)

People who believe that the Japanese governance system is superior to the American one argue that cross-holding is beneficial because it lowers cost of information transfer, increases incentives to monitor and intervene in order to save a stock investment, and to assist a long-term trading partner, which allows managers to take a long-term view in their decision-making process. If we do not find evidence supporting a positive relation between cross-holdings and target performance, it would suggest that cross-holding by friendly firms is more a tool for managerial entrenchment and insulation from external control than a device that improves corporate governance.

2.2.3. Financial Ties to the Main Bank

Maloney, McCormick and Mitchell (1993) find that bidder returns increase with leverage in U.S. domestic acquisitions. Based on the Prowse (1990) finding that measures of agency cost of debt[30] are substantially lower only in keiretsu firms with strong financial ties to the main bank (firms with above the median bank debt combined with below or above the median equity holding by main bank), Hwang and Kim (1996) conclude that the main bank's monitoring incentives increase with its financial interest in the client. Lincoln, Gerlach and Ahmadjian

[30] Prowse (1990) used the following measures of agency cost of debt: AD1 = R&D expenses / total sales, AD2 = intangible assets / total assets, AD3 = cash and marketable securities / total assets.

(1994) report that Japanese bankers consider firms without bank debt to be independent and will not provide them assistance in financial distress. Hence, independent firms are expected to be less closely monitored than keiretsu firms.

2.3. Bidder's Operations Hypothesis

Besides the corporate governance characteristics of bidders, several other features of bidders are likely to influence their ability to affect the target's performance. In particular, well-performing bidder may transfer beneficial operating processes to the target. Jarrell and Poulsen (1989), Houston and Ryngaert (1994) and Billet and Ryngaert (1997) argue that larger bidders may have better expertise to create synergies. According to Denis, Denis, and Sarin (1997) diversified acquisitions are less likely to capture synergies and may in fact give rise to additional agency problems. Lang, Stulz and Walkling (1991) suggest that bidders with greater free cash flows and/or lower leverage may have the necessary resources to relax financial constraints and fund the target's value-creating projects. Consistent with Froot and Stein's (1991) finding that dollar depreciation is associated with a significant increase in foreign direct inflows, an appreciation of the dollar relative to the yen is expected to make Japanese bidders more careful and willing to undertake only value-creating acquisitions.

Bidder's Operations: Bidder operating characteristics, such as performance, size, related acquisition, free cash flow and leverage, and appreciation of the U.S. dollar relative to the Japanese yen are important for the targets' performance.

Below is additional discussion on these variables:

a) *Bidder's performance.* In addition to using the abnormal stock returns to measure bidder's performance, there are several reasons that warrant the use of accounting-based performance measures in evaluating the performance of the Japanese firms. Kaplan (1994) stipulates that earnings may be a better measure of performance than stock returns due to Aoki's (1990) and Kester's (1991) observation that, conditional on earnings sufficient to satisfy bank and debt payments, managers are left alone to run their firm in their or employees' interest. Another advantage of earnings is that, contrary to stock returns, they are not affected by changes in the market discount rate. Kang and Shivdasani (1995) find that a non-standard turnover, in which the president remains on the board but not as a chairman, is significantly negatively related to industry adjusted operating income, return on assets (accounting short-term profitability of operations unaffected by tax and capital structure changes) and excess returns (relative to Tokyo Stock Exchange Price Index value-weighted, industry-adjusted indices, independent from long-term accounting changes).

b) *Bidder Size.* According to Jarrell and Poulsen (1989), Houston and Ryngaert (1994) and Billet and Ryngaert (1997), larger bidders have better expertise and opportunities to create synergies. They also have more resources and can provide assistance to the target.

c) *Related acquisitions.* According to Denis, Denis and Sarin (1997) evidence from U.S. non-related acquisitions[31] suggest that the agency costs of diversification[32] outweigh their benefits.[33] Findings of Pettway, Sicherman and Spiess (1993) suggest that while both U.S.

[31] Berger and Ofek (1995) report that the value of diversified firms was 13-15% lower than the sum of stand alone segments during 1986-1991. In addition, segments of diversified firms have lower profitability than single line businesses, but over-invest more.

[32] Amihud and Lev (1981) suggest that managers diversify to protect the value of their human capital. Shleifer and Vishy (1989) illustrate how entrenchment is done through irreversible manager specific investments. Jensen (1986) and Stulz (1990) stress that use of discretionary resources often leads to value-destroying, diversified investments.

[33] Weston (1970) and Williamson (1970) demonstrate that with information asymmetry, allocation of resources is

and Japanese markets react more positively to related domestic acquisitions, Japanese market reaction is more positive for diversified than for related overseas acquisitions. Kang and Yamada (1996) report that in contrast to those of independent firms, returns to keiretsu firms are significantly positive in domestic diversified acquisitions. Kester (1991) suggests that since keiretsu mangers have incentives to maximize the overall value of different stakeholders, including member firms, unrelated acquisitions are not necessarily in managerial self-interest, and will affect firm value differently than when independent firms make diversified acquisitions. Kang and Stulz (1996) argue that managers of keiretsu firms are more likely to focus on the wealth of their long-term investors, i.e. other keiretsu members.

d) *Bidder Free Cash Flow and Leverage.* In contrast to Jensen's (1986) argument on the agency problem of free cash flow, Lang, Stulz and Walkling (1991) suggest that the ability of the bidder to relax the financial constraints of the target may allow the target to undertake value-creating projects it would otherwise have had to forego.

e) *Appreciation of the U.S. dollar relative to the Japanese yen.* Froot and Stein (1991) demonstrate that dollar depreciation increases the relative wealth of foreigners, mainly denominated in foreign currency, by lowering their relative cost of capital, making dollar-denominated U.S. assets appear cheaper and leading to more aggressive bidding for U.S. assets. Hence, some acquisitions made during above average dollar depreciation might have been result of errors in capital budgeting, especially if driven by value destroying agency

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more efficient through the internal capital markets of large diversified firms. Stulz (1990) shows that large diversified firms reduce Myers (1977) under-investment problem through their internal capital markets. According to Teece (1980) diversified firms can take advantage of ecnomies of scope. Majd and Myers (1987) point out the differential tax code: divisional loss reduces firm's tax bill. Shleifer and Vishny (1992) mention the ability of diversified firms to sell assets in industries that suffered the least from liquidity problems increases conglomerate firm's debt capacity.

reasons. However, acquisitions made during appreciation or below average dollar depreciation, would have to clear a higher discount rate hurdle, suggesting that value creating projects were undertaken.

2.4. Control Variables

Besides bidder characteristics, based on prior literature, we expect target performance to be affected by other factors as well. These variables, based on data availability, are listed below:

a) *Target Size* has both positive and negative effects on the target performance. Stulz, Walkling and Song (1990) stipulate that larger targets have stronger negotiating power and might extract larger gains for its shareholders. However, Jarrell and Poulsen (1989), Houston and Ryngaert (1994) and Billet and Ryngaert (1997) argue that target size and gains to its shareholders are negatively related if bidders are more apt to overpay in acquisition of smaller targets.

b) *Target Growth Opportunities* negatively affect target performance, according to Lang, Stulz and Walkling (1991) and Servaes (1991), since acquisition of better managed targets is less likely to lead to higher extra synergies.

c) *Target Free Cash Flows* indicate Jensen's (1986) agency problem. However, Smith and Kim (1994) argue that the target's free cash flow could be a valuable source of financing for cash-poor bidders, leading to higher target acquisition gains.

d) *Target Leverage* can increase the target's bargaining power if debt is used to buy out outside shareholders with lower reservation prices, leaving more power with the incumbent manager with a higher reservation price, according to Stulz (1988), Harris and Raviv (1988) and Israel

(1992).[34] In addition, leverage lowers free cash flow and reduce Jensen's (1986) agency problem.

e) *The presence of Multiple Bidders* forces the ultimate winner of the multiple auction to pay a higher price for the target and generate larger gains to target shareholders, as argued by Bradley, Desai and Kim (1988) and Billett and Ryngaert (1997).

f) *An Anti-takeover Defense* increases the target's bargaining power, leading to higher gains for target shareholders according to Brickley, Coles and Teny (1994), Comment and Schwert (1995) and Billett and Ryngaert (1997).

g) *A Friendly Attitude of Target Management Toward Acquisition* indicates an absence of negative attitude used to increase target's bargaining power.

h) *Cash Payment in an Acquisition* has a positive effect, as implied by Travlos' (1987) argument that the bidding firm's management will use cash to acquire target when their firm is undervalued and common stock exchange when their stock is overvalued. Managers with the private knowledge about its firm's intrinsic value in the world of asymmetric information and acting in the interest of existing shareholders will use a cash payment to signal that their firm in the absence of the acquisition or prior to the expected synergies from the acquisition is undervalued. Hence, bidders using cash are more likely to pursue value-creating purchases.

g) *Nineties Dummy* with value of one for acquisitions announced during 1990-2000, when Japanese economy experienced difficulties, and zero for those announced over 1980-1989 period of Japanese economic boom and significant increase in their acquisitions of U.S.

[34] Empirically indistinguishable from a pure leverage effect: gains spread over fewer shares mechanically raise equity returns.

assets. We expect that those acquisitions announced during the period of economic difficulties will perform better.

3. DATA AND METHODOLOGY

3.1. Selection and Description of the Sample

In order to analyze the effect of the bidders' characteristics on the targets' long-term performance we need to examine acquisitions in which at least twelve months of data preceding and following the completion (longitudinal data requirement) were available for both bidder and target (dual data requirement). Furthermore, to isolate the effect of the characteristics unique to the Japanese bidders on the long-term performance of U.S. targets, identified in the Type 1 sample, we need to create a Type 2 sample of similar U.S. targets acquired by the U.S. bidders in the same two-digit SIC industry and year in which Type 1 targets were purchased (matching data requirement). Whenever availability of data allowed it, matching was also done based on the size of the target and the proportion of the acquired stake and its cost.

A search of the *SDC Worldwide Mergers and Acquisitions Database* identified the Type 1 sample of 1,295 announcements of Japanese bidders that acquired a stake in U.S. targets between 1980 and 2000, as indicated in Panel A of Table 1. Data for both the U.S. target and the Japanese bidder were available from the *Center for Research in Securities and Prices* (CRSP) and *Pacific-Basin Capital Market Research Center* (PACAP) databases, respectively, in 218 Type 1 announcements. Of those acquisitions satisfying the dual data requirement, 138 Japanese bidders belonged to a keiretsu, as classified by Nakatani (1984). Announced Type 1 acquisitions were completed in 1,064 cases. Data for both the U.S. target and the Japanese bidder were available for 171 completed Type 1 acquisitions, of which the Japanese bidder was a keiretsu member in 110 cases.

The Type 2 sample of 16,429 announcements of U.S. bidders acquiring a stake in U.S. targets in the same two-digit SIC industry and the same year as the Type 1 targets, was identified from the SDC database. Data for both the U.S. target and the U.S. bidder were available from CRSP database in 1,486 Type 2 announcements. Announced Type 2 acquisitions were completed in 12,870 cases, of which CRSP data for both the U.S. target and the U.S. bidder were available in 1,066 cases.

Our final matched sample of 41 completed Type 1 and Type 2 acquisitions, consists of cases where all three data requirements (dual, longitudinal and matching) were simultaneously satisfied, such that each of the four firms, Type 1 and its matching Type 2 bidder/target pair, have at least twelve months of data before and after the acquisitions. We sacrificed 76% and 96% of Type 1 and Type 2 completed acquisitions that satisfied the dual data requirement in order to simultaneously analyze the effect of the bidders on the targets' performance in general, and to isolate the importance of characteristics unique to the Japanese bidders.

The distributions of the announced and completed Type 1, Type 2 and matched acquisitions follow a similar pattern. The number of events steadily increases during the 1980s, peaks in 1990 and then falls substantially. While the number of announcements in the Type 1 sample is somewhat stable during the 1990s, it drastically increases in late 1990s for the Type 2 sample. The number of completed Type 1 acquisitions in 1981 and 1985 is greater than the number of announced deals because some purchases were finished in the year following the one in which they were announced.

None of the Type 1 or Type 2 matched targets was pursued by multiple bidders and none had anti-takeover defenses in place. Both the Type 1 and Type 2 matched samples acquisitions were cash financed in 30 cases, every time at 100% level. Related and additional acquisitions

were 16% and 22% more frequent, respectively, in the Type 1 than in the Type 2 sample. A friendly attitude of the targets' management toward bidders was 38% less frequent in Type 1 than in Type 2 sample.

Table 1: Sample Description

Panel A: Distribution of Type 1 and Type 2 U.S. Targets of Japanese and U.S. Bidders

(Numbers in parentheses denote Japanese bidders that belong to keiretsu; completed acquisitions matched by year and 2-digit SIC code, and target size, magnitude and cost of the acquired stake when possible)

Year	Type 1 Acquisitions				Matched Completed Type 1 and Type 2 Acquisitions	Type 2 Acquisitions			
	Announced		Completed			Announced		Completed	
	All Events	Targets & Bidders with Data	All Events	Targets & Bidders with Data		All Events	Targets & Bidders with Data	All Events	Targets & Bidders with Data
1980	3	2 (1)	1	0 (0)	0 (0)	5	2	0	0
1981	6	3 (0)	7	5 (1)	1 (0)	100	25	74	16
1982	6	1 (1)	4	0 (0)	0 (0)	1	1	0	0
1983	10	2 (2)	6	1 (1)	1 (1)	45	10	6	2
1984	12	7 (5)	12	6 (5)	3 (3)	453	55	354	45
1985	26	2 (1)	24	4 (2)	2 (1)	133	23	104	13
1986	49	13 (6)	37	8 (4)	2 (2)	318	46	253	29
1987	61	18 (11)	48	11 (6)	3 (3)	526	91	425	66
1988	120	28 (16)	92	18 (10)	3 (2)	683	107	508	65
1989	161	22 (13)	132	15 (10)	5 (3)	1,472	174	918	72
1990	232	29 (15)	201	28 (16)	8 (6)	1,950	163	1,764	155
1991	129	18 (14)	112	12 10)	3 (2)	739	65	506	44
1992	64	10 (8)	58	10 (7)	3 (3)	717	51	634	40
1993	35	10 (5)	32	8 (5)	2 (1)	818	81	515	46
1994	46	11 (7)	38	11 (7)	3 (2)	828	65	760	54
1995	42	5 (4)	28	4 (3)	1 (1)	958	80	992	88
1996	57	7 (4)	45	6 (3)	0 (0)	49	7	22	0
1997	53	5 (5)	46	5 (5)	1 (1)	483	51	311	28
1998	42	8 (6)	30	6 (5)	0 (0)	2,457	155	2,071	123
1999	73	13 (10)	49	10 (7)	0 (0)	2,943	177	2,578	174
2000	68	4 (4)	62	3 (3)	0 (0)	751	57	75	6
Total	**1,295**	**218 (138)**	**1,064**	**171 (110)**	**41 (31)**	**16,429**	**1,486**	**12,870**	**1,066**
Cash Financing (100% in every case)					30 (22)	30 (23)			
Related Acquisitions					21 (17)	18 (12)			
Additional Acquisitions					28 (20)	23 (16)			
Friendly Attitude					8 (6)	11 (10)			
Anti-takeover Defense					0 (0)	0 (0)			
Multiple Bidders					0 (0)	0 (0)			

The descriptive statistics for the characteristics of the acquisition deals, and for the financial and accounting characteristics of the targets and the bidders of matched completed acquisitions are presented in Panels B and C of Table 1, respectively, and summarized in Table 10 on page 89. The characteristics of the acquisition deals (initial, acquired and end stake, together with the cost of the acquired stake) are based on the data from the SDC database. The financial and accounting data, calculated for the year preceding the completion of the acquisition, are based on the data from the COMPUSTAT and PACAP databases for the U.S. and the Japanese firms, respectively. Targets' and bidders' free cash flow was defined as free cash flow measured as in Lehn and Poulsen (1989) relative to the total assets. The total leverage was defined as total debt relative to the sum of the total debt, market value of equity and preferred stock. The values of yen-denominated variables were converted into the dollar-denominated amounts using the exchange rates from the PACAP database. All monetary variables are expressed in the millions of the real dollars using GDP deflator with the base year 2000. Paired differences are the result of Type 2 variables being subtracted from Type 1 variables. The cumulative ownership of the largest 10 shareholders for Japanese and U.S. bidders was collected from the Japan Company Handbooks (published by Nihon Keizai Shinbunsha) and World Scope Database, respectively. Superscripts o, f and t next to the values of the t-statistics denote the statistical significance at 1%, 5% and 10% level.

Examination of the characteristics of the acquisition deals shows that, consistent with the empirical evidence, Type 1 bidders paid significantly more than Type 2 bidders to acquire an insignificantly smaller stake in the U.S. targets in which they held significantly larger toe-hold investment.

Table 1: Sample Description

Panel B: Characteristics of 41 Matched Targets of Completed Acquisitions

(Type 1 and 2 are U.S. targets of Japanese and U.S. bidders; Paired Differences = Type 1 – Type 2; targets of keiretsu bidders and their matched targets of U.S. bidders are Italicized; numbers in parentheses below the BHAR are the probabilities that t-statistics are different from zero; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level; monetary variables calculated in a year preceding the acquisition are expressed in millions of real dollars, GDP deflator = 100 in 2000)

Variable	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$ (P>|t|)	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Toe-hold (%)	1	29	4.60	0.00	0.00	44.50	10.99	2.252^{f}	29	3.16	11.47	1.481^{t}
		23	*4.13*	*0.00*	*0.00*	*44.50*	*11.04*	*1.796 f*	*23*	*2.55*	*12.03*	*1.018*
	2	29	1.18	0.00	0.00	14.00	2.76	2.709^{o}				
		23	*1.35*	*0.00*	*0.00*	*14.00*	*2.99*	*2.521 o*				
Acquired Stake (%)	1	29	12.10	7.40	0.30	100.00	13.80	4.721^{o}	29	-5.04	22.59	1.203
		23	*13.60*	*8.80*	*0.30*	*100.00*	*15.12*	*4.313 o*	*23*	*-5.76*	*25.37*	*1.088*
	2	29	20.28	9.40	1.10	100.00	25.85	4.961^{o}				
		23	*23.66*	*14.00*	*1.10*	*100.00*	*28.50*	*4.623 o*				
End Stake (%)	1	29	16.69	10.00	1.80	100.00	18.16	4.951^{o}	29	-1.89	23.05	0.441
		23	*17.73*	*10.00*	*1.80*	*100.00*	*19.65*	*4.329 o*	*23*	*-3.20*	*25.30*	*0.607*
	2	29	21.46	9.40	4.60	100.00	25.31	5.362^{o}				
		23	*25.01*	*14.60*	*4.60*	*100.00*	*27.79*	*5.011 o*				
Cost of Acquisition	1	34	41.844	5.400	1.000	435.633	84.069	2.902^{o}	29	22.696	93.321	1.324^{t}
		25	*45.268*	*5.100*	*1.000*	*435.633*	*94.471*	*2.396 f*	*22*	*23.517*	*104.165*	*1.059*
	2	35	22.426	8.296	0.941	170.000	32.693	4.508^{o}				
		27	*23.552*	*7.500*	*0.941*	*170.000*	*36.443*	*3.358 o*				
Cumulative Ownership Of 10 Larges Block-holders	1	16	26.53	22.16	0.21	60.11	21.00	5.053^{o}	16	12.92	29.40	1.458^{t}
		12	*31.63*	*27.96*	*0.46*	*60.11*	*21.53*	*5.089 o*	*12*	*15.10*	*31.96*	*1.418 t*
	2	19	15.38	6.27	0.08	81.39	18.56	3.613^{o}				
		16	*15.92*	*6.14*	*0.08*	*81.39*	*19.95*	*3.192 o*				
Book Value of Total Assets	1	41	30.133	0.877	0.034	881.358	138.170	1.396^{t}	41	26.902	138.885	1.240
		31	*34.357*	*1.150*	*0.034*	*881.358*	*157.571*	*1.214*	*31*	*30.438*	*158.504*	*1.069*
	2	41	3.230	1.721	0.023	50.395	7.920	2.612^{o}				
		31	*2.205*	*1.721*	*0.023*	*13.395*	*2.767*	*5.104 o*				
Market Value of Total Assets	1	41	13.580	1.054	0.165	243.174	40.751	2.134^{f}	41	7.677	46.691	1.053
		31	*13.720*	*1.054*	*0.165*	*243.174*	*44.022*	*1.735 f*	*31*	*6.437*	*51.321*	*0.698*
	2	41	5.904	2.182	0.112	132.593	20.735	1.823^{f}				
		31	*3.021*	*2.182*	*0.112*	*26.950*	*4.911*	*3.939 o*				
Sales	1	41	11.227	0.990	0.000	127.868	27.832	2.583^{o}	41	7.642	29.250	1.673^{t}
		31	*9.080*	*1.517*	*0.000*	*112.895*	*22.535*	*2.243 f*	*31*	*4.599*	*24.627*	*1.040*
	2	41	3.585	1.127	0.009	40.727	8.520	2.695^{o}				
		31	*2.956*	*0.743*	*0.009*	*38.894*	*6.989*	*2.708 o*				
Growth Opportunities (MV/BV of Assets)	1	41	2.936	1.394	0.276	21.149	4.056	4.635^{o}	41	1.320	3.392	2.492^{o}
		31	*2.982*	*1.356*	*0.276*	*21.149*	*4.523*	*3.670 o*	*31*	*1.427*	*3.657*	*2.173 o*
	2	41	1.616	1.334	0.367	7.508	1.360	7.605^{o}				
		31	*1.726*	*1.388*	*0.367*	*7.508*	*1.521*	*7.265 o*				
Free CF / Total Assets	1	41	-0.003	0.027	-0.288	0.170	0.111	0.157	41	-0.033	0.132	1.577^{t}
		31	*-0.001*	*0.028*	*-0.288*	*0.170*	*0.113*	*0.054*	*31*	*-0.034*	*0.135*	*1.409 t*
	2	41	0.030	0.039	-0.277	0.205	0.088	2.178^{f}				
		31	*0.032*	*0.039*	*-0.277*	*0.205*	*0.094*	*2.157 f*				
Total Leverage	1	41	0.243	0.141	0.000	0.900	0.265	5.864^{o}	41	0.018	0.302	0.391
		31	*0.276*	*0.159*	*0.000*	*0.900*	*0.280*	*5.489 o*	*31*	*-0.004*	*0.332*	*0.067*
	2	41	0.225	0.094	0.000	0.889	0.251	5.738^{o}				
		31	*0.214*	*0.103*	*0.000*	*0.889*	*0.238*	*5.752 o*				
Profitability (BHAR 3 years prior to the effective date)	1	41	-21.51	-31.28	-323.06	291.87		(0.484)	41	19.08	114.62	1.066
		31	*-23.69*	*-33.96*	*-198.28*	*186.92*		*(0.491)*	*31*	*9.38*	*91.18*	*0.573*
	2	41	-40.59	-32.44	-233.52	120.54		(0.483)				
		31	*-33.07*	*25.21*	*-233.52*	*120.54*		*(0.499)*				

The finding of significantly larger, based on sales, Type 1 than Type 2 targets in Panel B of Table 1, combined with the result that the Type 1 targets had significantly larger block holdings and significantly smaller free cash flows than Type 2 targets, are consistent with the hypothesized effect of our control variables (size and mitigated agency problem improve the target's bargaining power and ability to extract larger gains for its shareholders) and could be used to explain the significantly higher cost incurred to acquire stakes in Type 1 than in Type 2 targets.

The significantly larger cumulative holding of the 10 largest shareholders and the significantly smaller free cash flow for Type 1 than Type 2 bidders, in Table 1 Panel C, suggest that Japanese bidders of U.S. targets had fewer agency problems than U.S. bidders of similar U.S. targets. The significantly larger Type 1 bidders, based on sales and book value of assets, with significantly lower leverage are consistent with the Bidder's Governance Hypothesis that size and availability of resources increase the bidder's ability to improve the target's performance. This finding suggest that once the agency problem is controlled through reduction of free cash flows, the capital or financing structure becomes more important as a source of available funds than as a tool for managing agency problem.

The significantly lower growth opportunities for Type 1 than Type 2 bidders, in Table 1 Panel C, combined with the significantly higher growth opportunities for Type 1 than Type 2 targets, in Panel B of Table 1, suggest again that Japanese acquisitions of the U.S. targets in our sample were driven by value creating motives of multinational corporations obtaining advantage through innovative intangible assets, consistent with the transaction based, microeconomic reasons for FDI.

Table 1: Sample Description

Panel C: Characteristics of 41 Matched Bidders of Completed Acquisitions

(Type 1 and 2 are Japanese and U.S. bidders of U.S. targets; Paired Differences = Type 1 – Type 2; keiretsu bidders and their matched U.S. bidders are Italicized; numbers in parentheses below the BHAR are the probabilities that t-statistics are different from zero; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level; monetary variables calculated in a year preceding the acquisition are expressed in millions of real dollars, GDP deflator = 100 in 2000)

Variable	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$ (P>|t|)	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Toe-hold (%)	1	29	4.60	0.00	0.00	44.50	10.99	2.252^{f}				
		23	*4.13*	*0.00*	*0.00*	*44.50*	*11.04*	*1.796 f*	29	3.16	11.47	1.481^{t}
	2	29	1.18	0.00	0.00	14.00	2.76	2.709^{o}	*23*	*2.55*	*12.03*	*1.018*
		23	*1.35*	*0.00*	*0.00*	*14.00*	*2.99*	*2.521 o*				
Acquired Stake (%)	1	29	12.10	7.40	0.30	100.00	13.80	4.721^{o}				
		23	*13.60*	*8.80*	*0.30*	*100.00*	*15.12*	*4.313 o*	29	-5.04	22.59	1.203
	2	29	20.28	9.40	1.10	100.00	25.85	4.961^{o}	*23*	*-5.76*	*25.37*	*1.088*
		23	*23.66*	*14.00*	*1.10*	*100.00*	*28.50*	*4.623 o*				
End Stake (%)	1	29	16.69	10.00	1.80	100.00	18.16	4.951^{o}				
		23	*17.73*	*10.00*	*1.80*	*100.00*	*19.65*	*4.329 o*	29	-1.89	23.05	0.441
	2	29	21.46	9.40	4.60	100.00	25.31	5.362^{o}	*23*	*-3.20*	*25.30*	*0.607*
		23	*25.01*	*14.60*	*4.60*	*100.00*	*27.79*	*5.011 o*				
Cost of Acquisition	1	34	41.844	5.400	1.000	435.633	84.069	2.902^{o}				
		25	*45.268*	*5.100*	*1.000*	*435.633*	*94.471*	*2.396 f*	29	22.696	93.321	1.324^{t}
	2	35	22.426	8.296	0.941	170.000	32.693	4.508^{o}	*22*	*23.517*	*104.165*	*1.059*
		27	*23.552*	*7.500*	*0.941*	*170.000*	*36.443*	*3.358 o*				
Cumulative Ownership Of 10 Largest Block-holders	1	41	38.02	35.00	21.70	70.80	12.07	20.171^{o}				
		31	*39.08*	*35.00*	*21.70*	*70.80*	*13.11*	*16.598 o*	23	25.37	18.72	6.499^{o}
	2	23	12.62	6.62	0.00	63.37	17.43	3.472^{o}	*17*	*28.55*	*17.60*	*6.687 o*
		17	*11.55*	*6.62*	*0.00*	*59.20*	*15.16*	*3.142 o*				
Book Value of Total Assets	1	41	346.226	53.855	3.168	4525.197	963.682	2.300^{t}				
		31	*404.369*	*51.230*	*3.168*	*4525.197*	*1101.479*	*2.044 f*	41	225.951	891.641	1.623^{t}
	2	41	120.275	19.497	0.073	1250.456	283.504	2.716^{o}	*31*	*287.185*	*1003.036*	*1.594 t*
		31	*117.184*	*19.497*	*0.073*	*1250.456*	*281.850*	*2.315 f*				
Market Value of Total Assets	1	41	135.688	36.911	2.264	1210.321	253.709	3.425^{o}				
		31	*160.647*	*35.820*	*2.264*	*1210.321*	*287.545*	*3.111 o*	41	34.396	346.879	0.635
	2	41	101.292	20.342	0.146	1003.813	217.419	2.983^{o}	*31*	*67.431*	*370.079*	*1.014*
		31	*93.215*	*12.162*	*0.146*	*1003.813*	*200.553*	*2.588 o*				
Sales	1	41	266.838	47.605	2.708	1537.136	417.619	4.091^{o}				
		31	*193.801*	*47.483*	*2.708*	*1056.197*	*287.672*	*3.751 o*	41	195.532	462.626	2.706^{o}
	2	41	71.306	13.902	0.002	798.243	167.372	2.728^{o}	*31*	*135.760*	*330.482*	*2.287 f*
		31	*58.042*	*13.902*	*0.002*	*759.855*	*137.110*	*2.357 o*				
Growth Opportunities (MV/BV Of Assets)	1	41	1.081	1.094	0.075	3.891	0.861	8.033^{o}				
		31	*1.040*	*1.094*	*0.095*	*3.891*	*0.784*	*7.384 o*	41	-0.300	1.182	1.623^{t}
	2	41	1.380	1.047	0.135	4.057	0.924	9.561^{o}	*31*	*-0.304*	*1.169*	*1.448 t*
		31	*1.344*	*1.047*	*0.135*	*4.057*	*0.922*	*8.117 o*				
Free CF / Total Assets	1	41	-0.014	0.020	-0.475	0.105	0.121	0.760				
		31	*-0.001*	*0.023*	*-0.386*	*0.104*	*0.104*	*0.056*	41	-0.069	0.127	3.504^{o}
	2	41	0.055	0.047	-0.040	0.234	0.053	6.582^{o}	*31*	*-0.054*	*0.110*	*2.740 o*
		31	*0.053*	*0.041*	*-0.040*	*0.234*	*0.056*	*5.324 o*				
Total Leverage	1	41	0.102	0.031	0.002	0.682	0.161	4.053^{o}				
		31	*0.082*	*0.031*	*0.002*	*0.611*	*0.133*	*3.417 o*	41	-0.161	0.275	3.737^{o}
	2	41	0.263	0.188	0.000	0.951	0.237	7.085^{o}	*31*	*-0.189*	*0.273*	*3.844 o*
		31	*0.271*	*0.196*	*0.000*	*0.951*	*0.238*	*6.339 o*				
Profitability (BHAR 3 years prior to the effective date)	1	41	-7.40	-19.33	-365.36	362.11		(0.510)				
		31	*2.88*	*-21.31*	*-177.01*	*362.11*		*(0.000)*	41	9.33	122.36	0.488
	2	41	-16.73	-4.60	-250.45	193.45		(0.471)	*31*	*15.99*	*162.16*	*0.549*
		31	*-13.12*	*-0.12*	*-250.45*	*193.45*		*(0.505)*				

Consistent with the hypothesized effects for Bidders' Governance (BG), Bidders' Operations (BO) and Control Variables (CV), the descriptive statistics suggest that:

a) larger Type 1 bidders (BO: significantly larger book value of assets),
b) with less agency problem (BG: significantly smaller free cash flow and significantly larger block-holding),
c) and consequently less need for high leverage allowing them access to more assets (BO: significantly smaller leverage),
d) used sequential acquisitions (BG: significantly larger toe-hold) to learn about targets,
e) paying more for larger targets (CV: significantly larger acquisition costs and sales),
f) which had less potential for an agency problem (CV: significantly less free cash flow),
g) and more growth opportunities (CV: significantly larger market to book value of assets).

3.2. Methodology for Measuring the Short-term Performance

Abnormal stock returns at the announcement of the acquisitions were computed as residuals from market model *OLS* regression, following the standard Brown and Warner (1980 and 1985) event-study methodology. Equally and value weighted PACAP and CRSP indices were used to proxy Japanese and the U.S. market benchmarks:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt},$$

where AR_{it} is the abnormal return for security i at event day t (from 20 trading days before to 20 trading days after the announcement date), R_{it} is arithmetic return for security i at event day t, $\hat{\alpha}_i$ and $\hat{\beta}_i$ are values of OLS coefficients estimated from 220 to 21 trading days before announcement date and R_{mt} is arithmetic return on market benchmark for event day t.

The null hypothesis is that the announcement effect, measured as the average abnormal return (AAR) for the sample with *n* observations at a event day τ, or as sample average abnormal return cumulated (CAAR) over any two event days *s* and τ, is equal to zero:

$$AAR_{\tau} = \frac{1}{n}\sum_{i=1}^{n} AR_{i\tau} = 0, \quad \text{or}$$

$$CAAR_{s\tau} = \sum_{t=s}^{\tau} AAR_{t} = 0.$$

This was tested using a t-statistic with 199 degrees of freedom (*200* days in estimation period minus one), since the residual cross-correlation in calendar time used to calculate announcement effect is likely to be small, and residuals are assumed to be independent, identically and normally distributed, in the absence of the event.

The test statistic was calculated as the ratio of the announcement effect measure to the cross-sectional sample standard deviation of abnormal returns:

$$t_{AAR_{\tau}} = \frac{\frac{1}{n}\sum_{i=1}^{n} AR_{i\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\left[\frac{1}{199}\sum_{\theta=-220}^{-21}(AR_{i\theta} - AAR_{i})^2\right]}} = \frac{AAR_{\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\sigma_{i}^2}} = \frac{AAR_{\tau}}{\sqrt{\frac{1}{n}\sigma_{i\theta}^2}}, \quad \text{or}$$

$$t_{CAAR_{s\tau}} = \frac{\frac{1}{\tau - s}\sum_{t=s}^{\tau} AAR_{t}}{\sqrt{\frac{1}{\tau - s}\sum_{t=s}^{\tau}\frac{1}{n}\sigma_{i\theta}^2}} = \frac{\sum_{t=s}^{\tau} AAR_{t}}{(\tau - s)\sqrt{\frac{1}{\tau - s}\frac{1}{n}\sigma_{i\theta}^2}} = \frac{CAAR_{s\tau}}{\sqrt{\frac{\tau - s}{n}\sigma_{i\theta}^2}},$$

where $AAR_{i} = \frac{1}{200}\sum_{\theta=-220}^{-21} AR_{i\theta}$ is the average abnormal return for security *i*.

3.3. Methodology for Measuring Long-term Performance

The main objective of the study, an investigation of whether Japanese acquisitions of U.S. targets were driven by value-creating (improve target operating performance due to superior management ability) or value-destroying (agency problem) motives, may be easier to detect in the long run. If Japanese firms do have a long-run focus and if they are indeed managed in the interest of debtholders, so that as long as earnings are sufficient to satisfy banks and meet debt payments managers can run firms in their and employees' interest without interference from the main bank,[35] accounting operating performance measures may provide better insight than those based on stock prices. Hence, long-term financial and accounting performances were measured as abnormal stock returns and abnormal returns on assets, respectively, for the thirty-six months preceding and thirty six months following the month in which acquisitions were made.

3.3.1. Long-term Abnormal Stock Returns

Barber and Lyon (1997) report that commonly used parametric tests designed to detect long-term (one- to five-year) abnormal stock returns, where the return on the reference portfolio (i.e. equally or value weighted market index) is used to measure the expected performance in the absence of an event, are misspecified (empirical rejection rates exceed theoretical rejection rates) due to biases which violate zero mean and unit normality assumptions. Misspecifications persist regardless of whether the abnormal returns for security *i* are cumulated over τ periods:

$$CAR_{is\tau} = \sum_{t=s}^{\tau} AR_{it} ,$$

[35] Aoki (1990), Kester (1991), Porter (1992) and Kaplan (1994).

in which case the abnormal returns are subject to the measurement, the new listing or survivor and the skewness biases, or calculates as buy-and-hold abnormal return[36] over any two days s and τ:

$$BHAR_{is\tau} = \prod_{t=s}^{\tau}(1+R_{it}) - \prod_{t=s}^{\tau}(1+R_{mt}),$$

in which case abnormal returns suffer from the new listing, the rebalance and the skewness bias.

Measurement bias refers to the fact that the *CAR* is a biased predictor of *BHAR* due to omitted monthly compounding, causing individual securities with annual *BAHRs* close to zero and volatility higher than the market index to have *CARs* above *BAHRs*.[37] Conversely, volatile securities with high annual *BAHRs* will have *CARs* below *BHARs*.

The new listing or survivor bias is due to the reference index containing firms that begin to trade subsequent to an event. According to Ritter (1991), a significant portion of newly-listed firms are likely to be IPOs which underperform the market, deflating the reference portfolio return and making the abnormal returns and test statistics positively biased.

Skewness bias is due to positively skewed long-run abnormal returns. Returns in excess of 100%, common for sample firms but uncommon for the reference portfolio, lead to a negative bias in test statistics, resulting in inflated significance levels for lower-tail tests (p values too small) and low power for upper-tailed tests (p values too large). Positive correlation between sample means and sample standard deviations in positively skewed distributions (inflated estimate of standard deviation are conditional on observing high mean) leads to downwardly biased test statistics.

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[36] Ritter (1991) was among the first to argue that the *BHAR* should be used to test the null hypothesis that the mean annual abnormal return is equal to the zero, because the null hypothesis that the *CAR* is zero is equivalent to a test of the null hypothesis that the mean monthly abnormal return is equal to zero.

[37] For a firm and reference portfolio with (0, 0.69) and (0.30, 0.30) monthly returns, $CAR = \Sigma[R_i - E(R)] = (0-0.3)+(0.69-0.3)=0.09$, even though $BHAR = BHAR_{firm} - BHAR_{portf.} = (1+0)(1+0.69) - (1+0.3)(1+0.3) = 0$

The rebalancing bias arises because the sample firm returns are compounded without periodical rebalancing and a reference portfolio returns are compounded with periodical rebalancing (to maintain an equally weighted index over- and under-performing securities are sold and bought, leading to an inflated return on the market index and a negative bias in abnormal returns if securities are correlated).

Barber and Lyon (1997) show that test statistics, calculated as a ratio of average *BHAR* to cross-sectional standard deviation of *BHAR*, are well defined only when a portfolio return of size and book-to-market matched control firms is used as a proxy for expected return:[38]

$$t_{BHAR_{s\tau}} = \frac{\frac{1}{n}\sum_{i=1}^{n} BHAR_{is\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\left[\frac{1}{(\tau-s)-1}\sum_{t=s}^{\tau}(BHAR_{it} - ABHAR_i)^2\right]}} = \frac{ABHAR_{s\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\sigma_i^2}} = \frac{ABHAR_{s\tau}}{\sqrt{\frac{1}{n}\sigma_{is\tau}^2}},$$

where $ABHAR_i = \frac{1}{\tau - s}\sum_{t=s}^{\tau} BHAR_{it}$ is the average *BHAR* for security *i*.

For a randomly drawn sample from a normal distribution, this test statistics is Students *t* distributed with *τ-s-1* degrees of freedom under the null hypothesis. Although *BHARs* are not normal, the Central Limit Theorem guarantees that the distribution of mean *BHARs* measured from independent and identically distributed firms converges to normality as the number of sample firms increases.

The control firm approach alleviates, but does not completely eliminate, the new listing bias (both sample and control firms have to be listed in the event month), the rebalancing bias (returns of the sample and control firms are calculated in an analogous fashion) and the skewness bias (abnormal returns are reasonably symmetric).

[38] Control firms were identified as those with the book-to-market ratio closest to the sample firm from all the firms with market value of equity within $^{+}$/- 30% of the market value of equity of the sample firm.

Lyon, Barber and Tsai (1999) show that the commonly used tests for abnormal returns were misspecified not only due to the new listing, the rebalancing and the skewness biases, but also due to the cross-sectional dependence of sample observations and/or a bad asset pricing model. Although misspecification in non-random samples is pervasive, the test statistics are well defined, regardless of the size of the sample or the firms, when *BHARs* are calculated using size and book-to-market benchmark portfolios constructed to have a zero mean population abnormal return in order to control for the new listing and the rebalancing bias. *BHARs* are tested with the bootstrapped skewness-adjusted t^{bsa}-statistics or empirically generated distribution of mean long-run abnormal returns estimated from a pseudoportfolio.

Size and book-to-market benchmark portfolios are constructed in the following way. All NYSE firms are separated in deciles based on the market value of their equity in June of the event year. Firms from AMEX and NASDAQ are assigned to appropriate deciles. Since approximately 50% of the firms fall in the smallest size decile, this decile is further divided into quintiles regardless of the exchange at which securities are traded. Each of the fourteen size portfolios is further separated into quintiles based on book-to-market ratios calculated as book value of common equity (COMPUSTAT item 60)[39] divided by the market value of common equity, both from December of the year preceding the event year.

Long-term benchmark portfolio *BHAR*s are calculated as the average monthly compounded returns of all surviving securities that traded in the event month and represent passive, equally-weighted investment in all the securities constituting the benchmark portfolio in a given month. Since newly listed firms are not added to the benchmark portfolio and missing

[39] Firms with negative book value of equity are excluded.

monthly returns of delisted firms are replaced by the mean monthly return of firms still in the benchmark portfolio, both the new listing and the rebalancing biases are eliminated.

BHAR over any two investment months, *s* and τ, for each of *n* sample firms, is calculated as the difference between buy-and-hold returns (*BHR*) for sample firm *i* and benchmark portfolio *p*:

$$BHAR_{is\tau} = BHR_{is\tau} - BHR_{ps\tau} = \left[\prod_{t=s}^{\tau}(1+R_{it})-1\right] - \frac{1}{k}\sum_{j=1}^{k}\left[\prod_{t=s}^{\tau}(1+R_{jt})-1\right],$$

where *k* is the number of securities in benchmark portfolio traded in month *s*.

Conventional *t*-statistics should not be used for testing long run *BHAR* because of their positive skewness, which makes the sampling distribution of *t* negatively skewed. This leads to inflated significance levels for lower-tailed tests (reported *p* values smaller than they should be) and lower power for upper- tailed tests (reported *p* values too large).

Skewness bias is eliminated by the use of the bootstrapped skewness-adjusted:

$$t_{sa}^{b} = \sqrt{n^{b}}\left(S^{b} + \frac{\hat{\gamma}^{b}(S^{b})^{2}}{3} + \frac{\hat{\gamma}^{b}}{6n^{b}}\right),$$

$$S^{b} = \frac{ABHAR_{s\tau}^{b} - ABHAR_{s\tau}}{\sigma_{BHAR_{s\tau}}^{b}} = \frac{\frac{1}{1000}\sum_{l=1}^{1000}BHAR_{ls\tau}^{b} - \frac{1}{n}\sum_{i=1}^{n}BHAR_{is\tau}}{\sqrt{\frac{1}{1000}\sum_{l=1}^{1000}\left[\frac{1}{\tau-s-1}\sum_{t=s}^{\tau}\left(BHAR_{lt}^{b} - ABHAR_{l}^{b}\right)^{2}\right]}},$$

$$\hat{\gamma}^{b} = \frac{\sum_{i=1}^{n^{b}}(BHAR_{is\tau}^{b} - ABHAR_{s\tau}^{b})^{3}}{n^{b}(\sigma_{BHAR_{s\tau}}^{b})^{3}},$$

where $ABHAR_{s\tau}^{b}$ and $\sigma_{BHAR_{s\tau}}^{b}$ are the mean and the standard deviation from 1,000 bootstrapped re-samples, while $ABHAR_{l}^{b} = \frac{1}{\tau-s}\sum_{t=s}^{\tau}BHAR_{lt}^{b}$ is the average *BHAR* for bootstrapped re-sample *l*.

Based on this transformed t^{bsa}-statistic, calculated for each of 1,000 bootstrapped re-samples of size $n^b = n/4$, randomly drawn from the original sample of size n, upper and lower critical values for the transformed statistic required to reject the null hypothesis that the $ABHAR_{s\tau} = 0$ at the α significance level[40], are calculated by solving:

$$\Pr[t^{bsa} \le x_l^*] = \Pr[t^{bsa} \ge x_u^*] = \frac{\alpha}{2}.$$

This bootstrapping application of Johnson (1978) transformed statistics dominates conventional *t*-statistics when the parent distribution is asymmetrical because it reduces the probability of type I error.

3.3.2. Long-term Accounting Performance Measures

Barber and Lyon (1996) argue that the long-term accounting performance measures based on operating income (COMPUSTAT data item 13) are superior to those based on earnings since operating income is a cleaner measure of the productivity of operating assets (less obscured by special items, tax considerations or accounting for minority interests) and is unaffected by capital structure changes that influence interest expenses and consequently earnings. Since events being studied might affect the number of shares outstanding, operating income is preferred to operating income per share.

The realized return on assets for firm *i* in month *t* (ROA_{it}), defined as operating income scaled by operating assets, is used to measure performance. Since the current value of operating assets is not reported in financial statements, it is proxied by average of beginning and end of

[40] H_0: $ABHAR_{s\tau} = 0$ is rejected if $x_u^* < t^{bsa} < x_l^*$.

period book value of total assets (COMPUSTAT data item 6).

Abnormal return on assets for firm *i* in month *t* is computed as:

$$AROA_{it} = ROA_{it} - BROA_{it},$$

where $BROA_{it}$ is benchmark *ROA* (expected in absence of an event) for firm *i* in month *t*.

Following Safieddine and Titman's (1999) modification of Barber and Lyon's (1996) methodology, *BROA* is calculated as the median *ROA* of all the COMPUSTAT firms in the same two-digit SIC code[41] as the sample firm, excluding the sample firm, with book value of assets and *ROA* within +/- 30% and +/- 10% from the sample firm's measures in year preceding the acquisition. If no match is found, the algorithm is repeated for firms in the same one digit SIC code. Finally if no match is found, matching is performed on size and previous performance regardless of the SIC code. In the case of even number of firms in the industry comparison group, the *ROA* closest to the sample firm between two median firms is selected as the benchmark.

This methodology for choosing benchmark performance controls not only for economy- and industry-wide effects, but also adjusts for mean reversion in accounting data that reflect the transitory component of operating income. The tendency for mean reversion,[42] especially for the firm with extreme performance before an event, might be interpreted as an abnormal performance in the absence of pre-event performance matching.

Test statistics using time differences in the long-term abnormal accounting performance measures are more powerful than those using levels, because the latter ignore the history of the firm's performance relative to the benchmark. If a firm had unusually high pre-event *ROA*

[41] Guenther and Rosman (1994) point out much larger agreement between CRSP and COMPUSTAT at two than at four digit SIC code.

[42] Fama and Frech (1995) document that return on equity measures are slowly mean-reverting toward a population mean.

relative to the benchmark, and continues to earn above-average post-event profit, its performance might be interpreted as superior to that expected in the absence of an event. Typically this problem is dealt with by comparing the firm's post-event abnormal performance ($AROA_{it}$) and pre-event abnormal performance ($AROA_{it-1}$). Differences in abnormal returns on assets are computed as:

$$DAROA_{it} = AROA_{it} - AROA_{it-1} = (ROA_{it} - BROA_{it}) - (ROA_{it-1} - BROA_{it-1}),$$

which is equivalent to comparing differences in the firm's post- and pre-event performance ($DROA_{it}$) relative to differences in the benchmark post- and pre-event performance:

$$DAROA_{it} = DROA_{it} - DBROA_{it} = (ROA_{it} - ROA_{it-1}) - (BROA_{it} - BROA_{it-1}).$$

The null hypothesis is that the sample average difference in abnormal return on assets at any month τ is equal to zero:

$$ADAROA_{\tau} = \frac{1}{n}\sum_{i=1}^{n} DAROA_{i\tau} = 0\,,$$

where n is number of firms in the sample.

For independent, identically distributed and normal observations, in the absence of an event, the test statistic is assumed to be Student-t with 35 degrees of freedom (36 months in estimation period minus one).

Student-t statistics for any pre-event month is the ratio of pre-event *ADAROA* to its standard deviation estimated over 36 months preceding the pre-event period:

$$t_{ADAROA_{\tau<0}} = \frac{\frac{1}{n}\sum_{i=1}^{n} DAROA_{i\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\left[\frac{1}{35}\sum_{\theta=-72}^{-37}(DAROA_{i\theta} - ADAROA_{i})^2\right]}} = \frac{ADAROA_{\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\sigma_i^2}} = \frac{ADAROA_{\tau}}{\sqrt{\frac{1}{n}\sigma_{i\theta}^2}},$$

where $ADAROA_i = \frac{1}{36}\sum_{\theta=-72}^{-37} DAROA_{i\vartheta}$ is the average *DAROA* for firm i during 36 months

preceding the pre-event period.

The test statistic for the null hypothesis that sample $ADAROA_\tau = 0$ for any post-event month is the ratio of the sample *ADAROA* in the post-event period to its standard deviation estimated over the 36 months of the pre-event period:

$$t_{ADAROA_{\tau>0}} = \frac{\frac{1}{n}\sum_{i=1}^{n} DAROA_{i\tau}}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\left[\frac{1}{35}\sum_{\theta=-36}^{-1}(DAROA_{i\theta} - ADAROA_i)^2\right]}} = \frac{ADAROA_\tau}{\sqrt{\frac{1}{n}\sum_{i=1}^{n}\sigma_i^2}} = \frac{ADAROA_\tau}{\sqrt{\frac{1}{n}\sigma_{i\theta}^2}},$$

where $ADAROA_i = \frac{1}{36}\sum_{\tau=-36}^{-1} DAROA_{i\tau}$ is the average *DAROA* for firm *i* during 36 months of the pre-event period.

4. WEALTH EFFECTS OF JAPANESE AND DOMESTIC ACQUSITIONS

Although the purpose of this study is to analyze how the corporate governance and other characteristics of Japanese and U.S. acquirers affect the long-term, one and three year, post-acquisition stock and accounting performance of their respective U.S. targets, we also report the short-term wealth effects for the sake of completeness and comparison with the existing literature.

If the Japanese governance system is indeed superior to the U.S. governance system, then we expect to find that the U.S. stock market recognizes this and generates positive, significantly larger announcement effects for the U.S. targets of Japanese bidders than for the U.S. targets of U.S. bidders. This positive and significantly larger reaction is expected to be even more pronounced for the Japanese bidders that are keiretsu members. In addition to the U.S. stock market, we expect the Japanese market to also be cognizant of the abilities of the Japanese firms. Hence, we suppose that the combined stock reaction for the stockholders of targets and bidders be positive and significantly larger for Type 1 than for Type 2 bidder/target pairs.

The opposite or the absence of the expected announcement effects for the targets alone and/or for the bidder/target combinations would be consistent with the alternative hypothesis that the main-banks do nothing special in the practice and that value destroying motives associated with the agency problem were behind the Japanese acquisitions in the U.S. However, if the Japanese firms are different from the U.S. corporations, in the sense that Japanese managers have the long-term focus and objectives other than the stock price maximization (especially in the case of the keiretsu members which might have the prosperity of the entire industrial group ahead of the interests of the shareholders for any individual member), then the unexpected announcement effects might only indicate that the event study methodology is not capable of capturing the true

effects of the Japanese bidders. In that case we would need to look at the long-term performance measures. Furthermore, due to objectives other than stock price maximization, we would have to look at the long-term accounting performance measures based on the earnings in order to analyze if Japanese bidders were able to affect the performance of their U.S. targets more positively than the U.S. bidders that acquired similar U.S. targets in the same industry and the same year in which Type 1 targets were purchased.

4.1. Short-term Wealth Effects

Substantial positive and strongly significant announcement effects for all Type 1 and Type 2 matched targets of completed acquisitions, in Table 2 Panel A, are similar in magnitude to the empirical results from domestic acquisitions and up to almost two percent smaller than the stock reaction for Type 1 targets of keiretsu bidders and their Type 2 matched controls. Negative and significant difference in wealth gains for Type 1 and Type 2 target shareholders of all matched completed acquisitions, and even larger negative differences for Type 1 targets of keiretsu bidders and their Type 2 matched controls, are contrary to Kang's (1993) finding that the targets of Japanese bidders enjoyed larger short-term benefits than targets of any other bidders.

Because the 41 observations in the sample of matched completed acquisitions are not sufficiently numerous to allow analysis of sub-periods, in analysis not reported here we used the sample of Type 1 and Type 2 targets from all announced and completed acquisitions satisfying dual data requirement (data available for both bidder and target), where the announcement was

made no latter than 1988, the same period of analysis as Kang (1993), and were able to replicate his results.

When the samples of Type 1 and Type 2 targets from announced and completed acquisitions meeting dual data conditions were extended to the entire 1980 – 2000 period, the results in Table 2 Panel B were similar to but noticeably larger and more significant than those for the sample of targets from matched completed acquisitions reported in Panel A of Table 2.

Table 2: Short-term Wealth Effects for Targets' Shareholders

Panel A: Announcement Effect for Matched Completed Acquisitions

(Type 1 and 2 are U.S. targets of Japanese and U.S. bidders; Type 1K and 2K are U.S. targets of Japanese bidders that are keiretsu members and their matching controls acquired by U.S. bidders; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Window	All Matched Targets			Matched Targets of Keiretsu Bidders		
	Type 1	Type 2	Paired T1 – T2	Type 1K	Type 2K	Paired T1K – T2K
	Return on value weighted index is used as proxy for market return.					
-1, 0	2.13	5.54	-3.14	2.87	6.35	-3.48
$t_{df=n-1}$	1.317^{t}	4.039^{o}	1.552^{t}	1.432^{t}	3.683^{o}	1.263
N	41	41	41	31	31	31
-1, 1	3.62	12.30	-8.67	4.02	13.94	-9.92
$t_{df=n-1}$	2.197^{f}	5.971^{o}	3.225^{o}	1.986^{f}	5.359^{o}	2.940^{o}
N	41	41	41	31	31	31
-5, 5	3.74	13.48	-9.74	4.56	14.64	-10.08
$t_{df=n-1}$	1.646^{t}	4.968^{o}	2.377^{f}	1.549^{t}	4.425^{o}	1.946^{f}
N	41	41	41	31	31	31
-15, 15	3.29	15.67	-12.38	3.12	17.49	-14.37
$t_{df=n-1}$	1.059	4.141^{o}	2.286^{f}	0.847	3.914^{o}	2.229^{f}
N	41	41	41	31	31	31
	Return on equally weighted index is used as proxy for market return.					
-1, 0	1.94	5.36	-3.42	2.68	6.20	-3.52
$t_{df=n-1}$	1.195	3.964^{o}	1.576^{t}	1.332^{t}	3.666^{o}	1.300
N	41	41	41	31	31	31
-1, 1	3.41	11.97	-8.56	3.84	13.76	-9.91
$t_{df=n-1}$	2.022^{f}	5.802^{o}	3.175^{o}	1.875^{f}	5.276^{o}	2.944^{o}
N	41	41	41	31	31	31
-5, 5	3.06	13.23	-10.17	3.65	14.58	-10.93
$t_{df=n-1}$	1.313	4.996^{o}	2.503^{o}	1.213	4.460^{o}	2.118^{f}
N	41	41	41	31	31	31
-15, 15	2.25	17.25	-15.00	1.45	17.75	-16.30
$t_{df=n-1}$	0.772	4.526^{o}	2.793^{o}	0.416	3.890^{o}	2.547^{o}
N	41	41	41	31	31	31

While comparison of the announcement effect for various target types from matched completed acquisitions was made based on paired differences, targets from all announced and completed acquisitions satisfying the dual data requirement were compared by testing the null hypothesis that the difference of means for two populations with unknown and unequal variances are equal to zero, using the following t-statistic:

$$t = \frac{CAAR_1 - CAAR_2}{\sqrt{S_1^2/n_1 + S_2^2/n_2}},$$

with the appropriate degrees of freedom given by the following formula:

$$df \approx \frac{\left(S_1^2/n_1 + S_2^2/n_2\right)^2}{\frac{\left(S_1^2/n_1\right)^2}{(n_1 - 1)} + \frac{\left(S_2^2/n_2\right)^2}{(n_2 - 1)}},$$

where $CAAR_i$ is the average abnormal return for Type i target cumulated over the given event window, S_i^2 is estimated variance of $CAAR_i$ and n_i is the number of observations in Type i sample.

The significant negative differences between the announcement effect for Type 1 and Type 2 targets, and the even bigger difference for the targets of keiretsu members, which was observed for the sample of matched completed acquisitions, persist for the sample of all announced and completed acquisitions satisfying dual data requirement. This result, combined with the finding in Table 1 Panel B that Type 1 targets were significantly larger and had significantly less free cash flows, is consistent with hypothesized effects of our Control Variables (that target's bargaining power and its ability to extract larger wealth gains increases with its size and ability to mitigate agency problem).

Examination of the announcement effect for the Type 1 and Type 2 bidders of the matched completed acquisition in Panel A of Table 3 reveals that with the exception of the

negative and significant (-1, 0) event window for the Type 1 bidders, the stock reaction for all types of matched bidders and differences between various matched bidders over all event windows were not significantly different from zero.

Table 2: Short-term Wealth Effects for Targets' Shareholders
Panel B: Announcement Effect for All and Completed Acquisitions Satisfying Dual Data Requirement (Data Available for Both Bidders and Targets)

(Type 1 and 2 are U.S. targets of Japanese and U.S. bidders; Type 1K are U.S. targets of Japanese bidders that are keiretsu members; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level; degrees of freedom for differences between target types are in parentheses)

Window	All Announced Acquisitions					Completed Acquisitions				
	Type 1	Type 2	T1–T2	Type 1K	T1K–T2	Type 1	Type 2	T1–T2	Type 1K	T1K–T2
	Return on value weighted index is used as proxy for market return.									
-1, 0 $t_{df=n-1}$ n (df)	8.65 5.183^{o} 130	13.39 17.965^{o} 958	-4.74 2.594^{o} (185)	7.76 3.418^{o} 76	-5.63 2.358^{f} (92)	9.19 4.497^{o} 103	14.62 15.862^{o} 710	-5.42 2.420^{o} (147)	8.49 3.227^{o} 64	-6.12 2.196^{f} (79)
-1, 1 $t_{df=n-1}$ n (df)	12.65 6.420^{o} 130	16.44 20.377^{o} 959	-3.79 1.782^{f} (175)	11.78 4.347^{o} 76	-4.66 1.646^{t} (89)	13.48 5.640^{o} 103	17.93 18.168^{o} 711	-4.45 1.898^{f} (162)	13.12 4.177^{o} 64	-4.81 1.462^{t} (76)
-5, 5 $t_{df=n-1}$ n (df)	11.75 5.869^{o} 149	16.72 18.983^{o} 1076	-4.97 2.273^{f} (210)	10.54 3.807^{o} 88	-6.18 2.125^{f} (105)	12.75 5.271^{o} 118	18.74 17.854^{o} 799	-6.00 2.275^{f} (164)	12.16 3.737^{o} 73	-6.58 1.925^{f} (88)
-15, 15 $t_{df=n-1}$ n (df)	13.80 5.396^{o} 149	18.48 16.273^{o} 1076	-4.68 1.672^{f} (211)	9.80 2.975^{o} 88	-8.67 2.487^{o} (109)	13.94 4.879^{o} 118	21.63 16.113^{o} 799	-7.69 2.436^{o} (173)	10.54 2.886^{o} 73	-11.09 2.850^{o} (93)
	Return on equally weighted index is used as proxy for market return.									
-1, 0 $t_{df=n-1}$ n (df)	8.49 5.075^{o} 130	13.44 18.051^{o} 958	-4.95 2.703^{o} (184)	7.54 3.313^{o} 76	-5.90 2.465^{o} (92)	9.06 4.428^{o} 103	14.68 15.933^{o} 710	-5.62 2.503^{o} (147)	8.28 3.141^{o} 64	-6.40 2.292^{f} (79)
-1, 1 $t_{df=n-1}$ n (df)	12.43 6.261^{o} 130	16.55 20.590^{o} 959	-4.12 1.922^{f} (174)	11.48 4.203^{o} 76	-5.07 1.779^{f} (88)	13.28 5.507^{o} 103	18.03 18.308^{o} 711	-4.75 1.825^{f} (138)	12.81 4.050^{o} 64	-5.22 1.574^{t} (76)
-5, 5 $t_{df=n-1}$ n (df)	11.36 5.512^{o} 149	16.89 19.292^{o} 1076	-5.52 2.467^{o} (205)	10.12 3.554^{o} 88	-6.77 2.273^{f} (104)	12.40 4.981^{o} 118	18.82 17.947^{o} 799	-6.42 2.378^{o} (161)	11.86 3.571^{o} 73	-6.95 1.996^{f} (87)
-15, 15 $t_{df=n-1}$ n (df)	13.46 5.100^{o} 149	18.88 16.841^{o} 1076	-5.42 1.890^{f} (205)	9.98 2.831^{o} 88	-8.90 2.404^{o} (105)	13.76 4.632^{o} 118	21.81 16.323^{o} 799	-8.05 2.473^{o} (168)	11.18 2.867^{o} 73	-10.63 2.577^{o} (90)

These results again contradict Kang's (1993) findings of a positive stock reaction for shareholders of Japanese bidders announcing acquisitions in the U.S. When the analysis was

repeated for the sample of Type 1 and Type 2 bidders satisfying the dual data requirement, regardless of whether their acquisitions were announced not later than 1988 or over the entire 1980 – 2000 period, as indicated in Table 3 Panel B, positive and negative stock reactions for Type 1 and Type 2 bidders, respectively, were similar to those reported by Kang (1993).

Table 3: Short-term Wealth Effects for Bidders' Shareholders

Panel A: Announcement Effect for Matched Completed Acquisitions

(Type 1 and 2 are Japanese and U.S. bidders; Type 1K and 2K are keiretsu members and their matched U.S. bidders; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Window	All Matched Bidders			Matched Keiretsu Bidders		
	Type 1	Type 2	Paired T1 – T2	Type 1K	Type 2K	Paired T1K – T2K
	Return on value weighted index is used as proxy for market return.					
-1, 0 $t_{df=n-1}$ N	-0.56 1.962[f] 41	-0.15 0.320 41	-0.41 0.751 41	-0.43 1.272 31	-0.47 0.807 31	0.03 0.049 31
-1, 1 $t_{df=n-1}$ N	-0.39 1.264 41	-0.29 0.381 41	-0.09 0.111 41	-0.21 0.565 31	-0.50 0.512 31	0.29 0.265 31
-5, 5 $t_{df=n-1}$ N	-0.51 0.515 41	0.36 0.504 41	-0.87 0.761 41	-0.45 0.349 31	-0.26 0.351 31	-0.19 0.133 31
-15, 15 $t_{df=n-1}$ N	-0.48 0.195 41	2.17 1.008 41	-2.65 0.791 41	-0.38 0.134 31	-1.25 0.597 31	0.86 0.233 31
	Return on equally weighted index is used as proxy for market return.					
-1, 0 $t_{df=n-1}$ N	-0.25 0.832 41	-0.13 0.275 41	-0.12 0.225 41	-0.20 0.581 31	-0.40 0.691 31	0.20 0.301 31
-1, 1 $t_{df=n-1}$ N	-0.09 0.311 41	-0.42 0.547 41	0.33 0.396 41	0.01 0.040 31	-0.52 0.516 31	0.053 0.485 31
-5, 5 $t_{df=n-1}$ N	0.49 0.606 41	0.40 0.548 41	0.09 0.081 41	0.74 0.727 31	0.04 0.043 31	0.70 0.541 31
-15, 15 $t_{df=n-1}$ N	1.29 0.659 41	0.39 0.176 41	0.90 0.281 41	1.19 0.485 31	-1.57 0.651 31	2.77 0.742 31

Table 3: Short-term Wealth Effects for Bidders' Shareholders

Panel B: Announcement Effect for All and Completed Acquisitions Satisfying Dual Data Requirement (Data Available for Both Bidders and Targets)

(Type 1 and 2 are Japanese and U.S. bidders; Type 1K are Japanese bidders that are keiretsu members; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level; degrees of freedom for differences between target types are in parentheses)

Window	All Announced Acquisitions					Completed Acquisitions				
	Type 1	Type 2	T1–T2	Type 1K	T1K–T2	Type 1	Type 2	T1–T2	Type 1K	T1K–T2
	Return on value weighted index is used as proxy for market return.									
-1, 0	0.12	-0.43	0.55	-0.09	0.34	0.03	-0.27	0.30	-0.12	0.15
$t_{df=n-1}$	0.485	2.192^{f}	1.738^{f}	0.447	1.183	0.124	1.270	0.884	0.505	0.482
n (df)	130	958	(282)	76	(204)	103	710	(222)	64	(167)
-1, 1	0.08	-0.78	0.86	-0.25	0.53	0.05	-0.56	0.60	-0.16	0.39
$t_{df=n-1}$	0.290	3.077^{o}	2.295^{f}	0.987	1.465^{t}	0.167	1.959^{f}	1.491^{t}	0.556	0.958
n (df)	130	959	(341)	76	(218)	103	711	(295)	64	(180)
-5, 5	0.43	-1.09	1.51	-0.45	0.63	0.76	-1.03	1.78	0.06	1.08
$t_{df=n-1}$	0.848	2.963^{o}	2.431^{o}	0.892	1.016	1.486^{t}	2.623^{o}	2.777^{o}	0.102	1.602^{t}
n (df)	149	1076	(306)	88	(175)	118	799	(257)	73	(144)
-15, 15	0.79	-2.75	3.54	0.82	3.57	1.05	-2.65	3.70	1.10	3.75
$t_{df=n-1}$	0.921	4.766^{o}	3.426^{o}	0.819	3.083^{o}	1.115	4.360^{o}	3.306^{o}	0.994	2.973^{o}
n (df)	149	1076	(280)	88	(139)	118	799	(213)	73	(113)
	Return on equally weighted index used as proxy for market return.									
-1, 0	0.25	-0.40	0.64	0.09	0.49	0.20	-0.23	0.43	0.11	0.34
$t_{df=n-1}$	0.985	1.977^{f}	2.004^{f}	0.410	1.616^{t}	0.731	1.059	1.226	0.414	0.991
n (df)	130	958	(261)	76	(166)	103	710	(199)	64	(130)
-1, 1	0.22	-0.70	0.92	-0.05	0.65	0.24	-0.49	0.72	0.08	0.56
$t_{df=n-1}$	0.776	2.707^{o}	2.399^{o}	0.163	1.716^{f}	0.772	1.691^{f}	1.723^{f}	0.231	1.290^{t}
n (df)	130	959	(305)	76	(175)	103	711	(252)	64	(142)
-5, 5	0.67	-1.01	1.68	-0.10	0.91	1.00	-1.03	2.03	0.45	1.48
$t_{df=n-1}$	1.387^{t}	2.646^{o}	2.724^{o}	0.205	1.465^{t}	1.985^{f}	2.495^{o}	3.115^{o}	0.832	2.172^{f}
n (df)	149	1076	(314)	88	(180)	118	799	(260)	73	(147)
-15, 15	1.24	-2.67	3.92	1.04	3.71	1.84	-2.72	4.56	1.81	4.53
$t_{df=n-1}$	1.422^{t}	4.369^{o}	3.670^{o}	1.013	3.108^{o}	1.884^{f}	4.004^{o}	3.849^{o}	1.558^{t}	3.377^{o}
n (df)	149	1076	(277)	88	(138)	118	799	(216)	73	(113)

Contrary to the main bank theory and our hypothesized effect of Japanese Governance variables (that firms benefit from keiretsu membership), the Japanese stock market reacted less positively, and even negatively for some event windows, to the announced acquisitions by Type 1 bidders that were keiretsu members than to the announcement by all Type 1 bidders.

Since announcement effects for all but one event window for Type 1 and Type 2 bidders of matched completed acquisitions (in Table 3 Panel A) were insignificantly different from zero,

the combined target and bidder stock reaction for the matched completed acquisitions (in Table 4) are almost identical to the positive and significant announcement effects for Type 1 and Type 2 targets of matched completed acquisitions (in Table 2 Panel A).

With the exception of (-1,0) event window, the difference between Type 1 and Type 2 combined stock reaction to the targets' and bidders' shareholders of matched completed acquisitions in Table 4 were even more negative than the difference between the announcement effects for Type 1 and Type 2 targets in the Panel A of Table 2. Following the pattern already discussed in the analysis of the short-term wealth effect for the Type 1 and Type 2 targets of matched completed acquisitions, the results for the keiretsu members are worse than those for all Japanese bidders.

The combined stock reaction for bidders' and targets' shareholders was only analyzed for paired differences of matched completed acquisitions. In order to analyze the combined stock reaction for the larger samples of Type 1 and Type 2 acquisitions that satisfy the dual data requirement, the average bidder and target announcement effect for given type of acquisitions would have to be added before the differences between these sums could be compared. To test the statistical significance of these differences we would need the variance and the number of observations for samples of combined but unmatched bidder and target *CAARs*, which we could not estimate.

Although the short-term wealth effects were opposite from the hypothesized ones, we need to look at the long-term performance measures before we can unambiguously conclude whether the Japanese governance system in general and unique characteristics of the Japanese bidders in particular were beneficial for the targets' performance.

Table 4: Short-term Wealth Effects for Combined Targets' and Bidders' Shareholders of Matched Completed Acquisitions

(Type 1 and 2 are Japanese/U.S. and U.S./U.S. acquisitions; Type 1K and 2K are Japanese/U.S. pairs where bidders are keiretsu members and their matched U.S./U.S. pairs; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Window	All Matched Bidder/Target Unions			Keiretsu Matched Bidder/Target Unions		
	Type 1	Type 2	Paired T1 – T2	Type 1K	Type 2K	Paired T1K – T2K
	Return on value weighted index is used as proxy for market return.					
-1, 0 $t_{df=n-1}$ N	1.57 0.898 41	5.40 3.699^{o} 41	-3.82 1.619^{t} 41	2.44 1.122 31	5.88 3.134^{o} 31	-3.44 1.152 31
-1, 1 $t_{df=n-1}$ N	3.24 1.791^{f} 41	12.00 5.507^{o} 41	-8.77 3.116^{o} 41	3.81 1.716^{f} 31	13.44 4.835^{o} 31	-9.62 2.688^{o} 31
-5, 5 $t_{df=n-1}$ N	3.23 1.240 41	13.84 5.196^{o} 41	-10.60 2.526^{o} 41	4.12 1.220 31	14.38 4.411^{o} 31	-10.27 1.919^{f} 31
-15, 15 $t_{df=n-1}$ N	3.03 1.240 41	15.81 3.519^{o} 41	-12.78 1.968^{f} 41	2.73 0.550 31	16.25 3.031^{o} 31	-13.51 1.706^{f} 31
	Return on equally weighted index is used as proxy for market return.					
-1, 0 $t_{df=n-1}$ N	1.70 0.964 41	5.23 3.652^{o} 41	-3.54 1.519^{t} 41	2.48 1.143 31	5.79 3.171^{o} 31	-3.32 1.129 31
-1, 1 $t_{df=n-1}$ N	3.32 1.814^{f} 41	11.55 5.331^{o} 41	-8.23 2.944^{o} 41	3.86 1.727^{f} 31	13.24 4.799^{o} 31	-9.38 2.643^{o} 31
-5, 5 $t_{df=n-1}$ N	3.54 1.369^{t} 41	13.63 5.248^{o} 41	-10.09 2.472^{o} 41	4.39 1.321^{t} 31	14.62 4.507^{o} 31	-10.23 1.953^{f} 31
-15, 15 $t_{df=n-1}$ N	3.54 0.949 41	17.64 3.655^{o} 41	-14.10 2.08^{f} 41	2.64 0.582 31	16.18 2.833^{o} 31	-13.54 1.672^{f} 31

4.2. Long-term Wealth Effects

In addition to the short-term stock effect surrounding the announcement of acquisitions of the U.S. targets by the Japanese bidders, we also need to look at the long-term performance of targets and their bidders due to the declared long-term focus of the Japanese managers. Since it is hypothesized that Japanese managers pursue objectives other than stock price maximization,

namely earnings sufficient to meet debt obligations, we need to look both at the stock and accounting long-term performance measures.

Since there were only 41 Type 1 and Type 2 acquisitions that satisfied dual, longitudinal and matching data requirement, we used shorter term to replace the missing long-term performance measures (1 year return replaced missing 3 year return and 3 year return replaced missing 5 year returns), in order to preserve the already small sample size.

Long-term stock performance for targets and bidders measured as buy-and-hold abnormal stock returns for one, three and five years before and after the acquisitions are presented in Panel A of Table 5. Examination of the long-term buy-and-hold stock returns (*BHAR*) to shareholders of targets in Panel A reveals that the targets of keiretsu members and their matched Type 2 controls performed better than all targets together, both before and following the acquisitions. The *BHAR*s for both Type 1 and Type 2 targets were positive and significantly different from zero for one year before and three and five years following the completion of the purchase. The difference between *BHAR*s for Type 1 and Type 2 targets were statistically indistinguishable for all periods except for five years prior to the acquisitions when they were significantly bigger for Type 1 targets.

Similar to the targets' results, the bidders belonging to the keiretsu and their matched Type 2 acquirers, for all but a few of periods, had better *BHAR*s than all bidders together. While the sign of the differences between Type 1 and Type 2 targets' *BHARs* changed several times and was sometimes opposite for the entire sample and the sample of keiretsu targets, the differences between Type 1 and Type 2 bidders' *BHAR*s were more homogenous. For the entire sample and the sample of keiretsu bidders these differences were always of the same sign. Positive differences between bidders' *BHARs* for five and three years prior to the acquisition were

Table 5: Long-term Buy-and-Hold Abnormal Stock Returns

Panel A: Individual Targets and Bidders of Matched Completed Acquisitions

(Type 1 and 2 are U.S. targets of Japanese and U.S. bidders; paired diff. = Type 1 – Type 2; targets of keiretsu acquisitions and their matched controls are Italicized; short-term BHAR replace missing long-term BHAR; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Performance Measure	Type	Obs	Mean	Med	Min	Max	P > |t|	Paired Differences			
								Obs	Mean	STD	$t_{df=n-1}$
Targets' BHAR (5 years prior to the effective date)	1	41	3.19	-35.27	-252.17	578.01	0.119	41	77.32	198.02	2.500^{o}
		31	*6.67*	*-33.90*	*-196.08*	*536.82*	*0.005*	*31*	*57.34*	*311.55*	*1.025*
	2	41	-74.13	-63.86	-341.62	499.64	0.488				
		31	*-50.67*	*-31.71*	*-341.62*	*499.64*	*0.492*				
Targets' BHAR (3 years prior to the effective date)	1	41	-21.51	-31.28	-323.06	291.87	0.484	41	19.08	114.62	1.066
		31	*-23.69*	*-33.96*	*-198.28*	*186.92*	*0.491*	*31*	*9.38*	*91.18*	*0.573*
	2	41	-40.59	-32.44	-233.52	120.54	0.483				
		31	*-33.07*	*25.21*	*-233.52*	*120.54*	*0.499*				
Targets' BHAR (1 year prior to the effective date)	1	41	1.15	-1.89	-118.67	107.03	0.017	41	2.16	61.75	0.224
		31	*4.55*	*1.45*	*-34.24*	*107.03*	*0.000*	*31*	*-0.52*	*42.58*	*0.068*
	2	41	-1.02	-4.23	-45.76	187.23	0.498				
		31	*5.07*	*-1.91*	*-44.77*	*187.23*	*0.000*				
Targets' BHAR (1 year following the effective date)	1	41	-12.53	-34.34	-146.32	270.58	0.489	41	3.05	98.29	0.199
		31	*-3.68*	*-30.38*	*-146.32*	*270.58*	*0.495*	*31*	*3.75*	*118.85*	*0.176*
	2	41	-15.40	-19.97	-80.82	94.54	0.504				
		31	*-7.43*	*-9.59*	*-84.71*	94.54	*0.501*				
Targets' BHAR (3 years following the effective date)	1	41	-6.18	-44.54	-183.89	843.74	0.479	41	-8.53	174.06	0.314
		31	*14.35*	*-31.03*	*-132.56*	*843.74*	*0.000*	*31*	*4.78*	*356.62*	*0.075*
	2	41	2.35	-23.12	-199.23	278.79	0.079				
		31	*9.58*	*-13.41*	*-108.86*	*278.79*	*0.000*				
Targets' BHAR (5 years following the effective date)	1	41	-15.27	-38.79	-304.99	440.52	0.451	41	-65.12	422.68	0.986
		31	*15.53*	-38.33	*-224.39*	*440.52*	*0.000*	*31*	*-67.00*	*2305.14*	*0.162*
	2	41	49.84	-33.69	-194.13	2237.46	0.000				
		31	*82.52*	*-21.73*	*-170.82*	*2237.46*	*0.000*				
Bidders' BHAR (5 years prior to the effective date)	1	41	-30.99	-18.32	-476.32	368.90	0.510	41	3.12	230.09	0.087
		31	*-17.22*	*-21.90*	*-221.22*	*368.90*	*0.504*	*31*	*6.45*	*608.06*	*0.059*
	2	41	-34.10	-13.05	-687.15	802.80	0.476				
		31	*-23.67*	*-5.17*	*-687.15*	*802.80*	*0.497*				
Bidders' BHAR (3 years prior to the effective date)	1	41	-7.40	-19.33	-365.36	362.11	0.510	41	9.33	122.36	0.488
		31	*2.88*	*-21.31*	*-177.01*	*362.11*	*0.000*	*31*	*15.99*	*162.16*	*0.549*
	2	41	-16.73	-4.60	-250.45	193.45	0.471				
		31	*-13.12*	*-0.12*	*-250.45*	*193.45*	*0.505*				
Bidders' BHAR (1 year prior to the effective date)	1	41	-5.60	-1.45	-170.50	41.13	0.511	41	-12.99	44.44	1.871^{f}
		31	*-0.96*	*3.26*	*-51.32*	*41.13*	*0.502*	*31*	*-10.92*	*17.92*	*3.393^{o}*
	2	41	7.38	1.93	-38.42	120.30	0.000				
		31	*9.96*	*1.67*	-37.60	*120.30*	*0.000*				
Bidders' BHAR (1 year following the effective date)	1	41	-8.78	-8.47	-81.65	63.63	0.493	41	-2.21	37.50	0.377
		31	-8.76	*-8.21*	*-81.65*	*63.63*	*0.513*	*31*	*-0.56*	*16.10*	*0.192*
	2	41	-6.57	-3.26	-100.12	82.21	0.507				
		31	*-8.20*	*-4.04*	*-100.12*	*82.21*	*0.515*				
Bidders' BHAR (3 years following the effective date)	1	41	-10.73	-6.85	-255.41	69.32	0.486	41	-16.04	83.98	1.223
		31	*-10.84*	*-7.33*	*-255.41*	*69.32*	*0.500*	*31*	*-13.48*	*71.54*	*1.049*
	2	41	5.30	-19.50	-167.95	225.12	0.001				
		31	*2.64*	*-20.78*	*-167.95*	*225.12*	*0.060*				
Bidders' BHAR (5 years following the effective date)	1	41	-18.35	-12.35	-471.86	188.72	0.493	41	-58.62	242.17	1.550^{t}
		31	*-26.23*	*-13.19*	*-471.86*	*188.72*	*0.516*	*31*	*-76.37*	*739.81*	*0.575*
	2	41	40.27	-8.13	-226.96	995.96	0.000				
		31	*50.15*	*-8.13*	*-226.96*	*995.96*	*0.000*				

followed by negative differences for one year before through five years after the purchase. The *BHAR*s differences between Type 1 and Type 2 bidders were significantly negative only for one year before and five year following the purchase.

Table 5: Long-term Buy-and-Hold Abnormal Stock Returns

Panel B: Combined Targets and Bidders of Matched Completed Acquisitions

(Type 1 and 2 are Japanese/U.S. and U.S./U.S. bidder/target pairs; paired diff. = Type 1 – Type 2; keiretsu bidder/target pairs and their matched controls are Italicized; short-term BHAR replace missing long-term BHAR; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Performance Measure	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Combined BHAR (5 years prior to the effective date)	1	41	-27.79	-53.72	-487.47	514.92	194.27	0.916				
		31	*-10.55*	*-56.18*	*-356.19*	*514.02*	*374.89*	*0.157*	41	80.44	306.79	1.679^{t}
	2	41	-108.23	-124.31	-1028.77	835.15	278.12	2.492^{o}	*31*	*63.79*	*1093.02*	*0.325*
		31	*-74.34*	*-51.39*	*-1028.77*	*835.15*	*969.56*	*0.427*				
Combined BHAR (3 years prior to the effective date)	1	41	-28.91	-47.69	-382.21	460.57	146.28	1.266				
		31	*-20.82*	*-55.12*	*-337.36*	460.57	208.08	*0.557*	41	28.41	168.93	1.077
	2	41	-57.32	-48.31	-483.97	167.67	108.89	3.371^{o}	*31*	*25.37*	*313.78*	*0.450*
		31	*-46.19*	*-17.63*	*-483.97*	*167.67*	*132.61*	1.939^{f}				
Combined BHAR (1 year prior to the effective date)	1	41	-4.46	-5.09	-184.91	123.70	52.83	0.540				
		31	*3.59*	*2.43*	*-68.92*	*123.70*	*19.26*	*1.037*	41	-10.83	84.25	0.823
	2	41	6.37	-12.91	-56.48	284.42	63.26	0.645	*31*	*-11.44*	*75.07*	*0.848*
		31	*15.02*	*-6.45*	*-56.48*	*284.42*	*48.49*	1.725^{f}				
Combined BHAR (1 year following the effective date)	1	41	-21.13	-42.46	-157.42	271.32	92.95	1.456^{t}				
		31	*-12.44*	*-38.84*	*-157.42*	*271.32*	*104.96*	*0.660*	41	-0.84	110.60	0.049
	2	41	-21.97	-36.24	-138.86	140.07	63.57	2.213^{t}	*31*	*3.19*	*152.34*	*0.117*
		31	*-15.64*	*-26.67*	*-138.86*	*140.07*	*46.97*	1.854^{f}				
Combined BHAR (3 years following the effective date)	1	41	-16.92	-56.74	-258.41	811.62	170.43	0.636				
		31	*3.51*	*-28.31*	*-258.41*	*811.62*	*351.59*	*0.056*	41	-24.57	207.66	0.758
	2	41	7.65	16.44	-272.09	503.92	150.09	0.326	*31*	*-8.70*	*537.87*	*0.090*
		31	*12.22*	*-4.12*	*-272.09*	*503.92*	*263.43*	*0.258*				
Combined BHAR (5 years following the effective date)	1	41	-33.62	-60.44	-510.65	500.39	199.18	1.081				
		31	*-10.70*	*-44.79*	*-510.65*	*500.39*	*426.19*	*0.140*	41	-123.74	503.75	1.573^{t}
	2	41	90.12	4.57	-349.24	2186.73	450.15	1.282	*31*	*-143.37*	*3229.09*	*0.247*
		31	*132.67*	*27.47*	*-349.24*	*2186.73*	*2571.32*	*0.287*				

The *BHAR*s for Type 1 and Type 2 combined target/bidder pairs associated with keiretsu membership, in Panel B of Table 5, dominated all target/bidder pairs even more than was the case for just targets or just bidders. The difference between Type 1 and Type 2 *BHAR*s follows a reverse pattern similar to the one observed for Type 1 and Type 2 bidders. Positive differences for five and three years before the acquisitions reverse to negative for one year before through

five years after the purchase. However, the positive and negative differences are significant only for five years before and five years following the acquisition.

The absence of a significantly better performance for Type 1 targets and/or Type 1 combined target/bidder pairs is inconsistent with the expected effects of Japanese Governance Hypothesis and suggests that the characteristics unique to the Japanese governance are more likely to lead to agency problem than to superior performance. However, again we cannot make such conclusion until the long-term performance based on accounting measures is analyzed.

Accounting based performance measures for targets and bidders, defined as abnormal returns on assets (*AROA*), are presented in Panel A of Table 6. While the only significant *AROA* for Type 1 targets was negative and occurred one year before the acquisition, the Type 2 targets had significant and positive *AROA*s for a year prior to and one and five years following the purchase. The superiority in performance of keiretsu targets and their Type 2 matched controls over all targets was not as consistent as in the case of the stock based performance measures. Positive differences between Type 1 and Type 2 targets' *AROA*s for five and three years before the acquisitions followed by negative differences for one year before through five years after the acquisition were more uniformly distributed than in the case of *BHAR*s. The difference was again significant in only one year, but this time it was negative and in the first instead of the fifth year before the purchase as in the case of *BHAR*s.

Positive Type 1 and Type 2 bidders' *AROA*s for five years before through one year after the purchase followed by negative *AROA*s for three and five year after the acquisitions were again more uniformly distributed than when *BHAR*s were used to measure performance. Instead of reversing differences between Type 1 and Type 2 *BHAR*s from positive for five and three years before to negative for one year before through five years following the acquisitions, the

Table 6: Long-Term Abnormal Returns on Assets

Panel A: Individual Targets and Bidders of Matched Completed Acquisitions

(Type 1 and 2 are U.S. targets of Japanese and U.S. bidders; paired diff. = Type 1 – Type 2; targets of keiretsu acquisitions and their matched controls are Italicized; ROA % = operating income / operating assets; short-term ROA replace missing long-term ROA; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Performance Measure	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Targets' AROA (5 years prior to the effective date)	1	41	-1.70	1.45	-67.28	39.65	18.77	0.580				
		31	*-2.03*	*-0.63*	*-67.28*	*39.65*	*18.07*	*0.624*	41	1.78	35.36	0.322
	2	41	-3.48	-5.54	-95.10	88.54	26.24	0.849	*31*	*2.23*	*38.08*	*0.326*
		31	*-4.26*	*-5.54*	*-95.10*	*88.54*	*29.40*	*0.806*				
Targets' AROA (3 years prior to the effective date)	1	41	1.04	1.61	-67.28	45.08	18.48	0.362				
		31	*-2.00*	*-0.53*	*-67.28*	*45.08*	*19.72*	*0.564*	41	2.66	24.33	0.700
	2	41	-1.62	0.14	-45.23	37.39	15.67	0.661	*31*	*-0.58*	*26.13*	*0.124*
		31	*-1.42*	*0.14*	*-45.23*	*37.39*	*15.67*	*0.503*				
Targets' AROA (1 year prior to the effective date)	1	41	-2.76	-0.24	-67.28	24.22	12.35	1.433^{t}				
		31	*-2.61*	*-0.07*	*-67.28*	*24.22*	*13.82*	*1.051*	41	-3.05	12.94	1.511^{t}
	2	41	0.29	-0.05	-9.04	13.21	2.99	0.622	*31*	-3.38	*14.34*	*1.313^{t}*
		31	*0.77*	*0.04*	*-3.73*	*13.21*	*2.88*	*1.496^{t}*				
Targets' AROA (1 year following the effective date)	1	39	0.82	-3.33	-31.52	42.71	16.12	0.317				
		29	*0.63*	*-3.52*	*-20.86*	*33.12*	*12.86*	*0.262*	38	-3.00	18.38	1.006
	2	40	4.13	2.38	-39.01	54.19	16.61	1.572^{t}	*28*	*-3.08*	*18.64*	*0.873*
		30	*2.91*	*1.91*	*-18.11*	*54.19*	*14.23*	*1.120*				
Targets' AROA (3 years following the effective date)	1	39	-1.71	-3.39	-72.76	86.23	27.14	0.394				
		29	*-2.49*	*-0.60*	*-72.76*	*43.31*	*24.74*	*0.542*	38	-3.20	28.02	0.703
	2	40	1.73	2.50	-57.47	47.78	18.46	0.593	*28*	*-2.88*	*25.76*	*0.591*
		30	*0.76*	*1.78*	*-57.47*	47.78	*19.06*	*0.219*				
Targets' AROA (5 years following the effective date)	1	39	-3.36	-0.60	-74.83	66.52	25.09	0.835				
		29	*-1.84*	*-0.60*	*-45.04*	*28.85*	*16.69*	*0.594*	38	-7.61	39.95	1.175
	2	40	5.25	3.58	-93.66	70.82	25.09	1.322^{t}	*28*	*-7.28*	*37.10*	*1.038*
		30	*6.73*	*3.58*	*-93.66*	*70.82*	*27.22*	*1.354^{t}*				
Bidders' AROA (5 years prior to the effective date)	1	41	0.47	-0.43	-12.07	14.61	5.38	0.563				
		31	*0.04*	*-0.49*	*-12.07*	*13.69*	*5.06*	*0.042*	41	-3.26	15.43	1.353^{t}
	2	41	3.73	0.86	-14.53	42.38	13.72	1.742^{t}	*31*	*-2.29*	*14.78*	*0.861*
		31	*2.32*	*-0.08*	*-14.53*	*42.38*	*12.81*	*1.010*				
Bidders' AROA (3 years prior to the effective date)	1	41	0.52	-0.22	-6.29	11.86	3.91	0.846				
		31	*0.16*	*-0.29*	*-6.29*	*10.94*	*3.84*	*0.227*	41	-3.48	11.88	1.876^{f}
	2	41	4.00	2.46	-18.92	43.96	12.04	2.125^{f}	*31*	*-4.02*	*13.19*	*1.697^{f}*
		31	*4.18*	*1.12*	*-18.92*	*43.96*	*13.59*	*1.711^{f}*				
Bidders' AROA (1 year prior to the effective date)	1	41	0.04	0.00	-0.41	0.80	0.23	1.133				
		31	*0.06*	*0.01*	*-0.41*	*0.80*	*0.25*	*1.273*	41	-0.11	1.63	0.415
	2	41	0.15	0.00	-3.98	7.49	1.61	0.581	*31*	*-0.21*	*1.69*	*0.676*
		31	*0.26*	*0.00*	*-3.47*	*7.49*	*1.66*	*0.883*				
Bidders' AROA (1 year following the effective date)	1	41	0.49	0.39	-6.17	6.84	2.32	1.359^{t}				
		31	*0.69*	*0.39*	*-6.17*	*6.84*	*2.43*	*1.582^{t}*	41	-0.87	12.71	0.423
	2	38	1.40	0.26	-35.30	31.77	12.49	0.690	*31*	*-1.94*	*11.32*	*0.907*
		28	*2.70*	*0.41*	*-11.72*	*31.77*	*11.15*	*1.280*				
Bidders' AROA (3 years following the effective date)	1	41	-0.81	-0.09	-28.69	5.52	5.41	0.955				
		31	*-0.59*	*0.60*	*-28.69*	*5.52*	*5.83*	*0.567*	38	0.73	16.41	0.276
	2	38	-0.88	-4.18	-26.71	70.06	16.69	0.325	*28*	*-1.57*	*17.88*	*0.466*
		28	*1.90*	*-2.26*	*-26.71*	*70.06*	*18.27*	*0.550*				
Bidders' AROA (5 years following the effective date)	1	41	-1.08	-0.18	-19.04	3.54	4.00	1.725^{t}				
		31	*-0.79*	*-0.14*	*-19.04*	*3.12*	*3.97*	*1.100*	38	0.84	18.35	0.284
	2	38	-1.56	-2.79	-25.74	70.06	18.41	0.523	*28*	*-2.26*	*19.15*	*0.624*
		28	*1.99*	*-0.15*	*-25.74*	*70.06*	*19.34*	*0.545*				

differences between Type 1 and Type 2 *AROA*s are consistently negative, but significantly different from zero only for five and three years before the purchase.

The *AROA*s for Type 1 and Type 2 combined target/bidder pairs and the difference between Type 1 and Type 2 combined target/bidder pairs, in Table 6 Panel B, were significant only for one year before and one year after the acquisition. The difference between *AROA*s for Type 1 and Type 2 combined target/bidder pairs for all but three years prior to the acquisition were negative.

The results for the performance measures based on accounting data, that both targets and combined target/bidder pairs of acquisitions involving Japanese bidders had worse long-term performance than their counter-parts from domestic purchases, provide even more homogeneous and stronger evidence against the hypothesis that the Japanese governance system dominates the one in the U.S.

Since test statistics using time differences in long-term abnormal accounting performance measures are more powerful than those using levels (due to the fact that if a firm had an unusually high pre-event return on assets relative to the benchmark, and continues to earn above-average post-event profit, its performance might be interpreted as superior to that expected in absence of an event), the performance measured as a difference between abnormal returns on assets (*DAROA*) are presented in Table 7.

Similar to the pattern observed for the *BHAR*s and *AROA*s, the *DAROA*s for targets of keiretsu bidders, in Panel A of Table 7, were worse than for all Type 1 targets for every year except for the first year after the acquisition. Performance for both Type 1 and Type 2 targets improved relative to the previous year for five year before through one year after the acquisition and was worse than the year before for three and five years after the purchase. The differences

between *DAROA*s for Type 1 and Type 2 targets were negative and significant for five years before and five years after the acquisition, while the positive differences for three years before through three years after the purchase were not significantly different from zero.

The *DAROA*s for keiretsu bidders and their Type 2 matched bidders were better than for all Type 1 and Type 2 bidders in all but one year for each type of bidders. The difference between *DAROA*s for Type 1 and Type 2 bidders was negative and significant for five year before the acquisition. While the differences between *DAROA*s for Type 1 and Type 2 bidders were positive for all other years, they were significantly different from zero only for one year before and three years after the purchase.

Table 6: Long-term Abnormal Returns on Assets
Panel B: Combined Targets and Bidders of Matched Completed Acquisitions

(Type 1 and 2 Japanese/U.S. and U.S./U.S. bidder/target pairs; paired diff. = Type 1 – Type 2; keiretsu bidder/target pairs and their matched controls are Italicized; ROA % = operating income / operating assets; short-term ROA replace missing long-term ROA; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Performance Measure	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Combined AROA (5 years prior to the effective date)	1	41	-1.23	1.67	-71.24	37.67	19.71	0.399	41	-1.48	36.48	0.260
		31	*-1.99*	*0.48*	*-71.24*	*37.67*	*18.84*	*0.588*	*31*	*-0.06*	*38.46*	*0.008*
	2	41	0.25	-3.63	-81.53	90.03	29.04	0.056				
		31	*-1.93*	*-2.42*	*-81.53*	*90.03*	*30.32*	*0.355*				
Combined AROA (3 years prior to the effective date)	1	41	1.56	0.13	-68.29	44.85	19.78	0.505	41	1.09	15.39	0.367
		31	*-1.84*	*-1.26*	*-68.29*	*44.85*	*20.78*	*0.494*	*31*	*0.23*	*15.96*	*0.069*
	2	41	2.38	1.49	-38.81	39.10	15.70	0.971				
		31	*2.76*	*1.49*	*-21.31*	*39.10*	*14.74*	*1.042*				
Combined AROA (1 year prior to the effective date)	1	41	-2.72	-0.11	-67.56	24.27	12.40	1.405^{t}	41	-3.16	12.99	1.557^{t}
		31	*-2.55*	*-0.09*	*-67.56*	*24.27*	*13.89*	*1.023*	*31*	-3.59	*14.39*	*1.388^{t}*
	2	41	0.44	0.12	-9.13	13.02	3.31	0.846				
		31	*1.04*	*0.38*	*-3.69*	*13.02*	*3.22*	*1.789^{f}*				
Combined AROA (1 year following the effective date)	1	39	1.36	0.72	-30.83	44.69	16.71	0.510	35	-4.45	21.89	1.202
		29	*0.15*	*-1.68*	*-19.14*	*33.18*	*13.42*	*0.061*	*25*	*-5.96*	*22.04*	*1.352^{t}*
	2	37	5.35	7.50	-34.90	57.64	19.72	1.649^{t}				
		27	*5.27*	*7.50*	*-21.45*	*56.05*	*17.64*	*1.554^{t}*				
Combined AROA (3 years following the effective date)	1	39	-2.55	-3.90	-74.41	84.03	28.03	0.568	35	-0.82	31.54	0.153
		29	*-3.11*	*-0.85*	*-74.41*	*43.91*	*26.04*	*0.642*	*25*	*-2.38*	*29.76*	*0.400*
	2	37	-0.98	3.36	-84.18	52.22	23.81	0.250				
		27	*0.15*	*3.36*	*-84.18*	*52.22*	*26.03*	*0.030*				
Combined AROA (5 years following the effective date)	1	39	-4.56	-3.05	-77.21	62.06	25.21	1.130	35	-4.09	39.65	0.610
		29	*-2.78*	*-3.05*	*-45.42*	*27.49*	*16.52*	*0.906*	*25*	*-6.12*	*37.10*	*0.825*
	2	37	0.47	-3.48	-99.20	69.97	27.29	0.104				
		27	*4.61*	*3.32*	*-99.20*	*69.97*	*29.62*	*0.808*				

Table 7: Differences in Long-term Abnormal Returns on Assets

Panel A: Targets of Matched Completed Acquisitions

(Type 1 and 2 are U.S. targets of Japanese and U.S. bidders; paired diff. = Type 1 – Type 2; targets of keiretsu and their matched controls are Italicized; ROA % = operating income / operating assets; short-term ROA replace missing long-term ROA; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Performance Measure	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Targets' DAROA (5 years prior to the effective date)	1	39	0.09	-0.77	-70.12	55.85	21.01	0.028	38	-5.79	26.64	1.340^{t}
		29	*-1.18*	*-0.77*	*-70.12*	*36.72*	*20.27*	*0.313*	*28*	*-5.28*	*23.05*	*1.211*
	2	40	5.94	3.24	-37.46	77.59	19.76	1.901^{f}				
		30	*4.24*	*2.27*	*-37.46*	*64.24*	*17.78*	*1.308*				
Targets' DAROA (3 years prior to the effective date)	1	39	4.12	3.69	-70.12	50.32	17.79	1.445^{t}	38	1.17	26.49	0.272
		29	*1.45*	*3.07*	*-70.12*	*27.73*	*17.63*	*0.443*	*28*	*-1.14*	*25.55*	*0.236*
	2	40	2.92	4.30	-45.29	72.48	18.93	0.975				
		30	*2.48*	*2.39*	*-37.46*	*72.48*	*19.10*	*0.712*				
Targets' DAROA (1 year prior to the effective date)	1	39	1.12	-2.23	-35.72	69.21	20.71	0.338	38	0.45	24.33	0.113
		29	*5.51*	*2.58*	*-17.90*	*69.21*	*20.88*	*1.421*^{t}	*28*	*3.43*	*26.93*	*0.673*
	2	40	0.49	-2.19	-37.46	27.17	13.35	0.234				
		30	*1.90*	*0.27*	*-37.46*	*27.17*	*13.39*	*0.776*				
Targets' DAROA (1 year following the effective date)	1	39	4.78	0.47	-29.95	51.72	18.44	1.619^{t}	38	1.38	22.58	0.375
		29	*3.59*	*0.38*	*-20.84*	*47.76*	*15.54*	*1.243*	*28*	*2.13*	*23.18*	*0.486*
	2	40	3.83	2.15	-38.97	61.47	17.62	1.374^{t}				
		30	*2.11*	*0.67*	*-18.14*	*54.24*	*14.50*	*0.797*				
Targets' DAROA (3 years following the effective date)	1	39	-1.12	0.72	-46.48	52.05	18.17	0.385	38	3.07	26.34	0.717
		29	*-2.68*	*-1.28*	*-46.48*	*39.17*	*17.19*	*0.840*	*28*	*1.55*	*21.52*	*0.382*
	2	40	-3.77	-2.13	-49.99	13.72	15.27	1.562^{t}				
		30	*-3.73*	*-2.13*	*-48.35*	*13.72*	*13.47*	*1.517*^{t}				
Targets' DAROA (5 years following the effective date)	1	39	-4.22	-3.45	-64.51	54.22	19.90	1.323^{t}	38	-5.58	32.51	1.058
		29	*-7.55*	*-3.65*	*-64.51*	*13.77*	*15.83*	*2.570*^{o}	*28*	*-9.43*	*31.54*	*1.582*^{t}
	2	40	2.52	1.84	-70.47	96.18	22.52	0.709				
		30	*3.28*	*1.84*	*-70.47*	*96.18*	*25.18*	*0.713*				
Bidders' DAROA (5 years prior to the effective date)	1	41	-0.07	0.08	-10.09	5.42	3.05	0.144	40	-2.63	10.95	1.518^{t}
		31	*0.26*	*0.02*	*-7.51*	*5.42*	*2.57*	*0.557*	*31*	*-3.19*	*11.71*	*1.518*^{t}
	2	40	2.48	0.71	-13.53	49.11	10.53	1.490^{t}				
		31	*3.45*	*0.57*	*-13.53*	*49.11*	*11.48*	*1.673*^{t}				
Bidders' DAROA (3 years prior to the effective date)	1	41	-0.03	0.05	-5.70	6.17	2.30	0.077	40	1.72	12.23	0.888
		31	*0.16*	*0.04*	*-4.05*	*6.17*	*1.93*	*0.455*	*31*	*1.91*	*13.17*	*0.806*
	2	40	-1.74	-0.57	-40.17	41.39	11.90	0.926				
		31	*-1.75*	*-0.08*	*-40.17*	*41.39*	*13.05*	*0.746*				
Bidders' DAROA (1 year prior to the effective date)	1	41	0.90	0.49	-10.54	8.18	3.31	1.739^{f}	40	2.95	12.64	1.477^{t}
		31	*1.01*	*0.49*	*-10.54*	*8.18*	*3.54*	*1.661*^{t}	*31*	*3.32*	*14.14*	*1.307*
	2	40	-2.07	-1.51	-56.27	18.37	11.17	1.170				
		31	*-2.26*	*-0.19*	*-56.27*	*18.37*	*12.57*	*1.002*				
Bidders' DAROA (1 year following the effective date)	1	41	0.45	0.29	-6.23	6.85	2.26	1.274	38	0.11	13.90	0.049
		31	*0.63*	*0.29*	*-6.23*	*6.85*	*2.38*	*1.482*^{t}	*28*	*-1.28*	*12.49*	*0.540*
	2	38	0.38	0.11	-34.42	32.00	13.69	0.170				
		28	*1.98*	*0.38*	*-13.85*	*32.00*	*12.37*	*0.847*				
Bidders' DAROA (3 years following the effective date)	1	41	-0.89	-0.03	-26.59	3.84	4.48	1.272	38	3.58	14.34	1.537^{t}
		31	*-0.91*	*-0.03*	*-26.59*	*3.84*	*4.99*	*1.012*	*28*	*1.54*	*13.05*	*0.625*
	2	38	-3.85	-0.50	-46.15	40.56	14.04	1.690^{f}				
		28	*-1.61*	*0.38*	*-30.19*	*40.56*	*12.73*	*0.671*				
Bidders' DAROA (5 years following the effective date)	1	41	-0.18	-0.09	-8.25	7.98	2.52	0.444	38	1.71	11.90	0.885
		31	*-0.03*	*0.01*	*-8.25*	*7.98*	*2.63*	*0.068*	*28*	*1.28*	*13.16*	*0.513*
	2	38	-2.00	0.05	-45.40	24.92	11.75	1.050				
		28	*-1.45*	*0.66*	*-45.40*	*24.92*	*12.93*	0.595				

The differences between combined *DAROA*s for Type 1 and Type 2 target/bidder pairs, in Panel B of Table 7, were negative and significant for five years before and five years after the acquisition. Although the differences between combined *DAROA*s for Type 1 and Type 2 target/bidder pairs were positive for all other years, they were significantly different from zero only for one year before and three years after the purchase.

Table 7: Differences in Long-term Abnormal Returns on Assets

Panel B: Combined Targets and Bidders of Matched Completed Acquisitions

(Type 1 and 2 Japanese/U.S. and U.S./U.S. bidder/target pairs; paired diff. = Type 1 – Type 2; keiretsu bidder/target pairs and their matched controls are Italicized; ROA % = operating income / operating assets; short-term ROA replace missing long-term ROA; superscript o, f and t denote the statistical significance at 1%, 5% and 10% level)

Performance Measure	Type	Obs	Mean	Med	Min	Max	STD	$t_{df=n-1}$	Paired Differences			
									Obs	Mean	STD	$t_{df=n-1}$
Combined DAROA (5 years prior to the effective date)	1	39	-0.01	-1.07	-65.92	50.08	19.83	0.003	37	-7.76	25.97	1.819^{f}
		29	*-0.95*	*-1.00*	*-65.92*	*50.08*	*19.64*	*0.259*	*28*	*-8.69*	*24.55*	*1.870^{f}*
	2	39	8.48	4.55	-44.73	68.01	21.07	2.501^{o}				
		30	*7.74*	*4.55*	*-44.73*	*68.01*	*21.04*	*2.016^{f}*				
Combined DAROA (3 years prior to the effective date)	1	39	4.08	4.07	-74.17	44.63	18.01	1.416t	37	0.91	26.72	0.208
		29	*1.61*	*1.81*	*-74.17*	*28.24*	*18.31*	*0.474*	*28*	*0.51*	*28.52*	*0.095*
	2	39	2.49	6.90	-45.93	65.25	20.71	0.750				
		30	*0.83*	*2.91*	*-45.93*	*65.25*	*22.78*	*0.199*				
Combined DAROA (1 year prior to the effective date)	1	39	1.85	-2.19	-32.91	72.33	20.77	0.556	37	3.26	24.11	0.822
		29	*6.35*	*2.19*	*-17.28*	*72.33*	*21.01*	*1.628^{t}*	*28*	6.61	*26.27*	*1.331^{t}*
	2	39	-1.96	-2.78	-37.94	27.48	12.99	0.943				
		30	*-0.51*	*-1.15*	*-37.94*	*21.06*	*12.34*	*0.226*				
Combined DAROA (1 year following the effective date)	1	39	5.28	2.31	-29.26	53.78	19.03	1.732^{t}	35	0.59	26.05	0.134
		29	*4.29*	*2.31*	*-20.60*	*48.42*	*16.01*	*1.444^{t}*	*25*	*-0.48*	*26.07*	*0.091*
	2	38	4.31	-0.13	-34.65	66.77	20.87	1.258				
		28	*4.11*	*0.49*	*-21.03*	*56.39*	*18.37*	*1.162*				
Combined DAROA (3 years following the effective date)	1	39	-2.08	0.57	-46.30	48.62	19.28	0.672	35	8.57	30.13	1.683^{t}
		29	*-3.68*	*-0.31*	*-46.30*	*39.69*	*18.65*	*1.062*	*25*	*5.37*	*23.04*	*1.165*
	2	38	-9.21	-4.43	-68.40	30.55	20.65	2.713^{o}				
		28	*-7.44*	*-4.59*	*-48.30*	*23.91*	*23.91*	*2.262^{f}*				
Combined DAROA (5 years following the effective date)	1	39	-4.41	-4.20	-64.50	53.30	20.25	1.361^{t}	35	-4.77	31.55	0.894
		29	*-7.60*	*-4.69*	*-64.50*	*19.41*	*16.35*	*2.504^{o}*	*25*	*-9.92*	*29.98*	*1.654^{t}*
	2	38	0.90	0.60	-69.59	92.09	22.07	0.247				
		28	*2.44*	*0.60*	*-69.59*	*92.09*	*25.22*	*0.502*				

Since *DAROA* represents the change in *AROA* between two subsequent years, the opposite sign for *DAROA* and *AROA* does not imply contradictory results, but that the returns on assets for the Type 1 and Type 2 firms and the returns on assets for their benchmark firms had

different annual rates of change. For example, let's look at the opposite signs of combined target/bidder *AROA*s and *DAROA*s for one year before the acquisition in Panels A of Tables 6 and 7. The negative Type 1 and positive Type 2 *AROA*s, which led to a significant negative difference between Type 1 and Type 2 *AROA*s, indicates that the combined Type 1 performance was worse than the combined Type 2 performance. The positive Type 1 and negative Type 2 *DAROA*s, which resulted in a significant positive difference between Type 1 and Type 2 *DAROA*s does not mean that the combined Type 1 performance suddenly became better than the combined Type 2 performance. Instead it shows that annual rate of change for Type 1 and Type 2 combined returns on assets relative to their benchmarks were positive and negative, respectively, but does not necessary imply that the improved Type 1 and poorer Type 2 combined performance was sufficient to make the Type 1 target/bidder pairs perform better than Type 2 pairs. Hence, interpretation of *DAROA*s cannot be made without considering the performance based on *AROA*s.

Although the way *DAROA* is defined, as a difference in *AROA* from subsequent years, makes the performance measured using *DAROA*s harder to interpret and sometimes different from the observed performance based on *BHAR*s and *AROA*s, the more powerful statistics for the *DAROA*s (there were up to twice as many years in which performance was different from zero at statistically significant levels relative to the performance measured using *BHAR*s or *AROA*s) are very important for the following analysis of the drivers behind the observed performances.

5. DETERMINANTS OF TARGETS' LONG-TERM WEALTH GAINS

Based on the literature that explains factors affecting a firm's performance and data availability for these factors, targets' and bidders' characteristics hypothesized to be important for targets' performance were grouped into Bidder's Governance, Japanese Governance, Bidder's Operations and Control Variables. Our basic hypothesized relations between the targets' long-term post-acquisition performance and the bidders' and targets' characteristics take the following form:

Targets' long-term post-acquisition performance = a0

+ **Bidder's Governance Variables**
(+ a1*bidder leverage – a2*bidder free cash flow + a3*bidder block holding + a4*toe-hold)

+ **Japanese Governance Variables**
(+ a5*keiretsu membership + a6*mochiai + a7*main bank ties)

+ **Bidder's Operations Variables**
(+ a8*bidder performance + a9*bidder size + a10*related acquisition
+ a11*bidder free cash flow – a12* bidder leverage + a13*dollar appreciation)

+ Control Variables
($^{+}$/- a14*target size – a15*target growth opportunities $^{+}$/- a16*target free cash flow
+ a17*target leverage + a18*multiple bidders + a19*anti-takeover defense
+ a20*negative target managers' attitude + a21*cash payment + a22*nineties)

Due to the fact that none of the Type 1 or Type 2 matched targets was pursued by multiple bidders and none had anti-takeover defenses in place, as reported in Panel A of Table 1, these variables were not used in empirical analysis. Although cumulative ownership of the 10 largest shareholders, as a measure of block ownership, was collected for all Type 1 bidders, block ownership was also dropped due to 18 missing observations for Type 2 bidders which would reduce the already small sample of 82 observations by 22%.

Since leverage and free cash flow of bidders appear with opposite signs in Bidder's Governance and Bidder's Operations Hypotheses, the results from this analysis can be used to shed more light on the empirical question of whether these variables are more important as tools to control the agency problem or as proxies for bidders' access to resources and their ability to help targets with cash constraints.

Before doing cross-sectional analysis of the long-term wealth gains for the Type 1 and Type 2 targets, we used logit analysis to identify which of the variables hypothesized to be important for the post-acquisition targets' performance were statistically significant for determining whether a U.S. target was acquired by the Japanese or the U.S. bidder.

5.1. Logit Analysis of Type 1 versus Type 2 Acquisitions

Although the main purpose of this study is to explain how the value of acquired targets is affected by targets' and bidders' characteristics in general, we are also interested in investigating the role of several characteristics unique to the Japanese governance system, namely keiretsu membership, cross-holding and ties to a main bank. Unfortunately, the fact that the dependent variable in the logistic regression is a binary dummy, with values of one for Type 1 and zero for Type 2 acquisitions, makes it impossible to use Japan specific variables because they are zero for all Type 2 purchases, which prevents the likelihood model from reaching convergence. However, if the Japanese governance system is superior to the one in the U.S. then the hypothesized effects of our Governance, Operating and Control Variables are expected to be more pronounced for the Type 1 acquisitions.

To preserve space, the results from the logistic regression in Table 8 represent only the best model and the initial specification from which it was derived. For every performance measure there were nine initial specifications based on the combinations of the targets' and bidders' one, three and five year pre-acquisition performances. The best model for every performance measure was chosen based on the largest number of significant variables derived by subsequent elimination of the least significant variables from each of the nine initial specifications. In addition to different performance measures, analysis was done for two measures of the dollar-yen appreciation. Following Harris and Ravenscraft (1991) and Cebenoyan, Papaioannou and Travlos (1992), the deviation was defined as the difference between average dollar-yen appreciation for the sample period and annual dollar-yen appreciation in the year of completion, relative to the average dollar-yen appreciation for the sample period. The second measure of dollar-yen appreciation was the dummy variable "cheap dollar" with the value of one and zero for the years in which deviation was negative and positive, respectively.

Besides different performance and dollar-yen appreciation measures, several variables were used to measure the size of targets and bidders. The use of market-to-book value of assets to measure targets' growth opportunities precluded the book or the market value of assets as size proxy for targets, due to the co-linearity problem, and dictated that sales be used to measure targets' size. In the test runs, the book value of assets gave the best results as a measure of the bidders' size. Although bidders' growth opportunities were not hypothesized to be important, a model where bidders' market-to-book value of assets and sales were used as proxies for bidders' growth opportunities and size was estimated but produced results worse than the original specification.

Examination of Table 8 and its summary in Table 10 on page 89 reveals that the results from the logistic regressions concur with those from the analysis of descriptive statistics reported in Panels B and C of Table 1. All variables with significant differences between Type 1 and Type 2 acquisitions in analysis of financial and accounting characteristics in Table 1, with the exception of targets' sales and growth opportunities for both targets and bidders, were significant and had the same sign in the logit analysis also.

As predicted by the Bidder's Governance Hypothesis, the bidders' free cash flow and the toe-hold were negatively and positively, but both significantly, related to the Type 1 acquisitions in logistic regressions, as reported in all three panels of Table 8 and Panel B, respectively. These findings suggest that the Japanese bidders used free cash flow to control the agency problem and sequential entry to gain familiarity with the targets and their governance system more frequently than the U.S. bidders of similar U.S. targets. These logit results are consistent with the significantly smaller free cash flow and bigger toe-hold for Type 1 than Type 2 bidders that were reported in Table 1 Panel C.

Both the logit results and the descriptive statistics indicate that, contrary to the role of the free cash flow, the importance of the bidders' leverage was along the prediction from the Bidder's Operations Hypothesis rather than that from Bidder's Governance Hypothesis. As expected by the Bidder's Governance Hypothesis, the results from the logistics regression that the bidders' leverage and their size were negatively and positively, but both significantly, related to the Type 1 acquisitions, regardless of how the targets' and bidders' performance were measured, indicate that the Type 1 bidders used their size and available resources to help their targets facing cash constraints more often than the Type 2 acquirers of the similar targets.

In addition to the hypothesized variables established to be empirically important for the targets' performance by both the logistics regression and the analysis of financial and accounting characteristics, the empirical significance of some variables was

Table 8: Logit Analysis of Whether Japanese or U.S. Bidder Acquired U.S. Firm
Panel A: Performance Measured as Long-term Buy-and-Hold Abnormal Stock Returns

(Japan = 1 when Japanese bidder acquired U.S. target and Japan = 0 when U.S. bidder acquired U.S. target; Deviation = (average $/¥ appreciation – completion year $/¥ appreciation) / average $/¥ appreciation; Cheap $ = 1 for Deviation < 0; _b and _t denote bidder and target variables; _#b and _#t denote bidder and target performance # years before the effective date; Rank of main bank among 10 largest shareholders)

Variable	Initial Model		The Best Model		Variable	Initial Model		The Best Model	
	Obs	82	Obs	82		Obs	82	Obs	82
	LR $\chi2$	113.56	LR $\chi2$	72.25		LR $\chi2$	113.50	LR $\chi2$	73.02
	Prob>$\chi2$	0	Prob>$\chi2$	0		Prob>$\chi2$	0	Prob>$\chi2$	0
	Pseu R2	99.90	Pseu R2	63.56		Pseu R2	99.85	Pseu R2	64.23
Y = Japan	Coef	P>|$\chi2$|	Coef	P>|$\chi2$|	**Y = Japan**	Coef	P>|$\chi2$|	Coef	P>|$\chi2$|
Intercept	-15.5977	0.632	1.0788	0.448	Intercept	-20.3081	0.589	-1.0607	0.518
Leverage_b	-0.1592	0.901	-0.2636	0.000	Leverage_b	-0.2693	0.825	-0.2627	0.001
Free CF_b	-0.4537	0.836	-0.3286	0.000	Free CF_b	-0.6694	0.698	-0.3315	0.000
Toe-hold	0.0120	0.995	0.1617	0.223	Toe-hold	-0.1671	0.928	0.1900	0.309
Keiretsu	0.1671	0.420			Keiretsu	0.1618	0.653		
Mochiai	0.6443	0.833			Mochiai	0.5448	0.827		
Rank	0.6678	0.959			Rank	1.1628	0.947		
BV Assets_b	0.0158	0.798	0.0090	0.003	BV Assets_b	0.0240	0.655	0.0084	0.004
BHAR_1b	-0.0897	0.754			**BHAR_3b**	-0.0389	0.671		
BHAR_1t	0.0023	0.997	0.0104	0.434	**BHAR_5t**	0.0076	0.925	0.0033	0.308
Deviation	-0.0630	0.939	-0.0454	0.038	**Cheap $**	-0.0101	0.980	0.0239	0.053
Related	-0.0362	0.848			Related	-0.0373	0.851	0.0139	0.177
Sales_t	0.0638	0.938			Sales_t	0.1988	0.840		
Growth($^{MV}/_{BV}$)_t	0.7591	0.902	0.3017	0.244	Growth($^{MV}/_{BV}$)_t	1.1759	0.741	0.3593	0.121
Free CF_t	0.0224	0.983			Free CF_t	0.1310	0.881		
Leverage_t	0.0001	1.000	3.7286	0.064	Leverage_t	0.0128	0.985	0.0484	0.050
Friendly Attitude	0.0718	0.794	0.0213	0.031	Friendly Attitude	0.1037	0.582	0.0199	0.057
Cash Financing	0.0113	0.966	-0.0189	0.080	Cash Financing	0.0359	0.899	-0.0188	0.106
Nineties	0.0507	0.802			Nineties	0.0830	0.632		

confirmed through the logit analysis only. As predicted by Jensen's (1986) agency problem expectations for control variables and consistent with the observed effect of the targets' free cash flow, the significant and positive relationship between the targets' leverage and the likelihood of

Type 1 acquisitions suggests that significantly larger Japanese bidders with significantly more available resources were not after targets that could help them solve liquidity problem but were typically interested in the targets with less agency problems.

Table 8: Logit Analysis of Whether Japanese or U.S. Bidder Acquired U.S. Firm
Panel B: Performance Measured as Long-term Abnormal Return on Assets

(Japan = 1 when Japanese bidder acquired U.S. target and Japan = 0 when U.S. bidder acquired U.S. target; Deviation = (average $/¥ appreciation – completion year $/¥ appreciation) / average $/¥ appreciation; Cheap $ = 1 for Deviation < 0; _b and _t denote bidder and target variables; _#b and _#t denote bidder and target performance # years before the effective date; Rank of main bank among 10 largest shareholders)

Variable	Initial Model		The Best Model		Variable	Initial Model		The Best Model	
	Obs	82	Obs	82		Obs	82	Obs	82
	LR $\chi2$	113.53	LR $\chi2$	87.08		LR $\chi2$	113.52	LR $\chi2$	89.23
	Prob>$\chi2$	0	Prob>$\chi2$	0		Prob>$\chi2$	0	Prob>$\chi2$	0
	Pseu R2	99.87	Pseu R2	76.60		Pseu R2	99.87	Pseu R2	78.50
Y = Japan	Coef	P>|$\chi2$|	Coef	P>|$\chi2$|	**Y = Japan**	Coef	P>|$\chi2$|	Coef	P>|$\chi2$|
Intercept	-15.8267	0.751	3.2351	0.094	Intercept	-19.1283	0.673	0.1973	0.931
Leverage_b	-0.3845	0.705	-0.6454	0.012	Leverage_b	-0.3593	0.689	-0.7802	0.011
Free CF_b	-0.6535	0.767	-0.8504	0.009	Free CF_b	-0.6379	0.696	-0.9399	0.007
Toe-hold	0.2780	0.908	0.3185	0.332	Toe-hold	0.2778	0.902	0.7148	0.074
Keiretsu	0.1510	0.694			Keiretsu	0.1605	0.635		
Mochiai	0.4754	0.875			Mochiai	0.4427	0.875		
Rank	-0.2075	0.989			Rank	-0.0409	0.998		
BV Assets_b	0.0232	0.653	0.0250	0.020	BV Assets_b	0.0225	0.679	0.0295	0.016
AROA_5b	0.0338	0.977	-0.2014	0.038	**AROA_5b**	0.0564	0.950	-0.2135	0.033
AROA_1t	-0.3751	0.782	-0.3574	0.033	**AROA_1t**	-0.4840	0.610	-0.4527	0.024
Deviation	-0.0986	0.896	-0.0465	0.094	**Cheap $**	0.0194	0.940	0.0351	0.070
Related	-0.0265	0.890	1.1060	0.454	Related	-0.0280	0.868	0.0220	0.184
Sales_t	0.0766	0.931			Sales_t	0.0768	0.934		
Growth($^{MV}/_{BV}$)_t	0.8706	0.838			Growth($^{MV}/_{BV}$)_t	1.0554	0.758	0.3851	0.365
Free CF_t	0.0307	0.976	-0.1497	0.060	Free CF_t	-0.0181	0.982	-0.1853	0.043
Leverage_t	0.0980	0.780	0.0462	0.092	Leverage_t	0.0949	0.820	7.8573	0.070
Friendly Attitude	0.1004	0.680	0.0582	0.037	Friendly Attitude	0.0988	0.628	0.0700	0.028
Cash Financing	0.0107	0.977	-0.0225	0.149	Cash Financing	0.0260	0.937	-0.0348	0.070
Nineties	0.0269	0.917			Nineties	0.0418	0.831		

Although the number of Type 1 and Type 2 acquisitions financed by 100% cash payment was identical in Table 1 Panel A, the logistic regression coefficient for the cash financing dummy turned out to be significant and negative. This finding is contrary to the expected effect

of control variables based on the Travlos' (1987) prediction that in the world of asymmetric information the bidder's management, with private information about the intrinsic value of its firm and acting in the interest of its existing shareholders, will use cash only when bidder's stock is undervalued and acquisition of the target would lead to the creation of value. However, this result is along the lines of already discussed findings that, as predicted by the Bidder's Operations Hypothesis, the bidders' leverage and size had negative and positive, but in both cases significant, effects on the occurrence of Type 1 acquisitions, which suggested that Japanese bidders used their size and available resources to help their targets facing cash constraints more often than the Type 2 acquirers of the similar targets. Hence, the negative relationship between cash financed purchases and Type 1 acquisitions suggests that Japanese bidders tried to preserve resources in order to help their targets, which used free cash flow and leverage to manage the agency problem but might have had cash liquidity problems.

The significant and positive friendly attitude of the targets' management toward acquirer was against the hypothesized effect of the Control Variables. On the other hand, it is consistent with the empirical findings, also replicated in this study, that Japanese bidders paid more than any other acquirer of U.S. targets, in which case the targets' management did not have to express a negative attitude toward the acquisition in order to increase its bargaining power in an attempt to improve the inadequate market premium offered by the bidder.

Contrary to the Bidder's Operations Hypothesis, but consistent with the empirical evidence and microeconomic–transaction based-motives for FDI, the Type 1 acquisitions were more likely in years when the dollar depreciated relative to the yen, regardless of how the dollar-yen appreciation was measured. This finding suggests that either Type 1 bidders continuously made incorrect estimations of the cost of capital due to the appearance that the dollar-

denominated assets were cheaper in years with above average depreciation of dollar against yen or that Japanese multinational corporations were able to take advantage of inefficiencies in the financial markets.

Table 8: Logit Analysis of Whether Japanese or U.S. Bidder Acquired U.S. Firm
Panel C: Performance Measured as Difference in Long-term Abnormal Return on Assets

(Japan = 1 when Japanese bidder acquired U.S. target and Japan = 0 when U.S. bidder acquired U.S. target; Deviation = (average $/¥ appreciation – completion year $/¥ appreciation) / average $/¥ appreciation; Cheap $ = 1 for Deviation < 0; _b and _t denote bidder and target variables; _#b and _#t denote bidder and target performance # years before the effective date; Rank of main bank among 10 largest shareholders)

Variable	Initial Model		The Best Model		Variable	Initial Model		The Best Model	
	Obs	81	Obs	81		Obs	81	Obs	81
	LR $\chi2$	108.00	LR $\chi2$	85.14		LR $\chi2$	107.96	LR $\chi2$	86.83
	Prob>$\chi2$	0	Prob>$\chi2$	0		Prob>$\chi2$	0	Prob>$\chi2$	0
	Pseu R2	99.88	Pseu R2	75.83		Pseu R2	99.87	Pseu R2	77.33
Y = Japan	Coef	P>|$\chi2$|	Coef	P>|$\chi2$|	**Y = Japan**	Coef	P>|$\chi2$|	Coef	P>|$\chi2$|
Intercept	-8.9154	0.825	4.8679	0.027	Intercept	-13.2146	0.773	8.1873	0.012
Leverage_b	-0.5180	0.775	-0.4536	0.001	Leverage_b	-0.6556	0.563	-0.7117	0.006
Free CF_b	-0.6021	0.790	-0.5905	0.001	Free CF_b	-0.6406	0.644	-0.8687	0.005
Toe-hold	-0.0246	0.994	0.0943	0.477	Toe-hold	-0.0341	0.992	0.0799	0.627
Keiretsu	0.1075	0.618			Keiretsu	0.1028	0.695		
Mochiai	0.6346	0.833			Mochiai	0.5261	0.850		
Rank	-0.1371	0.993			Rank	0.3301	0.985		
BV Assets_b	0.0180	0.600	0.0124	0.006	BV Assets_b	0.0205	0.562	0.0178	0.013
DAROA_1b	0.3771	0.929	0.2280	0.039	**DAROA_1b**	0.6682	0.700	0.2388	0.015
DAROA_5t	0.0125	0.983			**DAROA_5t**	0.0564	0.845		
Deviation	-0.2212	0.830	-0.0573	0.046	**Cheap $**	0.0382	0.903	0.0608	0.019
Related	-0.0191	0.918			Related	-0.0013	0.994		
Sales_t	0.0645	0.944			Sales_t	0.0515	0.945		
Growth($^{MV}/_{BV}$)_t	0.9688	0.856			Growth($^{MV}/_{BV}$)_t	1.0924	0.864		
Free CF_t	0.0491	0.959			Free CF_t	-0.0294	0.984	-0.2074	0.035
Leverage_t	0.0669	0.934	0.0260	0.223	Leverage_t	0.0264	0.952		
Friendly Attitude	0.0959	0.772	0.0329	0.034	Friendly Attitude	0.0743	0.787		
Cash Financing	-0.0264	0.961	-0.0287	0.076	Cash Financing	0.0226	0.937	-0.0379	0.056
Nineties	-0.8464	0.982			Nineties	0.0250	0.875		

Consistent with the Bidder's Operations Hypothesis, the findings in Panels B and C of Table 8 that bidders' AROA five year before and DAROA one year previous to the acquisition were negatively and positively correlated, while targets' AROA in a year prior to the purchase

had a negative, but in all cases significant, relationship with Type 1 acquisitions suggest that, after turning around and improving its own performance, the typical Japanese bidder started to look for the U.S. target which was not plagued by an agency problem but had underperformed and had the potential for the biggest synergistic gains.

The results from the analysis of the descriptive statistics, summarized on page 41 and in Table 10 on page 89, were that larger Type 1 bidders, with less agency problems and consequently less need for high leverage and therefore more access to available assets, used sequential acquisitions to learn about governance and other characteristics of their typically larger targets purchased at higher cost, which had less potential for agency problems and more growth opportunities. Consistent with the hypothesized effects for Bidder's Governance (BG), Bidder's Operations (BO) and Control Variables (CV), the results from the logistic regressions, summarized in Table 10, modify these findings in the following way:

a) significantly larger Japanese bidders (BO: positive book value of assets),
b) with improved operating performance (BO: negative accounting performance five year prior to acquisition reversed into positive one year before the purchase),
c) less prone to agency problems (BG: negative free cash flow),
d) and consequently less need for high leverage allowing them access to more assets (BO: negative leverage),
e) used sequential acquisitions to learn about their targets (BG: positive toe-hold),
f) which had less agency problems (CV: negative free cash flow and positive leverage).

Although the negative effect of the cash financing and the positive influence of the targets' management attitude on the targets' performance were contrary to the Control Variables Hypothesis, they were indirectly consistent with the Bidder's Operations Hypothesis, suggesting

that underperforming targets with potential liquidity problems benefited from bidders with more resources and with documented willingness to pay more than other acquirers.

The negative influence of the dollar-yen appreciation, or the positive effect of "cheap dollar" dummy, on the targets' performance was the opposite of the Bidder's Operations Hypothesis but consistent with the transactions-based motives for the FDI.

5.2. Determinants of the Targets' Long-term Post-Acquisition Wealth Gains

Although most of the results from the logistic regressions were significant and had the signs predicted by the hypothesized effects of the Bidder's Governance, Bidder's Operations and Control Variables, they revealed nothing about the drivers behind the targets' long-term post-acquisition performance since only the pre-acquisition characteristics of targets' and bidders' were used in the logit analyses. Another deficiency of the logistic regressions was their inability to analyze the effects of the Japanese governance variables on the binary dependent variable with values of one and zero for Type 1 and Type 2 acquisitions, due to the fact that the Japanese governance variables had zero value for all Type 2 bidders. To address these issues we also performed an analysis of the cross-sectional variations in the targets' long-term post-acquisition performances.

For space preservation reasons, the results from the heteroscedasticity adjusted cross-sectional regressions in Table 9 represent only the best model and the initial specification from which it was derived. For every performance measure there were six initial specifications based on the combinations of bidders' performance from one, three and five years before and bidders' and targets' performance from one and three years after the acquisition. The choice of the best

model for every performance measure was based on the largest number of significant variables derived by subsequent elimination of the least significant variables from each of the six initial specifications.

Similar to the logit analysis, cross-sectional regressions, based on the Hubber robust estimate of variance, were run for different performance and dollar appreciation measures. In addition, analyses were performed for different measures of bidders' size until the best proxy was identified. Sales had to be used as a measure of the targets' size to avoid the co-linearity problem that would arise if the book or the market value of assets were used as the size proxy in the specification that used the market-to-book value as a measure of growth opportunities. Although not hypothesized to affect the targets' long-term post-acquisition performance, the bidders' growth opportunities, measured as the market-to-book value of assets, were included in the regression model where the bidders' size was approximated by bidders' sales. However, the results were worse than when the regressions based on the hypothesized effects were estimated.

Another five of the original twenty two variables specifying our hypothesized effects of targets' and bidders' characteristics on the targets' long-term post-acquisition performance could not be used for different reasons. The cumulative ownership of 10 largest shareholders was dropped due to the missing values problem. The dummies for the multiple bidders and the takeover defenses had to be eliminated since they were not present in any acquisition. The free cash flow and the leverage were classified as bidders' governance and bidders' operations variables with opposite signs but each was used only once in the regression analysis. Although seventeen of the original twenty two variables were used in the cross-sectional regression analysis, every initial specification had eighteen explanatory variables describing the hypothesized effects of targets' and bidders' characteristics on the targets' long-term post-

acquisition performance, because the bidders' performance was measured for both pre- and post-acquisition period.

An examination of the cross-sectional regression results in Table 9 and their summary in Table 10 on page 89 reveals that with the exception of the keiretsu and toe-hold all other variables were significant in at least one regression model. In addition to having more significant variables, their signs were more often as hypothesized in the cross-sectional regressions than in the analysis of the descriptive statistics and logistic regressions. Nevertheless, for most of the variables the sign of the effect was consistent for all three analyses. The fact that both the logistic and the cross-sectional regression models had the largest number of significant explanatory variables when the accounting variables were used to measure targets' and bidders' performance gives at least some validity to the proposition that the accounting performance measures might be more important for the Japanese manager with the long-term focus and with objectives other than stock price maximization.

The negative impact of the bidders' free cash flow, in Table 9 Panels C, consistent with the bidders' governance prediction that its reduction is used to manage the agency problem, confirmed the findings from both the analysis of the descriptive statistics and the logistic regressions.

The negative effect of the mochiai on both one and three year targets' post-acquisition performance (regardless of the performance and the dollar appreciation measures) and the positive effect of the main bank's rank for the accounting measures of targets' performance in the third year following the purchase, were against and in accordance with the predictions from the Japanese Governance Hypothesis. According to that hypothesis both mochiai and ties with

Table 9: Analysis of Targets' Long-term Post-acquisition Performance

Panel A: Performance Measured as Buy-and-Hold Abnormal Stock Returns

(_b and _t denote bidders' and targets' variables; _#b and #b denote bidders' BHAR # years pre- and post-purchase)

Variable	Initial Model		The Best Model		Variable	Initial Model		The Best Model	
	F(18,63)	1.03	F(8,73)	2.37		F(18,63)	1.70	F(10,71)	2.25
	Prob>F	0.444	Prob>F	0.025		Prob>F	0.064	Prob>F	0.024
	R2	23.23	R2	18.61		R2	22.67	R2	13.17
Y = BHAR1t	Coef	P>|t|	Coef	P>|t|	**Y = BHAR3t**	Coef	P>|t|	Coef	P>|t|
Intercept	23.6832	0.406	38.3260	0.217	Intercept	46.4921	0.420	85.8159	0.170
Leverage_b	-0.8316	0.051	-0.8089	0.024	Leverage_b	-0.7553	0.475	-1.3692	0.082
Free CF_b	0.6250	0.469			Free CF_b	2.9652	0.135		
Toe-hold	0.1513	0.879			Toe-hold	1.7506	0.468	0.9686	0.556
Keiretsu	0.3381	0.380			Keiretsu	0.9313	0.252		
Mochiai	-1.6900	0.163	-1.2806	0.057	Mochiai	-3.5868	0.130	-2.4464	0.072
Rank	0.0223	0.772	0.0586	0.243	Rank	0.0207	0.857	0.0867	0.284
BV Assets_b	0.0241	0.033	0.0252	0.009	BV Assets_b	0.0066	0.570	0.0175	0.061
BHAR_1b	0.1790	0.330			**BHAR_1b**	0.3844	0.199		
BHAR1b	0.0637	0.806	0.2707	0.221	**BHAR1b**	0.6285	0.326		
Deviation	-0.4210	0.454			**Deviation**	0.4179	0.654	-0.0376	0.957
Related	-0.0105	0.958			Related	-0.0908	0.824		
Sales_t	-0.8504	0.022	-0.7835	0.002	Sales_t	-1.3337	0.028	-1.6254	0.003
Growth($^{MV}/_{BV}$)_t	-5.5939	0.049	-4.7827	0.021	Growth($^{MV}/_{BV}$)_t	-5.7560	0.232	-5.2822	0.053
Free CF_t	0.2861	0.728			Free CF_t	1.6176	0.298	2.3098	0.150
Leverage_t	0.0583	0.887			Leverage_t	-0.1797	0.817		
Friendly Attitude	0.0471	0.812			Friendly Attitude	0.2864	0.528		
Cash Financing	-0.3682	0.135	-0.2868	0.194	Cash Financing	-0.6259	0.209	-0.5359	0.228
Nineties	0.0931	0.709			Nineties	0.1890	0.597		
Variable	F(18,63)	1.12	F(8,73)	2.37	Variable	F(18,63)	2.06	F(11,70)	1.91
	Prob>F	0.354	Prob>F	0.025		Prob>F	0.018	Prob>F	0.053
	R2	22.64	R2	18.61		R2	25.12	R2	14.87
Intercept	25.0956	0.469	38.3260	0.217	Intercept	86.0849	0.249	100.3561	0.180
Leverage_b	-0.7004	0.094	-0.8089	0.024	Leverage_b	-0.7017	0.475	-1.3728	0.082
Free CF_b	0.7658	0.351			Free CF_b	3.0899	0.104		
Toe-hold	-0.1386	0.887			Toe-hold	0.7069	0.763	0.8419	0.608
Keiretsu	0.3802	0.334			Keiretsu	1.0341	0.209		
Mochiai	-0.0183	0.138	-1.2806	0.057	Mochiai	-0.0437	0.093	-2.6028	0.079
Rank	0.0311	0.672	0.0586	0.243	Rank	0.0616	0.545	0.1089	0.207
BV Assets_b	0.0242	0.019	0.0252	0.009	BV Assets_b	0.0080	0.460	0.0182	0.069
BHAR_1b	0.1251	0.462			**BHAR_1b**	0.2693	0.367	0.4467	0.111
BHAR1b	0.1847	0.516	0.2707	0.221	**BHAR1b**	0.8997	0.181		
Cheap $	-0.1294	0.667			**Cheap $**	-0.8884	0.183	-0.2946	0.505
Related	-0.0320	0.874			Related	-0.1532	0.715		
Sales_t	-0.7736	0.020	-0.7835	0.002	Sales_t	-1.1278	0.048	-1.6556	0.004
Growth($^{MV}/_{BV}$)_t	-5.3762	0.080	-4.7827	0.021	Growth($^{MV}/_{BV}$)_t	-4.9562	0.297	-5.2749	0.054
Free CF_t	0.1624	0.857			Free CF_t	2.1621	0.229	2.2606	0.184
Leverage_t	-0.0687	0.851			Leverage_t	-0.2852	0.707		
Friendly Attitude	0.0274	0.891			Friendly Attitude	0.2890	0.514		
Cash Financing	-0.2578	0.233	-0.2868	0.194	Cash Financing	-0.4519	0.290	-0.4369	0.288
Nineties	0.2363	0.347			Nineties	0.4240	0.273		

the main bank should positively affect the targets' performance, since it has been assumed that cross-ownership lowers the cost of information transfer, motivates friendly shareholders to better monitor and intervene in order to save their investments and assist long term trading partner, allowing mangers to take a long-term view in their decision-making process, and that the main bank's monitoring incentives increase with the financial interest in their client. However, the cross-sectional regression results were consistent with the agency problem notion that the cross-ownership, and implicitly keiretsu membership, was primarily used to entrench and insulate management from external control, and that main banks perform a beneficial monitoring role but that it requires some time before its effects influence the targets' performance.

The negative effect of the bidders' leverage combined with the positive effect of the bidders' book value of assets, reported in all Panels of Table 9, coincide with the results from the analysis of the descriptive statistics and logistic regressions, and suggest that, as predicted by the Bidder's Operations Hypothesis, larger bidders with more available assets and expertise were in a better position to help their targets.

This explanation was even more applicable for acquisitions in related industries which, as predicted by the Bidder's Operations Hypothesis, had a positive relationship with the targets' performance, suggesting that the bidders' managers were aware of the fact that the agency cost of diversified acquisitions outweigh their benefits.

The positive acquirers' pre-acquisition performance, in Table 9 Panel B, is another bidders' operations variable whose empirical impact on the targets' wealth was as expected and in unison with the results from logit analysis. In addition, the cross- sectional regression analysis of the effect of the bidders' post-acquisition performance, in Panels B and C of Table 9, showed that it reversed from the unexpected negative in the first, to the expected positive in the third year

Table 9: Analysis of Targets' Long-term Post-acquisition Performance

Panel B: Performance Measured as Abnormal Return on Assets

(_b and _t denote bidders' and targets' variables; _#b and #b denote bidders' AROA # years pre- and post-purchase)

Variable	Initial Model		The Best Model		Variable	Initial Model		The Best Model	
	F(18,57)	2.80	F(8,67)	4.55		F(18,57)	7.68	F(10,68)	6.81
	Prob>F	0.002	Prob>F	0.000		Prob>F	0.000	Prob>F	0.000
	R2	34.52	R2	28.97		R2	31.80	R2	27.01
Y = AROA1t	Coef	P>|t|	Coef	P>|t|	**Y = AROA3t**	Coef	P>|t|	Coef	P>|t|
Intercept	-0.7360	0.916	7.5579	0.074	Intercept	-4.7448	0.647	-0.0564	0.993
Leverage_b	-0.1518	0.235	-0.2108	0.022	Leverage_b	-0.0147	0.908		
Free CF_b	0.1979	0.372			Free CF_b	0.3595	0.204	0.2252	0.280
Toe-hold	-0.1317	0.543			Toe-hold	-0.2098	0.513		
Keiretsu	0.0319	0.618			Keiretsu	0.0909	0.276		
Mochiai	-0.3195	0.043	-0.3950	0.002	Mochiai	-0.7184	0.018	-0.6352	0.023
Rank	-0.8812	0.454			Rank	0.0227	0.252	0.0345	0.073
BV Assets_b	0.0001	0.958			BV Assets_b	0.0053	0.086	0.0054	0.046
AROA_1b	3.8308	0.032	4.4287	0.008	**AROA_3b**	0.2036	0.559		
AROA1b	-0.0850	0.617	-0.1733	0.095	**AROA3b**	0.1402	0.648		
Deviation	0.1791	0.263			**Deviation**	0.3260	0.039	0.2652	0.049
Related	0.0157	0.678			Related	0.0315	0.512		
Sales_t	-0.0772	0.283	-0.1073	0.082	Sales_t	-0.0414	0.693		
Growth($^{MV}/_{BV}$)_t	-1.0733	0.101	-1.2084	0.038	Growth($^{MV}/_{BV}$)_t	-2.2972	0.115	-2.2462	0.077
Free CF_t	-0.4272	0.105	-0.3463	0.099	Free CF_t	-0.2778	0.315	-0.3296	0.150
Leverage_t	-0.0438	0.647			Leverage_t	-0.2543	0.075	-0.2370	0.095
Friendly Attitude	0.0328	0.432			Friendly Attitude	-0.0025	0.966		
Cash Financing	0.0516	0.234			Cash Financing	0.0821	0.161	0.0637	0.194
Nineties	0.1740	0.005	0.1276	0.002	Nineties	0.2334	0.000	0.1882	0.002
Variable	F(18,57)	2.78	F(8,67)	4.55	Variable	F(18,57)	3.19	F(9,69)	3.87
	Prob>F	0.002	Prob>F	0.000		Prob>F	0.000	Prob>F	0.001
	R2	31.99	R2	28.97		R2	27.81	R2	22.82
Intercept	2.9919	0.694	7.5579	0.074	Intercept	3.1863	0.769	5.9756	0.277
Leverage_b	-0.1905	0.122	-0.2108	0.022	Leverage_b	-0.0876	0.532	-0.1167	0.221
Free CF_b	0.1338	0.530			Free CF_b	0.2463	0.432		
Toe-hold	-0.1624	0.482			Toe-hold	-0.2778	0.466		
Keiretsu	0.0150	0.811			Keiretsu	0.0628	0.480		
Mochiai	-0.3095	0.046	-0.3950	0.002	Mochiai	-0.7258	0.008	-0.6897	0.005
Rank	-0.7400	0.549			Rank	0.0265	0.164	0.0321	0.075
BV Assets_b	0.0002	0.928			BV Assets_b	0.0055	0.085	0.0054	0.045
AROA_1b	3.7240	0.044	4.4287	0.008	**AROA_3b**	0.1783	0.638		
AROA1b	-0.1662	0.184	-0.1733	0.095	**AROA3b**	0.1240	0.689		
Cheap $	-0.0174	0.810			**Cheap $**	-0.0620	0.502		
Related	0.0203	0.577			Related	0.0370	0.456		
Sales_t	-0.0884	0.250	-0.1073	0.082	Sales_t	-0.0509	0.682		
Growth($^{MV}/_{BV}$)_t	-1.1407	0.077	-1.2084	0.038	Growth($^{MV}/_{BV}$)_t	-2.4251	0.104	-2.2622	0.068
Free CF_t	-0.3337	0.173	-0.3463	0.099	Free CF_t	-0.1031	0.714		
Leverage_t	-0.0093	0.921			Leverage_t	-0.2017	0.154	-0.1860	0.160
Friendly Attitude	0.0341	0.407			Friendly Attitude	0.0058	0.921		
Cash Financing	0.0212	0.678			Cash Financing	0.0346	0.633		
Nineties	0.1323	0.011	0.1276	0.002	Nineties	0.1665	0.013	0.1251	0.023

after the purchase. Similar to the explanation for the importance of the main bank's ties, this result suggests that the superior performance of the bidders required time before it was translated into the targets' performance.

Contrary to the bidders' governance prediction (that acquisitions made in years with above average dollar-yen depreciation are more likely to be the result of incorrectly estimated cost of capital, since dollar denominated assets appear cheaper to foreign bidders, and lead to value destroying purchases) but consistent with the empirical evidence and transaction based motives for FDI, cheap dollar and targets' post-purchase performance were positively related in Table 9 Panel C. Similar to the interpretation of the results from the logit analysis, this finding suggests that Japanese bidders were able to take advantage of imperfections in the financial markets and did not systematically misestimate the cost of capital. However, the effect of the both measures of the dollar-yen appreciation on targets' post-acquisition accounting performance measures were as expected, positive influence of the deviation and negative impact of the "cheap dollar" dummy, in the third year following the purchase. These results suggest that, similar to the influence of the main bank ties, it takes time for the true nature of some variables to show.

Consistent with the hypothesized effects of the Control Variables, the targets' growth opportunities, in all Panels of Table 9, and cash financing, in Table 9 Panel C, were negatively and positively correlated with the targets' post-acquisition long-term performance. The growth opportunities result suggests that, as expected, extra synergistic gains were less likely from acquisitions of better managed targets. In addition to the prediction that bidders' managers made acquisitions using cash financing only when their own stock was undervalued, an alternative explanation is that Japanese bidders could not acquire targets by exchanging shares of their own stock due to the lack of dual listing and/or American Depository Recites.

Table 9: Analysis of Targets' Long-term Post-acquisition Performance

Panel C: Performance Measured as Difference in Abnormal Return on Assets

(_b and _t denote bidders' and targets' variables; _#b and #b denote bidders' DAROA # years pre- and post-purchase)

Variable	Initial Model		The Best Model		Variable	Initial Model		The Best Model	
	F(18,56)	2.20	F(11,63)	3.26		F(18,56)	1.64	F(8,67)	2.89
	Prob>F	0.013	Prob>F	0.001		Prob>F	0.081	Prob>F	0.008
	R2	34.83	R2	34.02		R2	33.65	R2	28.50
Y = DAROA1t	Coef	P>|t|	Coef	P>|t|	**Y = DAROA3t**	Coef	P>|t|	Coef	P>|t|
Intercept	7.7034	0.327	10.0969	0.106	Intercept	-4.5971	0.442	-10.1667	0.001
Leverage_b	-0.2223	0.155	-0.2571	0.022	Leverage_b	0.0442	0.624	0.1001	0.169
Free CF_b	0.1136	0.679			Free CF_b	-0.0599	0.766		
Toe-hold	-0.2350	0.370	-0.2818	0.223	Toe-hold	-0.1696	0.653		
Keiretsu	0.0298	0.686			Keirtesu	0.3597	0.953		
Mochiai	-0.3152	0.068	-0.3259	0.026	Mochiai	-0.2964	0.133	-0.2926	0.099
Rank	-0.7104	0.580			Rank	0.0208	0.127	0.0231	0.041
BV Assets_b	-0.0010	0.673			BV Assets_b	0.0074	0.002	0.0053	0.029
DAROA_1b	0.6457	0.154	0.6316	0.121	**DAROA_1b**	-0.0052	0.983		
DAROA1b	-0.2280	0.202	-0.2726	0.039	**DAROA3b**	0.4851	0.062	0.4681	0.017
Deviation	0.0615	0.727			**Deviation**	0.1892	0.088	0.1493	0.081
Related	0.0645	0.180	0.0715	0.095	Related	0.0076	0.858		
Sales_t	-0.0950	0.270	-0.1257	0.052	Sales_t	-0.0924	0.169		
Growth($^{MV}/_{BV}$)_t	-1.0714	0.134	-1.0705	0.088	Growth($^{MV}/_{BV}$)_t	-0.3229	0.727		
Free CF_t	-0.6275	0.023	-0.5727	0.013	Free CF_t	0.5309	0.016	0.4778	0.018
Leverage_t	-0.0311	0.788			Leverage_t	-0.1109	0.145		
Friendly Attitude	0.0158	0.756			Friendly Attitude	-0.0560	0.169		
Cash Financing	-0.0197	0.711	-0.0304	0.503	Cash Financing	0.0314	0.539		
Nineties	0.1378	0.074	0.1154	0.011	Nineties	0.1592	0.005	0.1337	0.003
Variable	F(18,56)	2.31	F(11,63)	3.26	Variable	F(10,65)	1.57	F(10,65)	2.69
	Prob>F	0.009	Prob>F	0.001		Prob>F	0.100	Prob>F	0.008
	R2	35.75	R2	34.02		R2	32.89	R2	29.86
Intercept	7.4487	0.325	10.0969	0.106	Intercept	0.8080	0.874	-2.1521	0.560
Leverage_b	-0.2457	0.066	-0.2571	0.022	Leverage_b	0.0109	0.908		
Free CF_b	0.0505	0.843			Free CF_b	-0.1003	0.623	-0.0939	0.482
Toe-hold	-0.1885	0.464	-0.2818	0.223	Toe-hold	-0.2464	0.526		
Keiretsu	0.7899	0.907			Keiretsu	-0.0257	0.997		
Mochiai	-0.2362	0.155	-0.3259	0.026	Mochiai	-0.3465	0.056	-0.3783	0.029
Rank	-0.9022	0.481			Rank	0.0244	0.071	0.0236	0.036
BV Assets_b	-0.0011	0.619			BV Assets_b	0.0076	0.003	0.0073	0.002
DAROA_1b	0.6108	0.177	0.6316	0.121	**DAROA_1b**	-0.0405	0.870		
DAROA1b	-0.2898	0.061	-0.2726	0.039	**DAROA3b**	0.4692	0.049	0.4523	0.012
Cheap $	0.0655	0.387			**Cheap $**	-0.0824	0.180	-0.0799	0.083
Related	0.0700	0.118	0.0715	0.095	Related	0.0101	0.811		
Sales_t	-0.1141	0.207	-0.1257	0.052	Sales_t	-0.0881	0.255	-0.0701	0.343
Growth($^{MV}/_{BV}$)_t	-1.1653	0.081	-1.0705	0.088	Growth($^{MV}/_{BV}$)_t	-0.3457	0.713		
Free CF_t	-0.6197	0.011	-0.5727	0.013	Free CF_t	0.6453	0.003	0.6343	0.003
Leverage_t	-0.0050	0.964			Leverage_t	-0.0869	0.253	-0.0574	0.417
Friendly Attitude	0.0150	0.755			Friendly Attitude	-0.0497	0.196		
Cash Financing	-0.0555	0.274	-0.0304	0.503	Cash Financing	0.0184	0.711		
Nineties	0.0876	0.153	0.1154	0.011	Nineties	0.1411	0.011	0.1340	0.004

Although similar to the results from the logit analysis, the positive impact of the targets' management friendly attitude toward the acquisition, in Table 9 Panel B, was contrary to the predicted effects of control variables that a negative attitude increases the targets' bargaining power and its ability to extract an additional market premium. As mentioned in the discussion of the results from the logit analysis, one explanation is that the targets' management had no need to extract an additional premium due to the documented fact, also confirmed for our sample, that Japanese bidders paid more for U.S. targets than any other acquirer.

The negative correlation between size, measured as sales, and the abnormal long-term post-acquisition stock performance of targets, in all Panels of Table 9, was contrary to the control variables' prediction that bargaining power and ability to extract an additional premium increases with size. However it was consistent with the alternative prediction that bidders have a tendency to over pay for smaller targets.

The negative correlation between the targets' free cash flow and their accounting performance measures one year after the acquisition, in Panels B and C of Table 9, was consistent with the control variables' prediction (that the free cash flow indicates a potential agency problem) and the results from the analysis of the descriptive statistics and the logistic regressions, suggesting that the reduction in free cash flow was used to manage the agency problem. The positive and the negative impacts of the targets' free cash flow and leverage on their accounting performance three year after the acquisition, reported in Panels B and C of Table 9, were contrary to the control variables' predictions about the agency problem. However, these combined with the delayed effects of the Type 1 bidders' monitoring abilities, approximated by their post-acquisition performance and ties to the main bank, suggest that by the third year after the purchase the acquirers succeeded in controlling the targets' agency

problem, making the increased free cash flow and lowered leverage more important for the availability of resources than for managing the agency problem.

Table 10: Magnitude and Sign of Significant Results from Analyses of Descriptive Statistics, Logistic and Cross-sectional Robust Regressions

(Deviation = (average $/¥ appreciation – announcement year $/¥ appreciation) / average $/¥ appreciation; Cheap $ = 1 for Deviation < 0; _b and _t denote bidders' and targets' variables; _#b and #b denote bidders' performance # years before and after the effective date; Rank of main bank among 10 largest shareholders; bold fonts denote the significant result with sign that was contrary to hypothesized)

Hypothesis/ Variable	Expected Sign	Type1−Type2 Accounting and Financial Variables	Logit (Type1 acquisition=1)			Cross-sectional Robust Regression					
			BHAR	AROA	DAROA	BHAR		AROA		DAROA	
						1t	3t	1t	3t	1t	3t
Bidders' Governance											
Leverage_b	pos										
Free CF_b	neg	-0.069	-0.332	-0.940	-0.869						-0.25
Toe-hold	pos	3.160		0.715							
Japanese Governance											
Keiretsu											
Mochiai	pos					**-1.28**	**-2.60**	**-0.40**	**-0.69**	**-0.33**	**-0.38**
Rank	pos								0.04		0.02
Bidders' Operations											
Performance_1t	pos			**-0.453**							
Performance_5b	pos			**-0.214**							
Performance_1b	pos				0.239			4.43			
Performance1b	pos							**-0.17**		**-0.27**	
Performance3b	pos										0.47
BV Assets_b	pos	225.951	0.009	0.030	0.018	0.03	0.02		0.01		0.01
Related	pos									0.08	
Free CF_b	pos										
Leverage_b	neg	-0.161	-0.264	-0.780	-0.712	-0.81	-1.37	-0.21		-0.26	
Deviation	pos		**-0.045**	**-0.047**	**-0.057**				0.27		0.15
Cheap $	neg		**0.024**	**0.035**	**0.061**					**0.11**	-0.08
Control Variables											
Sales_t	+/-	7.642				-0.78	-1.66	-0.11		-0.13	
Growth($^{MV}/_{BV}$)_t	neg	**1.320**				-4.78	-5.28	-1.21	-2.25	-1.32	
Free CF_t	+/-	-0.033		-0.185	-0.207			-0.35		-0.68	0.63
Leverage_t	pos		0.048	0.079					**-0.24**		
Friendly Attitude	neg		**0.021**	**0.070**	**0.033**			**0.08**			
Cash Financing	pos		**-0.019**	**-0.035**	**-0.038**					**-0.08**	
Nineties	pos							0.13	0.19	0.12	0.13

As predicted by Control Variables Hypothesis the targets acquired during the nineties, the period of Japanese economic crises, had better accounting performance than those purchased during the eighties, the period of Japanese economic boom. According to the findings from the analysis of the descriptive statistics and the logistic regressions (presented on pages 41 and 79, respectively, and summarized in Table 10), larger Japanese bidders with improved operating performance and access to larger resources, which were less prone to the agency problem, used sequential acquisitions in years with above average dollar-yen depreciation to gain knowledge about the governance and other characteristics of their targets, which were typically subject to less agency problem, but suffered from liquidity and underperformance problems prior to the acquisition.

These finding were modified in the following way based on the analysis of the cross-sectional variations in the targets' post-acquisition long-term performances. Consistent with the Bidder's Governance (BG), Japanese Governance (JG), Bidder's Operations (BO) and Control Variables (CV) hypothesis:

a) larger Type 1 bidders (BO: positive book value of assets),
b) operating in the related industry (BO: positive related industry dummy),
c) using the free cash flow to control the agency problem (BG: negative free cash flow),
d) with a superior pre-acquisition performance (BO: positive accounting performance one year before the purchase),
e) able to reverse their own bad post-acquisition performance (BO: positive three and negative one year post-acquisition performance),
f) after taking control of targets' agency problem (JG: positive main bank's rank),
g) enhanced the post-acquisition performance of smaller targets (CV: negative sales),

h) especially those acquired during 1990s (CV: positive nineties dummy),

i) and in years with above average dollar-yen appreciation (BO: positive deviation and negative "cheap dollar" for accounting performance measures three years after the purchase);

j) with less agency problems (CV: negative free cash flow),

k) and fewer growth opportunities (CV: negative market-to-book value of equity).

Although the negative effect of the targets' leverage and the cash financing and the positive influence of the targets' management attitude on the targets' performance were contrary to the Control Variables Hypothesis, they were indirectly consistent with the Bidder's Operations Hypothesis, suggesting that underperforming targets with potential liquidity problems benefited from bidders with more resources. The documented willingness of Japanese bidders to pay more than other acquirers eliminated the need for a negative attitude by the targets' management since it was unnecessary to improve its bargaining power in order to extract an already hefty market premium.

The positive effect of "cheap dollar" dummy on the targets' accounting performance in the first year following the acquisition was the opposite of the Bidder's Operations Hypothesis but consistent with the transactions based motives for the FDI.

The negative effect of the cross-ownership/keiretsu membership on the targets' post-acquisition performance violates the prediction of the Japanese Governance Hypothesis. It suggests that cross-ownership by friendly stakeholders was primarily used to insulate the management from the market's scrutiny.

6. CONCLUSIONS AND FUTURE RESEARCH

In this study, we analyzed how bidders' and targets' characteristics affect targets' long-term post-acquisition performance. In addition, as a part of a wider discussion on whether the Japanese governance system dominated the one in the U.S., we looked at the importance of the bidders' characteristics unique to the Japanese governance mechanism for the targets' performance.

Both of these issues were previously analyzed but discussion based mainly on the short-term stock reactions surrounding acquisition announcements. One problem with this approach is that some of the announced purchases were not completed. Furthermore, the market expectations associated even with completed acquisitions were not necessarily materialized following the purchase. In addition, advocates of the Japanese governance system stipulated that it dominated the U.S. governance system due to the long-term focus of the Japanese managers who were pursuing objectives other than stock price maximization, which are better assessed by the accounting performance measures.

To address these issues we constructed a Type 1 sample of forty-one Japanese bidders and their U.S. targets and matched it with a Type 2 sample of forty-one U.S. bidders of similar U.S. targets acquired in the same 2-digit SIC industry and year as Type 1 targets, where all four firms had at least twelve months of financial and accounting data prior to and following the purchase.

Based on the existing literature and data availability we formulated four testable hypotheses. Some of the variables hypothesized to be important for the targets' performance appeared in more than one hypothesis, sometimes with different predictions. In the Bidder's Governance Hypothesis we stipulate that a targets' long-term post-acquisition performance is

positively affected by the superior governance of the acquirer. The corporate governance features recognized in the literature to improve performance for which data were available are: higher leverage and lower free cash flow, more block holding and larger toe-hold.

In the Japanese Governance Hypothesis we assume that Japanese bidders with keiretsu membership, greater cross-holding, and financial ties to a main bank have positive impact on the targets' long-term post-acquisition performance.

According to the Bidder's Operations Hypothesis the targets' long-term post-acquisition performance is positively affected by the following bidders' characteristics for which data were available: better performance, size and available resources, purchases in the related industry in years with above average dollar appreciation. Since we assume that bidders with lower leverage and higher free cash flows have access to more resources and are in a better position to assist targets with liquidity problems, the predicted influence of the leverage and the free cash flow is of the opposite direction to the one stipulated in the Bidder's Governance Hypothesis.

Beside above mentioned bidders' characteristics, based on prior literature, we expect target performance to be affected by other factors, Control Variables. In addition to target's size, growth opportunities, free cash flow, leverage, anti-takeover defenses and attitude of its managers toward the bidder, the presence of multiple bidders, and a cash financed purchase are predicted to be important for the target's performance.

The main findings of this study are summarized in Table 10 on page 89. The results of the analysis of the financial and accounting characteristics of bidders and targets, as well as the logistics and cross-sectional regressions, were almost identical. With only a couple of exceptions, the variables that were important for explaining differences between Type 1 and

Type 2 samples in one type of analysis were statistically significant and with the same, hypothesized sign in all other analyses.

As predicted by the Bidder's Governance Hypothesis the negative relationship between targets' performance and free cash flow was consistent with its use as the tool for managing an agency problem. Although, as predicted, Type 1 bidders had significantly larger toe-hold, which was also significant in logit analysis of Type 1 versus Type 2 bidders, it was irrelevant for the targets' long-term post-acquisition performance. This result suggested that the pre-acquisition knowledge about target was not crucial for its performance following the purchase.

The persistent negative impact of the cross-holding or the mochiai on the targets' performance was against the Japanese Governance Hypothesis, suggesting that cross-holding by friendly stakeholders was primarily used to insulate management from market scrutiny, creating agency problem. The expected but delayed positive influence of the main bank's rank suggests that the main bank's monitoring as a tool for managing targets' agency problem requires time before it becomes fully effective.

The negative effect of the bidders' leverage on the targets' performance violated predictions from the Bidder's Governance Hypothesis that it is used to manage agency problem. However, it is consistent with the expectations from the Operations Hypothesis that, together with the bidder's size, it indicated bidders' access to resources and their ability to assist illiquid targets, especially when the free cash flow is used to manage an agency problem and not as a source of resources, as predicted by Operations Hypothesis.

Consistent with the Operations Hypothesis, superior bidders' performance has a positive influence on the targets' performance, especially for acquisitions in a related industry. The unexpected negative effect of bidders' performance immediately after the purchase suggests that

it takes time for superior bidders' governance practices to be incorporated into the operations of their targets.

Although the negative effect of the dollar-yen depreciation (or positive influence of the "cheap dollar") was contrary to the Bidder's Operations Hypothesis, it was consistent with the transaction based motive for FDI.

According to the Control Variables Hypothesis both the targets' size and their free cash flow could positively or negatively influence the targets' performance. Although significantly larger sales for Type 1 targets suggest that targets might have used increased bargaining power to extract a market premium, the negative impact of the sales on the targets' performance was consistent with prediction that bidders overpay for smaller targets. The predominantly negative effects of the targets' free cash flows indicate that they were primarily used to manage an agency problem and not as a source of cash for illiquid bidders. This finding was consistent with the observed importance of the bidders' size and leverage as a source of assets for the target.

Significantly bigger growth opportunities for Type 1 targets were consistent with their negative effect on the targets' performance, as Control Variables prediction that the acquisition of better managed targets is less likely to lead to the higher synergistic effects.

Although the negative effect of the targets' leverage and the cash financing, and the positive influence of the targets' management attitude on the targets' performance were contrary to the Control Variables Hypothesis, they were indirectly consistent with the Bidder's Operations Hypothesis, suggesting that underperforming targets with potential liquidity problems benefited from bidders with more resources. The documented willingness of Japanese bidders to pay more than other acquirers eliminated the need for negative attitude of targets' management since it was unnecessary to improve bargaining power in order to extract an already hefty market premium.

Overall results suggest that better managed bidders with access to more resources positively affect the performance of their targets. An interesting empirical finding is that in the presence of alternative methods for managing the agency problem, especially those provided by the bidders, the targets' leverage becomes more important as a source of available resources than a tool to align the shareholders' and managers' interests.

The mixed results for the Japanese governance variables do not allow a clear cut answer as to whether the Japanese governance system dominates the one in the U.S. While the main bank ties had the expected, although delayed, positive effect on the long-term post-acquisition performance of targets, contrary to our predictions the impacts of the keiretsu and mochiai persisted as strongly negative, suggesting that cross-holding by friendly stakeholders is primarily used to insulate managers from outside scrutiny leading to higher agency problem. Of course, the relative economic effects of the cross-holdings and the main bank must be compared to arrive at a summative effect of the Japanese system of corporate governance. Even so, our findings suggest that the features have opposing influences on targets' long-term performance.

It seems that the ongoing discussion about which governance system is better has not been resolved due to the fact that the characteristics of the Japanese governance system have mixed effects on the corporate performance. While some provide superior monitoring and control leading to improved performance, others are used for entrenchment and insulation of the incumbent management, resulting in the increased agency problem.

In order to better extend of our understanding of the relative merits of Japanese and U.S. governance systems, we propose some further analyses:

Assuming that the market efficiently predicts the effects of bidders' governance on the long-term performance of targets, we expect that the immediate stock price reaction of the target

will incorporate these effects. In that case, the cross-sectional variation of the stock price reaction at the announcement may be explained by the same bidder's characteristics as we have employed in our study, including the governance features unique to Japanese bidders. Therefore, in order to asses the ability of the market to incorporate all available information into stock prices we plan to undertake a cross-sectional analysis of the short-term stock performance (defined as average abnormal return cumulated over an event window from five days prior to the five days following the announcement of the acquisition). An interesting experiment would be to compare the significance and direction of the effects of our hypothesized variables on both short-term and long-term targets' performance.

Since we performed a logit analysis on the sample of targets which were subsequently acquired, we plan to further study them using the probit analysis by extending the sample to include firms that were never acquired. As it is, our analysis is conditional in nature, since it examines only successfully acquired targets. While our analysis tells us what factors determine whether a target is successfully acquired by U.S. or Japanese bidders, it ignores the larger sample of firms that were never acquired by either type of bidder.

Although block holding is recognized as an important governance variable both in theory and in our Bidder's Governance Hypothesis, we had to drop it from our analysis due the difficulties of obtaining this data for a sufficient number of our sample firms. In order to improve our understanding of the bidders' characteristics that affect targets' post-acquisition performance, we plan to augment our analysis by hand-collecting this data from proxy statements.

Another the potential determinant of targets' post-acquisition performance that we did not control for in this study is the human capital accumulated at bidders and their targets. We

plan to analyze the importance of human capital by looking at the extent of intangible assets, which may be measured as one minus the ratio of fixed over total assets, where fixed assets are the sum of plant and equipment, buildings and land.

Finally, it is possible that some additional information could be extracted by combining and simultaneously analyzing all our three performance measures. We plan to do this using Zellner's (1962) method of estimating seemingly unrelated regressions.

We hope that these extensions of our research will lead to a further understanding of the relative merits of Japanese and U.S. corporate governance systems.

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