

**Do CEOs of Target Firms Trade Power for Premium?
Evidence From “Mergers of Equals”**

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Abstract: I study abnormal returns in a sample of “mergers of equals” transactions in which the two firms are approximately equal in post-merger shareholdings and board representation. Mergers of equals (MOEs) are friendly mergers generally characterized by extensive pre-merger negotiations between firms with comparable bargaining positions resulting in both lower target premiums and greater shared control (board and management) between target and acquiring firms. On average, acquirer shareholders capture more of the gains in MOEs measured by event returns, while target shareholders capture less, in comparison to a matched sample of transactions with unequal board representation (i.e. “mergers of non-equals” or MONEs). However, the value created by MOEs measured by combined event returns is not significantly different than the matched sample. Moreover, both the value created and target shareholders’ capture of the gains are systematically related to variables representing control rights in the merged firm. The evidence suggests that target CEOs with stronger bargaining positions and incentives negotiate shared control in the merged firm in exchange for lower target shareholder premiums.

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1. Introduction

Over the past decade, there has been considerable growth in M&A activity in transactions described as “mergers of equals.” Some recent and highly publicized examples of these types of mergers include: Traveler’s Group and Citicorp, AOL and Time Warner, Viacom and CBS, Daimler-Benz and Chrysler, Dean Witter and Morgan Stanley, Bell and GTE. Mergers of equals transactions are friendly mergers generally characterized by extensive pre-merger negotiations between two firms closer in size that result in approximately equal shareholdings and board representation in the merged firm. In addition to price, these negotiations determine the post-merger corporate governance and additional “social issues” including company name, location of headquarters, and plans for asset-restructuring. Proponents argue that certain characteristics of mergers of equals (i.e. greater retention of target directors and managers) create more value than standard merger transactions and are beneficial to shareholders of both firms.¹ An alternative hypothesis is that target CEOs trade “power for premium.” Specifically, they negotiate control rights in the merged firm (both board and management) in exchange for a lower premium for their shareholders.²

This paper contributes to our understanding of the incentives of target management in M&A transactions by analyzing the circumstances in which target CEOs negotiate shared control in the merged firm. It is not uncommon for the acquiring firm in a synergistic merger to retain directors and management of the target firm; however, the degree of retention varies considerably.³ In order to explicitly evaluate the “power vs. premium” tradeoff, I examine a sample of mergers in which the shared governance between acquiring and target firms is the most extreme—i.e. mergers of equals transactions (hereafter referred to as MOEs). I analyze shareholder event returns

¹ One main advantage of the merger of equals transaction for target firms is that it allows management and directors to “protect shareholders’ investment by ensuring a significant continuing management role for the company’s existing directors and management team.” (Herlihy, et al, 1996).

² The news media frequently has raised the issue of potential agency costs in merger of equals transactions. For example, in regards to the proposed merger of equals between Bell Atlantic and GTE announced in 1998, Lipin (WSJ, 7/28/1998, p. A3) raises the question of whether the CEO of GTE was trading “power for premium” and whether the two CEOs were “focusing on the shareholders or worried about their jobs”. He reported that “Wall Street dealmakers suggest that had GTE and its chairman, Charles R. Lee, sought to sell the company to the highest bidder, whether it was Bell Atlantic, BellSouth Corp. or some other company, shareholders would have gotten a better exchange.”

³Refer to discussion in Section 5.1.

(combined, acquirer, and target) and a variety of governance, management and performance characteristics. While other explanations are possible, the findings generally support the hypothesis that target CEOs trade “power for premium.”

The first novel finding in this paper is that while MOE transactions create value, the combined abnormal returns are not significantly different than a matched sample of mergers. The paper’s most interesting findings concern the sharing of both shareholder returns and control rights among target and acquirer stakeholders. First, acquirer shareholders in MOEs capture more of the gains measured by event returns, while target shareholders capture less, in comparison to a matched sample. Interestingly, shared governance is more common in transactions involving larger, poorer-performing target firms managed by younger target CEOs with lower stock ownership. Finally, the target shareholder’s capture of the gains is negatively related to variables representing control rights of the target CEO. Specifically, abnormal returns to target shareholders are significantly lower in transactions in which target directors have an equal or controlling interest on the post-merger board and in transactions that stipulate a succession plan for the CEO or Chairman position in the merged firm.

The characteristics of M&A transactions-- hostile vs. friendly, tender offer vs. merger, cash vs. stock-financed, along with the creation and distribution of gains among stakeholders--are endogenously determined outcomes. Consistent with this, previous literature makes references to the relative bargaining positions of firms as determinants of the outcomes of merger and acquisitions.⁴ This paper’s findings are generally consistent with a bargaining model in which target CEOs with strong bargaining positions, offset by incentives to retain control, negotiate shared governance in the merged firm. Target CEOs of larger firms have stronger bargaining positions relative to acquirers for a variety of reasons. For example, acquirer CEO preferences for “empire-building” and the limited number of large potential targets, combined with the greater difficulty in financing a larger acquisition, favor target CEOs of large firms. However, the strength of target CEO bargaining power is offset by greater incentives to retain control. Young target CEOs

⁴For example, Schwert (2000) finds that the differences between hostile and friendly transactions are largely a reflection of bargaining strategy by acquiring and target firms. He analyzes pre-merger bidding strategy in detail, but doesn’t consider other common aspects of merger negotiations such as retention of both target directors and managers.

managing poorer-performing firms that operate in consolidating industries face fewer opportunities in the labor market and, as a result, higher cost of job loss. MOE transactions provide an interesting sample in which to study merger outcomes because one measure of the bargaining positions of target CEOs – i.e. the relative size of the target firm to the acquiring firm -- is “more equal.” More generally, these transactions give insight into the distribution of gains among stakeholders in the broader class of synergistic mergers with varying degrees of relative bargaining positions and strengths of incentives among target CEOs.

Importantly, differences in the distribution of gains in MOEs could be due to selection bias, i.e. certain types of firms choose to complete an MOE transaction, rather than a merger or tender offer transaction. To partly control for this and due to the effort involved in collecting governance variables, I use a probit specification to identify criteria to select a matched sample of transactions from a large sample of mergers. This matched sample (termed “mergers of non-equals” or MONEs) is comprised of transactions that are similar to MOEs across several firm and transaction characteristics, but differ in the degree of shared governance. Furthermore, in the cross-sectional analysis, I estimate a 2SLS regression in addition to OLS and use instruments that represent the strength of bargaining positions and incentives of target CEOs in negotiating shared governance.

Lastly, in addition to analyzing target CEO incentives in mergers of equals transactions, I confirm some questions already examined in the literature regarding shareholder returns in mergers. In a sample of approximately 1700 mergers and acquisitions of U.S. publicly traded companies in the period from 1991-1999, I find that the combined event returns are positive, target event returns are positive (and large), and acquirer event returns are negative (and small) (Weston, Chung and Siu, 1998). In a comparison between tender offer and merger transactions, I find that tender offers create more value than merger transactions⁵ and, consistent with previous studies, that the capture of the gains by target shareholders is larger in tender offers than mergers (Jensen & Ruback, 1983).

⁵ I am unaware of any study that documents that tender offer transactions create more value than merger transactions.

The remainder of this paper is organized as follows. Section 2 discusses related literature in the context of how CEO bargaining power and incentives affect the division of gains among stakeholders. Section 3 describes the data and characterizes MOE transactions. Section 4 discusses the empirical methodology and the method used to select the matched sample. Section 5 presents the market expectations for creation and divisions of gains between shareholders and evaluates the relationship between governance variables and shareholder returns. Section 6 discusses limitations and robustness. Section 7 concludes.

2. Merger Outcomes Determined by CEO Bargaining Positions and Incentives

Previous work on the incentives of target CEOs focuses on hostile takeovers and the circumstances under which management is forced to give up control. Since private benefits of control can lead to agency problems and lower firm value, the market for corporate control creates value through the removal of inefficient or entrenched target management (e.g. Morck, Shleifer, and Vishny, 1988). Evidence suggests that in hostile takeovers, target shareholders capture the gains at the expense of target management who experience high turnover (Shivdasani, 1993). In contrast, friendly mergers, which are the more prevalent form of acquisition in the 1990s (Schwert, 2000), create value through synergies arising from integration of the two firms making both acquirer and target better off (Morck, Shleifer, and Vishny, 1988, 1989). However, in these transactions, empirical evidence on the capture of the gains is mixed. In general, acquirer shareholders' abnormal returns are slightly negative or close to zero which might be explained by acquirer CEO preferences for either "empire-building" or independence, or by overconfidence in ability (Gorton, Kahl, and Rosen, 1999; Morck, Shleifer, and Vishny, 1990; Roll, 1986). While target shareholder returns are significantly higher than acquirer returns in mergers, they are lower in comparison to target returns in tender offers (Jensen & Ruback, 1983).

In this paper, I focus on friendly mergers and analyze the conditions in which target CEOs retain control in the merged firm and evaluate the relationship between shared governance and shareholder returns. While the potential trade of "power for premium" is present in all mergers, I focus on a sample of MOE transactions in which

shared governance is the most extreme and premiums are characteristically low. In MOEs, post-merger control rights are shared between approximately equal-sized firms. Consistent with the objective to share control as opposed to sell it, the governance of the merged firm is characterized by both equal board and senior management representation and equal shareholder ownership. Proponents of MOEs argue that, in addition to the standard value-enhancing mechanisms of synergistic mergers,⁶ value is created through the retention of directors and management of the target firm.⁷ However, since proponents also claim that MOEs maximize target shareholder value, their argument implies that the additional value from director and management retention should offset lower premiums to target shareholders. In contrast, opponents of MOEs argue that target shareholders could achieve a higher return if their firm was sold to the highest bidder in an auction; and, while shared governance is beneficial to management, it is achieved at the expense of target shareholders. In light of these two opposing views, I ask the following questions: What is the outcome of merger negotiations when target CEOs manage firms that are equal in size to the acquiring firm? How much value is created and how do shareholders split the gains? Do target CEOs with strong bargaining positions and incentives to retain control negotiate shared governance in exchange for lower premiums for their shareholders?

Determinants of both the relative bargaining positions and incentives of target and acquirer CEOs in merger negotiations are many. Target CEOs of larger firms may have stronger bargaining positions relative to acquirers for a variety of reasons. Acquirer CEOs simply may have a preference for “empire building” and several studies have documented that CEO compensation is determined by firm size (Murphy, 2000). Alternatively, acquiring CEOs may prefer larger targets for defensive reasons, i.e. to reduce the probability that their firm will be identified as a potential target (Gorton, Kahl

⁶Synergistic mergers create value through cost-reduction from economies of scale (e.g. combining operations and increasing scale) or revenue enhancement through economies of scope (e.g. cross-selling of products through shared distribution).

⁷ Some of the advantages cited by proponents include the following: acquiring firms can expand quickly creating shareholder value through merger synergies at much less cost than high premium acquisitions; target firm management and directors “maintain control and properly perceive their duty as managing their institutions for the long-term benefits of their shareholders and other significant constituencies”... “protect shareholders’ investment by ensuring a significant continuing management role for the company’s existing directors and management team” ...and allowing “*the best people from both organizations to manage the combined institution, thus enhancing long-term shareholder values.*” (Herlihy, et al, 1996).

and Rosen, 1999). Moreover, the difficulty in financing a takeover of a large target firm favors target CEOs of large firms.⁸ Since MOE transactions are more common in mergers with targets that operate in industries undergoing significant restructuring and consolidation (e.g. banking, utilities, and health care), target CEOs may have stronger bargaining positions due to the decreasing number of potential target firms.⁹ Importantly, and as discussed in Section 5.2, target CEOs in MOEs manage poorer-performing firms, are younger and own a lower percentage of the firm's common stock. Hence, while they may derive bargaining power from firm size and other factors, this power may be offset by greater incentives to negotiate shared governance due to more limited external employment opportunities. Finally, bargaining positions of target CEOs are enhanced if they have control over firm resources that are valuable to the acquiring firm (e.g. CEOs with control over key managers or customers, or possibly regulatory authorities) (Rajan and Zingales, 2000).¹⁰

Two theoretical papers give insight into the nature of the bargaining between CEOs in merger negotiations. First, Hermalin and Weisbach (1998) develop a model whereby board composition arises endogenously out of a bargaining game between the CEO and outside directors. While their model describes how CEOs with greater perceived ability can influence the board composition *within* their firm, it is suggestive of the type of bargaining that may occur *between* firms in which target CEOs negotiate post-merger board seats and management positions. Second, Harris (1994) models the determination of the identity of acquiring and target firms in single-bidder, synergistic takeovers as an outcome of a bargaining game. Firms with CEOs that have higher costs

⁸Additional empirical findings related to target firm size and consistent with larger firms having stronger bargaining positions include: target firm size is negatively related to takeover probability (Comment and Schwert, 1995); conditional on an offer being received by a target firm, target firm size is positively related to the likelihood that the offer will be hostile (Schwert, 2000).

⁹Mitchell and Mulherin (1996) find that the degree of takeover activity by industry sector can be explained by economic shocks. During the 1990s, the banking sector's share of the number of MOE transactions categorized by target industry (23.0%) is comparable to the sector's share of all M&A transactions (19.3%) where the sector includes commercial banks and bank holding companies. However, the banking sector's share of the value of MOE transactions (42.7%) far exceeds the sector's share of all M&A transactions (15.7%). The utility sector's share of the number of MOE transactions (11.5%) exceeds the sector's share of all M&A transactions (2.7%) where the sector includes electric, gas and water distribution companies. The health services sector's share of the number of MOE transactions (9.8%) exceeds the sector's share of all M&A transactions (4.5%).

¹⁰Rajan and Zingales (2000) argue that control over human capital may be a greater source of power than control over physical assets since almost all control rights over it are residual i.e., not allocable through contract.

associated with job loss have less bargaining power and are more likely to become the acquirer to retain their jobs. However, in doing so, they give up gains to target shareholders at the expense of acquirer shareholders. In this paper, I assume that the identity of the acquirer and target firms are determined, and evaluate target CEO incentives instead of acquirer CEO incentives.

Finally, Hartzell, Ofek and Yermack (2000, hereafter HOY) investigate incentives of target CEOs in friendly mergers and while the motivation is similar to that in this paper, their emphasis and econometric approach differ significantly. HOY analyze benefits received by target CEOs in a sample of mergers during 1995-1997 and conclude that increases in target CEO wealth are not extraordinarily high and target CEOs make tradeoffs between financial and career-related benefits. They find weak evidence that target premiums are negatively associated with target CEO benefits. In contrast, the findings in this paper primarily relate to shareholder returns—both the overall magnitude and the distribution between target and acquiring firms—in a sample of mergers in which the strength of both the target CEO bargaining position and incentives, and the degree of shared governance are the most extreme.

3. Data and Methodology

3.1 Sample

The analysis in this paper is based on transactions identified from the mergers and acquisitions database of Securities Data Company (SDC). I begin with all U.S. mergers with announcement dates between January 1, 1991 and December 31, 1999. The sample period is selected to focus on the time period in which MOEs are more common. The sample comprises acquisitions in which the following criteria are met: (i) both firms are publicly traded and listed on the Center for Research in Securities Prices (CRSP) database (ii) the merger is not classified as a share repurchase, a self-tender, or a sale of minority interest; and (iii) the method of financing of the merger is classified as either a stock swap or a tender offer transaction.¹¹ These criteria yield a sample of 1730 deals

¹¹ SDC definitions include: self-tender is a transaction in which the company offers to buy back its equity securities through a tender offer; sale of a minority interest is a transaction in which the seller of a minority interest (another company, bank or significant individual) is not the parent of the target company; and a stock swap is a transaction in which the acquiring company exchanges equity in itself for equity in the

with 1457 classified as stock swaps (or mergers) and 273 classified as tender offers.¹² From the sub-sample of mergers, I use SDC's classification to identify the 53 transactions that are mergers of equals (MOEs). MOE transactions in the SDC database are defined as merger transactions in which: (i) the two firms publicly announce the merger as a MOE, (ii) the two firms have approximately the same pre-merger market capitalization, (iii) the ownership of the new entity will be owned approximately 50/50 by each company's shareholders, and (iv) both companies should have approximately equal representation on the board of directors of the new company.

For this sample of 53 MOEs, I attempt to gather data on board and management characteristics from two SEC filings filed in connection with the transaction (Form DEFM 14A and Form S-4) and several SEC filings of the merged company filed after the merger becomes effective (Proxy statements, Form DEF 14A, 10Ks). In addition, I confirm and in one case revise the first announcement dates from the Wall Street Journal and other journals accessed through Dow Jones Interactive. Also, I confirmed that the transaction was announced as a merger of equals and that the relative size of the two firms, post-merger share ownership and board representation met the SDC criteria. This screening reduced the MOE sample to 40 transactions in which the relative size of the two firms (measured by the ratio of target market capitalization divided by the sum of target and acquirer market capitalization) averaged .44 (s.d.= .09), target shareholder post-holdings averaged 47.4% (s.d.=5.2%), and target share of post-merger board seats averaged 49.4% (s.d.=2.9%). Next, I use the matching criteria described in Section 4.3 to identify 40 merger transactions from the 1404 merger transactions in the large sample. I collect the same data for this matched sample of 40 mergers ("mergers of non-equals" or MONEs). The final sample for regression analysis includes information on 80

target and the acquirer must be acquiring at least 50% of the target's equity or be acquiring the remaining interest up to 100% of the target's equity, and at least 50% of the consideration offered must be in the form of equity; a tender offer is a transaction in which a formal offer of determined duration to acquire a public company's shares is made to equity holders and includes tender/ mergers which is a transaction in which a tender offer is launched, and the offer is followed by a merger agreement in which the acquiring company agrees to purchase the remaining shares not tendered under the offer.

¹² The tender offer category includes some transactions classified as tender/merger transactions that began as a tender offer for the majority of the stock with the minority subsequently being acquired via an exchange of stock. In this final sample, all of the stock swap deals are classified by SDC as friendly mergers and the majority of the tender offers are classified as friendly, with the remainder classified as hostile.

transactions (80 acquirers and 80 targets) with some variables missing. Details of the 40 MOE transactions are provided in the appendix.

3.2 Identification of Acquirer and Target Firm in MOE Transactions

In a hostile takeover, there is little uncertainty about the distinction between the acquirer and the target. The acquiring firm (generally larger) makes an offer directly to the shareholders of the target firm (generally smaller) and target shareholders decide whether to tender their shares to the acquirer. In general, the acquirer initiates the bid and offers a price, the acquirer's management and board of directors control the firm after the merger, and the acquirer is the surviving legal entity. However, in friendly mergers, the distinctions are less clear. First, the terms of the merger are negotiated between the CEOs of the two firms and then subsequently approved by both boards of directors and both sets of shareholders. In addition, the two firms may be closer in size. Finally, the management and the board of directors of the merged firm frequently include officers of the target firm. Despite these differences, the distinction between the acquirer and target is still relatively certain in friendly mergers.

In contrast to hostile takeovers and friendly mergers, the distinction between acquirer and target in a MOE transaction is less certain. In fact, the underlying notion of the agreement suggests that firms are equal and that neither firm is the acquirer or target. Importantly, while the misclassification of target and acquirer would not affect the combined event returns, it would bias the measures of the average gains captured by the acquiring and target firms within the sample. Specifically, if the acquiring firms are misclassified as targets and vice-versa, this would bias the average gains to acquirer and target shareholders toward equality. In this paper, I use SDC's classification of acquirer and target companies which is based on the following criteria: (i) the acquirer is the company with the greater percentage of post-merger share ownership; in the event of equal ownership shares, SDC uses other subjective criteria including: (ii) the acquirer is the company which designates its CEO as the merged firm's CEO, or (iii) the acquirer is the company which has favorable treatment in the name of the merged firm. In order to verify these criteria and the ultimate classification, I use SEC filings to document post-

merger share ownership, which firm fills the CEO position, the name of the merged entity, and additional information about the surviving legal entity.¹³

3.3 Mergers of Equals—Frequency, Share and Distinguishing Characteristics

While the number of mergers of equals transactions is small, MOEs account for a significant and growing proportion of the value of M&A transactions over the past ten years. Table 1 reveals the distribution of transaction characteristics by type of transaction for the larger sample over the period 1991-1999. MOEs account for approximately 2% of the number of transactions, but approximately 10% of the value of the transactions.¹⁴ This is in contrast to mergers that account for 86% of the number and 77% of the value of transactions; and to tender offers that account for 12% of the number and 13% of the value of transactions. MOEs' average share of the value of transactions is greater in the second half of the period (5.1% vs.13.8%), while mergers and tender offers average shares are lower in the second half of the period (79.3% vs. 77.3% and 15.6% vs. 8.9%, respectively).

Table 2 compares several measures that characterize merger transactions by type of transaction. While the average size of acquirers in MOE transactions (measured by market capitalization 10 days prior to announcement from CRSP) is not significantly different than acquirers in mergers or tender offers, the average size of target firms is larger. Hence, the relative size of the target firm to the acquirer is significantly larger in MOE transactions. Specifically, for MOEs in the sample, the ratio of the target's market value to the sum of the acquirer and target's market values averages .44. The corresponding ratio for mergers and tender offers is .19 and .16, respectively. Consistent with the differences in target firm size, the average value of the transaction (reported by SDC) of MOEs, mergers, and tender offers is \$8.34 billion, \$1.00 billion and \$0.75 billion, respectively.

¹³ Sample average statistics of these variables are presented in Table 6 and information by transaction is presented in the detailed appendix.

¹⁴ Transaction value is defined by SDC as total value of consideration paid by the acquirer, excluding fees and expenses. If a portion of the consideration paid by the acquirer is common stock, the stock is valued using the closing price on the last full trading day prior to the announcement of the terms of the stock swap. If the exchange ratio of shares offered changes, the stock is valued based on its closing price the last full trading date prior to the date of the exchange ratio change.

Importantly, and as mentioned earlier, the method that determines price and the premium paid to target shareholders varies across types of transactions. In tender offers, the acquiring firm makes a bid directly to the target's shareholders. The bid includes a premium over the current price of the stock and shareholders individually decide whether to tender their shares. However, in most merger transactions, the price is typically determined by negotiations between two parties--the CEOs of the two firms supported by their advisors. The terms being negotiated can cover a broad spectrum. At one extreme, CEOs negotiate only the price. MOEs represent the other extreme, in which CEOs negotiate price, but also control rights (e.g. the structure of the board of directors, management structure, CEO succession plans) and other "social issues" (e.g. post-merger asset restructuring, company name, and location of headquarters).¹⁵

One factor that influences the outcomes of merger negotiations is the relative size of the target firm to the acquirer. As argued earlier, acquirer CEO preferences for empire-building combined with the difficulty in financing a large transaction may enable target CEOs of larger firms to negotiate shared governance (or equivalently, a MOE transaction). An analysis of the transactions that combine equally-sized firms shows that shared governance is more likely among this subset. Specifically, the MOE share of the transactions combining equally-sized firms is significantly greater than the MOE share of all transactions (21% vs. 3%). In contrast, the shares of both tender offers and mergers of this subset are smaller than the corresponding shares of all transactions (8% vs. 16% and 71% vs. 81%, respectively).¹⁶ These results suggest that the relative size of the two firms is an important factor in determining the degree of shared governance.

The varying degrees of negotiation and the possible tradeoff between the price (or premium) and control rights (and social issues) leads to additional differences between transaction types. Most notably, the ex ante target premium (reported by SDC) in MOE transactions is significantly lower on average (14.6%) than in merger (41.1%) and tender

¹⁵ It is important to note that ultimately both the board of directors and shareholders of each firm must approve mergers. For simplicity, I ignore the role that block shareholders may play in the firm's choice of a MOE transaction.

¹⁶For these statistics, transactions combining equally-sized firms are defined as those in which the relative size of the target (defined as the ratio of the target market value to the sum of the acquirer and target market values) ranges between .4 and .5 (approximately 9% of the sample described in the footnote to Table 3).

offer transactions (52.2%).¹⁷ Moreover, due to the increased complexity of the negotiations, MOE transactions take significantly longer to complete.¹⁸ The average elapsed days from the merger announcement to completion of the deal (both reported by SDC) is 193 days for MOEs, 159 days for mergers, and 82 days for tender offers.

Other notable differences across transaction types are based on the following characteristics: the frequency of horizontal mergers, the industry in which the target firm operates, and whether targets are incorporated in states protected by takeover legislation. These characteristics are most probably related to the relative bargaining of the two CEOs. In approximately 80% of the MOE transactions, the merger can be characterized as horizontal i.e. the two firms operate in the same 2-digit SIC code as coded by SDC. Horizontal mergers are equally common among merger transactions (72%), but significantly less common in tender offers (56%). Horizontal mergers are more likely to require regulatory approval possibly increasing the importance of cooperation by target CEOs. In addition, the target firms in MOE and merger transactions are more likely to operate in the financial services industry (40% and 39%, respectively) in comparison to targets in tender offers (5%). Finally, target firms in MOEs are more likely to be incorporated in states protected by takeover laws (81% incorporated in states with business combination legislation in comparison to merger transactions 65%) that increase the bargaining position of target CEOs.¹⁹

¹⁷SDC defines the target premium as the premium paid to target shareholders on their stock over the price at which the stock was trading at the day before the announcement of the terms of the deal. In stock-financed deals, this is measured by the implied premium based on the share price of both firms the day before the merger announcement and the exchange ratio specified in the terms of the merger. I refer to this premium as an *ex ante* premium because it is the exchange ratio between target and acquiring firm stock that is negotiated *before* the announcement of the event. This *ex ante* premium is highly correlated with, but different than abnormal returns that measure the market's response to both the announcement of the merger and the terms of the agreement.

¹⁸ However, the longer time may be due to greater anti-trust concerns in large, horizontal mergers and the high frequency of mergers in financial services that require regulatory approval.

¹⁹States protected by takeover laws are those that have passed a Business Combination (BC) law [from Bertrand and Mullainathan (2000)]. BC's impose a moratorium on specified transactions between a target and a raider holding a specified threshold of stock, unless the board votes otherwise. Specified transactions include sale of assets, mergers, and business relationships between raider and target. BC laws give the target board and, in turn, target management the right to "veto" a takeover by making it more difficult to finance one. Takeover laws increase the relative bargaining power of the target CEO and may lead to higher premiums (Comment and Schwert, 1995).

3.3 Calculating Abnormal Returns

I calculate abnormal returns using the market model and standard cumulative abnormal return methodology. Market model statistics are obtained for the acquirer and target using the CRSP equally-weighted market index and an estimation window consisting of all available trading data from 300 trading days before the first announcement associated with the acquisition to 60 trading days before the first announcement. The event window spans from both 1 day and 10 days before the announcement of the merger to the first announcement date.²⁰ The general methodology for calculating abnormal returns is outlined in Bradley, Desai, and Kim (1988). The estimation equation is to calculate the abnormal return to firm i on day t is:

$$AR_{it} = R_{it} - \bar{\alpha}_i - \bar{\beta}_i \cdot R_{mt} \quad \text{with } t = -300 \text{ to } -60.$$

The market return, R_{mt} , is calculated using the equally-weighted CRSP index. The cumulative abnormal returns to firm i are calculated by summing the abnormal returns over the event window. Combined cumulative abnormal returns are generated by forming a portfolio consisting of the target and the acquirer, using their market values 10 days before the first announcement to form portfolio weights. To improve the specification of the tests, the p-values (in Table 3) are determined using the z-statistic that is based on the standardized cross-sectional method for market model abnormal returns (Boehmer, Musumeci and Poulson, 1991).²¹ The reported rank test is the nonparametric rank test introduced by Corrado (1989).

3.4 Comparison of Shareholder Returns in MOEs, Mergers and Tender Offers

Over the period from 1991-1999, the market expects M&A transactions to create value and for the target firms to receive a greater share of the value-created relative to acquirers. Table 3 presents cumulative average abnormal returns for the entire sample and for the three categories of transaction type for the announcement period (-1,0).

Combined abnormal returns for the entire sample average a significant 1.14%, with

²⁰ Results are robust to various estimation windows. CARs in Table 3 are 2-day CARs; CARs used in the cross-sectional analysis are 11-day CARs.

²¹ This test is the same as the Patell test (1976) except that there is a final empirical cross-sectional variance adjustment in place of the analytical variance of the total standardized prediction error.

acquirers earning small, negative returns (-.089%) and targets earning large, positive returns (13.11%). These results generally are consistent with previous findings.²²

The novel findings about abnormal returns in this paper concern mergers of equals. The results presented in Table 3 suggest that while the average value-created by MOEs is comparable to all other transactions, acquirer shareholders capture more of the gains and target shareholders capture less of the gains in MOEs. Specifically, on average, the combined abnormal returns for the MOE sample is not significantly different than that for the entire sample (2.21% vs. 1.14%); however, acquirer returns are significantly higher in MOEs (0.62% vs. -0.89%) and target returns are significantly lower in MOEs (4.71% vs. 13.11). Since MOE transactions are a subset of mergers, the more interesting comparison is that between MOEs and mergers. The results on the sharing of gains between shareholders still holds. However, while on average, MOE combined returns are greater than mergers (2.21% vs. 0.74%), this difference is not robust in comparison to a matched sample. In summary, based on the large sample comparison between MOEs and mergers: MOEs create more value, acquirer shareholders capture more of the gains, while target shareholders capture less relative to merger transactions.

4. Construction of the Matched Sample

4.1 Selection Bias and Empirical Strategy

As mentioned earlier, the above analysis suffers from endogeneity problems.²³ CEOs choose MOEs when the benefits of this form of transaction are greater than the benefits of choosing a MONE. Conditional on the occurrence of a transaction, the decision to choose a merger with shared control over a merger without shared control

²² Jensen and Ruback (1983) find acquirer (target) returns of approximately 0% (20%) in merger transactions and 4% (30%) in tender offer transactions. Other studies find negative abnormal returns for acquiring firms (see Gorton, Kahl and Rosen, 1999 for a list of studies).

²³The ideal experiment would be to observe a sample of identical firms in which the target CEO was deciding between two types of transactions: a MOE (with shared control i.e. half of the board seats filled by target directors and the presence of a succession plan) and a MONE (with no shared control). If shareholder returns were lower in the MOE transactions relative to returns in the MONE transactions, then this evidence would support the hypothesis that CEOs choosing MOEs with shared control are not maximizing returns to shareholders. Note, however, this experiment would say nothing about whether the CEO was maximizing the objectives of other stakeholders i.e. board members, employees, or senior management.

might depend on the presence of some transaction, firm and/or manager-specific characteristics. For example, suppose a firm operating in a consolidating industry is trading at a discount relative to other firms in its industry. This may occur from changes in industry structure and competitive advantage that reduce the expected payoff for the firm. In addition, suppose the firm's managers and board of directors are very valuable. Such a firm's CEO might be incapable of negotiating a high premium for its shareholders in merger negotiations due to lower expected payoffs, but might choose to merge with an acquirer that lacks managerial capabilities. In contrast, the firm might be a poor-performer run by inefficient managers with limited outside employment opportunities and the CEO might negotiate shared control to protect his job in exchange for a lower premium. In either case, not taking into account past performance and managerial ability might result in incorrectly attributing lower abnormal returns to the choice of a MOE rather than underlying transaction, firm or managerial characteristics.

Ideally, one would want to estimate a system of two equations: the first being the choice to negotiate shared control (i.e. a MOE transaction or more specifically equal board and management representation) and the second being the effect of this choice on abnormal returns. In this paper, I address the endogeneity problem in two ways. First, due to the effort involved in collecting governance variables for the 1700 transaction sample, I use a probit specification to identify criteria to select a matched sample of transactions from the large sample of mergers. This matched sample (termed "mergers of non-equals" or MONEs) is comprised of transactions that are similar to MOEs across several firm and transaction characteristics, but differ in the degree of shared governance. Mean comparison tests of shareholder returns and shared governance are conducted between MOEs and the matched MONE sample (Section 5.1). Second, in the cross-sectional analysis, to obtain unbiased estimates of the effect of shared governance on abnormal returns, I estimate 2SLS regressions in addition to OLS (Section 5.3). The instruments used for the governance variables represent the bargaining power and incentives of target CEOs to negotiate control and are orthogonal to shareholder returns.

4.2 Identification of a Matched Sample

To identify the criteria that affect the decision to share governance in a merger, I ask the following question: conditional on a merger or acquisition being announced, what factors determine whether it will be a MOE transaction? Table 4 shows the results of various probit models that regress the probability that the firm-pair announces a MOE transaction on a variety of transaction and firm characteristics that distinguish the different transaction types (discussed earlier and summarized in Table 2). These characteristics represent both the potential benefits from shared governance and the relative bargaining positions and incentives of target CEOs. They include: (i) the relative size of the target as a measure of the attractiveness of the target firm to acquirer CEOs with preferences for “empire-building” and the scope of the task in replacing target boards and management [TRELsize defined as the relative size of the target to the acquirer (measured by the ratio of the target firm’s market capitalization 10 days prior to the event divided by the sum of the target and acquiring firm’s market capitalization)]; (ii) whether the merger is horizontal as a measure of the relevance and value of the target’s human capital and the importance of cooperation by the target CEO in the event of anti-trust concerns (HORIZ measured by a dummy variable which equals one if the target and the acquirer 2-digit SIC codes are equal and zero otherwise); (iii) whether the target is incorporated in a state protected by takeover laws that effectively protect target managers (BCDUM measured by a dummy variable equal to one if business combination laws that protect target management are in effect and zero otherwise)²⁴; (iv) whether the target operates in the financial services industry in which regulatory considerations and industry consolidation affect both the benefits of shared governance and bargaining positions and incentives (FINDUM measured by a dummy variable which equals one if SDC designates the target’s industry as financial services and zero otherwise); and (v) the value of the transaction as another measure of target size and its attractiveness to acquiring CEOs and as a measure of the difficulty in financing the transaction (TRANS measured by the log of transaction value defined by SDC).²⁵

²⁴Takeover law is a dummy variable equal to 1 (or 0) if the target is (or is not) incorporated in a state that has passed a Business Combination (BC) law.

²⁵Year dummies are not jointly significant. Industry dummies (2-digit SIC) for acquirers or target firms are not jointly significant, but MOEs are proportionately more common in financial services industries,

In addition, prior performance of the two firms affects both the value of shared governance and relative bargaining positions. Hence, the specification includes (industry-adjusted) financial performance measures using Compustat for both acquirer and target firms in the year prior to the merger, including: ROA (operating income/assets), revenue growth, leverage (total debt/assets), and Tobin's Q. These measures are deviated from industry medians in which the industry is defined as the Compustat SIC code with a minimum of 10 firms. If 10 firms are not found in the 4-digit SIC code, then I use the median of the firms in the 3-digit SIC code; if 10 firms are not found in the 3-digit SIC code, then I use the median of the firms in the 2-digit SIC code.²⁶ Variable definitions are in the appendix.

The results in Table 4 suggest that the larger the relative and absolute size (or value) of the target (TRELSIZE and TRANS, respectively), the higher the probability of a MOE transaction. The coefficients of both variables are positive and significant in all specifications. Interestingly, faster growing and more highly leveraged target firms (TREVGR and TLEVERAGE, respectively) and acquirers with more favorable investment opportunities (ATOBINSQ) are more likely to choose a MOE transaction (marginally significant coefficients). Finally, MOE transactions are more likely in horizontal mergers and in mergers with targets that operate in financial services (marginally significant coefficients).

These results identify factors that, conditional on a merger being announced, determine the likelihood of shared control (or an MOE transaction).²⁷ The significance of the estimated coefficients (plus the magnitude in the probit specification that estimates each variable's marginal effect; not reported) suggests that the appropriate criteria to select the matched sample from the large sample of merger transactions include: target's industry (measured by the 2-digit SIC code), relative size of the target and acquirer, the value of the transaction, and whether the merger is horizontal. I use these four criteria in the order listed above (plus the year of the announcement) to select transactions from the

hence I use a dummy variable to distinguish between target firms operating in financial services vs. all other industries.

²⁶As is standard in using these data, the sample size is reduced significantly as financial variables are added to the regressions adding yet another selection problem.

²⁷Note that management characteristics, such as CEO age and share ownership, which affect CEO incentives are not included in this large sample analysis, but are included in the comparison of MOE and matched samples and the regression of shareholder returns on governance variables.

sample of 1404 mergers and supplement the selection with personal judgment to make tradeoffs between the criteria when necessary. First, I identify mergers with targets that operate in the same 2-digit SIC code as the MOE targets (and generally transactions with announcement dates within 2-years of the MOE announcement date). From this subset, I select mergers using the relative size of the target and acquirer as the next criterion. Next, I use the value of the transaction to select among this sample. Finally, I use the type of merger (horizontal vs. diversifying) as a final screen. This process results in a set of possible matches for each MOE from which the match is chosen randomly. If pre- and post-merger SEC filings are not available for the first randomly selected match, a subsequent match among the remaining candidates is chosen (again randomly). In two cases, all initial candidates were eliminated through this sequential process and the screening based on the initial criteria was re-examined to add another candidate to the list of potential matches.

5. Market Expectations for Value Creation and Capture of Gains

5.1 Comparison of Shareholder Returns and Governance Variables

The value created by mergers of equals (i.e. MOEs) measured by combined event returns is not significantly different than that of a matched sample of transactions without shared control (i.e. transactions with unequal board representation or mergers of non-equals (or MONEs)). In Panel A of Table 5, 2-day combined abnormal returns of MOEs are greater than returns in the matched MONE sample (1.97% vs. 0.80%); however, the difference is not significant (p-value =.391). In contrast, in the comparison to the larger sample of unmatched merger transactions, MOE returns are significantly greater (2.21% vs. 0.74) (at the 10% level of significance). This difference between the two samples suggests that controlling for selection bias is important.²⁸ More interestingly, acquirer shareholders capture more of the gains in MOEs, while target shareholders capture less. In Table 5, acquirer 2-day returns are significantly higher in MOEs than in the matched sample (0.60% vs. -4.36%; p-value=.001), while target 2-day returns are significantly

²⁸However, the difference also might be simply explained by the reduced power of the tests in the smaller matched sample.

lower in MOEs (3.89% vs. 9.44%; p-value=.010).²⁹ These differences generally are consistent with those found in the comparison of MOEs to the larger unmatched sample (acquirer, 0.62 % vs. -1.19%; target, 4.71% vs. 11.59%). Similar results hold for longer event windows, both 11-day and 31-day abnormal returns.

Table 5 also compares both board and management characteristics that are related to post-merger shared control for the two samples. I use two variables to represent crude measures of control rights from which target CEOs derive private benefits. First, since I assume that target CEOs prefer appointments of target firm directors to the post-merger board over appointments of acquiring firm directors, I use the target's control of the board (TBOARD) as one measure (Panel B of Table 5).³⁰ TBOARD is a dummy variable equal to one if the share of the post-merger board seats filled by target directors is greater than or equal to 50% and zero otherwise. The proportion of transactions in which the target firm fills 50% or more of the post-merger board seats (represented by TBOARD) is significantly higher in the MOE sample (0.80 vs. 0.23; p-value=.000). It is interesting that while the averages of pre-merger board size between the two samples are not different, the average post-merger board is larger in the MOE sample. Moreover, the average of the target's share of the post-merger board seats is close to 50% for MOEs (confirming the accuracy of SDC's definition of a MOE transaction) which is significantly higher than for MONEs (49.8% vs. 28.1%; p-value=.000).³¹

²⁹ Because of the large size of several of the MOE transactions, it is difficult to find matched firms of equal transaction size. As a result, the samples are different (at the 10% level of significance) in average transaction size. However, this difference does not explain the difference in abnormal returns between samples. Specifically, there is no systematic relationship in a plot of abnormal returns on transaction size (or size of target) by MOE and MONE transactions. Moreover, the difference is robust in a regression that controls for both absolute target size and relative target size and is robust in the subset of transactions in which the target size is less than the median of the sample.

³⁰ In the literature on board composition, a standard assumption is that CEOs prefer the appointments of "insiders" to the board of directors as opposed to independent directors (e.g. Hermalin and Weisbach, 2001). Analogously, I assume that both target and acquirer CEOs prefer appointments of their firm's directors to the post-merger board. This simplifying assumption ignores the incentives of directors and their role in the approval process of mergers. While Harford (2000) finds evidence that the external control market is effective should directors fail as monitors in takeovers, it is unclear whether the same mechanism holds for the class of MOEs in which target CEOs have strong bargaining power and target directors retain an equal or controlling interest on the post-merger board.

³¹ In a sample of takeovers, Harford (2000) finds similar board growth and retention rates as that found in my sample of MONEs. Specifically, he finds that the bidder retains 36% of the target board members. However, this average retention rate is comprised of 85% retention in terminated bids and only 13% retention in completed bids. In a sample of completed mergers, HOY (2000) find that the target's share of the post-merger board is approximately 18%.

Since I assume that employment contracts and succession plans for senior management positions represent one method by which CEOs negotiate for additional (or protect existing) private benefits, I use the presence of a succession plan for the CEO or Chairman position (CEOSUCC) as the second measure of shared control (Panel C of Table 5). CEOSUCC is a dummy variable equal to one if the merger includes a succession plan for either the CEO or Chairman position in the merged firm and zero otherwise. The frequency of CEO/Chairman succession plans (represented by CEOSUCC) is significantly higher in the MOE sample (0.37 vs. 0.13; p-value=.010). These employment contracts as defined in the SEC filings can take a variety of forms. For example, the contract may specify that the acquirer CEO fill and remain in the CEO position in the merged firm until retirement; or it may specify that the acquirer CEO fill the CEO position in the short run, but then will be replaced by the target CEO at some future date.³² I argue that the presence of a succession plan for either the CEO or Chairman position is another indicator of sharing of control in mergers and may be representative of self-interested CEOs increasing private or other stakeholder benefits at the expense of shareholder returns.³³ Finally, the frequency of transactions in which the CEO of the acquirer fills the CEO position in the merged firm is significantly lower in the MOE sample.³⁴

5.2 Bargaining Position and Incentives of Target CEOs

As mentioned earlier, in addition to the relative size of the target firm and the other variables used to select the matched sample, bargaining positions and incentives of

³² For example, in the merger of equals between Nationsbank (acquirer) and BankAmerica (target), McColl (CEO of Nationsbank) assumed the position of CEO of the merged firm immediately after the completion of the merger. However, as part of the merger agreement, Coulter (CEO of BankAmerica) negotiated that he would assume the position of CEO upon McColl's retirement.

³³ There is considerable heterogeneity in the form of the succession plans in the sample. Succession plans can apply to the CEO position, the Chairman position, or both and can protect the target or acquirer senior management. Six of the fourteen succession plans in the MOE transactions protect either the target CEO or the target Chairman or both (or 16% of the MOE transactions vs. 5% of the MONE transactions represented by TCEOSUCC in Table 5). Of these six, four of the succession plans stipulate that the acquirer CEO will initially fill the CEO position in the merged firm and the target CEO will subsequently be promoted to the position. HOY (2000) document the existence of explicit succession agreements for target CEOs in approximately 3% of their sample (9 of 311 mergers). They find that the target CEO agreements in their sample of mergers are generally not honored. While I do not investigate the outcome of these employment agreements, I argue that the act of negotiating the agreements is a reasonable proxy of the intent to share control.

³⁴ This measure is one of the measures used to verify classification of acquiring and target firms.

target CEOs are affected by variables such as CEO age and ability, stock ownership, the extent of outside employment opportunities, and the presence of golden parachutes. Table 6 compares both firm and management characteristics that proxy for the strength of target CEO incentives to retain control and, in turn, bargaining position. Younger CEOs have a greater incentive to negotiate shared governance because they derive greater benefits from job retention relative to older CEOs who are closer to retirement. This is particularly true in consolidating industries in which the number of CEO positions is declining with the number of firms. While average acquirer CEO age (represented by AGE) is not significantly different between the two samples (53.7 vs. 53.3; p-value=.767), target CEOs are younger in MOEs (53.6 vs. 56.3; p-value=.100). Based on a comparison within samples, acquirer CEOs in MOEs are the same age as target CEOs (53.7 vs. 53.6; p-value=.816), while acquirer CEOs are younger than target CEOs in MONEs (53.3 vs. 56.3; p-value=.034). Another measure of the cost of job loss for a target CEO and, in turn, his incentive to negotiate shared governance is the amount of resources he controls normalized by the stage in his career. I use the log of market capitalization divided by CEO age (represented by POWER) as one measure of control over resources. Target CEOs control the same level of resources as acquirer CEOs within MOE transactions (.269 vs. .267; p-value=.510) but control more resources than target CEOs in MONEs (.262 vs. .241; p-value=.015). These findings suggest that target CEOs in MOEs may have higher costs of job loss and stronger incentives to negotiate shared control relative to target CEOs in MONEs.

Share ownership by the CEO (and by directors, executives, and greater than 5% shareholders) mitigates incentives for CEOs to increase private benefits of control at the expense of shareholders. The greater the share ownership, the more costly it is for target CEOs to negotiate shared governance in exchange for premiums.³⁵ Table 6 shows that while average acquirer CEO share ownership at the date of the merger announcement (represented by CEOOWN) is not significantly different between the two samples (1.6% vs. 4.2%; p-value=.116), target CEOs in MOEs hold a significantly lower share of stock (0.4% vs. 2.8%; p-value=.011). Based on a comparison within samples, acquirer CEO

³⁵Managerial ownership can also affect CEO bargaining power. Stulz (1988) argues that firms with higher managerial ownership, conditional on an acquisition being made, are expected to receive a higher price due to the CEO's bargaining power.

ownership is not significantly different than target CEO ownership in either the MOE or MONE samples. Interestingly, average ownership by directors, executives and greater than 5% shareholders for the acquirer at the date of the merger announcement (represented by OWN) is significantly lower in MOEs (7.7% vs. 13.1%; p-value=.084). There are no other significant differences between the samples or between the acquiring and target firms within the samples for the broad group ownership.

Pre-merger firm performance affects bargaining positions and incentives in merger negotiations. Poor firm performance may be indicative of a target CEO with low ability, few outside employment opportunities, and a higher cost of job loss. Less able target CEOs, despite strong bargaining positions derived from firm size, have stronger incentives to negotiate shared control precisely because their alternative career opportunities are limited. The last two variables in Table 6 (defined in the appendix) compare industry-adjusted, pre-merger operating performance. On average within both samples, acquirers are performing above their industry medians measured by both return on assets one year prior to the merger announcement and asset growth three years prior to the announcement (all positive numbers). Target firms in MOEs are less profitable compared to their industry average (ROA is 0.50% below), but are growing at a faster relative rate (asset growth is 10.3% above). In contrast, targets in MONEs are more profitable compared to their industry average (ROA is 1.29% above), but are growing at a slower relative rate (asset growth is 3.0% below). Acquirers (industry-adjusted) growth rate is significantly greater than target firms in both MOE and MONE samples (p-values=.006 and .052, respectively).³⁶ Possibly of most interest, target firms in MOEs are significantly less profitable than target firms in MONEs (-0.50 vs. 1.29; p-value=.093). Finally, target firms' investment opportunities (measured by industry-adjusted Tobin's Q) are less attractive on average than those for acquirers in MOE transactions (.012 vs. .539; p-value=.032).

Comparison of pre-merger performance suggests that target firms in MOE transactions are generally poor-performers relative to both the corresponding acquirers

³⁶ The probit specification in Table 4 suggested that faster-growing target firms (1-year prior to the event) are more likely to choose an MOE transaction. In contrast, the analysis in Table 6 suggests that *within* MOE transactions, target firms are growing more slowly (3-years prior to the event) than the acquiring firms.

within the MOE sample and to target firms in the MONE sample. Acquirers are growing faster and have more attractive investment opportunities relative to targets in MOE transactions; and target firms in MOEs are less profitable than those in MONEs. These findings help explain why, despite stronger bargaining power due to larger firm size, target firms of MOE transactions are not acquiring firms. Moreover, if firm performance is informative about CEO ability, target CEOs of MOEs may have more limited outside opportunities and higher costs of job loss and a stronger incentive to negotiate shared governance.

5.3 Explaining the Cross-section of Expected Value Creation and Capture of Gains

In this section, I turn to evaluating the hypothesis of the “power-premium tradeoff” by analyzing the relationship between shareholder returns and the shared governance of the merged firm. Before estimating regressions, I analyze the simple correlations between the terms of the merger negotiations that are being determined simultaneously and the measures related to bargaining positions and incentives of target CEOs. The signs of the correlation coefficients and the significance levels presented in Table 7 are suggestive of the subsequent regression results and help to identify appropriate instruments for shared governance. Both measures of target shareholder returns-- target abnormal returns calculated from CRSP (TCAR) and SDC’s reported premium (PREMIUM)-- are negatively correlated with the three governance variables-- the target firm’s control of the board (TBOARD), the presence of a succession plan for the CEO or Chairman position (CEOSUCC), and the presence of a succession plan protecting the target CEO or Chairman (TCEOSUCC). Hence, greater shared control with the target CEO is associated with lower target shareholder returns and premiums.

The associations between the governance variables and the various measures of the relative bargaining positions and incentives of target CEOs give insight into possible instruments for shared control. Both the target firm’s control of the board (TBOARD) and the presence of a succession plan (CEOSUCC) are positively associated with the relative size of the target (TRELSIZE). The target CEO’s control over resources normalized by age (TPOWER) is positively associated with CEOSUCC, but is not correlated with TBOARD. Interestingly, CEO stock ownership in both firms

(TCEOOWN, ACEOOWN) and director, executive, and 5% shareholder stock ownership in both firms (TOWN, AOWN) are negatively related to the presence of a succession plan (CEOSUCC). Finally, if performance is related to ability, one might expect acquiring firms to retain the board members and senior management of better performing targets. In contrast, all governance variables (TBOARD, CEOSUCC, and TCEOSUCC) are negatively associated with target performance (TROA). This last finding is consistent with the explanation that board seats and management positions are negotiated for reasons other than retention of valuable human capital.

Next I turn to the cross-sectional investigation of possible relationships between the negotiated governance of the merged firm and the market's response to the announcement of the merger. The hypothesis being tested is whether target CEOs are compromising the interests of their own shareholders in exchange for private or other stakeholder benefits of control. In order to do this, I estimate the following regressions:

$$CAR^c = \alpha + \beta_1^c \cdot TBOARD + \beta_2^c \cdot CEOSUCC + \varepsilon \quad (1)$$

$$CAR^a = \alpha + \beta_1^a \cdot TBOARD + \beta_2^a \cdot CEOSUCC + \varepsilon \quad (2)$$

$$CAR^t = \alpha + \beta_1^t \cdot TBOARD + \beta_2^t \cdot CEOSUCC + \varepsilon \quad (3)$$

The dependent variable, CAR, is the cumulative abnormal return during the 11-day window as defined earlier. The superscripts *c*, *a*, and *t* represent combined, acquirer and target, respectively. Hence, I estimate these regressions to evaluate the relationship between both the value-created by the merger (CAR^c) and the division of the gains between acquirer (CAR^a) and target (CAR^t) shareholders, and the governance of the merged firm (TBOARD and CEOSUCC as defined earlier).

The null hypothesis is that CEOs negotiate shared control (and MOE transactions) in order to maximize shareholder returns. This implies that increases in shared control should increase merger gains (i.e. $\beta_1^c, \beta_2^c > 0$) and be beneficial to both sets of shareholders (i.e. $\beta_1^a, \beta_2^a, \beta_1^t, \beta_2^t > 0$). The alternative hypothesis is that target CEOs negotiate the terms of the merger to increase private or other stakeholder benefits (measured by board seats and succession plans) at the expense of target shareholder

returns. This hypothesis implies that increases in shared control should decrease merger gains (i.e. $\beta_1^c, \beta_2^c < 0$) and be detrimental to target shareholders (i.e. $\beta_1^t, \beta_2^t < 0$).³⁷

Table 8 shows the results of OLS specifications of regressions of both target CARs (Table 8a) and combined CARs (Table 8b) on governance variables. Columns 1-3 in Table 8a show that both target board control (TBOARD) and the presence of a CEO or Chairman succession plan (CEOSUCC) are negatively related to target abnormal returns. Both coefficients in all three specifications are negative and significant.³⁸ Moreover, these results are robust in specifications in columns 4-5 in which additional controls such as target firm size (TSIZE) and target firm relative size (TRELsize) are included and in columns 6-10 which include a dummy variable (MOEDUM) which equals one if the transaction is a MOE and zero otherwise. Importantly, the magnitude of the coefficients suggests that both governance variables are economically significant. Specifically, based on the coefficients of TBOARD and CEOSUCC in specification 10 (-0.078 and -0.072, respectively), target CARs in transactions with either target board control or the presence of a succession plan are approximately 7% lower than the sample mean of 8.6%.³⁹

Table 8b suggests that the presence of a succession plan reduces the value created by the merger. In all specifications, the coefficient on CEOSUCC is negative and significant. However, target control of the post-merger board has no effect on the value-created (with the exception of columns 1 and 6 in which it appears as a single regressor). The results presented in both tables generally support the alternative hypothesis that target CEOs compromise the interests of their own shareholders in exchange for the private benefits from appointing target directors to the post-merger board and negotiating a succession plan for the CEO position. Merger agreements that appoint a larger share of target directors to the post-merger board and that include CEO/Chairman succession plans are associated with lower target shareholder returns (i.e. $\beta_1^t, \beta_2^t < 0$). Of additional

³⁷Finally, the hypothesized effect on acquirer shareholder returns is less clear because it depends on the sharing of gains between acquirer shareholders and CEOs, and since it's not the focus of this paper, I only report the results of estimating specification (1) and (3). In the estimation of (2), TBOARD has a positive (but insignificant) effect on acquirer shareholder returns, while CEOSUCC has a negative (but insignificant) effect.

³⁸Note that the significance levels are based on more conservative two-sided tests.

³⁹The results in the regressions in Table 8a (and Table 8b which is discussed next) are generally robust to the inclusion of both year and target industry dummy variables; however, since neither set of dummies is jointly significant, I don't report the results.

interest, and at odds with the claim that management retention creates value, transactions that include succession plans create less value measured by combined abnormal returns (i.e. $\beta_2^c < 0$).^{40 41}

Importantly, both governance variables in equations (1) and (3) are endogenous variables. Hence, omitted variables that are correlated with both returns and shared governance may bias the OLS estimates of the coefficients. To address this problem, I instrument the governance variables with measures related to the bargaining position and incentives of the target CEO. The instruments I evaluate (among others considered) include: the relative size of the target to the acquirer (TRELsize); the target firm's operating performance deviated from industry medians in the year prior to the merger announcement (TROA); the share of common stock owned by the directors, executives and 5% shareholders of the acquiring firm (AOWN) at the date of the merger announcement; the share of common stock owned by the target CEO (TCEOOWN) at the date of the merger announcement; and the resources that target CEOs control normalized by CEO age (TPOWER).

Table 9a shows the results of the first-stage probit regression of the governance variables regressed on the instruments mentioned above. The results in columns 1 and 2 suggest that TRELsize and TROA appear to be potential instruments for TBOARD (statistically significant coefficients), however the explanatory power of TROA is limited. As mentioned earlier, the negative coefficient on TROA suggests that valuable human capital may not be the reason for retention of target board members. In addition, stock ownership by the directors, executives and 5% shareholders of the acquiring firm might be a potential instrument for TBOARD, however, the coefficient in column 3 is not statistically significant. Turning to potential instruments for CEOSUCC, the results in

⁴⁰ Arguably, a better measure of target CEO benefits is the presence of a succession plan that specifically protects his position in the merged firm. The systematic relationship between shareholder returns and the presence of a succession plan is robust when CEOSUCC is defined as the presence of a succession plan that protects either the target CEO or the target Chairman (TCEOSUCC). Specifically, in the regression of target CARs, the coefficients (s.e.) on TCEOSUCC are -.132 (.034)^{***}, -.099 (.021)^{**}, -.124 (.027)^{**} and -.133 (.027)^{***} in (2), (3), (4) and (5) of Table 8a, respectively. Furthermore, in the regression of combined CARs, the coefficients are -.062 (.027)^{**}, -.054 (.025)^{**}, -.067 (.028)^{**} and -.070 (.027)^{**} in (2), (3), (4) and (5) in Table 8b, respectively.

⁴¹ In a sample of acquisitions by bank-holding companies, Singh and Zollo (1998) find that post-acquisition operating performance of the combined entity is higher when turnover of the top management of the target firm is lower.

columns 4-6 suggest that TRELsize, TPOWER and TCEOOWN are potential instruments for CEOSUCC, however the explanatory power of TPOWER is limited.

Table 9b shows the results of IV specifications of regressions of both target CARs and combined CARs on governance variables using various instruments for the governance variables. While the signs of the coefficients are consistent with the OLS regressions reported in Table 8a and 8b, the magnitudes seem excessively large combined with low levels of significance. These results are most likely due to weak instruments in combination with a small sample size. Furthermore, one may argue that TRELsize, TROA and TPOWER are not viable instruments because they are not orthogonal to abnormal returns. This problem is somewhat attenuated for TRELsize because the matched sample was selected using this criteria which may explain why the coefficient on this variable is not significant when included in the OLS regressions in Table 8. In contrast, variables such as CEO age and CEO and director share ownership are ideal candidates for instruments because they should be correlated with governance variables, but are orthogonal to abnormal returns. However, to date, analysis using age and preliminary share ownership data has led to limited success. Other candidates for instruments include defensive takeover measures (e.g. poison pills) and contracts protecting target CEOs (e.g. golden parachutes).^{42,43}

⁴² If the omitted variables in the target returns OLS regression in Table 9a are negatively correlated with the governance variables and when included would have a negative coefficient, then the bias on the OLS coefficients of the governance variables is positive. This suggests the true coefficients are less than the OLS coefficients. The larger negative coefficients in the IV regressions are consistent with this result. For example, if target CEOs also negotiate on the behalf of employees, and succession plans for CEOs and the protection of employees are substitutes (i.e. negatively correlated) in negotiations, then the effect of governance variables on target returns would be overstated in an OLS regression that omits the protection of employees. The same type of effect occurs if the gain from the target CEO giving up control (e.g. represented by golden parachutes) is omitted from the OLS specification.

⁴³ Interestingly, the relative size of the target (TRELsize) is not a reasonable instrument for TCEOSUCC, while both target performance (TROA) and target CEO control over resources (TPOWER) are better instruments for TCEOSUCC. Target CEOs in poor performing firms and with control over more resources are more likely to negotiate a succession plan suggesting that the purpose of succession plans is to protect target CEO jobs. In the probit of TCEOSUCC regressed on TPOWER, the coefficient is significant and the Pseudo- R² equals .260. Furthermore, in the IV regressions of target and combined CARs using TPOWER as an instrument for TCEOSUCC, the coefficients (s.e.) of (5) and (11) in Table 9b are -.083 (.102) and -.017 (.066), respectively.

5.3 Evidence and Alternative Explanations

As mentioned in the introduction, proponents of MOEs claim that shared governance creates value for shareholders of both firms through the retention of valuable human capital of the target firm. While acquiring shareholders may gain, the evidence suggests that target shareholders do not. First, MOEs create no more value than the matched sample of mergers measured by combined abnormal returns. Second, acquirer shareholders capture more of the gains in MOEs, while target shareholders capture less in comparison to the matched sample. Third, target returns are negatively related to both measures of shared governance between acquiring and target firms--target board control and the presence of a succession plan. Moreover, combined returns are negatively related to the presence of a succession plan. The last two findings are consistent with the alternative hypothesis that target CEOs trade “power for premium.”

More generally, the results give insight into the division of gains among stakeholders in the broader class of friendly mergers. Specifically, the results are generally consistent with a model in which bargaining positions and incentives of target CEOs endogenously determine both the degree of shared governance and the distribution of gains among shareholders. Acquirer CEOs increase their private benefits of control and compensation by managing a larger post-merger firm, but give up some control to target CEOs. In exchange for sharing control with target CEOs, acquirer CEOs negotiate lower target premiums that are beneficial to acquirer shareholders (measured by higher acquirer event returns) and detrimental to target shareholders (measured by lower target event returns). Target CEOs of larger firms have strong bargaining positions because of acquirer CEO preferences for “empire-building” and the limited number of large potential targets in consolidating industries, combined with the greater difficulty in financing a large acquisition. However, while target CEOs in MOEs may have strong bargaining positions due to firm size, the evidence suggests that they have greater incentives to negotiate shared governance because of potentially higher costs of job loss. They manage poorer-performing firms (arguably one indicator of lower CEO ability) and have control over the resources of very large firms at younger ages (positions that are few in number and difficult to replace particularly in consolidating industries). Finally, they own a lower

percentage of their firm's common stock suggesting that the agency-mitigating effects from stock ownership are more limited.

One possible alternative explanation to consider is that target CEOs in MOEs may be unable to command a higher ex ante premium because of poor performance relative to industry peers. However, it is not clear why the market's response to the announcement of the merger (i.e. target CARs) should be lower due to poor performance. It's possible that some type of information asymmetry may lead to lower target CARs. For example, both the acquirer and target CEOs may share private information about poor future performance that determines the target premium. In this case, lower target CARs may be the market's reaction to this information as it is revealed through the terms of the merger and not a response to value-diverting actions by target CEOs. However, even if this is true, it is not clear why both the target's control of the board and the presence of a succession plan should be negatively related to target CARs.

Another alternative, but related explanation is target CEOs choose MOEs for defensive reasons. For example, in a consolidating industry, target CEOs pursue MOEs as a pre-emptive merger in order to retain some control. This alternative may be preferable to target CEOs in comparison to being acquired by an unsuitable acquirer and subsequently fired.⁴⁴ A possible alternative to this agency argument is target CEOs pursue pre-emptive MOEs in the best interests of their shareholders because of their beliefs about limited opportunities for the firm. Again, if this is true, it is not clear why governance variables should be negatively related to target CARs.⁴⁵

⁴⁴In a recent working paper, Gorton, Kahl and Rosen (1999) develop a model based on the assumption that acquirer CEOs prefer to remain independent and have an incentive to engage in value-reducing defensive mergers. They argue that a large bank may acquire a large target firm to provide a strong defense against being acquired for two reasons: (i) two firms engaged in costly integration make a less attractive target and (ii) acquisition of a larger (combined) firm is more difficult to finance. Consistent with the model's predictions, they find negative acquirer CARs for large banks and positive acquirer CARs for small banks.

⁴⁵The characterization of MOEs as pre-emptive mergers can be further explored by analyzing differences between horizontal and diversifying mergers. Pre-emptive mergers are more likely between two firms in the same industry (i.e. horizontal or refocusing merger), and less likely in a merger between two firms in different industries (i.e. diversifying merger). I find evidence that target shareholders in diversifying MOEs capture more of the gains than in horizontal MOEs and (weak) evidence that the market responds less negatively to succession plans in horizontal mergers.

6. Limitations and Robustness

As mentioned earlier, the main empirical finding--acquirer returns are higher and target returns are lower in MOEs in comparison to mergers--might simply be a result of misclassifying acquirer and target firms in transactions in which firms are "equal." In Section 3.2, I describe the additional criteria used to verify SDC's classification of acquirer and target firms. Despite the effectiveness of these additional measures, misclassification would bias the average target and acquirer CARs in the MOE sample toward equality (or zero). Two additional findings suggest that neither misclassification nor variations masked by sample averages explain this main result. First, the average and standard deviation of the absolute value of the simple difference between acquirer and target CARs *within* transactions are significantly lower in the MOE sample at a 1% level of significance [mean (s.d.) of 5.9% (.068) for MOE vs. 14.4% (.116) for MONE]. Furthermore, in 29 cases out of 39, this *within* transaction difference is lower in the MOE transactions in direct comparison to the matched MONE transaction (the average difference is 8.9% and the p-value of the Wilcoxon signed-ranks test is .0001).

Three other explanations for the main result could be greater information leakage, lower probability of success, or lower frequency of competing bids in MOE transactions. First, since the extent of negotiations in MOEs is greater than that in the matched sample, more information about the intentions of acquirers and targets may leak prior to the announcement date. Returns in the MOE sample will be spread out over time. Two facts address this concern. The frequency of transactions that originally began as a rumor based on SDC's classification is no different between samples. Furthermore, a comparison based on longer CAR windows [(-5,0) and (-10,0)] confirms that the differences between target and acquirer returns are of comparable magnitude to CARs based on 2-day windows and not significantly different from one another. Second, since event returns on transactions with a lower probability of success are lower, it may be that lower success rates may explain the lower target returns in MOEs. Generally, while all returns are slightly higher for completed transactions, the results—both mean comparisons and cross-sectional regressions--are robust when using the subset of completed transactions. Finally, since competing bids lead to higher target premiums, differences in the frequency of competing bids may explain the differences in the

distribution of gains between MOE and matched samples. In fact, the matched sample has a significantly higher frequency of competing bids after the merger announcement (17.5% vs. 2.6% as documented by SDC; p -value=.030). However, both the mean comparison and cross-sectional results are generally robust in the sample that excludes these transactions.⁴⁶

Another concern is that lower target returns in MOEs might simply be a function of the limited number of potential acquirers for large target firms. If this were the case, one would expect no difference in transactions involving smaller target firms that arguably have a greater number of potential bidders. However, the difference in average target returns in MOEs in comparison to mergers is significant and of roughly the same magnitude in the subset of transactions in which target firm size is below the median. Furthermore, this explanation of fewer potential bidders doesn't explain why target event returns are negatively related to governance variables. While outside of the scope of this study, an analysis of the structure and dynamics of both acquirer and target industries would shed light on the alternative opportunities for both acquiring and target stakeholders.

6. Conclusions

M & A transactions and their characteristics are jointly determined outcomes of the negotiations between acquiring and target firms. In this paper, I evaluate target CEO incentives and abilities to negotiate shared governance in synergistic mergers. Specifically, I investigate the relationship between the retention of target directors and management and the creation and distribution of gains among shareholders in a sample of mergers of equals (MOEs) transactions. Mergers with shared governance (MOEs) create no more value in comparison to a matched sample, and the acquirer shareholders in MOEs capture more of the gains while the target shareholders capture less in comparison to a matched sample. Furthermore, target event returns are lower when target board members have an equal or controlling interest on the merged board; and both target and combined event returns are lower when the merger agreement includes a succession plan

⁴⁶SDC defines a competing bid as one where a third party launches an offer for the target while the original bid is pending. It is also interesting to note that only one transaction in the matched sample involved a white knight.

for the CEO or Chairman position. While alternative explanations are possible, the findings generally support the hypothesis that target CEOs trade “power for premium.” Specifically, they negotiate control rights in the merged firm (both board and management) in exchange for a lower premium for their shareholders.

The results are generally consistent with a bargaining model in which target CEOs with strong bargaining positions, offset by incentives to retain control, negotiate shared governance in the merged firm. Target CEOs in MOEs have strong bargaining positions because they are managing firms that are closer in size to acquiring firms. However, this power is offset by their stronger incentives to negotiate shared control. In MOEs, target CEOs are younger and are more likely to manage poorer-performing firms in industries undergoing consolidation. In turn, they may face fewer opportunities in the labor market and have higher costs of job loss.

While the evidence generally supports the “power vs. premium tradeoff,” an alternative explanation that remains is that target CEOs favor other stakeholder interests in negotiations (e.g. employees) and not necessarily their own. Regardless of whether there are net social gains from such mergers, the fact remains that the exchange of target shareholder premiums for post-merger shared governance between target and acquirer CEOs is not beneficial to target shareholders.

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Table 1
Number and Share of Transactions of Mergers of Equals (MOEs), Mergers and Tender Offers
1991-1999

<u>Year</u>	<u>Number of Transactions</u>				<u>Transaction value (\$mill)</u>				<u>Share of Number of Transactions (%)</u>			<u>Share of Value of Transactions (%)</u>		
	<u>All</u>	<u>MOEs</u>	<u>Mergers</u>	<u>Tender Offers</u>	<u>All</u>	<u>MOEs</u>	<u>Mergers</u>	<u>Tender Offers</u>	<u>MOEs</u>	<u>Mergers</u>	<u>Tender Offers</u>	<u>MOEs</u>	<u>Mergers</u>	<u>Tender Offers</u>
1991	144	1	130	13	33,706	63	30,462	3,181	0.7%	90.3%	9.0%	0.2%	90.4%	9.4%
1992	166	5	151	10	32,862	3,354	27,310	2,198	3.0%	91.0%	6.0%	10.2%	83.1%	6.7%
1993	213	4	188	21	129,882	3,952	103,660	22,270	1.9%	88.3%	9.9%	3.0%	79.8%	17.2%
1994	324	4	281	39	102,732	7,106	65,695	29,931	1.2%	86.7%	12.0%	6.9%	64.0%	29.1%
1995	326	7	272	47	154,559	21,947	108,232	24,380	2.2%	83.4%	14.4%	14.2%	70.0%	15.8%
1996	354	12	291	51	259,792	29,429	189,006	41,357	3.4%	82.2%	14.4%	11.3%	72.8%	15.9%
1997	470	10	394	66	408,573	32,452	329,062	47,060	2.1%	83.8%	14.0%	7.9%	80.5%	11.5%
1998	475	8	404	63	927,436	220,045	666,871	40,520	1.7%	85.1%	13.3%	23.7%	71.9%	4.4%
1999	430	10	347	73	935,079	115,693	783,601	35,784	2.3%	80.7%	17.0%	12.4%	83.8%	3.8%
Total	2902	61	2458	383										
Average	322	7	273	43	331,624	48,227	255,989	27,409	2.1%	85.7%	12.2%	10.0%	77.4%	12.7%

Notes: The sample includes all U.S. mergers listed by Securities Data Company (SDC) with announcement dates between 1/1/1991 and 12/31/1999 that meet the following criteria: the merger is not classified as a share repurchase, a self-tender, or a sale of a minority interest; the method of financing is classified as either a stock swap or a tender offer transaction. A merger (or stock swap) is a transaction in which the acquiring company exchanges equity in itself for equity in the target and the acquirer must be acquiring at least 50% of the target's equity or be acquiring the remaining interest up to 100% of the target's equity, and at least 50% of the consideration offered must be in the form of equity. A tender offer is a transaction in which a formal offer of determined duration to acquire a public company's shares is made to equity holders and includes tender/ mergers which is a transaction in which a tender offer is launched, and the offer is followed by a merger agreement in which the acquiring company agrees to purchase the remaining shares not tendered under the offer. See footnote 7 for additional definitions. A merger of equals (MOE) transaction is defined by SDC as a merger transaction in which: (i) the two firms publicly announce the merger as a MOE, (ii) the two firms have approximately equal pre-merger market capitalization (iii) the ownership of the new entity will be owned approximately 50/50 by each company's shareholders, and (iv) both companies should have approximately equal representation on the board of directors of the new company. *Transaction value* is defined by SDC as total value of consideration paid by the acquirer, excluding fees and expenses. If a portion of the consideration paid by the acquirer is common stock, the stock is valued using the closing price on the last full trading day prior to the announcement of the terms of the stock swap. If the exchange ratio of shares offered changes, the stock is valued based on its closing price the last full trading date prior to the date of the exchange ratio change.

Table 2
Descriptive Characteristics
Comparison of Mergers of Equals (MOEs), Mergers and Tender Offers
1991-1999

Descriptive Characteristics	MOEs			Mergers			Tender Offers		
	<u>N</u>	<u>Mean</u>	<u>Med</u>	<u>N</u>	<u>Mean</u>	<u>Med</u>	<u>N</u>	<u>Mean</u>	<u>Med</u>
Acquirer Value Prior to Offer (mill)	53	8754	1235	1404	5557	935	273	11,400	1828
Target Value Prior to Offer (mill)	53	7455	908	1404	659 ^a	115	273	481 ^a	133
Target Value/ (Target + Acquirer Value)	53	.440	.448	1404	.194 ^a	.151	273	.161 ^a	.094
Transaction Value (mill)	52	8335	1313	1371	1001 ^a	161	273	747 ^a	211
Target Premium (ex ante) (%)	51	14.6	12.2	1303	41.1 ^a	34.4	270	52.5 ^a	47.1
Days to Complete Transaction	40	193	170	1155	159 ^b	141	226	82 ^a	63
Frequency of Horizontal Mergers	53	.79	-	1404	.72	-	273	.56 ^a	-
Frequency of Targets Operating in Financial Services Industry	53	.40	-	1404	.39	-	273	.05 ^a	-
Frequency of Targets Incorporated in States Protected by Takeover Laws	53	.81	-	1404	.65 ^b	-	273	.79	-

Notes: This sample is based on the sample described in Table 1 with the added criterion that both firms are publicly traded and listed on the Center for Research in Securities Prices (CRSP) database. Acquirer and target values prior to the offer are market capitalization figures reported by CRSP 10 calendar days prior to the announcement of the merger. Transaction value is defined by SDC as total value of consideration paid by the acquirer, excluding fees and expenses. If a portion of the consideration paid by the acquirer is common stock, the stock is valued using the closing price on the last full trading day prior to the announcement of the terms of the stock swap. If the exchange ratio of shares offered changes, the stock is valued based on its closing price the last full trading date prior to the date of the exchange ratio change. Target premium (ex ante) is defined by SDC the premium paid to target shareholders on their stock over the price at which the stock was trading at the day before the announcement of the terms of the deal. In stock-financed deals, this is measured by the implied premium based on the share price of both firms the day before the merger announcement and the exchange ratio specified in the terms of the merger. This ex ante premium is correlated with, but different than abnormal returns. Days to complete transaction are the number of calendar days between the merger announcement and the completion date. Frequency of horizontal mergers is the percentage of transactions within each category in which the two firms operate in the same 2-digit SIC code reported by SDC. Frequency of targets operating in financial services industry is the percentage of transactions within in each category in which the target firm operates in the financial services industry (as defined by SDC industry classifications). Frequency of targets incorporated in states protected by takeover laws is the percentage of transactions within each category in which the target firm is incorporated in states with business combination legislation. Superscripts a, b, and c indicate that the mean of the category is significantly different than the mean of the MOE category at the 1%, 5%, and 10% significance level, respectively.

Table 3

**Average Cumulative Abnormal Returns, CARs (-1,0)
Comparison of Mergers of Equals (MOEs), Mergers and Tender Offers
1991-1999**

Cumulative Abnormal Returns	All		MOEs		Mergers		Tender Offers	
	CAR(%)/ (p-value)	Pos: Neg/ (Rank Z)	CAR (%)/ (p-value)	Pos: Neg/ (Rank Z)	CAR(%)/ (p-value)	Pos: Neg/ (Rank Z)	CAR(%)/ (p-value)	Pos: Neg/ (Rank Z)
Combined Event Returns (Acquirer + Target)	1.14 (.000)	1000:723 -	2.21 (.005)	35:18 -	0.74 ^c (.000)	768:629 -	3.03 (.000)	197:76 -
Acquirer Event Returns	-0.89 ^c (.000)	718:1005 (-6.18)	0.62 (.187)	30:23 (1.40)	-1.19 ^c (.000)	552:845 (-6.62)	0.37 (.316)	136:137 (-1.47)
Target Event Returns	13.11 ^a (.000)	1361:359 (11.92)	4.71 (.000)	34:19 (3.52)	11.59 ^a (.000)	1082:312 (11.33)	22.55 ^a (.000)	245:28 (10.89)
N	1730		53		1404		273	

Notes: CARs represent two-day cumulative average abnormal returns (-1,0). Market model statistics are obtained for the acquirer and target using the CRSP equally weighted market index and an estimation window consisting of all available trading data from 300 trading days before the first announcement associated with the acquisition to 60 trading days before the first announcement. The test statistic (z) is based on the standardized cross-sectional method for market model abnormal returns (Boehmer, Musumeci and Poulson, 1991), which is the same as the Patell test (1976) except that there is a final empirical cross-sectional variance adjustment in place of the analytical variance of the total standardized prediction error. Combined CARs are generated by forming a portfolio consisting of the target and the acquirer and using their market values 10 days before the first announcement to form portfolio weights. The reported rank test is the nonparametric rank test introduced by Corrado (1989). Superscripts a, b, and c indicate that the mean is significantly different than the mean of the MOE category at the 1%, 5%, and 10% level, respectively.

Table 4: Determinants of Merger of Equals (MOE) Transactions (Probit Specification)
Dependent Variable is Dummy equal to 1 if the transaction is a MOE transaction

	(1)	(2)	(3)	(4)	(5)	(6)
TRELSIZE	3.064 (0.410)***	3.891 (0.588)***	4.342 (0.663)***	4.456 (0.731)***	3.611 (0.875)***	4.292 (1.084)***
HORIZ	0.232 (0.184)	0.312 (0.250)	0.468 (0.277)*	0.428 (0.289)	0.602 (0.352)*	0.788 (0.395)**
BCDUM	0.131 (0.184)	0.371 (0.256)	0.354 (0.267)	0.230 (0.282)	0.370 (0.348)	0.173 (0.370)
FINDUM	0.422 (0.161)***	0.357 (0.209)*	0.343 (0.218)	0.389 (0.234)*	0.115 (0.655)	0.785 (0.755)
TRANS	0.196 (0.042)***	0.151 (0.057)***	0.160 (0.060)***	0.188 (0.065)***	0.271 (0.084)***	0.309 (0.097)***
AROA (%)		0.960 (1.631)	0.708 (1.729)	1.176 (1.866)	-0.662 (2.332)	-2.089 (2.630)
TROA (%)		-2.336 (1.952)	-1.843 (1.985)	-2.688 (2.274)	-0.893 (2.515)	-1.658 (2.982)
AREVGR (%)			0.045 (0.069)	0.153 (0.146)	0.010 (0.084)	0.044 (0.169)
TREVGR (%)			0.197 (0.110)*	0.208 (0.111)*	0.235 (0.121)*	0.252 (0.129)*
ALEVERAGE(%)				1.034 (0.780)		1.348 (0.879)
TLEVERAGE(%)				1.017 (0.658)		1.720 (1.032)*
ATOBINSQ					0.125 (0.118)	0.430 (0.171)**
TTOBINSQ					-0.139 (0.158)	-0.066 (0.213)
Constant	-4.433 (0.367)***	-4.530 (0.521)***	-4.904 (0.594)***	-5.127 (0.658)***	-5.541 (0.885)***	-6.343 (1.091)***
Observations	1696	893	837	662	503	399
Pseudo R-sqd	0.28	0.32	0.34	0.35	0.33	0.37

Notes: standard errors are in parentheses. TRELSIZE is the relative size of the target to the acquirer (measured by the ratio of the target firm's market capitalization 10 days prior to the event divided by the sum of the target and acquiring firm's market capitalization); HORIZ is whether the merger is horizontal or not (measured by a dummy variable which equals one if the target and the acquirer 2-digit SIC codes are equal and zero otherwise); BCDUM is whether the target is incorporated in a state that is protected by takeover laws (measured by a dummy variable equal to one if business combination laws that protect target management are in effect and zero otherwise); FINDUM is whether the target operates in the financial services industry (measured by a dummy variable which equals one if SDC designates the target's industry as financial services and zero otherwise); and TRANS is the value of the transaction (measured by the log of transaction value defined by SDC). In addition, the specification includes (industry-adjusted) financial performance measures using Compustat for both acquirer and target firms in the year prior to the merger, including: ROA (operating income/assets); REVGR (revenue growth), LEVERAGE (total debt/assets); and (TOBINSQ) Tobin's Q. These measures are deviated from industry medians in which the industry is defined as the Compustat SIC code with a minimum of 10 firms. As is standard in using these data, the sample size is reduced significantly as financial variables are added to the regressions adding yet another selection problem. Financial variable definitions are in the appendix. ***, **, and * indicate significance at the 1%, 5% and 10% level, respectively.

Table 5
Shareholder Event Returns (CARs) and Governance Characteristics (Board and Management)
Mean Comparison Tests of Mergers of Equals (MOEs) vs. Matched Merger of Non-Equals (MONEs)

	MOE Sample			MONE Sample			MOE vs. MONE Sample		
Panel A: Shareholder Event Returns									
	Acquirer (p-value)	Target (p-value)	Combined (p-value)	Acquirer (p-value)	Target (p-value)	Combined (p-value)	Acquirer Difference (p-value)	Target Difference (p-value)	Combined Difference (p-value)
2-Day CAR (-1,0)	0.60 (.332)	3.89*** (.003)	1.97*** (.017)	-4.36*** (.000)	9.44*** (.000)	0.80 (.435)	(.001)***	(.010)***	(.391)
11-Day CAR (-10,0)	0.36 (.674)	4.56*** (.010)	1.83 (.142)	-2.26 (.124)	13.32*** (.000)	3.58*** (.009)	(.182)	(.002)***	(.342)
Panel B: Board Characteristics									
	Acquirer/ N	Target/ N	Other/ N	Acquirer/ N	Target/ N	Other/ N	Acquirer Difference (p-value)/ N	Target Difference (p-value)/ N	Other Difference (p-value)/ N
Pre-merger Board Size	12.7/ 37	11.5/ 37		11.0/ 40	10.5/ 40		(.146)/ 77	(.251)/ 77	
Post-merger Board Size			16.5/ 40			14.1/ 40			(.050)**/ 80
Post-merger board share (%)	50.2/ 40	49.8/ 40		71.9/ 40	28.1/ 40		(.000)***/ 80	(.000)***/ 80	
Frequency of Target Board Control (TBOARD)	-	-	.80/ 40	-	-	.23/ 40	-	-	(.000)**/ 80
Panel C: Management Positions									
	Sample Frequency / N			Sample Frequency / N			Frequency Difference (p-value) / N		
Acquirer CEO as Post-merger CEO		.53 / 38			.82 / 39			(.005)*** / 77	
Presence of CEO/Chairman Succession Plan (CEOSUCC)		.37 / 38			.13 / 39			(.010)*** / 77	
Presence of Target CEO/Chairman Succession Plan (TCEOSUCC)		.16 / 38			.05 / 39			(.129) / 77	

Notes: Combined CARs are generated by forming a portfolio consisting of the target and the acquiring firms (using market values 10 days before the first announcement to form portfolio weights). Refer to the footnotes in Table 3 for additional definitions. Frequency of Target Board Control (TBOARD) is defined as a dummy variable equal to one if the post-merger share of seats held on the board of directors by the target firm is greater than or equal to 50%, and zero otherwise. Frequency of Acquirer CEO as post-merger CEO is based on the proportion of transactions in which the acquiring firm CEO initially fills the CEO position in the merged firm. CEOSUCC is defined as a dummy variable equal to one if the merger includes a succession plan for either the CEO or Chairman positions in the merged firm and zero otherwise. TCEOSUCC is defined as a dummy variable equal to one if the merger includes a succession plan for either the target CEO or target Chairman positions in the merged firm and zero otherwise. ***, **, and * indicate 1%, 5%, and 10% significance levels, respectively.

Table 6

**Measures of Target CEO Bargaining Position and Incentives
Mean Comparison Tests of Mergers of Equals (MOEs) vs. Matched Mergers of Non-Equals (MONEs)**

	MOE Sample			MONE Sample			MOE vs. MONE Sample	
	<u>Acquirer/N</u>	<u>Target/N</u>	<u>Acquirer/Target Difference (p-value)/N</u>	<u>Acquirer/N</u>	<u>Target/N</u>	<u>Acquirer/Target Difference (p-value)/N</u>	<u>Acquirer Difference (p-value)/N</u>	<u>Target Difference (p-value)/N</u>
CEO Age (AGE)	53.7/38	53.6/36	(.816)/36	53.3/39	56.3/39	(.034)**/39	(.767)/77	(.100)*/75
Firm Size/CEO Age (POWER)	.269/38	.267/36	(.595)/36	.262/39	.241/39	(.001)***/39	(.510)/75	(.015)**/75
CEO Stock Ownership % (CEOOWN)	1.6/30	0.4/29	(.159)/27	4.2/39	2.8/34	(.741)/34	(.116)/69	(.011)**/63
Ownership (%) (OWN)	7.7/29	8.8/30	(.792)/28	13.1/39	13.2/39	(.971)/39	(.084)*/68	(.246)/69
Return on Assets (%) (ROA)	1.15/35	-.50/33	(.220)/33	1.52/27	1.29/29	(.545)/22	(.766)/62	(.093)*/62
Asset Growth (%) (GROWTH)	13.9/28	10.3/29	(.006)***/27	12.5/25	-3.0/28	(.052)*/20	(.864)/53	(.339)/57
Tobin's Q (TOBINSQ)	.539/22	.012/21	(.032)**/19	.373/16	.830/21	(.975)/14	(.623)/38	(.253)/42

Notes: POWER is a measure of the amount of resources controlled by the CEO normalized by the stage in his career and is defined by the logarithm of firm market capitalization divided by CEO age at the date of merger announcement. CEOOWN is the % ownership of common stock held by the CEO of the firm at the date of merger announcement. OWN is the % ownership of common stock held by directors, executives and 5% shareholders of the firm at the date of merger announcement. ROA is the firm's return on assets (operating income/ assets) deviated from the industry median in the year prior to the merger announcement. GROWTH is the growth rate in assets for the firm deviated from the industry median over the 3 years prior to the merger announcement. TOBINSQ is Tobin's Q for the firm deviated from the industry median in the year prior to the merger agreement. Industry-adjusted pre-merger financial variables are defined in the appendix. ***, **, and * indicate significance at the 1%, 5% and 10% level, respectively.

**Table 7: Correlation Coefficients and Significance Levels
Shareholder Returns, Shared Governance, and Bargaining Position and Incentive Variables**

	Shareholder Return Variables			Shared Governance Variables			Target CEO Bargaining Position and Incentive Variables							
	TCAR	CCAR	PREMIUM	TBOARD	CEOSUCC	TCEOSUCC	TRELSIZE	TPOWER	TAGE	TCEOOWN	ACEOOWN	TOWN	AOWN	TROA
TCAR	1.0000													
CCAR	0.7038 0.0000	1.0000												
PREMIUM	0.6187 0.0000	0.2720 0.0182	1.0000											
TBOARD	-0.5352 0.0000	-0.2286 0.0455	-0.4653 0.0000	1.0000										
CEOSUCC	-0.3744 0.0008	-0.2488 0.0291	-0.3056 0.0077	0.3639 0.0010	1.0000									
TCEOSUCC	-0.3276 0.0036	-0.2521 0.0270	-0.1937 0.0959	0.1552 0.1720	0.5965 0.0000	1.0000								
TRELSIZE	-0.4352 0.0001	-0.1963 0.0871	-0.3122 0.0064	0.5991 0.0000	0.3076 0.0065	0.0467 0.6866	1.0000							
TPOWER	-0.0846 0.4706	-0.0303 0.7967	-0.0265 0.8240	0.0125 0.9150	0.2497 0.0307	0.3976 0.0004	-0.0927 0.4288	1.0000						
TAGE	-0.0004 0.9972	-0.0855 0.4660	0.0285 0.8108	0.1070 0.3608	0.1318 0.2597	-0.0928 0.4282	0.2867 0.0127	-0.6330 0.0000	1.0000					
TCEOOWN	0.1305 0.3079	0.0146 0.9095	0.0749 0.5662	-0.1659 0.1937	-0.2386 0.0596	-0.1674 0.1897	-0.1464 0.2524	-0.2554 0.0451	0.1401 0.2774	1.0000				
ACEOOWN	0.0800 0.5132	0.0635 0.6040	-0.2820 0.0208	-0.1021 0.4039	-0.2211 0.0679	-0.1580 0.1948	0.0169 0.8902	-0.1162 0.3455	-0.1195 0.3319	0.2278 0.0774	1.0000			
TOWN	0.0737 0.5471	0.2034 0.0937	-0.1336 0.2810	-0.0876 0.4741	-0.2727 0.0234	-0.1307 0.2843	0.0085 0.9445	-0.0462 0.7059	-0.2941 0.0142	0.1737 0.2004	0.5694 0.0000	1.0000		
AOWN	0.2911 0.0160	0.2489 0.0407	-0.0288 0.8186	-0.1866 0.1276	-0.3457 0.0039	-0.2368 0.0519	-0.0273 0.8249	-0.1518 0.2165	-0.1704 0.1649	0.1733 0.2016	0.6236 0.0000	0.2932 0.0161	1.0000	
TROA	0.3134 0.0131	0.2743 0.0310	-0.0145 0.9115	-0.2695 0.0341	-0.2106 0.1003	-0.3332 0.0081	-0.1566 0.2241	-0.1566 0.2280	0.0889 0.4956	0.3396 0.0120	0.3253 0.0135	0.0326 0.8115	0.1471 0.2793	1.0000

Notes: Significance levels are reported directly below the correlation coefficients. Shareholder return variables: TCAR (CCAR) represents 11-day target (combined) abnormal returns; PREMIUM is the target premium as defined by SDC. See footnote to Table 3 for complete definitions. Governance variables: TBOARD is defined as a dummy variable equal to one if the post-merger share of seats held on the board of directors by the target firm is greater than or equal to 50%, and zero otherwise. CEOSUCC is defined as a dummy variable equal to one if the merger includes a succession plan for either the CEO or Chairman positions in the merged firm and zero otherwise. TCEOSUCC is defined as a dummy variable equal to one if the merger includes a succession plan for either the target CEO or target Chairman positions in the merged firm and zero otherwise. Target CEO bargaining power variables: TRELSIZE is the relative size of the target to the acquirer (measured by the ratio of the target firm's market capitalization 10 days prior to the event divided by the sum of the target and acquiring firm's market capitalization); TPOWER is defined as the logarithm of target firm market capitalization divided by target CEO age at the event date. TAGE is the target CEO age at the event date. TCEOOWN (ACEOOWN) is the % of common stock owned by the target (acquirer) CEO at the event date. TOWN (AOWN) is the % of common stock owned by target (acquirer) directors, executives, and 5% shareholders. TROA is defined as industry-adjusted target operating income divided by assets in the year prior to the event date.

Table 8a: Determinants of Target Event Responses to Merger Announcements
Dependent Variable is Target Abnormal Returns [CARs^t (-10,0)]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
MOEDUM						-0.008 (0.028)	-0.058 (0.027)**	-0.004 (0.028)	-0.009 (0.030)	-0.014 (0.030)
TBOARD	-0.132 (0.024)***		-0.113 (0.026)***	-0.110 (0.027)***	-0.087 (0.032)***	-0.127 (0.028)***		-0.111 (0.030)***	-0.105 (0.032)***	-0.078 (0.038)**
CEOSUCC		-0.107 (0.028)***	-0.057 (0.026)**	-0.076 (0.030)**	-0.072 (0.030)**		-0.088 (0.030)**	-0.056 (0.027)**	-0.076 (0.031)**	-0.072 (0.031)**
TSIZE				0.009 (0.007)	0.009 (0.007)				0.009 (0.007)	0.009 (0.007)
TRELSIZE					-0.002 (0.001)					-0.002 (0.001)
Constant	0.154 (0.018)***	0.114 (0.016)***	0.159 (0.018)***	0.044 (0.101)	0.102 (0.108)	0.156 (0.019)**	0.138 (0.019)***	0.159 (0.019)***	0.042 (0.104)	0.101 (0.110)
Obs.	77	77	77	77	77	77	77	77	77	77
R-sqd.	0.29	0.14	0.32	0.33	0.35	0.29	0.19	0.32	0.33	0.35

Table 8b: Dependent Variable is Combined Abnormal Returns [CARs^c (-10,0)]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
MOEDUM						0.018 (0.019)	0.004 (0.018)	0.021 (0.019)	0.019 (0.020)	0.018 (0.020)
TBOARD	-0.034 (0.017)**		-0.023 (0.019)	-0.022 (0.019)	-0.015 (0.021)	-0.045 (0.019)**		-0.035 (0.020)	-0.032 (0.020)	-0.026 (0.022)
CEOSUCC		-0.043 (0.018)**	-0.033 (0.019)*	-0.043 (0.022)**	-0.042 (0.022)*		-0.045 (0.019)**	-0.035 (0.020)*	-0.043 (0.022)**	-0.042 (0.022)*
TSIZE				0.004 (0.006)	0.005 (0.006)				0.004 (0.006)	0.004 (0.006)
TRELSIZE					0.000 (0.001)					0.000 (0.001)
Constant	0.043 (0.012)***	0.036 (0.010)***	0.046 (0.012)***	-0.014 (0.080)	0.002 (0.085)	0.039 (0.012)***	0.035 (0.011)***	0.041 (0.013)***	-0.009 (0.079)	0.003 (0.084)
Obs.	77	77	77	77	77	77	77	77	77	77
R-sqd.	0.05	0.06	0.08	0.09	0.10	0.06	0.06	0.10	0.10	0.10

Note: robust standard errors in parentheses. CARs represent eleven-day cumulative average abnormal returns (-10,0). See footnote to Table 3 for additional details. TBOARD is defined as a dummy variable equal to one if the post-merger share of seats held on the board of directors by the target firm is greater than or equal to 50% and zero otherwise. CEOSUCC is defined as a dummy variable equal to one if the merger includes a succession plan for either the CEO or Chairman positions in the merged firm and zero otherwise. MOEDUM is a dummy variable equal to one if the transaction is a MOE and zero otherwise. TSIZE is the log of target firm capitalization. TRELSIZE is the ratio of the target firm's market capitalization 10 days prior to the event divided by the sum of the target and acquiring firm's market capitalization multiplied by 100. ***, **, and * indicate significance at the 1%, 5% and 10% level, respectively.

**Table 9a: Instruments for Degree of Shared Control in Merged Firm
Target Relative Size, Target Profitability, Target CEO Power, Acquirer and Target Stock Ownership
Probit Specification**

	(1) TBOARD	(2) TBOARD	(3) TBOARD	(4) CEOSUCC	(5) CEOSUCC	(6) CEOSUCC
TRELSIZE	0.111 (0.023)***			0.044 (0.016)**		
TROA		-0.101 (0.050)**				
AOWN			-0.020 (0.013)			
TPOWER					7.985 (3.728)**	
TCEOOWN						-1.140*** (.478)
Constant	-4.656 (0.988)***	0.026 (0.163)	0.055 (0.200)	-2.591 (0.741)***	-2.731 (0.988)***	-0.084 (0.232)
Obs.	77	62	68	77	75	63
Pseudo Rsqd	0.343	0.059	0.027	0.094	0.057	0.225

**Table 9b: Determinants of Target and Combined Event Responses to Merger Announcements
Dependent Variable is Target Abnormal Returns (TCARs) or Combined Abnormal Returns (CCARs)
Instrumental Variables Specification**

	(1) TCAR	(2) TCAR	(3) TCAR	(4) TCAR	(5) TCAR	(6) TCAR	(7) CCAR	(8) CCAR	(9) CCAR	(10) CCAR	(11) CCAR	(12) CCAR
TBOARD	-0.179 (0.041)***	-0.282 (0.121)**	-0.387 (0.215)*				-0.049 (0.028)*	-0.143 (0.082)*	-0.198 (0.146)			
CEOSUCC				-0.404 (0.150)**	-0.094 (0.118)	-0.159 (0.141)				-0.111 (0.068)*	-0.020 (0.074)	-0.010 (0.088)
Constant	0.178 (0.024)***	0.238 (0.063)***	0.265 (0.097)***	0.187 (0.042)***	0.115 (0.033)***	0.138 (0.039)***	0.051 (0.017)***	0.104 (0.043)**	0.117 (0.066)*	0.053 (0.019)**	0.034 (0.020)*	0.032 (0.024)
Obs.	77	62	68	77	75	63	77	62	68	77	75	63
Instrument	TRELSIZE	TROA	AOWN	TRELSIZE	TPOWER	TCEOOWN	TRELSIZE	TROA	AOWN	TRELSIZE	TPOWER	TCEOOWN

Note: robust standard errors are in parentheses. CARs represent eleven-day cumulative average abnormal returns (-10,0). See footnote to Table 3 for additional details. TROA is the target firm's return on assets (operating income/ assets) in the year prior to the merger announcement. TPOWER is a measure of the amount of resources controlled by the CEO normalized by the stage in his career and is defined by the logarithm of firm market capitalization divided by CEO age at the date of merger announcement. AOWN is the % ownership of common stock held by directors, executives and 5% shareholders of the acquiring firm at the date of merger announcement. TCEOOWN is the % ownership of common stock held by the CEO of the target firm at the date of merger announcement. ***, **, and * indicate significance at the 1%, 5% and 10% level, respectively.

Appendix

Financial Performance Variables:

1. Return on Assets (%)—operating income divided by assets in the year prior to the merger (t-1) deviated from the industry median multiplied by 100; [Compustat: DATA 13/DATA 6]
2. 3 Year Average ROA (%) –same as (1), but averaged for the three years prior to the merger.
3. Revenue Growth (%)—growth in revenues in the year prior to the merger deviated from the industry median multiplied by 100;
[Compustat: [DATA 12(t-1)-DATA 12(t-2)/ DATA 12(t-2)]]
4. 3 Year Average Revenue Growth (%)—same as (3), but averaged for the three years prior to the merger.
5. 3 Year Average Asset Growth (%)—same as (4), but using assets (Compustat: DATA 6) instead of revenues (DATA 12).
6. Tobin's Q—market value of assets divided by the book value of assets in the year prior to the merger (t-1) deviated from the industry median; the market value of assets is defined as book value of assets plus market value of common equity-book value of common equity- balance sheet deferred taxes; [Compustat: (DATA 6 + DATA 24*DATA 25-DATA60-DATA74)/ DATA 6]
7. Leverage—Long-term Debt/ Total Assets in the year prior to the merger (t-1) deviated from the industry median multiplied by 100; [Compustat: DATA 9/ DATA 6]

The above measures are deviated from industry medians in which the industry is defined as the Compustat SIC code with a minimum of 10 firms. If 10 firms are not found in the 4-digit SIC code, then I use the median of the firms in the 3-digit SIC code; if 10 firms are not found in the 3-digit SIC code, then I use the median of the firms in the 2-digit SIC code.

Appendix: Merger Gains and Division of Gains Among Stakeholders

Theory suggests that mergers should occur as a response to a change in economic conditions, such as an exogenous change in supply or demand, regulatory changes, or technological innovations. There are many possible sources of value created by mergers including dismissal of inefficient management, economies of scale and scope, combination of complementary resources, the redeployment of assets to more profitable uses (including both human capital and physical assets). Based on similar notation as in Bradley, Desai and Kim (1988), I define value-created as the sum of the change in the wealth of the stockholders of the target and acquiring firms:

$$\Delta V = \Delta W_T + \Delta W_A \quad \text{where}$$

ΔV = value created or synergistic gains from the merger

ΔW_T = capture of the gains by target-firm shareholders

ΔW_A = capture of the gains by acquiring-firm shareholders

Using standard methodology, both the value and capture of the gains will be measured based on the market's response to the announcement of the merger (i.e. cumulative abnormal returns). In this paper, I investigate both the size and distribution of the gains for mergers between firms of approximately equal size. Moreover, I preliminarily evaluate whether the CEOs of the target firms also capture a share of the gains from the merger beyond gains from price appreciation of their shareholdings.

The description below is a simple sketch of how managerial incentives may affect both the size and distribution of the gains from mergers among stakeholders. However, one can imagine a model in which the relative magnitudes of the agency gains are determined by the strength of the bargaining positions of the various stakeholders (in particular, the CEOs of each firm). CEOs in weaker bargaining positions may become the target for an acquisition. However, among the set of target CEOs, variation in bargaining positions may determine which CEOs are more likely to negotiate shared control in exchange for lower premiums to target shareholders.

CEOs of both acquiring and target firms derive private benefits from shared control in the merged firm (e.g. they derive utility from attaining the CEO position or from appointing target directors to the board of the merged firm). In acting as agents for the shareholders in bargaining the terms of the merger, self-interested target CEOs may negotiate terms that are beneficial to them at their shareholders' expense. Specifically, they accept a lower premium paid on their shareholder's stock in exchange for control in the merged firm (i.e. management positions or board seats). In contrast, acquirer stakeholders gain: acquirer shareholders gain from reduced target premiums and acquirer CEOs gain from increased private benefits of managing a larger firm.

The division of gains is represented by the following notation:

$$\Delta W_T = W_T \cdot CAR_T$$

$$\Delta W_A = W_A \cdot CAR_A$$

where

$W_T(W_A)$ = value of the target (acquirer) equity 10 days prior to the first announcement of the merger.

$CAR_T(CAR_A)$ = cumulative abnormal return to the target (acquiring) firm of 1 day prior to and the announcement day (-1,0).

However, as mentioned above, target shareholders may lose some of the gains to other stakeholders (i.e. target and acquirer CEOs and acquirer shareholders). Hence, I define observed abnormal returns to the target shareholders as the returns in absence of agency problems (or first-best returns, denoted by *) minus the benefits received by the target CEO. Similarly, I define observed abnormal returns to the acquiring shareholders as the returns in absence of agency problems plus the benefits received from paying lower premiums to target shareholders minus the benefits received by the acquirer CEO.

$$CAR_T = CAR_T^* - B_T \qquad CAR_A = CAR_A^* + B_A^S - B_A^C$$

where $CAR_T^*(CAR_A^*)$ = cumulative abnormal returns to the target (acquiring) firm in the absence of agency problems

B_T = Share of agency gains to target CEO

B_A^S = Share of agency gains to acquirer shareholders

B_A^C = Share of agency gains to acquirer CEO

and $B_T = B_A^S - B_A^C$

The share of agency gains to the target CEO (B_T) comes from the private benefits derived from sharing the governance of the merged firm (i.e. management positions and board seats).⁴⁷ The share of agency gains to acquirer shareholders (B_A^S) comes from paying a lower ex ante premium to target shareholders. The share of agency gains to acquirer CEO (B_A^C) comes from the private benefits derived from managing (or possibly co-managing) a larger firm.⁴⁸

⁴⁷ In this extremely simplified expression, the gains to both target and acquirer CEOs are measured by the loss in shareholder returns.

⁴⁸ This sketch of a model makes many simplifying assumptions about the distribution of gains between stakeholders. Also, it implicitly assumes that the first-best gains (i.e. gains in absence of agency costs) from the merger are equally shared between each firm's shareholders. The purpose of this description is to sketch one possible story about the distribution of gains among stakeholders. In a formal model, the distribution of gains to target CEOs would be a function of variables representing their relative bargaining power (e.g. size of firm, potential target firms in an industry, degree of control over their firm's human capital, extent of outside employment opportunities, etc.).

Appendix

Description of Mergers of Equals (Sample of 40 MOEs)

Data in this appendix come from a variety of sources. Market capitalization, Cumulative Abnormal Returns (CARs), and SIC codes come from CRSP and Compustat. The method of calculating CARs is described in the text and the footnote to Table 3. Merger announcement/ completion dates, the classifications of mergers and tender offer transactions, and the initial classifications of MOE transactions come from Security Data Company (SDC). The MOE transactions subsequently are verified in the WSJ and other journals accessed through Dow Jones Interactive. In addition, Target Premium (ex ante), transaction value, and the initial identification of the acquiring and target firms come from SDC. Shareholder Post-holdings, board composition, succession plans, CEO Succession Plan, CEO age, surviving legal entity and location of headquarters come from two SEC filings in connection with the transaction (Form DEFM 14A and Form S-4) and several SEC filings of the merged company filed after the merger becomes effective (Proxy statements, Form DEF 14A, 10Ks).

	Acquirer	Target	Merged Firm	
Name	Bell Atlantic Corp. (BEL)	GTE Corp. (GTE)		Bell Atlantic Corp. (BEL)
Market Cap. (\$M)	70,537	54,385	Target Relative Size	43.5%
Industry SIC Code	4813	4899	Horizontal Merger	Yes
CAR (-1,0)	-0.57%	-6.93%	Combined CAR (-1,0)	-3.34%
Shareholder Post-holdings	57%	43%	Transaction Value (\$M)	53,415
Pre-Merger Directors	22	13	Target Premium (ex ante)	-4.94%
Post-Merger Directors	8	8	Announcement Date	7/28/98
CEO Succession Plan	Yes	No	Completion Date	11/20/99
Chairman Succession Plan	Yes	No	Surviving Legal Entity	Bell Atlantic Corp.
CEO Age	51	58	Post-Merger CEO	Co-Chiefs
Headquarters	New York, NY	Irving, TX	Headquarters	New York, NY

	Acquirer	Target	Merged Firm	
Name	Travelers Group	Citicorp		Citigroup Inc. (C)
Market Cap. (\$M)	70,933	64,676	Target Relative Size	47.69%
Industry SIC Code	6311	6021	Horizontal Merger	No
CAR (-1,0)	19.34%	26.89%	Combined CAR (-1,0)	22.94%
Shareholder Post-holdings	50%	50%	Transaction Value (\$M)	72,558
Pre-Merger Directors	19	15	Target Premium (ex ante)	18.97%
Post-Merger Directors	12	12	Announcement Date	4/6/98
CEO Succession Plan	No	No	Completion Date	10/8/98
Chairman Succession Plan	--	--	Surviving Legal Entity	Travelers Group
CEO Age	64	59	Post-Merger CEO	Co-Chiefs
Headquarters	New York, NY	New York, NY	Headquarters	New York, NY

	Acquirer	Target	Merged Firm	
Name	NBD Bancorp, Inc. (NBD)	First Chicago Corp. (FNB)		First Chicago NBD Corporation (NBD)
Market Cap. (\$M)	5,044	5,390	Target Relative Size	51.66%
Industry SIC Code	6712	6021	Horizontal Merger	No
CAR (-1,0)	4.51%	-.52%	Combined CAR (-1,0)	1.91%
Shareholder Post-holdings	49.9%	51.1%	Transaction Value (\$M)	5,415
Pre-Merger Directors	21	17	Target Premium (ex ante)	0.56%
Post-Merger Directors	11	11	Announcement Date	7/12/95
CEO Succession Plan	Yes	No	Completion Date	12/1/95
Chairman Succession Plan	Yes	No	Surviving Legal Entity	NBD Bancorp, Inc.
CEO Age	54	64	Post-Merger CEO	Acquirer
Headquarters	Detroit, MI	Chicago, IL	Headquarters	Chicago, IL

	Acquirer	Target	Merged Firm
Name	PECO Energy Co. (PE)	Unicom Corp. (UCM)	Exelon Corp.
Market Cap. (\$M)	7,900	8,382	Target Relative Size 51.48%
Industry SIC Code	4931	4911	Horizontal Merger Yes
CAR (-1,0)	-7.00%	-2.04%	Combined CAR (-1,0) -4.44%
Shareholder Post-holdings	54%	46%	Transaction Value (\$M) 7,386
Pre-Merger Directors	12	11	Target Premium (ex ante) -13.91%
Post-Merger Directors	8	8	Announcement Date 9/23/99
CEO Succession Plan	No	Yes	Completion Date Not Completed
Chairman Succession Plan	No	Yes	Surviving Legal Entity Neither
CEO Age	59	53	Post-Merger CEO Co-Chiefs
Headquarters	Philadelphia, PA	Chicago, IL	Headquarters Chicago, IL

	Acquirer	Target	Merged Firm
Name	NationsBank Corp. (NB)	BankAmerica Corp. (BAC)	BankAmerica Corp. (BAC)
Market Cap. (\$M)	71,083	26,164	Target Relative Size 26.91%
Industry SIC Code	6021	6021	Horizontal Merger Yes
CAR (-1,0)	7.00%	3.07%	Combined CAR (-1,0) 5.94%
Shareholder Post-holdings	54.7%	45.3%	Transaction Value (\$M) 61,633
Pre-Merger Directors	26	14	Target Premium (ex ante) 2.82%
Post-Merger Directors	11	9	Announcement Date 4/13/98
CEO Succession Plan	No	Yes	Completion Date 9/30/98
Chairman Succession Plan	--	--	Surviving Legal Entity NationsBank Corp.
CEO Age	62	50	Post-Merger CEO Acquirer
Headquarters	Charlotte, NC	San Francisco, CA	Headquarters San Francisco, CA/ Charlotte, NC

	Acquirer	Target	Merged Firm
Name	Nevada Power Co. (NVP)	Sierra Pacific Resources (SRP)	Sierra Pacific Resources (SRP)
Market Cap. (\$M)	1,286	1,125	Target Relative Size 46.67%
Industry SIC Code	4911	4931	Horizontal Merger Yes
CAR (-1,0)	1.84%	1.43%	Combined CAR (-1,0) 1.65%
Shareholder Post-holdings	50.2%	49.8%	Transaction Value (\$M) 1,081
Pre-Merger Directors	11	10	Target Premium (ex ante) -8.11%
Post-Merger Directors	7	7	Announcement Date 4/30/98
CEO Succession Plan	No	No	Completion Date 7/28/99
Chairman Succession Plan	--	--	Surviving Legal Entity Sierra Pacific
CEO Age	60	45	Post-Merger CEO Acquirer (Other)
Headquarters	Las Vegas, NV	Reno, NV	Headquarters Reno, NV

	Acquirer	Target	Merged Firm
Name	First Security Financial Corp.	Omni Capital Group	Security Bancorp
Market Cap. (\$M)	68	45	Target Relative Size 40.10%
Industry SIC Code	6022	6021	Horizontal Merger Yes
CAR (-1,0)	-9.07%	-2.03%	Combined CAR (-1,0) -6.25%
Shareholder Post-holdings	--	--	Transaction Value (\$M) 63
Pre-Merger Directors	--	--	Target Premium (ex ante) 37.5%
Post-Merger Directors	11	11	Announcement Date 11/26/91
CEO Succession Plan	No	No	Completion Date 6/30/92
Chairman Succession Plan	--	--	Surviving Legal Entity --
CEO Age	--	--	Post-Merger CEO --
Headquarters	--	--	Headquarters --

	Acquirer	Target	Merged Firm
Name	Staples, Inc. (SPLS)	Office Depot, Inc. (ODP)	Staples/Office Depot, Inc.
Market Cap. (\$M)	3,209	2,624	Target Relative Size 44.98%
Industry SIC Code	5943	5943	Horizontal Merger Yes
CAR (-1,0)	-4.11%	29.04%	Combined CAR (-1,0) 10.8%
Shareholder Post-holdings	47%	53%	Transaction Value (\$M) 3,538
Pre-Merger Directors	11	10	Target Premium (ex ante) 36.80%
Post-Merger Directors	8	6	Announcement Date 9/4/96
CEO Succession Plan	Yes	No	Completion Date Not completed
Chairman Succession Plan	Yes	No	Surviving Legal Entity Staples, Inc.
CEO Age	47	50	Post-Merger CEO Acquirer
Headquarters	MA	Delray Beach, FL	Headquarters MA

	Acquirer	Target	Merged Firm
Name	Wisconsin Energy Corp.	Northern States Power Co.	Primergy
Market Cap. (\$M)	2,986	2,935	Target Relative Size 49.57%
Industry SIC Code	4931	4932	Horizontal Merger Yes
CAR (-1,0)	2.81%	1.95%	Combined CAR (-1,0) 2.38%
Shareholder Post-holdings	50%	50%	Transaction Value (\$M) 3,037
Pre-Merger Directors	11	13	Target Premium (ex ante) 4.63%
Post-Merger Directors	6	6	Announcement Date 5/1/95
CEO Succession Plan	Yes	No	Completion Date Not completed
Chairman Succession Plan	Yes	No	Surviving Legal Entity Wisconsin Energy
CEO Age	50	59	Post-Merger CEO Target
Headquarters	Milwaukee, WI	Minneapolis, MN	Headquarters Minneapolis, MN

	Acquirer	Target	Merged Firm
Name	Indiana Energy, Inc.	SIGCORP, Inc.	--
Market Cap. (\$M)	665	734	Target Relative Size 52.48%
Industry SIC Code	4924	4911	Horizontal Merger Yes
CAR (-1,0)	0.72%	-0.74%	Combined CAR (-1,0) -0.04%
Shareholder Post-holdings	48.6%	51.4 %	Transaction Value (\$M) 1,214
Pre-Merger Directors	12	9	Target Premium (ex ante) 0.28%
Post-Merger Directors	8	8	Announcement Date 6/11/99
CEO Succession Plan	No	No	Completion Date 3/21/00
Chairman Succession Plan	--	--	Surviving Legal Entity Neither
CEO Age	65	63	Post-Merger CEO Acquirer (Other)
Headquarters	Indianapolis, IN	Evansville, IN	Headquarters Evansville, IN

	Acquirer	Target	Merged Firm
Name	Chateau Properties (CPJ)	ROC Communities (RCI)	Chateau Properties (CPJ)
Market Cap. (\$M)	136	295	Target Relative Size 68.50%
Industry SIC Code	6798	6798	Horizontal Merger Yes
CAR (-1,0)	0.72%	2.04%	Combined CAR (-1,0) 1.63%
Shareholder Post-holdings	51.4%	48.6%	Transaction Value (\$M) 289
Pre-Merger Directors	7	--	Target Premium (ex ante) -1.34%
Post-Merger Directors	5	5	Announcement Date 7/18/96
CEO Succession Plan	No	No	Completion Date 2/21/97
Chairman Succession Plan	--	--	Surviving Legal Entity Chateau Properties
CEO Age	53	51	Post-Merger CEO Target
Headquarters	Clinton Township, MI	Englewood, CO	Headquarters Englewood, CO

	Acquirer	Target		Merged Firm
Name	Premier Bancshares, Inc. (PMB)	Central & Southern Holding Co. (CSBC)		Premier Bancshares, Inc. (PMB)
Market Cap. (\$M)	51	41	Target Relative Size	44.56%
Industry SIC Code	6022	6022	Horizontal Merger	Yes
CAR (-1,0)	5.79%	4.25%	Combined CAR (-1,0)	5.10%
Shareholder Post-holdings	54%	46%	Transaction Value (\$M)	51
Pre-Merger Directors	8	10	Target Premium (ex ante)	38.87%
Post-Merger Directors	8	7	Announcement Date	1/15/97
CEO Succession Plan	No	No	Completion Date	6/23/97
Chairman Succession Plan	--	--	Surviving Legal Entity	Premier Bancshares
CEO Age	48	48	Post-Merger CEO	Acquirer
Headquarters	Atlanta, GA	Milledgeville, GA	Headquarters	

	Acquirer	Target		Merged Firm
Name	Pinnacle Financial Services	Indiana Federal Corp.		Pinnacle Financial Services
Market Cap. (\$M)	142	94	Target Relative Size	39.64%
Industry SIC Code	6022	6035	Horizontal Merger	Yes
CAR (-1,0)	-1.20%	17.06%	Combined CAR (-1,0)	6.04%
Shareholder Post-holdings	55.4%	45.6%	Transaction Value (\$M)	121
Pre-Merger Directors	8	8	Target Premium (ex ante)	17.86%
Post-Merger Directors	5	5	Announcement Date	11/14/96
CEO Succession Plan	No	No	Completion Date	8/4/97
Chairman Succession Plan	--	--	Surviving Legal Entity	Pinnacle Financial
CEO Age	56	45	Post-Merger CEO	Acquirer
Headquarters	St. Joseph, MI	Valparaiso, IN	Headquarters	Valparaiso, IN

	Acquirer	Target		Merged Firm
Name	Ocean Energy, Inc. (OEI)	United Meridian Corporation (UMC)		Ocean Energy, Inc. (OEI)
Market Cap. (\$M)	1,336	1,082	Target Relative Size	44.76%
Industry SIC Code	1311	1311	Horizontal Merger	Yes
CAR (-1,0)	-3.43%	-3.38%	Combined CAR (-1,0)	-3.41%
Shareholder Post-holdings	54%	46%	Transaction Value (\$M)	1,032
Pre-Merger Directors	--	12	Target Premium (ex ante)	-9.67%
Post-Merger Directors	7	7	Announcement Date	12/23/97
CEO Succession Plan	No	No	Completion Date	3/27/98
Chairman Succession Plan	--	--	Surviving Legal Entity	Ocean Energy, Inc.
CEO Age	44	64	Post-Merger CEO	Acquirer
Headquarters	Baton Rouge, LA	Houston, TX	Headquarters	Houston, TX

	Acquirer	Target		Merged Firm
Name	Society Corp. (SCY)	KeyCorp (KEY)		KeyCorp (KEY)
Market Cap. (\$M)	3,755	3,769	Target Relative Size	50.09%
Industry SIC Code	6021	6021	Horizontal Merger	Yes
CAR (-1,0)	1.05%	0.91%	Combined CAR (-1,0)	0.98%
Shareholder Post-holdings	48.4%	51.6%	Transaction Value (\$M)	3,924
Pre-Merger Directors	--	--	Target Premium (ex ante)	-.39%
Post-Merger Directors	11	11	Announcement Date	10/1/93
CEO Succession Plan	Yes	No	Completion Date	3/1/94
Chairman Succession Plan	--	--	Surviving Legal Entity	KeyCorp
CEO Age	49	62	Post-Merger CEO	Target
Headquarters	Cleveland, OH	Albany, NY	Headquarters	Cleveland, OH

	Acquirer	Target		Merged Firm
Name	Associated Banc-Corp (ASBC)	First Financial Corporation (FFHC)		Associated Banc-Corp (ASBC)
Market Cap. (\$M)	815	997	Target Relative Size	55.03%
Industry SIC Code	6021	6035	Horizontal Merger	Yes
CAR (-1,0)	-4.24%	-3.62%	Combined CAR (-1,0)	-3.90%
Shareholder Post-holdings	45%	55%	Transaction Value (\$M)	1,075
Pre-Merger Directors	9	8	Target Premium (ex ante)	12.15%
Post-Merger Directors	7	7	Announcement Date	5/15/97
CEO Succession Plan	No	No	Completion Date	10/29/97
Chairman Succession Plan	--	--	Surviving Legal Entity	Associated
CEO Age	61	54	Post-Merger CEO	Acquirer
Headquarters	Green Bay, WI	Stevens Point, WI	Headquarters	Green Bay, WI

	Acquirer	Target		Merged Firm
Name	ASARCO Incorporated (AR)	Cyprus Amax Minerals Company (CYM)		ASARCO Cyprus, Inc.
Market Cap. (\$M)	747	1,334	Target Relative Size	64.09%
Industry SIC Code	1021	1021	Horizontal Merger	Yes
CAR (-1,0)	-0.53%	-0.41%	Combined CAR (-1,0)	-0.46%
Shareholder Post-holdings	36.5%	63.5%	Transaction Value (\$M)	1,462
Pre-Merger Directors	12	10	Target Premium (ex ante)	-2.29%
Post-Merger Directors	8	8	Announcement Date	7/15/99
CEO Succession Plan	Yes	No	Completion Date	Not Completed
Chairman Succession Plan	Yes	No	Surviving Legal Entity	Neither
CEO Age	56	66	Post-Merger CEO	Co-Chiefs
Headquarters	New York, NY	Englewood, CO	Headquarters	New York, NY

	Acquirer	Target		Merged Firm
Name	CapStar Hotel Co. (CHO)	American General Hospitality Corp. (AGT)		Meristar Hospitality Corp. (MHX)
Market Cap. (\$M)	908	375	Target Relative Size	29.23%
Industry SIC Code	7011	6798	Horizontal Merger	No
CAR (-1,0)	-4.91%	1.44%	Combined CAR (-1,0)	-3.05%
Shareholder Post-holdings	56%	44%	Transaction Value (\$M)	1,212
Pre-Merger Directors	10	5	Target Premium (ex ante)	52.01%
Post-Merger Directors	3	6	Announcement Date	3/16/98
CEO Succession Plan	No	No	Completion Date	8/3/98
Chairman Succession Plan	--	--	Surviving Legal Entity	--
CEO Age	--	--	Post-Merger CEO	--
Headquarters	Washington, D.C.	Irving, TX	Headquarters	Washington, D.C.

	Acquirer	Target		Merged Firm
Name	Charter One Financial, Inc. (COFI)	FirstFed Michigan Corporation (FFOM)		Charter One Financial, Inc. (COFI)
Market Cap. (\$M)	542	479	Target Relative Size	46.93%
Industry SIC Code	6035	6035	Horizontal Merger	Yes
CAR (-1,0)	1.43%	2.79%	Combined CAR (-1,0)	2.07%
Shareholder Post-holdings	49.7%	50.3%	Transaction Value (\$M)	570
Pre-Merger Directors	12	10	Target Premium (ex ante)	23.11%
Post-Merger Directors	8	8	Announcement Date	5/30/95
CEO Succession Plan	No	No	Completion Date	11/1/95
Chairman Succession Plan	--	--	Surviving Legal Entity	Charter One
CEO Age	48	--	Post-Merger CEO	Acquirer
Headquarters	Cleveland, OH	Detroit, MI	Headquarters	Cleveland, OH

	Acquirer	Target	Merged Firm	
Name	Bell Atlantic Corp. (BEL)	NYNEX Corp. (NYN)		Bell Atlantic Corp. (BEL)
Market Cap. (\$M)	26,769	21,768	Target Relative Size	44.85%
Industry SIC Code	4899	4813	Horizontal Merger	Yes
CAR (-1,0)	6.90%	4.94%	Combined CAR (-1,0)	1.59%
Shareholder Post-holdings	56%	44%	Transaction Value (\$M)	21,346
Pre-Merger Directors	17	13	Target Premium (ex ante)	-5.68%
Post-Merger Directors	11	11	Announcement Date	4/22/96
CEO Succession Plan	No	Yes	Completion Date	8/15/97
Chairman Succession Plan	No	Yes	Surviving Legal Entity	Bell Atlantic Corp.
CEO Age	59	49	Post-Merger CEO	Acquirer
Headquarters	Philadelphia, PA	New York, NY	Headquarters	New York, NY

	Acquirer	Target	Merged Firm	
Name	BB&T Financial Corp. (BBTF)	Southern National Co. (SNB)		BB&T Corporation (BBT)
Market Cap. (\$M)	1093	908	Target Relative Size	45.38%
Industry SIC Code	6022	6022	Horizontal Merger	Yes
CAR (-1,0)	3.66%	4.44%	Combined CAR (-1,0)	4.01%
Shareholder Post-holdings	55%	45%	Transaction Value (\$M)	1,348
Pre-Merger Directors	24	24	Target Premium (ex ante)	51.22%
Post-Merger Directors	12	12	Announcement Date	8/1/94
CEO Succession Plan	No	No	Completion Date	2/28/95
Chairman Succession Plan	--	--	Surviving Legal Entity	Southern National
CEO Age	45	53	Post-Merger CEO	Acquirer
Headquarters	Wilson, NC	Winston-Salem, NC	Headquarters	Winston-Salem, NC

	Acquirer	Target	Merged Firm	
Name	CUC International Inc. (CU)	HFS, Inc. (HFS)		Cendant Corp.
Market Cap. (\$M)	9,321	7,110	Target Relative Size	43.27%
Industry SIC Code	8699	7011	Horizontal Merger	No
CAR (-1,0)	3.90%	0.44%	Combined CAR (-1,0)	2.40%
Shareholder Post-holdings	50%	50%	Transaction Value (\$M)	11,343
Pre-Merger Directors	10	15	Target Premium (ex ante)	5.23%
Post-Merger Directors	15	15	Announcement Date	5/27/97
CEO Succession Plan	Yes	No	Completion Date	12/18/97
Chairman Succession Plan	No	Yes	Surviving Legal Entity	CUC International
CEO Age	54	56	Post-Merger CEO	Target
Headquarters	Stamford, CT	Parsippany, NJ	Headquarters	

	Acquirer	Target	Merged Firm	
Name	Chemical Banking Corp.	Chase Manhattan Corp. (CMB)		Chase Manhattan Corp. (CMB).
Market Cap. (\$M)	12,917	9321	Target Relative Size	41.92%
Industry SIC Code	6021	6021	Horizontal Merger	Yes
CAR (-1,0)	11.89%	14.34%	Combined CAR (-1,0)	12.92%
Shareholder Post-holdings	57%	43%	Transaction Value (\$M)	10,440
Pre-Merger Directors	20	15	Target Premium (ex ante)	5.46%
Post-Merger Directors	20	15	Announcement Date	8/28/95
CEO Succession Plan	No	No	Completion Date	3/31/96
Chairman Succession Plan	--	--	Surviving Legal Entity	Chase Manhattan
CEO Age	59	56	Post-Merger CEO	Acquirer
Headquarters	New York, NY	New York, NY	Headquarters	New York, NY

	Acquirer	Target	Merged Firm
Name	FCB Financial Corp. (FCBF)	OSB Financial Corp. (OSBF)	FCB Financial Corp. (FCBF)
Market Cap. (\$M)	45	28	Target Relative Size 38.64%
Industry SIC Code	6035	6035	Horizontal Merger Yes
CAR (-1,0)	2.61%	6.58%	Combined CAR (-1,0) 4.15%
Shareholder Post-holdings	60.2%	39.8%	Transaction Value (\$M) 31
Pre-Merger Directors	7	--	Target Premium (ex ante) 15.90%
Post-Merger Directors	7	7	Announcement Date 11/14/96
CEO Succession Plan	No	No	Completion Date 5/2/97
Chairman Succession Plan	--	--	Surviving Legal Entity FCB Financial
CEO Age	58	47	Post-Merger CEO Target
Headquarters	Neenah, WI	Oshkosh, WI	Headquarters Oshkosh, WI

	Acquirer	Target	Merged Firm
Name	Falcon Drilling Company, Inc. (FLC)	Reading & Bates Corporation (RB)	R&B Falcon Corp. (FLC)
Market Cap. (\$M)	2,269	1,927	Target Relative Size 45.93%
Industry SIC Code	1381	1381	Horizontal Merger Yes
CAR (-1,0)	-1.69%	6.76%	Combined CAR (-1,0) 2.19%
Shareholder Post-holdings	48%	52%	Transaction Value (\$M) 2587
Pre-Merger Directors	7	7	Target Premium (ex ante) 30.47%
Post-Merger Directors	5	5	Announcement Date 7/19/97
CEO Succession Plan	No	No	Completion Date 12/31/97
Chairman Succession Plan	--	--	Surviving Legal Entity Neither
CEO Age	45	50	Post-Merger CEO Acquirer
Headquarters	Houston, TX	Houston, TX	Headquarters Houston, TX

	Acquirer	Target	Merged Firm
Name	Durco International Inc. (DURI)	BW/IP, Inc. (BWF)	Flowserve Corp. (FLS)
Market Cap. (\$M)	573	407	Target Relative Size 41.51%
Industry SIC Code	3559	3561	Horizontal Merger Yes
CAR (-1,0)	4.03%	0.23%	Combined CAR (-1,0) -2.26%
Shareholder Post-holdings	58%	42%	Transaction Value (\$M) 531
Pre-Merger Directors	--	8	Target Premium (ex ante) 18.72%
Post-Merger Directors	5	4	Announcement Date 5/6/97
CEO Succession Plan	No	No	Completion Date 7/22/97
Chairman Succession Plan	--	--	Surviving Legal Entity Durco International
CEO Age	53	55	Post-Merger CEO Target
Headquarters	Dayton, OH	Long Beach, CA	Headquarters Irving, TX

	Acquirer	Target	Merged Firm
Name	Promus Hotel Corp. (PRH)	Doubletree Corp. (TREE)	Promus Hotel Corp. (PRH)
Market Cap. (\$M)	2,070	1,826	Target Relative Size 46.87%
Industry SIC Code	7011	7011	Horizontal Merger Yes
CAR (-1,0)	2.33%	-3.61%	Combined CAR (-1,0) -0.46%
Shareholder Post-holdings	54%	46%	Transaction Value (\$M) 1,704
Pre-Merger Directors	11	11	Target Premium (ex ante) -7.27%
Post-Merger Directors	7	7	Announcement Date 9/2/97
CEO Succession Plan	No	Yes	Completion Date 12/19/97
Chairman Succession Plan	--	--	Surviving Legal Entity Promus Hotel Corp.
CEO Age	64	48	Post-Merger CEO Acquirer
Headquarters	Memphis, TN	Phoenix, AZ	Headquarters Memphis, TN

	Acquirer	Target	Merged Firm	
Name	Hinsdale Financial Corp. (HNFC)	Liberty Bancorp, Inc. (LBCI)		Alliance Bancorp (ABCL)
Market Cap. (\$M)	62	59	Target Relative Size	48.87%
Industry SIC Code	6712	6035	Horizontal Merger	No
CAR (-1,0)	5.58%	-1.34%	Combined CAR (-1,0)	-3.51%
Shareholder Post-holdings	50.8%	49.2%	Transaction Value (\$M)	66
Pre-Merger Directors	--	24	Target Premium (ex ante)	3.21%
Post-Merger Directors	7	7	Announcement Date	8/5/96
CEO Succession Plan	No	No	Completion Date	2/10/97
Chairman Succession Plan	--	--	Surviving Legal Entity	Hinsdale Financial
CEO Age	54	57	Post-Merger CEO	Acquirer
Headquarters	Hinsdale, IL	Chicago, IL	Headquarters	Hinsdale, IL

	Acquirer	Target	Merged Firm	
Name	Foundation Health Corp. (FH)	Health Systems International, Inc. (HQ)		Foundation Health Corp. (FH)
Market Cap. (\$M)	2,048	600	Target Relative Size	22.65%
Industry SIC Code	6324	8011	Horizontal Merger	No
CAR (-1,0)	0.79%	5.16%	Combined CAR (-1,0)	1.78%
Shareholder Post-holdings	61%	39%	Transaction Value (\$M)	1,277
Pre-Merger Directors	10	14	Target Premium (ex ante)	13.26%
Post-Merger Directors	6	5	Announcement Date	10/1/96
CEO Succession Plan	No	No	Completion Date	4/1/97
Chairman Succession Plan	--	--	Surviving Legal Entity	Health Systems
CEO Age	48	57	Post-Merger CEO	Target
Headquarters	Rancho Cordova, CA	Woodland Hills, CA	Headquarters	Woodland Hills, CA

	Acquirer	Target	Merged Firm	
Name	Friede Goldman International Inc. (FGI)	Halter Marine Group, Inc. (HLX)		Friede Goldman International Inc. (FGI)
Market Cap. (\$M)	409	175	Target Relative Size	29.98%
Industry SIC Code	3731	3731	Horizontal Merger	Yes
CAR (-1,0)	1.60%	-4.10%	Combined CAR (-1,0)	-0.11%
Shareholder Post-holdings	58.7%	41.3%	Transaction Value (\$M)	244
Pre-Merger Directors	8	7	Target Premium (ex ante)	.52%
Post-Merger Directors	6	5	Announcement Date	6/2/99
CEO Succession Plan	No	No	Completion Date	11/3/99
Chairman Succession Plan	--	--	Surviving Legal Entity	Friede Goldman
CEO Age	54	48	Post-Merger CEO	Acquirer
Headquarters	Jackson, MS	Gulfport, MS	Headquarters	Gulfport, MS

	Acquirer	Target	Merged Firm	
Name	Fred Meyer, Inc. (FMY)	Smith's Food & Drug Centers, Inc. (SFD)		FM Corp.
Market Cap. (\$M)	1,307	402	Target Relative Size	23.52%
Industry SIC Code	5311	5411	Horizontal Merger	No
CAR (-1,0)	2.23%	12.23%	Combined CAR (-1,0)	4.58%
Shareholder Post-holdings	62%	38%	Transaction Value (\$M)	2,018
Pre-Merger Directors	16	7	Target Premium (ex ante)	26.99%
Post-Merger Directors	7	7	Announcement Date	5/12/97
CEO Succession Plan	No	No	Completion Date	9/9/97
Chairman Succession Plan	--	--	Surviving Legal Entity	Fred Meyer, Inc.
CEO Age	53	47	Post-Merger CEO	Acquirer
Headquarters	Portland, OR	Salt Lake City, UT	Headquarters	Portland, OR

	Acquirer	Target		Merged Firm
Name	MindSpring Enterprises, Inc.	EarthLink Network, Inc. (ELNK)		EarthLink Network, Inc. (ELNK)
Market Cap. (\$M)	1,694	1,402	Target Relative Size	45.29%
Industry SIC Code	7389	7375	Horizontal Merger	Yes
CAR (-1,0)	10.39%	12.04%	Combined CAR (-1,0)	11.14%
Shareholder Post-holdings	50%	50%	Transaction Value (\$M)	2,342
Pre-Merger Directors	5	10	Target Premium (ex ante)	9.90%
Post-Merger Directors	4	4	Announcement Date	9/24/99
CEO Succession Plan	No	No	Completion Date	2/4/00
Chairman Succession Plan	--	--	Surviving Legal Entity	EarthLink Network
CEO Age	40	42	Post-Merger CEO	Target
Headquarters	Atlanta, GA	Pasadena, CA	Headquarters	Atlanta, GA

	Acquirer	Target		Merged Firm
Name	Martin Marietta Corp.	Lockheed Corp.		Lockheed Martin Corporation (LMT)
Market Cap. (\$M)	4,562	3,966	Target Relative Size	46.51%
Industry SIC Code	3761	3721	Horizontal Merger	Yes
CAR (-1,0)	0.82%	17.27%	Combined CAR (-1,0)	8.47%
Shareholder Post-holdings	48%	52%	Transaction Value (\$M)	5,204
Pre-Merger Directors	17	14	Target Premium (ex ante)	26.09%
Post-Merger Directors	12	12	Announcement Date	8/30/94
CEO Succession Plan	Yes	No	Completion Date	3/15/95
Chairman Succession Plan	--	--	Surviving Legal Entity	Neither
CEO Age	59	63	Post-Merger CEO	Target
Headquarters	Bethesda, MD	Calabasas, CA	Headquarters	Bethesda, MD

	Acquirer	Target		Merged Firm
Name	Little Falls Bancorp, Inc. (LFBI)	Skylands Community Bank (SKCB)		Little Falls Bancorp, Inc.
Market Cap. (\$M)	51	37	Target Relative Size	42.38%
Industry SIC Code	6021	6022	Horizontal Merger	Yes
CAR (-1,0)	-19.78%	-14.45%	Combined CAR (-1,0)	-17.52%
Shareholder Post-holdings	57%	43%	Transaction Value (\$M)	40
Pre-Merger Directors	7	--	Target Premium (ex ante)	-3.03%
Post-Merger Directors	8	11	Announcement Date	8/13/98
CEO Succession Plan	No	No	Completion Date	Not Completed
Chairman Succession Plan	--	--	Surviving Legal Entity	Neither
CEO Age	51	--	Post-Merger CEO	Target
Headquarters	Little Falls, NJ	Hackettstown, NJ	Headquarters	Little Falls, NJ

	Acquirer	Target		Merged Firm
Name	UtiliCorp United Inc. (UCU)	Kansas City Power & Light Co. (KLT)		KC United Corp.
Market Cap. (\$M)	1,304	1,609	Target Relative Size	55.24%
Industry SIC Code	4911	4911	Horizontal Merger	Yes
CAR (-1,0)	0.90%	1.99%	Combined CAR (-1,0)	1.50%
Shareholder Post-holdings	43%	57%	Transaction Value (\$M)	1,688
Pre-Merger Directors	9	9	Target Premium (ex ante)	9.55%
Post-Merger Directors	9	9	Announcement Date	1/22/96
CEO Succession Plan	Yes	No	Completion Date	Not Completed
Chairman Succession Plan	Yes	No	Surviving Legal Entity	Neither
CEO Age	41	49	Post-Merger CEO	Acquirer
Headquarters	Kansas City, MO	Kansas City, MO	Headquarters	Kansas City, MO

	Acquirer	Target	Merged Firm
Name	Commercial Bancorp	West Coast Bancorp (WCBC)	West Coast Bancorp (WCBC)
Market Cap. (\$M)	43	25	Target Relative Size 36.72%
Industry SIC Code	6022	6022	Horizontal Merger Yes
CAR (-1,0)	1.48%	-1.55%	Combined CAR (-1,0) 0.91%
Shareholder Post-holdings	60.4%	39.6%	Transaction Value (\$M) 21
Pre-Merger Directors	15	7	Target Premium (ex ante) 5.6%
Post-Merger Directors	7	7	Announcement Date 10/25/94
CEO Succession Plan	No	No	Completion Date 2/28/95
Chairman Succession Plan	--	--	Surviving Legal Entity Commercial
CEO Age	55	47	Post-Merger CEO Co-Chiefs
Headquarters	Salem, OR	Newport, OR	Headquarters Lake Oswego, OR

	Acquirer	Target	Merged Firm
Name	Westinghouse Air Brake Company (WAB)	MotivePower Industries, Inc. (MPO)	Westinghouse Air Brake Technologies
Market Cap. (\$M)	751	467	Target Relative Size 38.33%
Industry SIC Code	3743	3743	Horizontal Merger Yes
CAR (-1,0)	5.89%	15.84%	Combined CAR (-1,0) 9.71%
Shareholder Post-holdings	55%	45%	Transaction Value (\$M) 493
Pre-Merger Directors	8	7	Target Premium (ex ante) -29.80%
Post-Merger Directors	7	7	Announcement Date 9/27/99
CEO Succession Plan	No	No	Completion Date 11/19/99
Chairman Succession Plan	--	--	Surviving Legal Entity Westinghouse Air
CEO Age	56	56	Post-Merger CEO Acquirer
Headquarters	Wilmerding, PA	Pittsburgh, PA	Headquarters Pittsburgh, PA

	Acquirer	Target	Merged Firm
Name	Dean Witter, Discover & Co.	Morgan Stanley Group, Inc.	Morgan Stanley, Dean Witter, Discover & Co. (MWD)
Market Cap. (\$M)	11,896	8,631	Target Relative Size 42.05%
Industry SIC Code	6211	6211	Horizontal Merger Yes
CAR (-1,0)	6.51%	15.21%	Combined CAR (-1,0) 10.17%
Shareholder Post-holdings	55%	45%	Transaction Value (\$M) 10,573
Pre-Merger Directors	10	10	Target Premium (ex ante) 13.81%
Post-Merger Directors	7	7	Announcement Date 2/5/97
CEO Succession Plan	No	No	Completion Date 5/31/97
Chairman Succession Plan	--	--	Surviving Legal Entity Dean Witter
CEO Age	53	52	Post-Merger CEO Acquirer
Headquarters	New York, NY	New York, NY	Headquarters New York, NY

	Acquirer	Target	Merged Firm
Name	Monsanto Co. (MTC)	Pharmacia & Upjohn, Inc. (PNU)	Pharmacia Corp. (PHA)
Market Cap. (\$M)	27,804	27,480	Target Relative Size 49.71%
Industry SIC Code	8731	2879	Horizontal Merger No
CAR (-1,0)	-8.50%	-11.22%	Combined CAR (-1,0) -9.85%
Shareholder Post-holdings	51%	49%	Transaction Value (\$M) 26,486
Pre-Merger Directors	8	12	Target Premium (ex ante) --
Post-Merger Directors	9	9	Announcement Date 12/20/99
CEO Succession Plan	No	Yes	Completion Date 3/31/00
Chairman Succession Plan	No	Yes	Surviving Legal Entity Pharmacia & Upjohn
CEO Age	60	53	Post-Merger CEO Target
Headquarters	St. Louis, MO	Peapack, NJ	Headquarters Peapack, NJ

	Acquirer	Target		Merged Firm
Name	LG&E Energy Corp.	KU Energy Corp.		LG&E Energy Corp.
Market Cap. (\$M)	1,626	1,177	Target Relative Size	41.99%
Industry SIC Code	4911	4911	Horizontal Merger	Yes
CAR (-1,0)	-8.14%	13.14%	Combined CAR (-1,0)	0.80%
Shareholder Post-holdings	51.3%	48.7%	Transaction Value (\$M)	1,593
Pre-Merger Directors	11	10	Target Premium (ex ante)	35.69%
Post-Merger Directors	8	7	Announcement Date	5/21/97
CEO Succession Plan	No	No	Completion Date	5/4/98
Chairman Succession Plan	--	--	Surviving Legal Entity	LG&E Energy
CEO Age	53	54	Post-Merger CEO	Acquirer
Headquarters	Louisville, KY	Lexington, KY	Headquarters	Louisville, KY

