

The Sources of Value Destruction in Acquisitions by Entrenched Managers*

Jarrad Harford^a, Mark Humphery-Jenner^{b,c}, Ronan Powell^b

^a *Foster School of Business, University of Washington, Seattle, WA 98195, USA*

^b *School of Banking and Finance, University of New South Wales, Sydney, NSW 2052, Australia*

^c *European Banking Center, Tilburg University, 5000LE Tilburg, The Netherlands*

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Abstract

Prior work has established that entrenched managers make value-decreasing acquisitions. In this study, we ask how exactly they destroy that value. Overall, we find that value destruction by entrenched managers comes from a combination of factors. First, they disproportionately avoid private targets, which have been shown to be generally associated with value creation. Second, when they do buy private targets or public targets with blockholders, they tend not to use all-equity offers, which has the effect of avoiding the transfer of a valuable blockholder to the bidder. We further test whether entrenched managers simply overpay for good targets or actually choose targets with lower synergies. We find that while they overpay, they also choose low-synergy targets in the first place, as shown by combined announcement returns and post-merger operating performance.

JEL classification: G34; G32

Keywords: Corporate governance; Mergers; Entrenchment; Blockholders; Overpayment

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Abstract

Prior work has established that entrenched managers make value-decreasing acquisitions. In this study, we ask how exactly they destroy that value. Overall, we find that value destruction by entrenched managers comes from a combination of factors. First, they disproportionately avoid private targets, which have been shown to be generally associated with value creation. Second, when they do buy private targets or public targets with blockholders, they tend not to use all-equity offers, which has the effect of avoiding the transfer of a valuable blockholder to the bidder. We further test whether entrenched managers simply overpay for good targets or actually choose targets with lower synergies. We find that while they overpay, they also choose low-synergy targets in the first place, as shown by combined announcement returns and post-merger operating performance.

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1. Introduction

It is well known that one particularly costly manifestation of the agency conflict between shareholders and managers is a bad acquisition (see, for example, Jensen, 1986). Recently, Masulis, Wang and Xie (2007) present evidence that acquisitions that destroy the most bidder value are made by managers who can be considered partly entrenched. In this paper, we ask how partly-entrenched managers destroy value in their acquisitions. Specifically, we study the types of acquisitions they make with respect to the target's attributes, the method of payment, and the synergies created.

We find that a significant portion of value-destruction comes from entrenched managers' avoidance of private targets, and for preserving their position of entrenchment. Prior research, such as Chang (1998) and Fuller, Netter and Stegemoller (2002), has shown that acquisitions of private targets are generally value-increasing, while those of public targets are more likely to be value-decreasing. Most evidence points to the capture of the illiquidity discount (see Officer, 2007) and to the creation of a monitoring blockholder in an equity-based transaction, as discussed in Chang (1998) and Fuller, et al. (2002). We find that when entrenched managers do target private companies, they are more likely to use cash. While we can never perfectly assign motivation, paying cash has the effect of avoiding the potential creation of a blockholder. We also find that entrenched managers prefer not to use stock when acquiring public firms with large blockholders. Nonetheless, even controlling for the form of the target, entrenched managers make worse acquisitions, so target form is not the whole explanation.

We next examine synergies and overpayment across acquisitions. All value destruction involves overpayment. The question we ask is whether entrenched managers select low synergy

targets in the first place, or select high or normal synergy targets, but simply pay too much for them. The post-merger operating performance for acquisitions by entrenched managers is worse than for others, suggesting that poor target selection, as opposed to simply overpaying for good targets, explains the value destruction.

We also examine premiums paid by entrenched and non-entrenched managers. Notably, on average entrenched managers pay lower premiums than non-entrenched managers. Thus, the net effect of paying somewhat lower premiums for much worse targets is value destruction. Some evidence suggests that the higher premiums paid by non-entrenched managers are justified by greater synergy creation.

The paper contributes to the literature in several ways. First, we show that entrenched managers select targets and methods of payments differently from non-entrenched managers in ways that are consistent with trying to preserve their entrenchment. Specifically, they are less likely to pay stock for private targets, or for public targets that have significant blockholders, implying an attempt to preserve entrenchment. Second, we show some collateral support for the idea that stock acquisitions of private targets create a monitoring blockholder. Specifically, we show that the benefits of stock acquisitions of private targets increase with deal size (and thus, increase with the potential size and power of the monitoring blockholder). Third, we establish that the source of value destruction goes beyond simply overpaying for good targets—rather entrenched managers select targets that yield low synergies.

The paper proceeds as follows. In the next section we develop the hypotheses. We follow with a description of the sample in section 3. Section 4 presents the empirical results and Section 5 describes some robustness tests. Section 6 concludes.

2. Hypotheses development

Acquisitions are a well-established point of potential agency conflict between managers and shareholders. The potential for value destruction will be greater when the agency conflict is not well-controlled. In keeping with this, early work by Byrd and Hickman (1992) shows that firms with outsider-dominated boards make better acquisitions than those with insider-dominated boards. Recently, the GIM index (Gompers, Ishii and Metrick, 2003) has been proposed as a direct measure of managerial entrenchment because it aggregates antitakeover provisions. Further, even ignoring a direct entrenching effect of the provisions, a preponderance of these provisions at a firm likely indicates a generally self-serving approach by management and an accommodating board (see e.g., Davila and Penalva, 2006). As such, the GIM index serves as an indicator of firms where agency problems are most severe. Masulis et al. (2007) provide evidence consistent with the hypothesis that high GIM-index firms (so-called dictators) engage in value-destroying acquisitions on average, even controlling for a wide variety of firm and event characteristics. Our goal is to explore the source of this value destruction. In doing so, we test the following hypotheses.

Target selection: There is a continuum of entrenchment. Even if a manager is relatively entrenched, that does not mean that there is no action he/she could take that would weaken

his/her position. On the contrary, such a manager will actively seek to maintain his/her level of entrenchment. Thus, 'entrenched' managers may promote investments that increase (or at least do not decrease) their level of entrenchment. Target selection is one way to do this.

Avoiding private targets helps entrenched managers to preserve their entrenchment and avoid further internal scrutiny. When a bidder buys a private target with stock, it creates a large shareholder because the ownership of the private firm is concentrated. This large shareholder then has the ability and motivation to monitor bidding management going forward. Chang (1998) and Fuller et al. (2002) find evidence consistent with this, showing that, in contrast to the case of public targets, bidders using equity to buy private targets receive higher announcement returns on average. Entrenched managers prefer to avoid any additional monitoring and so would not acquire a private firm using equity. A solution is to effect the acquisition with cash. However, if they do not have sufficient cash on hand, they would need to turn to external capital markets for financing, at which point they would be subject to similar monitoring and/or scrutiny. The net effect would be fewer private targets overall, with a preference for cash payment when private firms are targeted.

Under-targeting private firms has negative consequences for bidder shareholders as extant evidence shows that acquisitions of private targets are value-creating and those of public targets are value-destroying, on average (e.g. Chang, 1998; Fuller et al., 2002). Officer (2007) shows that premiums for private targets are significantly lower than are those for similar public firms, owing to the value of providing liquidity to the private target's owners. Specifically, acquisitions of unlisted targets involve an illiquidity discount. Here, the acquirer pays a lower acquisition premium (a) to compensate for the illiquidity of the asset, (b) to compensate for the

opacity of the target, and (c) because the unlisted target takes liquidity as a form of non-pecuniary payment (following Capron and Shen, 2007; Faccio, McConnell, and Stolin, 2006). Thus, under-targeting private companies would explain part of the average value-destruction by entrenched bidders.

Avoiding public targets that have blockholders can also reinforce entrenchment. Prior literature suggests that large blockholders monitor managers through actions such as voting at shareholder meetings (Agrawal and Mandelker, 1990; Chen et al, 2007; Aggarwal et al, 2011). If managers use stock to acquire a target that has a large blockholder, then they may risk importing a large blockholder to the merged firm. Thus, entrenched managers would avoid using stock to acquire a target that has a large monitoring blockholder.

Pure overpayment: Entrenched managers are more interested in completing the deal than in maximizing bidding shareholder value. Whether it is due to empire-building incentives or defensive acquisition incentives such as those described in Gorton, Kahl and Rosen (2009), entrenched managers interested in preserving and extending their private benefits of control would be willing to overpay for target assets. This leads to the overpayment hypothesis: entrenched managers overpay for their targets (which may otherwise be similar to targets of unentrenched managers), thus destroying value.

Low synergies: A related hypothesis is that entrenched managers choose targets with which their firm has low (or no) synergies. This is still overpayment in the sense that any premium for a no-synergy target is overpayment, but specifically focuses on the lack of synergies, as opposed to overpayment for a firm with an average amount of synergies. The lack of synergies

could be due to a poor match because entrenched managers are more interested in empire-building than value creation. Alternatively, or in combination, it could be that entrenched managers lack the skill to exploit potential synergies that do exist.

3. Sample

The initial sample includes 3,935 takeovers made by US acquirers of public, private and subsidiary targets from 1990 to 2005. The takeover sample is from SDC Platinum's Mergers and Acquisitions database. We follow Masulis et al. (2007) by imposing the following sample requirements:

- (i) The acquisition must be completed;
- (ii) The bidder must own less than 50% of the target before the acquisition and 100% after;
- (iii) Transaction value must exceed \$1 million and at least 1% of the bidder's market capitalization 11 days before the announcement;
- (iv) The bidder must have accounting data on Compustat and stock data on CRSP for 210 trading days before the announcement;
- (v) The bidder must have Investor Responsibility Research Centre (IRRC) governance data.

The IRRC database (now part of RiskMetrics) primarily contains large S&P 500 firms that constitute over 70% of US stock market capitalization (Bebchuk et al., 2009). However, post-1998 IRRC publications now include smaller firms. The IRRC has published data in 1990, 1993,

1995, 1998, 2000, 2002, and 2004. We assume that firms maintain the previous publication's provisions in between publication dates (following Gompers et al., 2003; Masulis et al., 2007).¹

Because of our focus on the paths to value destruction for entrenched managers, we categorize our acquirers into democracy or dictator categories based on their GIM-index (where a firm with ≥ 10 antitakeover provisions is a dictator). For robustness, we categorize democracy and dictator based on the extremes of GIM and find our inferences are unchanged (see Section 5). We also impose the condition that a firm must have a non-classified board to be considered a democracy. We also separately considered simply using the presence of a classified board to proxy for entrenchment and self-interest. While the classified board is a simple measure, it is also a blunt proxy for agency problems as it is present in approximately 63% of firms and only protects against one type of disciplinary action, a proxy fight. Nonetheless, we wanted to see how well a very simple, easily calculated measure would perform compared to the more complex GIM index. Using this simple, blunt measure produces results that are largely consistent with those reported in the paper, as well as usually significant, but they are also weaker (not tabulated). Table 1 presents the time series of mergers, broken-out by democracy and dictator acquirers.

Table 1 shows a gradual increase in activity during the early to mid-1990s, with significant increases in both the number of transactions and the size of the acquiring firms in the late 1990s. The mean and median relative transaction size does not decrease as the acquirer size increases, indicative of the large deals seen at the end of the 1990s. Notably, the large differences in mean and median values reflect the existence of some very large bidders and deals. While

¹ The results are qualitatively similar if we use the subsequent publication's data to back-fill the governance indices. The results also hold if we constrain our sample to include only larger firms for the full sample period, i.e., those that belong to the S&P 500 index.

initially dictator bidders are larger on average than democracy bidders, the relation begins to reverse in 1994. Democracy firms were slower to join the 1990s merger wave than were dictator firms. The announcement returns for dictator bids turn negative earlier and are more consistently negative than for democracy bidders. However, the results do confirm conclusions from other studies such as Moeller, et al. (2005) that many bids made in 1999 were value-destructive.

4. Results

Table 2 presents summary statistics for the sample split according to the entrenched status of the acquirer. Panel A shows that dictators are more likely to have a classic free cash flow problem, showing higher free cash flow coupled with lower Tobin's q . Dictators are also more likely to have one person undertaking the dual role of CEO and Chairperson, and to have larger boards, lower CEO pay sensitivity, lower CEO equity ownership and lower equity-based pay. Taken together, the results are certainly consistent with the proposition that a preponderance of ATPs is a reasonable proxy for managerial entrenchment (Goyal and Park, 2002; Yermack, 1996; Datta, Iskandar-Datta, and Raman, 2001; Core and Guay, 2002).

Panel C of Table 2 documents the deal characteristics, revealing several differences between dictator and democracy deals. Dictator deals are less likely to be high-tech, but are more likely to be diversified or conglomerate in nature. Dictator managers are also much more likely to be serial acquirers. Nonetheless, the data on premiums shows that dictator firms actually pay *lower* premiums on average than do democracies.

Table 3 provides some initial insight into the roots of dictator bidder value-destruction. In the first row, we confirm the general result, found in Masulis, et al. (2007), that announcement returns (CARs) are lower for dictator firms. Broken-out by target form, the data reveal several important facts. Compared to democracy firms, dictator firms earn positive, but smaller CARs on private and subsidiary targets. They earn negative, but similar CARs on public targets. However, the frequencies reveal that the targets of dictator firms are less likely to be private than are the targets of democracy firms (32% vs. 39%) and more likely to be public (34% vs. 31%). Thus, the general result that dictator firms destroy value on average is due to a combination of choosing generally value-decreasing public targets more often and to creating less value when choosing private and subsidiary targets.

The rest of the panel breaks-out the transactions by target form and method of payment. One notable finding is that dictator firms are more likely to use stock for public targets, but are less likely to use stock for private targets. Fuller, et al. (2002) hypothesize that the generally higher returns for acquisitions of private targets with stock are due at least partly to the creation of a blockholder. Dictator bidders' preference for cash is consistent with entrenched management's desire to avoid creating a new monitor (but is not conclusive). In later multivariate analysis, we further explore the facts that compared to democracy firms, dictator firms show a preference for public targets and are much less likely to use stock when paying for private targets. We further examine whether they show a preference for avoiding blockholders in general.

Univariate results are at best suggestive, identifying characteristics that must be included in the multivariate analysis to come. The picture that emerges is that dictator acquirers tend to

be more mature, with lower q 's, higher leverage, and higher free cash flows. Combined with their high antitakeover index and board and compensation characteristics, the potential for significant agency problems exist. Table 1 shows that dictator acquirers are more active in general, and Table 2 shows that they disproportionately under-target private firms. When they do target private firms, they are less likely than democracy acquirers to use all stock as consideration. This has the effect, intended or not, of avoiding the creation of a blockholder through the transaction.

4.1. *Likelihood of bidding*

The univariate results in Table 3 suggest that the targets of dictator bidders are shifted toward public rather than private status. Here we examine target choice in a multivariate setting to explore that observation further. Specifically, we estimate a double-sided tobit (censored at 0 and 1) to explain the proportion of future targets that are public (or private or subsidiary) for a given bidder at a point in time. We control for bidder characteristics that should influence the decision as well as the public status of the bidder's prior targets. We estimate the tobit as the second step of a two-step Heckman procedure that controls for the selection inherent in a bidder choosing to bid again at some point in the future.² The results are presented in Table 4.

Column 1 shows that the observation from the univariate results does indeed carry-over to the multivariate setting; dictator firms have a significantly lower fraction of private targets, all else equal. Columns 4 and 5 shed some light on this result. The proportion of private targets paid

² The selection equation controls for the dictator dummy (that the GIM index exceeds 10); the bidder's industry concentration (Herfindahl-Hirschman index); cash holdings/assets; the number of previous deals; the natural log of the firm's market value of assets; book leverage; whether the prior deal was friendly; the bidders PRIV; and, the Officer (2007) proxy premium paid for the prior acquisition.

for with cash is not abnormally low for dictator bidders, but the proportion paid for with stock is. While we cannot conclusively determine the motivations of dictator bidders, this set of results is consistent with the conjecture that entrenched managers pay stock for a private target so as to avoid creating blockholders from the target owners. The results remain significant if we use higher values of GIM to identify dictator firms.

To further examine whether entrenched managers behave as if they wish to avoid blockholder monitoring, in panel B we examine public targets with existing blockholders. Even though the ownership of some of these blockholders could drop below the blockholder level after the acquisition, their willingness to become a blockholder reveals that they are more likely than other shareholders to be activist (see Aggarwal et al, 2011), something an entrenched manager would prefer to avoid. In our tests in panel B we estimate the likelihood of targeting a firm with a blockholder. The interaction variable for dictator paying with stock is negative and significant, indicating that entrenched managers are less likely to use a stock swap to acquire a target with a blockholder. Likewise, the interaction for dictator and all cash payment is positive and significant. Again, while it is impossible to assign motivation, we note that the results for method of payment in private targets and for public targets with blockholders is consistent with blockholder-avoidance. These results are broadly consistent with Bertrand and Mullinathan (2003)'s quiet-life hypothesis, characterizing part of the agency problem as a desire by entrenched managers to maintain their position of freedom-from-interference.

4.2. *Announcement returns*

We move to an analysis of the value creation or destruction by different types of bidders by estimating a specification to explain the bidder's stock price reaction to the acquisition announcement. We use 5-day CARs measured from days -2 to +2, where $t=0$ is the takeover announcement day. The CARs are measured as the return in excess of that predicted by a market model. Similar to Masulis et al. (2007), we estimate the market model over days -210 to -11.³ The announcement return specification includes an indicator variable for bidders we classify as dictators. Models 1 to 3 test the target selection hypothesis, and models 4 and 5 test the overpayment hypothesis, discussed at the end of this subsection. Model 1 is the base model, which includes no interactions. Model 2 includes interactions to capture target organizational status and method of payment (Private*All stock), and larger private-all stock deals (Private*All stock*Relative size). The latter interaction is included to account for the fact that monitoring potential is related to the relative size of the private target to that of the acquirer. Model 3 then includes interactions with our dictator dummy to specifically test if coefficient values differ across dictator and democracy acquirers. We also include a number of control variables that are standard to the literature (see, e.g., Fuller et al., 2002; Humphery-Jenner and Powell, 2011; Moeller et al., 2004; Moeller and Schlingemann, 2005; Moeller et al., 2005; Masulis et al., 2007; and Travlos, 1987). Specifically, we include prior-year stock return (stock run-up), size, q , free cash flow, leverage, a measure of industry merger activity (Industry M&A), relative size of the target, abnormal trading volume, and indicator variables for deals in high technology industries,

³ The results are robust to different event windows (e.g., -3,+3, -1,+1). Further, the results are robust to alternative models of expected return, including a market-adjusted model with alpha equal to zero and beta equal to one, and GARCH or EGARCH estimations.

conglomerate deals, all cash, all stock, target organizational status (i.e., private or subsidiary), competed deals, friendly deals, crossborder deals, and acquirers involved in serial deals. Jensen (2005) proposes that the existence of overvalued or highly valued equity could give rise to value-destroying acquisitions. Following the approach in Dong et al. (2006), which is similar to that used by Rhodes-Kropf et al. (2005) and Lee et al. (1999), we also include a measure of overvalued equity, price-to-residual-income value (PRIV).⁴

The results in Table 5 show that dictators have lower announcement returns, consistent with the results in Masulis, et al. (2007). In untabulated results, we also find that the dictator dummy is negatively significant in the public-only and non-public samples. As in prior literature, we also show in model (2) that the announcement returns for private acquisitions are higher when the bidder uses stock, consistent with a positive effect from a potential increase in monitoring from a new blockholder. Model (3) shows, however, that for dictators, the market perceives target size as an important factor in delivering monitoring benefits, with only stock bids for larger private targets generating higher returns. This impact of relative deal size is economically significant. For dictatorship-firms acquiring an unlisted target with stock, a one standard deviation increase in relative deal size doubles CARs (holding all else constant). The calculation is: $\beta(Relative\ Deal\ Size) \times (Relative\ Deal\ Size) + \beta(Private \times Stock) + \beta(Private \times Stock \times Relative\ Deal\ Size) \times (Relative\ Deal\ Size) + \beta(Dictator \times Private \times Stock) + \beta(Dictator \times Private \times Stock \times Relative\ Deal\ Size) \times (Relative\ Deal\ Size)$, where a $\beta(.)$ term represents a regression coefficient from Column 3 of Table 6 and 'Relative Deal Size' represents the relative deal size for acquisitions by dictators. The average 'Relative Deal Size' is

⁴ For a detailed description of the computation of PRIV, see Lee et al. (2001) and Dong et al. (2006).

0.137, and the standard deviation is 0.200. Thus, the CAR for the 'average' relative deal size (ignoring all other coefficients) is 2.518%. Increasing the 'Relative Deal Size' by one standard deviation to 0.337 induces a CAR of 5.172%. So, holding all else constant, increasing the relative deal size by one standard deviation doubles CARs for dictatorships that make acquisitions of private targets with stock.

Consistent with extant findings on public samples, the results also show that higher bidder q, higher bidder leverage, and bids by smaller firms are greeted more positively by the market, while public and friendly bids, and those with overvalued equity (PRIV) are more value-destructive.

One concern with using announcement returns is that they incorporate the stock market's assessment of more than just the value of the acquisition to the acquirer. For example, they also include a reassessment of the standalone value of the bidder, possibly reflecting the implication that internal growth opportunities are not as valuable as had previously been believed. We take two approaches to mitigate this inference problem. First, we repeat the analysis excluding the first acquisition made by a given bidder. Although we try to control for the fact that high GIM-index firms also tend to be maturing firms, it is possible our controls are incomplete. Under the assumption that most of the information about the state of the bidder's internal growth opportunities is revealed at the announcement of its first bid, dropping the first bid from the sample will provide a cleaner measure of the bid's effect on the bidder's value. When we do so, the inferences are unchanged.

The second approach we take is to examine the post-acquisition performance directly. This performance should be more specifically related to the advisability of the deal. We discuss those results, presented in Table 6, in the next section.

In additional specifications (models 4 and 5) reported in Table 5, we include a measure of the premium using the method developed in Officer (2007), allowing us to include all targets, whether public or not. If we could completely control for potential synergies in our regressions, then a higher premium would always be bad for the acquirer, as it would unambiguously represent less value captured. However, assuming that we cannot perfectly control for synergies, then in the cross-section, higher premiums may also be associated with higher total synergies. In that case, the coefficient on premium would capture the net effect of two opposing forces: a larger synergy pie to be divided and a smaller piece for the acquirer. If we find a uniformly negative coefficient on premium, then the synergy effect is either not present or too small. Alternatively, if we find that the coefficient on premium is negative for dictator firms and not for democracy firms, then it suggests that the effect is there in general, but that higher premiums are more often associated with loss of value for dictator bidders on net, than they are for democracy bidders on net.

The coefficient on premium in model (4) is significantly negative, indicating that the market views higher premiums by managers as overpayment. Interacting the dictator dummy with premium (model 5) indicates that the market views premiums paid by dictators as overpayment. At the same time, the coefficient on premium in this model is insignificant, such that the market views higher premiums paid by democracy managers as appropriate compensation for higher synergies. Although there are problems with using the actual premium

in announcement return regressions, we repeat the test with actual premium (rather than proxy premium) and our inferences are unchanged (untabulated). The negative relation between premiums and announcement returns is consistent with both the pure overpayment and low-synergy hypotheses. In order to distinguish between the two hypotheses, we will examine post-merger operating performance in the next section.

4.3. *Synergies*

In Table 6, we continue to examine the hypothesis that, despite paying lower premiums on average, dictator firms are still overpaying because they have low synergies with their targets. In Panel A, we examine combined bidder and target announcement returns to assess total synergies (value creation) in the mergers. The results show that on average the public deals in our sample do create value in that they have net positive synergies: the mean combined CAR is 0.9% and the median is 0.4%.⁵ When we break these out by whether bidder management was entrenched or not, we see that combined CARs for dictator firms are much lower than those for democracy firms. In fact the median point estimate is negative for the dictator firms. Conversely, democracy bidder combined CARs are positive and greater than 1%. The differences between the market's assessment of the total synergies (combined CARs) for democracy bidder-led deals and dictator bidder-led deals are also significant. Again, if we drop the first acquisition by a bidder from the sample, the inferences are unchanged.

⁵ These figures are slightly smaller than those reported in Moeller, Schlingemann and Stulz (2004), who find a combined CAR of 1.352%. An explanation is that our acquirers must have IRRC data, and so are larger on average than acquirers in their sample. Supporting this, they report a combined CAR of 0.70% when they restrict their sample to bidders whose market capitalization is in the top 75% of NYSE firms.

The announcement return results should in part reflect an unbiased assessment of the merger's effect on the future operating performance of the combined firm. Post-merger operating performance tests have inherently low power because the counterfactual (the bidder's performance had it not completed the merger) is hard to proxy for. We follow extant literature and use industry performance as the counterfactual. Consequently, Panel B presents industry-adjusted changes in operating performance around the merger. The panel reveals generally worse performance for dictator firms in the first place along with a worsening of performance after the merger.

Due to the pre-existing difference in performance between democracy and dictator firms, in Table 7 (Panel A) we control for pre-merger performance in a regression setting similar to Healy, Palepu and Ruback (1992). In Panel B we also include controls for the size and book-to-market of the acquirer, as well as the method of payment, attitude of the deal and whether the target and acquirer are in related industries. In this type of regression, the constant captures the abnormal performance change from before to after the merger. The democracy firms show a significant increase in performance following the merger. The performance of dictators is insignificantly different from that prior to the merger. When we nest the samples so that we can test for differences in post-merger performance in democracy vs. dictator firms, we find that the coefficient on the democracy indicator is significantly positive. Panel B reports the models with pre-merger industry-adjusted performance and other controls. Here the results indicate that dictator bidders significantly underperform post-merger, but democracies do not.

While dictator firms overpay for their targets, the findings are also consistent with the low synergies hypothesis—dictator firms choose targets with below average synergies, but do not

pay a low-enough premium for them. Both the announcement returns and post-merger operating performance reflect this. These results are also consistent with those found for overvalued-stock acquisitions by Fu, Lin and Officer (2010). Specifically, they find that when the bidder's stock is potentially overvalued, the post-merger performance is poor, leading them to conclude that these acquisitions are characterized by a lack of synergies.

5. Robustness

5.1. Are we truly picking-up a governance effect?

We repeat our analysis substituting different measures in place of the dictator dummy variable: the continuous GIM index, the continuous "Entrenchment Index," from Bebchuk, Cohen and Farrell (2009), and dummy variables set to one when the GIM index is greater than or equal to 11, 12, 13 and 14, the entrenchment index is greater or equal to 3, 4 and 5, or the firm has a poison pill. In all cases, the inferences remain the same. We also attempt to control further for the concern that entrenchment simply proxies for low growth in the announcement return models by splitting the sample using quartile and median Tobin's q, market-to-book, and firm age. We find that the negative relation between entrenched management and acquirer returns is not simply a low-growth effect.

5.2. Endogeneity concerns

One concern with using proxy or actual premiums in our announcement returns analysis is that premiums may be endogenous with respect to announcement returns and other variables

in the regression model, including firm size, multiple bidders and method of payment. Also, there may be collinearity problems when premium is included in the model given that it is positively correlated with other variables, including firm size, relative size, Tobin's q and overvaluation (PRIV). To address these concerns we employ instrumental variables using a generalized method of moments (GMM) regression approach (see Hansen, 1982). The results from the GMM regression models are consistent with those reported in Table 5. Specification tests related to over-identifying restrictions (Hansen's J) and the validity of the instruments used (Stock-Wright S -statistic) indicate that these are not significant concerns for our GMM models.

We also examine endogeneity concerns related to possible omitted variables in our acquirer announcement returns regression models. Endogeneity arising from omitted variables could be a problem if an omitted variable explains the correlations between premium and acquirer returns. Masulis et al. (2007) examine the impact of managerial quality on their findings, since conceivably the observed correlation between ATPs and returns could be driven by low quality CEOs, who adopt ATPs to entrench themselves. If low quality CEOs also overpay for acquisitions, this could explain the correlation between takeover premium and acquirer returns. For completeness, we re-estimate our models reported in Table 5, including a proxy for CEO quality, measured as industry-adjusted operating income growth over the 3 years prior to takeover announcement. In untabulated results we find a highly significant and positive correlation between CEO quality and acquirer returns, supporting the contention that quality CEOs make more profitable acquisitions (Morck, Shleifer and Vishny, 1990). The GIM dictator dummy remains negative and significant as reported in Table 5. Further, premium remains significantly negative for dictators only, indicating that CEO quality does not appear to drive the

correlation between premium and acquirer returns. The other variables also remain largely unchanged to those reported previously.

6. Discussion and conclusion

We explain why acquisitions by entrenched managers destroy value. Masulis et al. (2007) show that the market reacts negatively to takeovers by entrenched managers. We examine the drivers of this negative reaction and find several.

Dictators prefer to avoid acquisitions that risk reducing their level of entrenchment. Thus, they are less likely to acquire private targets using stock (thereby avoiding the creation of a monitoring blockholder). Further, when dictators acquire public targets they are less likely to pay stock for targets that have a significant blockholder, thereby avoiding the imposition of a monitoring institutional shareholder. Both results suggest attempts by dictators to reinforce their entrenchment and avoid additional monitoring.

Dictators also tend to overpay and select low-synergy targets. Post-takeover operating performance is lower for dictators' acquisitions, implying that dictators select targets that are less synergistic. Further, the market reacts negatively to the takeover premiums that dictators pay, implying that the premiums reflect overpayment for low-synergy targets.

These results highlight the avenues of value destruction in acquisitions by entrenched managers. Entrenched managers avoid acquiring firms that might reduce their level of entrenchment, fail to capture value-creating illiquidity discounts, make acquisitions that are less

synergistic, and tend to overpay. We emphasize the importance of examining not just if, but why and how entrenched managers destroy value.

Appendix A

Table AI: Variable definitions

| <i>Variable</i> | <i>Definition</i> |
|--|---|
| <i>Abnormal returns and antitakeover provisions</i> | |
| CARs | 5-day cumulative abnormal returns (%), calculated using the market model. The paper estimates market model parameters over days (-210,-11) using an OLS model. |
| GIM | Gompers et al. (2003) governance index; aggregates 24 antitakeover provisions. |
| <i>Bidder characteristics</i> | |
| Firm size | Log of total assets (item6); Log of market value (number of shares outstanding x price 11 days prior to announcement); Log of sales (item 12) |
| Leverage | Book value of debt (item34 + item9) over total assets (item6) |
| Free cash flow | Operating income before depreciation (item13) – interest expense (item15) – income taxes (item16) – capital expenditures (item128) over book value of total assets (item6): (item13 – item15 – item16 – item128)/ item6 |
| Tobin's q | Market value of assets over book value of assets: (item6 – item60 + item25 x item199)/item6 |
| Price-to-residual-income-value (PRIV) | Price 35 days before announcement over residual income valuation (see Appendix B for more details). |
| Stock run-up | Bidder buy-and-hold-abnormal return over days (-210,-11) using the CRSP value-weighted index as the market return |
| Volume | Abnormal volume over days (-30,-11). |
| CEO-Chair | Dummy: 1 if CEO is also the board's chairman, 0 otherwise |
| Board size | Number of directors on bidder's board |
| Prop. independent directors | Dummy: 1 if over 50% of directors are independent, 0 otherwise |
| Largest blockholder | Percentage holding of largest blockholder that holds more than 5% of the bidder |
| CEO wealth sensitivity | Change in value of CEO's compensation per 1% change in stock price; utilizes Core and Guay's (2002) methodology |
| CEO equity ownership | Bidder CEO's percentage ownership of the bidder (includes stock and option holdings) |
| CEO equity-based pay | Proportion of Bidder CEO's pay that is equity-based. Equity-based compensation includes stock options and restricted stock grants |

Table AI (continued)

| <i>Variable</i> | <i>Definition</i> |
|------------------------------------|--|
| <i>Deal characteristics</i> | |
| Transaction value | Dollar value of deal reported by SDC Platinum |
| Public | Dummy: 1 for public targets, 0 otherwise |
| Private | Dummy: 1 for private targets, 0 otherwise |
| Subsidiary | Dummy: 1 for subsidiary targets, 0 otherwise |
| All cash | Dummy: 1 for deals financed with cash only, 0 otherwise |
| All stock | Dummy: 1 for deals financed with stock only, 0 otherwise |
| Mixed | Dummy: 1 for deals financed with a mix of cash and stock, 0 otherwise |
| Conglomerate | Dummy: 1 where bidder and target are in a different Fama-French industry, 0 otherwise |
| Relative size | Transaction value over bidder's market capitalization 11 days before the announcement date. |
| Industry M&A | Aggregate value of corporate control transactions over the aggregate book value of assets (item 6) for each prior year and Fama-French industry |
| Friendly | Dummy: 1 for friendly deals, 0 otherwise |
| Serial 3, Serial 4, Serial 5 | Dummy: 1 for acquirers involved in 3, 4 or 5 or more deals over the sample period |
| Competed | Dummy: 1 for competed deals, 0 otherwise |
| Crossborder | Dummy: 1 for crossborder deals |
| Premium | Payment exceeding target's price 3, 11 or 35 days before the takeover announcement. The calculation is is: $(\text{Payment})/(\text{Target Market Value}) - 1$. The payment data is from SDC platinum. The target's market value is the market value 3, 11, or 35 days before the acquisition as obtained from CRSP by multiplying the share price and the number of shares outstanding. |
| Tech | Dummy: 1 for high-tech acquisitions, 0 otherwise. An acquisition is high-tech if both the bidder and target are technology firms. Following Loughran and Ritter (2004), Faccio and Masulis (2005), and Masulis et al. (2007), tech firms involve computer hardware {SIC codes 3571, 3572, 3575, 3577, 3578}; communications equipment {3661,3663,3669}; electronics {3671, 3672, 3674, 3675, 3677, 3678, 3679}; navigation equipment {3812}; measuring and controlling devices {3823, 3825, 3826, 3827, 3829}; medical instruments {4812, 4813}; telephone equipment {4899} and software {7371, 7372, 7373, 7374, 7375, 7378, 7379}. |

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Table 1

Sample construction by announcement year and dictator/democracy groups

Number of takeovers of publically listed targets completed between 1990 and 2005 by acquirer market capitalization, relative deal size, and 5-day cumulative abnormal returns (CARs). In this table, Dictators are firms with a GIM \geq 10. Democracies are firms with a GIM<10 and a non-classified board (CBRD=0). Median values are reported in parentheses.

| Year | Dictator (GIM \geq 10) | | | | Democracy (GIM<10 & CBRD=0) | | | |
|------|--------------------------|------------------------------------|---------------------------|----------------------|-----------------------------|------------------------------------|---------------------------|----------------------|
| | <i>Number of deals</i> | <i>Market Capitalization (\$m)</i> | <i>Relative deal size</i> | <i>5-day CAR (%)</i> | <i>Number of deals</i> | <i>Market Capitalization (\$m)</i> | <i>Relative deal size</i> | <i>5-day CAR (%)</i> |
| 1990 | 59 | 2,177 (699) | 0.092 (0.042) | 0.903 (1.167) | 37 | 829 (486) | 0.134 (0.076) | 2.074 (1.710) |
| 1991 | 49 | 1,701 (899) | 0.160 (0.052) | 1.453 (-0.201) | 35 | 2,407 (960) | 0.150 (0.075) | 0.535 (0.658) |
| 1992 | 56 | 2,094 (1,237) | 0.112 (0.044) | -0.896 (-1.111) | 34 | 1,394 (733) | 0.091 (0.066) | 2.286 (1.655) |
| 1993 | 109 | 2,646 (1,538) | 0.105 (0.041) | 0.182 (-0.271) | 53 | 2,042 (1,007) | 0.090 (0.052) | 2.283 (0.708) |
| 1994 | 123 | 2,886 (1,743) | 0.102 (0.044) | 0.323 (-0.369) | 53 | 3,526 (1,647) | 0.137 (0.041) | 0.744 (-0.395) |
| 1995 | 110 | 3,508 (1,741) | 0.159 (0.086) | -0.280 (-0.251) | 61 | 4,002 (1,312) | 0.125 (0.064) | 0.822 (-0.364) |
| 1996 | 125 | 4,061 (2,366) | 0.171 (0.074) | 0.798 (0.691) | 64 | 5,134 (2,074) | 0.123 (0.057) | 2.470 (1.700) |
| 1997 | 141 | 5,104 (2,828) | 0.152 (0.070) | -0.014 (-0.495) | 59 | 9,258 (2,695) | 0.112 (0.052) | 0.412 (0.094) |
| 1998 | 166 | 6,116 (3,279) | 0.140 (0.067) | -0.725 (-0.792) | 130 | 9,952 (2,680) | 0.137 (0.054) | 1.117 (1.120) |
| 1999 | 162 | 8,205 (2,522) | 0.137 (0.059) | -0.319 (-1.034) | 90 | 16,591 (2,081) | 0.172 (0.068) | -0.238 (-0.348) |
| 2000 | 124 | 9,580 (3,001) | 0.188 (0.079) | -1.505 (-0.542) | 89 | 24,913 (4,653) | 0.128 (0.051) | 0.797 (1.512) |
| 2001 | 113 | 8,578 (3,282) | 0.124 (0.053) | -0.794 (-0.787) | 88 | 10,908 (2,381) | 0.116 (0.051) | -0.373 (-0.436) |

Table 1 (continued)

| <i>Year</i> | Dictator (GIM \geq 10) | | | | Democracy (GIM<10 & CBRD=0) | | | |
|---|--------------------------|------------------------------------|---------------------------|----------------------|-----------------------------|------------------------------------|---------------------------|----------------------|
| | <i>Number of deals</i> | <i>Market Capitalization (\$m)</i> | <i>Relative deal size</i> | <i>5-day CAR (%)</i> | <i>Number of deals</i> | <i>Market Capitalization (\$m)</i> | <i>Relative deal size</i> | <i>5-day CAR (%)</i> |
| 2002 | 140 | 6,780 (1,629) | 0.100 (0.054) | 1.174 (0.673) | 109 | 8,085 (996) | 0.118 (0.057) | 0.767 (-0.307) |
| 2003 | 131 | 3,862 (1,993) | 0.136 (0.066) | -0.723 (-0.779) | 85 | 9,909 (1,054) | 0.085 (0.053) | -0.976 (-0.512) |
| 2004 | 152 | 5,317 (2,141) | 0.149 (0.060) | 0.837 (0.675) | 88 | 5,323 (1,424) | 0.154 (0.070) | 1.156 (1.002) |
| 2005 | 145 | 9,929 (3,421) | 0.136 (0.057) | -0.120 (-0.145) | 60 | 14,105 (1,535) | 0.121 (0.057) | 1.995 (0.936) |
| Overall | 1,905 | 5,664 (2,199) | 0.137 (0.059) | -0.036 (-0.197) | 1,135 | 9,320 (1,655) | 0.126 (0.057) | 0.837 (0.628) |
| Subsample analysis for different time periods | | | | | | | | |
| 1990- | 273 | 2,155 | 0.117 | 0.411 | 159 | 1,668 | 0.116 | 1.795 |
| 1994- | 499 | 3,890 | 0.146 | 0.207 | 237 | 5,480 | 0.124 | 1.112 |
| 1998- | 565 | 8,120 | 0.147 | -0.836 | 397 | 15,591 | 0.138 | 0.326 |
| 2002- | 568 | 6,472 | 0.13 | 0.292 | 342 | 9,356 | 0.12 | 0.736 |

Table 2

Acquirer, target and deal characteristics

Descriptive statistics for acquirer, target and deal characteristics as defined in Appendix A and B sorted by dictator/democracy portfolios. Dictators are defined as firms with a GIM \geq 10. Democracies are defined as firms with a GIM $<$ 10 and a non-classified board (CBRD=0). Median values are denoted in parentheses. Superscripts ***, **, and * denote a statistically significant difference between dictator/democracy acquirers, using a two-tailed test at the 1%, 5%, and 10% levels, respectively.

| | All | Dictator GIM \geq 10 | Democracy GIM $<$ 10 &CBRD=0 |
|-----------------------------------|-------------------|---------------------------|------------------------------------|
| Panel A: Acquirer characteristics | | | |
| Market value equity (\$mil) | 6,924 (1,845) | 5,664*** (2,199) | 9,320 (1,655) |
| Total assets (\$mil) | 12,154 (2,323) | 11,996 (3,520)*** | 15,477 (1,550) |
| Tobin's q | 1.793 (1.415) | 1.635*** (1.354)*** | 2.021 (1.601) |
| Free cash flow | 0.017 (0.022) | 0.020*** (0.023)** | 0.016 (0.021) |
| Leverage | 0.166 (0.143) | 0.179*** (0.157)*** | 0.142 (0.105) |
| Stock run-up | 0.071 (0.018) | 0.047*** (0.009)* | 0.078 (0.001) |
| Industry M&A | 0.022 (0.015) | 0.021*** (0.014)*** | 0.025 (0.017) |
| Relative size | 0.134 (0.059) | 0.137 (0.059) | 0.126 (0.057) |
| Volume | 0.072 (-0.045) | 0.083 (-0.033) | 0.123 (-0.030) |
| PRIV | 2.137 (1.566) | 1.840*** (1.469)*** | 2.432 (1.696) |
| CEO Chair | 0.808 | 0.836*** | 0.780 |
| Board size | 9.924 | 10.642*** | 8.953 |
| Prop. independent directors | 0.741 | 0.735* | 0.757 |
| Largest block holder (%) | 11.421 | 11.151 | 11.727 |
| CEO wealth sensitivity | 0.118 | 0.062*** | 0.182 |
| CEO equity ownership | 0.030 | 0.022*** | 0.035 |
| CEO equity-based pay | 0.441 | 0.411*** | 0.491 |

Table 2 (continued)

| | All | Dictator GIM \geq 10 | Democracy GIM<10 & CBRD=0 |
|---------------------------------|------------------|---------------------------|---------------------------------|
| Panel B: Target characteristics | | | |
| Total assets (\$m) | 4,343 (660) | 3,214*** (1,046)*** | 8,378 (540) |
| Market value (\$m) | 2,468 (297) | 2,379 (389) | 3,171 (354) |
| Tobin's q | 2.076 (1.339) | 1.910 (1.231)* | 2.404 (1.576) |
| Leverage | 0.121 (0.082) | 0.130 (0.091) | 0.104 (0.034) |
| PRIV | 1.791 (1.133) | 1.574 (1.000) | 2.017 (1.410) |
| Panel C: Deal characteristics | | | |
| Tech dummy | 0.209 | 0.134*** | 0.307 |
| Conglomerate | 0.369 | 0.399** | 0.358 |
| Competed | 0.020 | 0.022 | 0.017 |
| Crossborder | 0.007 | 0.002*** | 0.016 |
| Friendly | 0.989 | 0.987 | 0.989 |
| Serial 3 | 0.688 | 0.735*** | 0.653 |
| Serial 4 | 0.532 | 0.585*** | 0.470 |
| Serial 5 | 0.425 | 0.469*** | 0.350 |
| Premium (3-day) | 0.512 0.399 | 0.498 (0.385)* | 0.539 (0.444) |
| Premium (11-day) | 0.584 0.464 | 0.564 (0.426)** | 0.616 (0.500) |
| Premium (35-day) | 0.671 0.549 | 0.645** (0.513)** | 0.725 (0.631) |

Table 3

Acquirer CARs by organizational status, method of payment, and interactions

Descriptive statistics for acquirer characteristics as defined in Appendix A sorted by dictator/democracy portfolios. Dictators are defined as firms with a $GIM \geq 10$. Democracies are defined as firms with a $GIM < 10$ and a non-classified board ($CBRD=0$). Median values are denoted in parentheses, followed by frequencies, in brackets. Superscripts ***, **, and * denote a statistically significant difference between dictator/democracy acquirers, using a two-tailed test at the 1%, 5%, and 10% levels, respectively. Frequency differences are tested with a Chi-square test.

| | All | Dictator $GIM \geq 10$ | Democracy $GIM < 10$ & $CBRD=0$ |
|--------------------|-------------------------------|--|---------------------------------------|
| All deals | 0.301 (0.118) | -0.036*** (-0.197)*** | 0.837 (0.628) |
| Public targets | -1.457 (-1.328) [0.316] | -1.531 (-1.360) [0.342]** | -1.259 (-0.965) [0.307] |
| Private targets | 0.771 (0.597) [0.364] | 0.484** (0.304)*** [0.316]*** | 1.438 (1.456) [0.393] |
| Subsidiary targets | 1.493 (0.840) [0.319] | 0.940*** (0.544) [0.337]** | 2.192 (1.278) [0.294] |
| All cash | 0.960 (0.612) [0.553] | 0.498*** (0.309)** [0.578]*** | 1.562 (1.171) [0.518] |
| All stock | -1.188 (-0.900) [0.230] | -1.156 (-1.026) [0.214]** | -0.864 (-0.364) [0.251] |
| Mixed | 0.199 (-0.044) [0.218] | -0.368** (-0.734)** [0.208] | 1.060 (0.659) [0.231] |
| Public * All cash | 0.297 (-0.022) [0.094] | 0.145 (-0.204) [0.103] | 0.443 (-0.635) [0.093] |
| Public* All stock | -2.340 (-1.885) [0.136] | -1.931 (-1.672) [0.141]*** | -2.823 (-2.737) [0.135] |
| Public * Mixed | -1.975 (-1.498) [0.086] | -2.724*** (-2.263)*** [0.098]*** | -0.603 (-0.175) [0.079] |
| Private * All cash | 0.753 (0.485) [0.191] | 0.280** (0.315)* [0.182] | 1.526 (1.483) [0.190] |

Table 3 (continued)

| | All | Dictator GIM \geq 10 | Democracy GIM<10 &CBRD=0 |
|------------------------|------------------------------|--------------------------------------|--------------------------------|
| Private * All stock | 0.506 (0.338) [0.081] | 0.345** (-0.199)*** [0.061]*** | 1.808 (2.379) [0.098] |
| Private * Mixed | 1.041 (0.838) [0.086] | 1.109 (0.605) [0.098]*** | 0.933 (1.001) [0.079] |
| Subsidiary * All cash | 1.327 (0.811) [0.266] | 0.716*** (0.439)* [0.290]*** | 2.046 (1.562) [0.231] |
| Subsidiary * All stock | 0.051 (-0.907) [0.011] | 0.023 (0.608) [0.011] | -1.313 (-1.169) [0.017] |
| Subsidiary * Mixed | 3.095 (1.779) [0.038] | 3.045 (2.086) [0.036] | 4.173 (2.885) [0.047] |

Table 4

Predicting the target type

Panel A examines the types of acquisitions made by acquirers who make more than one acquisition. The dependent variable in column 1 is the proportion of all deals after the first deal that are for private targets. Similarly, the dependent variables in columns 2-5 are the proportion of deals that are for public targets, subsidiary targets, private targets paid for using cash, and private targets paid for using stock. All models use a Heckman procedure to control for self-selection into making more than one bid. Dictator is a dummy variable taking a value of 1 if $GIM \geq 10$, and 0 otherwise. PRIV, leverage, free cash flow and Tobin's q are defined in Appendix A and B. Panel B examines the likelihood using logit regressions that an acquirer bids for a public target with a blockholder. The dependent variable in columns 1-3 (4-6) is equal to 1 if the target has a blockholder with holdings of 5% or more (greater than the median blockholdings level). The independent variables are defined in Appendix A and B. Standard errors denoted in parentheses are adjusted for heteroskedasticity and acquirer clustering. Regressions control for year fixed effects (unreported). Superscripts ***, **, * denotes significance at 1%, 5% and 10%, respectively.

| Panel A: Acquisition type | | | | | |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Variables | Private (1) | Public (2) | Subsidiary (3) | Private Cash (4) | Private Stock (5) |
| Dictator dummy | -0.101* (0.058) | 0.021 (0.062) | 0.032 (0.061) | -0.043 (0.085) | -0.299*** (0.084) |
| Log market val | -0.206*** (0.026) | 0.254*** (0.030) | -0.073*** (0.026) | -0.254*** (0.036) | -0.127*** (0.034) |
| Tobin's q | -0.02 (0.028) | 0.015 (0.030) | -0.019 (0.028) | 0.020 (0.039) | -0.062* (0.037) |
| Free cash flow | 0.536 (0.625) | 0.986 (1.171) | -1.344 (0.955) | 2.007** (1.013) | -1.844* (1.114) |
| Leverage | -0.575** (0.255) | -0.671** (0.278) | 1.348*** (0.252) | -0.246 (0.401) | -0.860** (0.353) |
| PRIV | 0.007 (0.006) | -0.005 (0.007) | 0.001 (0.005) | 0.002 (0.006) | 0.018* (0.011) |
| Inv Mills | -0.440* (0.266) | -0.291 (0.292) | 0.107 (0.291) | -0.318 (0.410) | -0.777** (0.381) |
| Constant | 3.527*** (0.617) | -2.496*** (0.706) | -0.005 (0.670) | 3.121*** (0.880) | 2.601*** (0.844) |
| No. of obs | 2,364 | 2,364 | 2,364 | 2,364 | 2,364 |
| F-Statistic | 5.19*** | 9.05*** | 3.61*** | 4.87*** | 2.96*** |
| Pseudo R ² | 7% | 12% | 4% | 8% | 4% |

Table 4 (continued)

Panel B: Likelihood of targeting a firm with a blockholder

| | <i>Target blockholdings $\geq 5\%$</i> | | | <i>Target blockholdings \geq median blockholdings</i> | | |
|-----------------------|---|----------------------|---------------------|--|----------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Dictator dummy | -0.056 (0.159) | 0.165 (0.176) | -0.214 (0.173) | -0.11 (0.142) | 0.14 (0.160) | -0.270* (0.157) |
| Dictator*All stock | | -0.534*** (0.185) | | | -0.610*** (0.180) | |
| Dictator*All cash | | | 0.528*** (0.201) | | | 0.525*** (0.192) |
| Log market value | 0.149*** (0.053) | 0.166*** (0.054) | 0.162*** (0.054) | 0.122** (0.049) | 0.142*** (0.049) | 0.136*** (0.049) |
| Tobin's q | 0.365*** (0.089) | 0.357*** (0.084) | 0.356*** (0.085) | 0.202*** (0.063) | 0.203*** (0.061) | 0.199*** (0.062) |
| Free cash flow | 0.489 (2.330) | 0.057 (2.341) | 0.022 (2.332) | -0.771 (2.230) | -1.312 (2.234) | -1.294 (2.223) |
| Leverage | 0.69 (0.631) | 0.542 (0.632) | 0.638 (0.631) | 0.1 (0.601) | -0.056 (0.603) | 0.057 (0.602) |
| Stock run-up | -0.300* (0.166) | -0.270* (0.164) | -0.284* (0.165) | -0.153 (0.152) | -0.125 (0.150) | -0.139 (0.152) |
| PRIV | 0.001 (0.011) | 0.001 (0.010) | 0.001 (0.010) | 0.003 (0.008) | 0.003 (0.008) | 0.003 (0.008) |
| Constant | -0.884 (0.585) | -1.063* (0.590) | -0.976* (0.589) | -0.662 (0.526) | -0.881* (0.530) | -0.766 (0.529) |
| No. of observations | 1,245 | 1,245 | 1,245 | 1,245 | 1,245 | 1,245 |
| Wald Statistic | 54.17*** | 65.2*** | 60.9*** | 53.13*** | 63.01*** | 60.09*** |
| Pseudo-R ² | 4.25% | 4.82% | 4.72% | 3.19% | 3.95% | 3.68% |

Table 5

Acquirer announcement return regressions

The regressions are estimated using a sample of completed acquisitions from 1990 to 2005. The 5-day OLS market model CAR (in percentages) is the dependant variable. Model 1 is estimated on the full sample without any method of payment or target firm organizational status variables. Dictator is a dummy variable taking a value of 1 if GIM \geq 10, and 0 otherwise. Regressions (2) and (3) include interactions between target organizational status (private), method of payment (all stock), and relative size to test the target selection hypothesis. Regression (3) specifically tests whether the coefficient estimates on the interactions are significantly different between dictators and democracies. Regressions (4) and (5) include Officer's (2007) proxy premium measure to test the overpayment hypothesis. Regression (5) includes the interaction between the dictator dummy and proxy premium to specifically test if the coefficients are significantly different between dictators and democracies. Other variable definitions are defined in Appendix A and B. Standard errors denoted in parentheses are adjusted for heteroskedasticity and acquirer clustering. Superscripts ***, **, * denotes significance at 1%, 5% and 10%, respectively. All regressions control for year fixed effects (not reported).

| Variables | <i>Hypotheses and models</i> | | | | |
|--|------------------------------|----------------------|----------------------|----------------------|----------------------|
| | Target selection | | | Overpayment | |
| | (1) | (2) | (3) | (4) | (5) |
| Dictator dummy | -0.528** (0.210) | -0.521** (0.211) | -0.547** (0.219) | -0.630*** (0.219) | -0.337 (0.300) |
| Subsidiary | 2.059*** (0.327) | 1.862*** (0.339) | 1.857*** (0.339) | 1.933*** (0.326) | 1.766*** (0.336) |
| Private | 1.497*** (0.278) | 1.132*** (0.339) | 1.129*** (0.340) | 1.338*** (0.280) | 1.006*** (0.339) |
| All cash | 0.312 (0.310) | 0.34 (0.310) | 0.34 (0.310) | 0.311 (0.313) | 0.341 (0.314) |
| All stock | -0.812** (0.345) | -1.243*** (0.386) | -1.243*** (0.386) | -0.929*** (0.348) | -1.345*** (0.382) |
| Private*All stock | | 1.249** (0.623) | 1.424* (0.732) | | 1.284* (0.772) |
| Private*All stock*Relative size | | -2.09 (8.430) | -7.088 (8.774) | | -7.183 (9.149) |
| Dictator*Private*All stock | | | -0.718 (0.798) | | -0.345 (0.849) |
| Dictator*Private*All stock*Relative size | | | 20.161* (10.940) | | 19.465* (11.134) |
| Proxy premium | | | | -0.314** (0.142) | -0.14 (0.191) |
| Dictator*Proxy premium | | | | | -0.423* (0.251) |
| Stock run-up | 0.978*** (0.340) | 0.966*** (0.341) | 0.973*** (0.342) | 1.013*** (0.348) | 0.996*** (0.350) |

Table 5 (continued)

| Variables | <i>Hypotheses and models</i> | | | | |
|-------------------------|------------------------------|----------------------|----------------------|----------------------|----------------------|
| | Target selection | | | Overpayment | |
| | (1) | (2) | (3) | (4) | (5) |
| PRIV | -0.085*** (0.019) | -0.085*** (0.019) | -0.084*** (0.019) | -0.086*** (0.020) | -0.084*** (0.020) |
| Log market value | -0.320*** (0.081) | -0.329*** (0.081) | -0.327*** (0.081) | -0.317*** (0.089) | -0.323*** (0.089) |
| Tobin's q | 0.294** (0.116) | 0.291** (0.117) | 0.289** (0.118) | 0.353*** (0.125) | 0.350*** (0.127) |
| Free cash flow | 6.598* (3.905) | 6.654* (3.901) | 6.980* (3.877) | 7.344* (4.106) | 7.880* (4.062) |
| Leverage | 3.186*** (1.041) | 3.217*** (1.032) | 3.252*** (1.034) | 3.845*** (1.077) | 3.941*** (1.067) |
| Industry M&A | -0.118 (6.141) | -0.271 (6.149) | -0.477 (6.135) | 0.097 (6.181) | -0.619 (6.170) |
| Relative size | 0.148 (0.792) | 0.159 (0.790) | 0.165 (0.790) | 0.052 (0.855) | 0.111 (0.848) |
| Tech | 0.319 (0.246) | 0.313 (0.246) | 0.296 (0.246) | 0.284 (0.255) | 0.239 (0.255) |
| Conglomerate | 0.036 (0.226) | 0.026 (0.226) | 0.026 (0.226) | 0.044 (0.235) | 0.021 (0.236) |
| Competed | -0.95 (0.700) | -1.049 (0.704) | -1.158 (0.708) | -0.709 (0.672) | -0.958 (0.675) |
| Volume | 0.124 (0.098) | 0.117 (0.098) | 0.114 (0.098) | 0.161 (0.101) | 0.154 (0.102) |
| Crossborder | 2.967** (1.161) | 2.918** (1.178) | 2.883** (1.189) | 2.875** (1.240) | 2.771** (1.272) |
| Friendly | -2.784*** (0.871) | -2.773*** (0.867) | -2.795*** (0.867) | -3.024*** (0.932) | -3.142*** (0.940) |
| Serial_3 | 0.091 (0.273) | 0.094 (0.273) | 0.113 (0.273) | -0.024 (0.287) | 0.001 (0.286) |
| Constant | 3.592*** (1.247) | 3.888*** (1.251) | 3.922*** (1.253) | 3.993*** (1.322) | 4.277*** (1.342) |
| Observations | 3,934 | 3,934 | 3,934 | 3,718 | 3,718 |
| F-Statistic | 8.54*** | 8.47*** | 8.17*** | 8.39*** | 8.12*** |
| Adjusted-R ² | 7.30% | 7.40% | 7.50% | 8.10% | 8.40% |

Table 6

Performance of mergers

Panel A in the table reports the combined acquirer and target 5-day cumulative abnormal returns, where relative market values are used as weights, adjusted for toeholds held by the bidder. Panel B reports the industry-adjusted operating performance of merging firms from fiscal years -3 to +3. Operating performance is calculated as return on assets (ROA), defined as operating income before depreciation (Compustat data item 13) scaled by total assets. The operating performance before the merger is a weighted average of the acquirer and target, with the weights being their relative total assets measured at the beginning of the fiscal year. Dictator acquirers are defined as those with a value of GIM \geq 10. Democracy acquirers are defined as those acquirers with a value of GIM $<$ 10 and a non-classified board (CBRD=0). Superscripts ***, **, * denotes statistical significance at 1%, 5% and 10%, respectively.

| Panel A: Combined acquirer and target cumulative abnormal returns (CARs) | | | | |
|--|-----------|--------------------|-----------|------------|
| | All | Dictator/Democracy | | |
| Mean CAR | 0.86%** | | | |
| Median CAR | (0.37%) | | | |
| Dictator | | 0.11% | | |
| | | (-0.25%) | | |
| Democracy | | 1.68%*** | | |
| | | (2.23%) | | |
| Mean difference | | -1.57%** | | |
| Median difference | | (-2.48%)*** | | |
| Panel B: Industry-adjusted operating performance | | | | |
| Year relative to takeover | All | Democracy | Dictator | Difference |
| T-3 | 5.66% | 6.16% | 5.25% | 0.91% |
| T-2 | 5.78% | 6.23% | 5.42% | 0.81% |
| T-1 | 5.60% | 6.28% | 5.05% | 1.24% |
| T=0 (announcement year) | 5.58% | 6.44% | 4.88% | 1.57%*** |
| Pre IAOP mean | 5.48% | 6.26% | 4.83% | 1.43% |
| T+1 | 5.20% | 6.45% | 4.17% | 2.28%*** |
| T+2 | 4.61% | 5.88% | 3.56% | 2.32%*** |
| T+3 | 3.96% | 5.11% | 3.01% | 2.10%*** |
| Post IAOP 3yr mean | 4.59% | 5.81% | 3.58% | 2.23%*** |
| Post 3yr IAOP mean less Pre IAOP, T-1 | -1.02%*** | -0.49% | -1.47%*** | 0.97% |
| Post 3yr IAOP mean less Pre IAOP mean | -0.89%*** | -0.49% | -1.25%*** | 0.76% |

Table 7

Operating performance regressions

The table reports the result of Healy, Palepu and Ruback's (1992) regressions for measuring the operating gains to mergers, where the mean industry-adjusted ROA over the 3-year post period is regressed on the combined acquirer-target industry-adjusted ROA for the fiscal year before the takeover (T-1). The regression intercept is an estimate of the operating gains to mergers. Dictator acquirers are defined as those acquirers with a value of GIM \geq 10. Democracy acquirers are defined as those acquirers with a value of GIM $<$ 10 and a non-classified board (CBRD=0). Panel B reports the regression models with additional controls for acquirer size, book-to-market, a cash payment dummy (=1 for cash), a friendly dummy (=1 for friendly) and a related dummy (=1 if the acquirer and target are in the same Fama-French industry). Standard errors denoted in parentheses are adjusted for heteroskedasticity and acquirer clustering. Superscripts ***, **, * denotes significance at 1%, 5% and 10%, respectively.

Panel A: Healy, Palepu and Ruback (1992) regression

| Model | All (1) | Dictator (2) | Democracy (3) | All + dummy (4) |
|-------------------------|---------------------|---------------------|---------------------|---------------------|
| IAOP pre, T-1 | 0.670*** (0.064) | 0.577*** (0.098) | 0.761*** (0.067) | 0.666*** (0.064) |
| Democracy dummy | | | | 0.014** (0.007) |
| Constant | 0.82%* (0.004) | 0.67% (0.005) | 1.01%* (0.006) | 0.22% (0.005) |
| No. of observations | 531 | 239 | 194 | 531 |
| F-statistic | 110.92*** | 34.98*** | 129.67*** | 58.4*** |
| Adjusted-R ² | 56.15% | 46.39% | 66.56% | 56.70% |

Table 7 (continued)

| Panel B: Healy, Palepu and Ruback (1992) regressions with controls | | | | |
|--|---------------------|---------------------|----------------------|----------------------|
| Model | All (1) | Dictator (2) | Democracy (3) | All + dummy (4) |
| IAOP pre, T-1 | 0.600*** (0.071) | 0.555*** (0.098) | 0.569*** (0.089) | 0.592*** (0.071) |
| Democracy dummy | | | | 0.017*** (0.006) |
| Log market value | 0.002 (0.002) | 0.003 (0.002) | 0.000 (0.004) | 0.002 (0.002) |
| Log book-to-market | -0.017** (0.009) | -0.004 (0.008) | -0.042*** (0.012) | -0.018** (0.008) |
| Related | 0.009 (0.006) | 0.017* (0.009) | 0.004 (0.007) | 0.010* (0.006) |
| All cash | 0.010 (0.007) | 0.007 (0.009) | 0.012 (0.008) | 0.009 (0.007) |
| Friendly | 0.002 (0.005) | 0.011* (0.007) | -0.003 (0.008) | 0.003 (0.005) |
| Constant | -3.44%** (0.017) | -4.79%** (0.023) | -2.26% (0.027) | -4.72%*** (0.018) |
| No. of observations | 524 | 237 | 190 | 524 |
| F-statistic | 34.14*** | 6.75*** | 64.96*** | 31.97*** |
| Adjusted-R ² | 59.23% | 48.94% | 72.52% | 60.01% |