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4 Characteristics of Targets of Hostile and Friendly Takeovers

Randall Mørck, Andrei Shleifer, and Robert W. Vishny

4.1 Introduction

Economic analysis has identified two broad classes of takeovers. The first is what we call disciplinary takeovers, the purpose of which seems to be to correct the non-value-maximizing (NVM) practices of managers of the target firms. These practices might include excessive growth and diversification, lavish consumption of perquisites, overpayment to employees and suppliers, or debt avoidance to secure a "quiet life." Disciplinary takeovers thus address the problem of what Williamson (1964) has called discretionary behavior by managers and Jensen (1986a) has christened "the agency cost of free cash flow." Because disciplinary takeovers are designed to replace or change the policies of managers who do not maximize shareholder value, the actual integration of the businesses of the acquirer and the target is not really essential. The takeover is only the most effective way to change control and with it the target's operating strategy.

The second class of takeovers can be loosely called synergistic, since the motivating force behind them is the possibility of benefits from combining the businesses of two firms. Synergy gains can come from increases in market power, from offsetting the profits of one firm with the tax loss carryforwards of the other, from combining R&D labs or

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marketing networks, or from simply eliminating functions that are common to the two firms. Unlike in disciplinary takeovers, the integration of the two businesses is essential for realizing the gains in synergistic takeovers.

It is important to note from the start that the gains in synergistic takeovers could well be gains for the managers as much as for the shareholders. For example, when managers launch diversification programs, they may be creating no value for shareholders but only satisfying their own preferences for growth. The point nonetheless remains that the acquiring firm is seeking a combination of the operations or cash flows of the two firms and not an improvement of the target, as in disciplinary takeovers.

This paper attempts to verify the conjecture that disciplinary takeovers are often hostile and synergistic takeovers are often friendly. We assemble evidence showing that targets of hostile (friendly) bids have the ownership and asset characteristics that one would expect of the targets of disciplinary (synergistic) takeovers. We interpret this evidence as showing that, at least to some extent, the motive for a takeover determines its mood.

The claim that hostility and friendliness typically reflect two different takeover motives is by no means clear-cut. Some diversification-motivated takeovers undoubtedly run into resistance from managers of the targeted firms, who are unhappy either with expected changes in operations or with the compensation they receive for giving up control. Similarly, some takeovers launched to change the target's operating strategy proceed with the consent of the target's managers, who obtain lucrative enough rewards to give up control peacefully, or else simply want to retire. These grey areas suggest the possibility that variation in the monetary incentives of managers across targeted firms can completely account for mood differences from acquisition to acquisition. Walkling and Long (1984) seem to take this view. In contrast, we show that there are numerous characteristics, in addition to measures of the financial incentives offered to the incumbent managers, that differ across hostile and friendly acquisitions. Moreover, these are the differences one would expect to find between the targets of disciplinary takeovers and those of synergistic takeovers.

The analysis of this paper is based on the sample of all publicly traded Fortune 500 firms as of 1980. Of the 454 firms in the sample, 82 were acquired by third parties or underwent a management buyout in the years 1981–85. Based on an examination of the Wall Street Journal Index, 40 of those takeovers appear to have started out hostile and 42 friendly. We call an acquisition hostile of the initial bid for the target (which need not be a bid from the eventual buyer) was neither negotiated with its board prior to being made nor accepted by the board as

made. Thus, initial rejection by the target's board is taken as evidence of the bidder's hostility, as is active management resistance to the bid, escape to a "white knight," or a management buyout in response to unsolicited pressure. We sort acquisitions on the basis of the initial mood because we are interested in the source of the takeover gains that sparked the bidding in the first place. Acquisitions that are not classified as hostile are called friendly.

The remaining sections of the paper examine ownership and financial characteristics of the firms in the 1980 Fortune 500 sample. Section 4.2 focuses on the ownership characteristics of targets of friendly and hostile acquisitions. "Friendly targets" appear to have much higher board ownership than either "hostile targets" or the rest of the sample, and in particular much higher ownership by the top officers. Compared to an average firm in the sample, a friendly target is much more likely, and a hostile target much less likely, to be run by a founder or a member of the founder's family. Furthermore, the probability of an acquisition, and particularly of a friendly acquisition, rises with management ownership. In fact, the intentional exit of the founding family or of a CEO with a very large stake in the firm is a frequent impetus for a friendly acquisition in our sample. Although the results on ownership identify some clear differences between hostile and friendly targets, they do not suggest a definite link between the motive for a takeover and its mood.

Section 4.3 examines the asset and performance characteristics of the firms in the sample. The results suggest that the targets of friendly acquisitions have a Tobin's q comparable to that of nontargets, but that hostile targets have a lower q. Hostile targets not only have a low q within their industry but also are concentrated in low-q industries. Friendly targets are younger and faster growing firms than hostile targets and are basically indistinguishable from the sample as a whole in terms of performance variables.

These results are the basic evidence consistent with our conjecture that synergistic takeovers are more likely to be friendly and disciplinary takeovers are more likely to be hostile. Hostile targets appear to be poor performers, as we would expect of candidates for the disciplinary takeovers. In contrast, it seems less likely that the match-specific attractions of synergistic targets would be easily captured by basic performance measures.

Section 4.4 presents probit estimates of the effects of firm characteristics on the probability of a hostile or friendly acquisition. The results confirm that a firm with a low market value relative to the amount of fixed assets it holds is more likely to become a hostile target than the average firm. This appears to be largely accounted for by an industry effect and not just by a particularly low valuation within the

industry. Controlling for size, top officer ownership, and Tobin's q, we find that the presence of the founding family reduces the likelihood of hostile bids, but does not raise that of friendly bids. Large management stakes in the target, on the other hand, do more to encourage friendly acquisitions than to discourage hostile ones.

Section 4.5 takes a separate look at management buyouts. These deals deserve special attention because they cannot be motivated by synergistic gains. We define hostile management buyouts as deals done in response to a third party bid or filing of a Schedule 13d with an expression of intent to seek control. Friendly management buyouts, then, are transactions in which such pressure is not apparent. Because our sample of these buyouts is quite small, accurate statistical inference is impossible; all we can do is eyeball the data. Except for the fact that leveraged buyouts are, on average, much smaller transactions than others, the differences between friendly and hostile management buyouts largely mimic the differences between friendly and hostile acquisitions more generally. The external pressure that prompts defensive management buyouts seems likely to be an attempt to discipline the management. Friendly management buyouts, however, seem more likely to be done for tax reasons or possibly to buy undervalued shares.

We interpret this study as furnishing some evidence consistent with the view that hostile targets and friendly targets are very different types of companies. Whereas the targets of friendly bids appear to be a wide range of firms in many industries, the targets of hostile bids are usually older, more slowly growing firms that are valued much below the replacement cost of their tangible assets. Friendly acquisitions could be motivated by corporate diversification, synergies, and, as our results suggest, the life-cycle decisions of a founder or a manager with a dominant stake. Bidders in hostile transactions may be more interested in shutting down, selling off, or redepreciating the physical capital of the target than they are in continuing business as usual. In addition to the possible heterogeneity of financial incentives, managers' resistance to takeovers may be related to their unwillingness to accept the particular changes sought by the bidder, often leading them to seek a white knight or a management buyout. In short, the evidence is consistent with our notion that the source of gains from a takeover can determine its mood.

4.2 Ownership Structure and Acquisitions

In this section we present ownership characteristics of the 1980 Fortune 500 firms that were acquired in the subsequent five years. Recent empirical research (Demsetz and Lehn 1985; Mørck, Shleifer and Vishny, forthcoming) has documented the incidence of substantial managerial ownership of large industrial corporations. These studies have not,

however, focused on the ownership structure of acquisition targets, which is the task of this section. Evidence on ownership enables us to see whether the managers of nontargets, hostile targets, and friendly targets have different financial interests in an acquisition.

The relationship between management ownership and takeover mood has been previously examined by Walkling and Long (1984), who found that changes in managers' personal wealth from a successful acquisition are negatively related to the decision to resist. In our analysis we also consider the impact of management ownership on the probability of an acquisition, be it hostile or friendly, as well as the influence of the presence of a founding family and of the chairman of the board's age on the probability of either a hostile or a friendly acquisition. In this way, we hope to obtain a more complete picture of the function of managers' financial incentives in takeovers.

Throughout this analysis we try to avoid sample selection problems, and to this end we begin with all publicly traded 1980 Fortune 500 firms (Walkling and Long might have an unrepresentative sample since they reported abnormally high initial stakes for the acquiring firms: 11 percent for contested offers and 27 percent for uncontested offers). Moreover, because we are interested in differences between firms, we try to avoid the question of cyclical variation and compare all firms as of 1980. In the case of ownership, data come from the 1980 Corporate Data Exchange (CDE) directory, which contains data on the ownership positions of board members as well as large outside shareholders. We do not have data on executive compensation or on the ownership positions taking the form of options; many studies (for example, Murphy 1985) indicate that changes in executive wealth resulting from stock ownership are large relative to those from other sources.

The first measure of ownership we use is the combined percentage stake of the board of directors. Because of the nature of CDE reporting, the stakes are added up over only those board members whose positions exceed 0.2 percent. This may lead to some problems for the largest firms, where even the tiniest percentage ownership positions are worth millions of dollars.

To the extent that the board makes the decision whether to resist an offer, the board's stake may be the appropriate measure of financial incentives. In addition to this measure, we divide the board ownership into that of the top two officers and that of the rest of the board. The first captures the interest of the top officers, whose concern for the outcome of a bid might go well beyond their personal capital gain, and the second captures the interest of important decision makers who might care little about the outcome of a bid except for their personal financial gain. These two measures complement the board's stake as a whole in that they reflect the pecuniary gain of the two

constituencies on the board with possibly different attitudes toward the acquisition.

Other personal characteristics of board members might influence their attitude toward the firm's being acquired independent of their ownership stake. First, top officers who are founders or members of the founding family might play a special role in the company, either because they command the loyalty of shareholders and employees or because their attachment to the company is more than just financial. For this reason, it seemed useful to ask what fraction of friendly and hostile takeover targets were run by a member of the founding family. This is of particular interest in the context of executive succession, since sale of the company might be a natural means for a founder's retirement. For a similar reason, we are interested in the age of the board chairman, since his retirement plans might influence his attitude toward the sale of the company.

Recall that we term an acquisition hostile if it was not negotiated prior to the initial bid, was not accepted by the board from the start, or was contested by the target management in any way. This category thus includes acquisitions by white knights. It also includes management buyouts that were precipitated by a bid or a 13d filing expressing the intent to acquire control, since such pressure is clearly hostile (Shleifer and Vishny 1988). Our calling a target hostile whenever there is any evidence of the board's rejection of the initial offer may misclassify as hostile some situations in which the board is only attempting to obtain a higher bid. Because there are only three transactions in our sample where resistance was limited simply to a rejection of the first offer, we proceed using this classification. Our classification records a transaction as friendly either if there is no evidence of resistance from the target management to the first prospective acquirer or if the management implemented a management buyout and we have no evidence of a hostile threat. Again, the classification is far from perfect since the target's management may have been coerced into going along in the face of imminent defeat.

Although section 4.5 below presents some evidence to the effect that it is appropriate to include hostile and friendly management buyouts in the general samples of hostile and friendly transactions, we try to be cautious and present many of the results both including and excluding these buyouts from the samples of targets. Unless noted otherwise, our discussion will concern the results for the case in which management buyouts (MBOs, in the tables) are included.

Table 4.1a presents the means and medians of various ownership variables for different groups of companies, and table 4.1b gives t-statistics for tests of the differences of means between these groups.

In the whole sample the board of directors owned on average 10.9 percent of the company; 6.3 percent was the average stake of the top two officers, and 4.5 percent was the average stake of the rest of the board. Not surprisingly, the ownership positions are skewed to the right: the medians for the above three measures were 3.54 percent, 0.61 percent, and 1.09 percent respectively. One way to describe the magnitude of these stakes is that the average value of the top two officers' positions was $40.5 million and the median was $2.26 million. Almost a quarter of the companies in the sample were run by members of the founding family, and the average chairman of the board was a youthful 58 years old.

From the viewpoint of ownership, the friendly targets were very different both from the sample as a whole and from the hostile targets. The boards of the friendly targets owned over 20 percent of the company, on average, which is statistically significantly more than both the 10.9 percent average board ownership in the sample and the 8.3 percent average of the hostile targets. The hostile targets had, on average, less board ownership than the whole sample, though this difference is not statistically significant. The greater board ownership among the friendly targets came from the greater ownership of the top officers. In fact, the stakes of outside board members do not seem to have been much different from either those in the hostile targets or in the whole sample. At the 15 percent confidence level, the hostile targets seem to have had less top officer ownership than did the average firm. The difference in officer positions is even more dramatic if one looks at the dollar values of the stake, where the average for a friendly target was twice that for the sample as a whole, and nine times that for a hostile target. All these results are echoed in the medians as well, although not as dramatically.

The incidence of a member of the founding family on the top management team was also very high in friendly targets, showing up as an impressive 40 percent. This is statistically significantly higher than the 24 percent average for the sample as a whole and the 10 percent average for the hostile targets. The incidence of the founding family's presence in hostile targets was low relative to the sample, with a t-statistic of −2.23. There does not seem to be any significant difference in the age of the chairman or in the outside board ownership between the full sample and friendly and hostile targets. But when the management buyouts are not classified as acquisitions, we find that the chairmen of hostile targets were slightly younger than the average chairman in the sample, perhaps suggesting that the younger managers were more likely to strike a favorable deal with a white knight or fight harder to remain independent, while the older managers were more apt to rely on the management buyout as a takeover defense.

Table 4.1a **Characteristics of Top Management, by Type of Acquisition**

		Type of Acquisition				
Characteristic		Full Sample	Friendly	Hostile	Friendly Non-MBO	Hostile Non-MBO
Founding family present on top	Mean	.244	.405	.100	.412	.0938
management team = 1	Median	0	0	0	0	0
Fractional equity ownership by the	Mean	.109	.208	.0829	.186	.0874
board of directors	Median	.0354	.135	.0418	.0894	.0382
Fractional equity ownership by top	Mean	.0635	.145	.0318	.139	.0364
two officers	Median	.0061	.0176	.0049	.0139	.0044
Fractional equity ownership by the	Mean	.0455	.0625	.0512	.0464	.0510
rest of the board	Median	.0109	.0172	.0233	.0152	.0227
Age of board	Mean	58.4	58.7	57.1	58.5	55.3
chairman	Median	59.0	57.0	58.0	57.0	57.5
Dollar value of top officers' stake	Mean	40.05	83.75	9.22	60.79	11.23
(in millions)	Median	2.26	6.02	.795	4.22	1.11

Table 4.1b ***T*-Statistics for Tests of Equality of Means of Top Management Variables, by Acquisition Type**

	Friendly vs. Sample	Hostile vs. Sample	Friendly Non-MBO vs. Sample	Hostile Non-MBO vs. Sample	Friendly vs. Hostile	Friendly Non-MBO vs. Hostile Non-MBO
Founding family present on top management team = 1	2.55	−2.23	2.37	−2.06	3.33	3.12
Fractional equity ownership by the board of directors	4.42	−1.11	3.03	−.811	3.28	2.26
Fractional equity ownership by top two officers	4.20	−1.56	3.45	−1.18	3.33	2.55
Fractional equity ownership by the rest of the board	1.27	.415	.0611	.358	.559	−.23
Age of board chairman	.217	−1.13	.0481	−2.28	.742	1.34
Dollar value of top officers' stake (in millions)	1.55	−1.25	.667	−1.04	2.03	1.60

Before interpreting these results, we should explicitly acknowledge that the means we compute are only intended to be suggestive, since in their calculation we do not control for important differences between firms. For example, firms with very small ownership are larger firms that are less likely to be acquired. Without a multivariate analysis, some of the correlations we describe might be spurious. We deal with these issues in section 4.4 but in the meantime proceed as if the evidence is indicative of the causal relationship between ownership and takeovers.

One interpretation of the results presented so far is that the management teams with strong financial incentives to accept a tender offer at a premium do not resist. This is supported by the fact that the boards of friendly targets had higher stakes and the boards of hostile targets had lower stakes than the sample average. Moreover, the entire difference is basically accounted for by the differential ownership of the top officers. Since officers have more to lose as a result of an acquisition than do other board members, looking at top officers rather than whole boards may be more powerful in explaining the resistance strategy adopted.

An alternative interpretation of the findings on friendly offers is that management teams with very high ownership have close to a veto power over the outcome of the bid, and that therefore the only acquisitions with high management ownership we observe are friendly. This is corroborated by the fact that the firms whose founders were present were more likely to be the targets of friendly bids, since the founders might have had a stronger preference for control as well as a better ability to resist. The two interpretations are not, of course, incompatible. Companies might be targets of friendly offers both because managers have a great incentive to succumb and because if they chose not to, the offer could not succeed.

The latter view suggests that a number of would-be hostile offers end up as friendly offers because of the necessity to bribe the entrenched managers. This view does not, however, explain the higher incidence of total acquisitions among high-ownership firms that we find in the data. Table 4.2a presents the numbers and probabilities of various types of acquisitions for firms with special ownership structures, and table 4.2b provides some hypothesis tests. Table 4.2a shows that, whereas the probability of a non-MBO acquisition within five years was 14.5 percent in the sample as a whole, it was 19.7 percent if the officer stake exceeded 15 percent. If management buyouts are included, the probability that a firm with over 15 percent officer ownership would be acquired exceeds that for a firm with under 15 percent ownership by 11 percent, with a *t*-statistic of 2.11. That large stakes invite bids suggests that the managers' incentive to sell was probably a factor in the observed pattern of takeover activity.

Table 4.2a **Acquisition Activity, by Ownership Category**

Ownership	Total Number of Firms	Number of:				Probability of:	
		Friendly	Hostile	Friendly Non-MBO	Hostile Non-MBO	Non-MBO Acquisition	Hostile Non-MBO
Founding family present	111	17	4	14	3	.153	.027
Founding family absent	343	25	36	20	29	.143	.085
Top officers' stake greater than 15 percent	66	15	3	10	3	.197	.045
Full sample	454	42	40	34	32	.145	.070

Table 4.2b **Differences between Acquisition Probabilities for Various Ownership Categories (t-Statistics for tests of equality of acquisition probabilities in parentheses)**

			All Acquisitions	Non-MBO Acquisitions
Probability of hostile acquisition Founder = 1	vs.	Probability of hostile acquisition Founder = 0	−.0690 (−2.23)	−.0575 (−2.06)
Probability of friendly acquisition Founder = 1	vs.	Probability of friendly acquisition Founder = 0	.0803 (2.55)	.0678 (2.37)
Probability of any acquisition Founder = 1	vs.	Probability of any acquisition Founder = 0	.0114 (.270)	.0103 (.27)
Probability of hostile acquisition OFF > .15	vs.	Probability of hostile acquisition OFF ≤ .15	−.0499 (−1.32)	−.0293 (−.858)
Probability of friendly acquisition OFF > .15	vs.	Probability of friendly acquisition OFF ≤ .15	.1577 (4.16)	.0896 (2.57)
Probability of any acquisition OFF > .15	vs.	Probability of any acquisition OFF ≤ .15	.1078 (2.11)	.0604 (1.29)

Note: OFF = percentage ownership stake of the top officer of the firm.

The reason why companies with very high officer ownership have a higher likelihood of being acquired is that they have a much higher likelihood of a friendly bid. The probability that a firm with at least 15 percent top officer ownership was acquired in a friendly non-MBO transaction is 15.2 percent versus 6.2 percent for firms with officer ownership below 15 percent. This difference between high and low officer ownership firms is significant at the 1 percent level ($t = 2.57$). On the other hand, the probability that a non-MBO acquisition would be initiated in a hostile manner is 4.5 percent for high officer ownership firms versus 7.4 percent for firms with less than 15 percent top officer ownership, a difference which is not statistically significant.

These results suggest the possibility that the ownership structure of some firms makes them especially attractive targets of friendly takeovers. For example, if a top officer with a large equity stake wants to retire and simultaneously take some of his wealth out of the firm, he will probably prefer selling out at a premium to a diversification-minded acquirer to selling his shares on the open market. Life-cycle decisions of the officers thus may provide a stimulus for friendly bids.

Further evidence on this point comes from the results on founders. Table 4.2a shows that the probability of any acquisition of a firm run by the founding family is not much different from that of an average company in the sample. The likelihood of a friendly bid, however, is much higher for founders' firms, and that of a hostile bid is much lower. For the entire sample the probability of a hostile non-MBO acquisition is 7.0 percent, and the probability of a friendly non-MBO acquisition is 7.5 percent. For firms run by founding families, in contrast, the likelihood of a friendly bid is 12.6 percent and that of a hostile bid is 2.7 percent. The probability of a friendly bid is statistically significantly higher for firms with founding families than for firms without ($t = 2.37$), and the probability of a hostile bid is significantly lower ($t = -2.06$). If founders can effectively deter hostile bids, and end up selling their firms when they intend to leave the business, such results might be expected.

A final piece of statistical evidence that corroborates the top management exit story concerns the age of the chairman. Although the average chairman in our sample was 58.4 years old, and the average chairman of a firm with a founding family member at the helm was 59.7, the average chairman in firms that were run by the founding family *and* sold to a friendly acquirer was 62.6 years old. These findings are consistent with the notion that founders who sell off their firms before retirement should on average be older.

An examination of the stories of individual companies confirms the statistical evidence. A common story (for example, ABC, Beckman Instruments, Clark Oil, and others) is an elderly founder wishing to sell the business before he retires. In fact, of the 14 founder-run firms that were acquired by another party in a friendly transaction over the period in question, one was the case of bankruptcy, one of a need to get money to pay inheritance taxes, one of a super-manager merging into a larger firm to get a bigger job, and the rest of founders or of their family members wishing to get out.

If an important part of friendly acquisitions is simply a personal life-cycle decision of top management, it is natural to ask how high takeover premia can be paid in such transactions. One possibility is mismanagement under the founder's reign, such as insufficient risk taking, insufficient expansion to maintain high fractional equity ownership, or just poor decision making. In this case the founder's exit is accompanied by a disciplinary takeover. An alternative possibility is that the takeover is synergistic but the desire of managers to run their own show often precludes such combinations. The founder's wish to get out provides the impetus for realizing the already available gains. Some evidence shedding light on these two possibilities is presented in the next section.

4.3 Financial Characteristics of the Targets

The financial motivation of the target's management is unlikely to be the only factor entering into the decision to oppose a tender offer. Some acquisitions might be undertaken for reasons management particularly dislikes, such as its own replacement or the liquidation of the firm. In this section we pursue such possible heterogeneity of acquisition targets.

The starting point of our analysis is Tobin's q. As the ratio of the market value of the firm to the replacement cost of its *tangible* assets, Tobin's q can be viewed as measuring the intangible assets of the firm. These may include future growth opportunities, monopoly power, quality of management, goodwill, rents appropriated away from unions, and so on. Since we are looking at the measured q, this interpretation can be troublesome. The replacement cost of assets could be overstated, for example, if the firm bought its assets a long time ago and their value has depreciated significantly because of technological progress, foreign competition, or other changes. In these cases the inflation-adjusted historical cost is a poor guide to the true replacement cost, but a very low q is probably still a reliable indicator of a declining firm.

Alternatively, q might just capture the mispricing by the stock market of the firm's physical assets in their current use. If, however, a low q genuinely measures the low valuation of the firm's tangible assets in their current use, it may pay to sell off assets when q is low because those assets have a higher value in another firm or sector. Even when the firm's capital is highly firm- or sector-specific, it may pay simply to abandon the unprofitable capacity or insist on a reduction in union wages that were set under more profitable conditions.

A related measure of profitability relative to the value of physical assets is the deviation of a firm's q from the average q of its three-digit (Standard Industrial Classification code) industry, Dq. The market might attach low value to the assets of the whole industry, and it could attach an even lower value to the assets of a particular firm within that industry. If the market does the latter, we must look at the firm's idiosyncratic characteristics, such as its management, as a source of potential acquisition gains.

Tobin's q can shed light on the hypothesis that hostile acquisitions are essentially purchases of old physical assets that can be redeployed more profitably elsewhere either from an efficiency or a tax viewpoint. If a low q reflects a low valuation of physical assets relative to their potential, acquiring the firm might be a cost-effective way to buy and redeploy its physical capital. In the same vein we look at the age of the firm, which might give us an idea of the age of its capital. Apart

from serving as an indicator of a declining firm, the age of the capital stock is a proxy for the potential for a step up in the basis from which this capital can be redepreciated. From the tax viewpoint acquiring older assets is more advantageous; Shleifer and Vishny (1988) argue that such tax considerations can be important in management buyouts.

Since Tobin's q might be mismeasured, we are also interested in other potential measures of the firm's performance. In particular, we look at a ten-year growth rate of the firm's work force, GL. If q and GL are simultaneously low, we are more confident in attributing low valuation to past or current troubles rather than to mismeasurement or market mispricing.

In two effective papers, Michael Jensen (1986a, 1986b) has proposed a free cash flow theory of low stock market valuation of targets of hostile takeovers. In his theory, because some firms waste shareholders' wealth on unprofitable investments and managerial perquisites, eliminating this waste can create shareholder value. An example of wasted free cash flow, proposed by Jensen and by Jacobs (1986), is exploration activity in the oil industry that did not slow down in the face of changing economic conditions. Jensen suggested that interest and dividend payments alleviate the problem of free cash flow. In this regard he points to the role of debt as a means to commit future corporate revenues to being paid out.

Strictly speaking, to be properly tested, Jensen's theory requires controlling for a variety of aspects of the firm's opportunity set. We nevertheless check what fraction of their earnings nontargets, hostile targets, and friendly targets allocate to dividends, interest payments, and investment. The question is whether higher payouts and lower investment preclude hostile action.

Another important strand in the discussion of corporate acquisitions argues that capital market imperfections can deter otherwise feasible transactions. A firm with a large market value could be difficult to acquire, especially without the cooperation of its management, because financial markets might be unable to supply the credit necessary for the acquisition. This view attributes the lively hostile takeover activity of the 1980s at least in part to the appearance of junk bond financing. Looking at the market values of acquired firms should thus enable us to appraise the extent to which capital market imperfections matter. Not surprisingly, all types of targets have fewer assets and lower market values than do firms that are not acquired, indicating that capital market imperfections might deter some corporate control transactions. Because market value is correlated with both q and management ownership, we defer further discussion of this issue to the multivariate analysis section.

The means and medians of the variables of interest by the type of firm are presented in table 4.3a, with the t-tests of differences of means in table 4.3b. Recall that all the variables are measured at the end of 1980. The average Tobin's q of the sample is .848, which is the standard result of the low valuation of corporate assets by the stock market in 1980. The average q of a friendly target is .796, which is not significantly below that of the sample. In contrast, the average q of a hostile target is only .524, which is significantly below .848 ($t = -2.84$). A similar pattern emerges in the medians.

Unfortunately, a variety of interpretations are consistent with this result. The first possibility is that hostile targets were mismanaged and therefore had a low Tobin's q. The result of such mismanagement is the inefficient utilization of the fixed assets of the firm and in turn the low valuation of these assets by the market. Removing the management might justify the takeover premium, although the managers would probably resist because they would not want to lose control or to have their incompetence revealed. Managers of friendly targets, in contrast, are safe; they do not need to worry about being removed.

Mismanagement can come in two forms. It can be a firm-specific or an industrywide phenomenon. In the former case what should matter for hostility is the extent to which the firm underperforms similar firms. To some extent this difference is measured by Dq. In fact, the mean of Dq is positive for friendly targets and negative for hostile ones, with the difference significant at the 10 percent level ($t = 1.72$). On the other hand, the differences in the medians are much smaller. To ascertain whether the industry effect or the firm effect is more important in predicting hostile activity, the next section presents some probit estimates.

An alternative interpretation of the extremely low Tobin's q's of the hostile firms is that, while the assets may be managed properly, they simply are not particularly valuable. For example, if the hostile targets invested a long time ago when their industry was growing, but now the fortunes of the industry have turned around, they will be stuck with a lot of capital. Under this scenario hostile targets might be in smokestack industries ruined by technological progress and foreign competition.

Consistent with this view is the finding that the hostile targets were older and more slowly growing than the average firm in the sample. The difference in the year of incorporation between hostile targets and other firms was over six years, and it is significant at the 6 percent level. The difference in the growth rates of the work force was 1.4 percent (or almost twofold), which is significant at the 12 percent level. Friendly targets, in contrast, were younger than the average firm and were growing at roughly the same rate.

Although this view suggests why firms with a great deal of old, fixed capital would have a low Tobin's q, it does not explain why these firms

are attractive candidates for hostile acquisitions. One explanation is the free cash flow theory. If low-q industries are in decline, managers may be too slow to close down or sell off plants, curtail investment, and trim down operations. There is some evidence that the hostile targets were investing a smaller fraction of earnings than the average firm in the sample ($t = -1.86$).

If managers' dedication to the survival of organizations, stressed by Donaldson and Lorsch (1983), keeps them from shrinking their operations sufficiently fast, then acquirers can increase value by speeding up the decline of the target company. Our numbers on the growth of the work force, the incorporation year, investment, and q are all consistent with the version of the free cash flow theory that stresses management's tendency to disinvest too slowly.

Another reason why old tangible assets could attract acquirers has to do with taxes. An important feature of the pre-1986 U.S. tax code was the General Utilities doctrine, according to which if a firm's assets were sold in a liquidation, capital gains taxes could be avoided at the corporate level. After such an acquisition, the target's assets could be redepreciated, presumably using the accelerated schedules of the 1980s. The step-up in basis could have been an important tax motivation for acquiring old capital. In addition, of course, there are tax gains from leverage. Although these apply equally to firms without too much fixed capital, it may be more costly for these firms to obtain debt financing. If managers oppose a loss of control to an acquirer, they can lever up by themselves or lever up and step up the basis by effecting a management buyout or finding a white knight. These, in fact, have been common responses to hostile pressure.

One final explanation for hostile offers that is consistent with our findings is underpricing by the market. If the stock market does not value some firms properly, an acquirer who understands their intrinsic value may be able to buy their assets more cheaply on the stock market than on the new or used capital goods market. Managers reluctant to give up assets at below their intrinsic worth would resist such acquisitions. One problem with this explanation of hostile bids is that it says nothing about why the older, slow-growth companies with mostly tangible assets are the only ones undervalued on the stock market. Moreover, since once a company is in play the corporate control market becomes very competitive and a great deal of information is revealed, acquirers are definitely limited in their ability to profit in this way.

In summary, hostile targets appear to have sharply distinguishable asset characteristics. Relative to the market value of the firm, they appear to have a considerable amount of old tangible capital. They are growing slowly and have heavy debts. Although these characteristics suggest that hostile acquisitions might be related to the desire to purchase these fixed assets, a variety of explanations are just as consistent

Table 4.3a **Asset and Financial Characteristics of the Sample and the Acquired Firms, 1980**

Characteristic		Sample	Friendly	Hostile	Friendly Non-MBO	Hostile Non-MBO
q	Mean	.848	.796	.524	.774	.545
	Median	.645	.617	.452	.624	.461
Dq	Mean	0	.0163	−.113	−.0368	−.119
	Median	−.0304	−.0662	−.112	−.0794	−.115
Replacement cost	Mean	2772.6	1372.0	1947.5	1534.6	2237.1
	Median	1055	747.7	791.4	843.1	960.6
Growth rate of work force (GL)	Mean	.0272	.0258	.0137	.0270	.0140
	Median	.0199	.0183	.00948	.0232	.00948
Year of incorporation	Mean	1918.3	1924.6	1911.9	1924.6	1914.9
	Median	1920	1925	1913	1925	1916
Total market value	Mean	2092.6	969.8	1009.1	1028.4	1181.1
	Median	808.2	683.2	384.2	732.0	387.8
Investment/income	Mean	.704	.651	.576	.687	.588
	Median	.640	.522	.579	.629	.609
Dividends/income	Mean	.183	.158	.178	.162	.176
	Median	.175	.151	.176	.151	.172
Interest/income	Mean	.193	.246	.219	.254	.232
	Median	.175	.261	.211	.269	.223
Value of long-term debt/total market value	Mean	.248	.285	.330	.269	.335
	Median	.208	.228	.267	.213	.299

Table 4.3b ***T*-Statistics for Tests of Equality of Means of Asset and Financial Variables, by Type of Acquisition**

	Friendly vs. Sample	Hostile vs. Sample	Friendly Non-MBO vs. Sample	Hostile Non-MBO vs. Sample	Hostile vs. Friendly	Hostile Non-MBO vs. Friendly Non-MBO
q	−.360	−2.84	−.464	−2.36	−2.66	−2.19
Dq	.163	−1.43	−.337	−1.34	−1.72	−1.39
Replacement cost	−1.13	−.840	−.914	−.485	.641	.656
Growth rate of work force (GL)	−.148	−1.54	−.0191	−1.37	−1.02	−.985
Year of incorporation	1.97	−1.92	1.78	−.922	−2.78	−2.02
Total market value	−1.19	−1.46	−1.04	−1.09	.0866	.285
Investment/income	−.701	−1.86	−.204	−1.57	−.818	−.96
Dividends/income	−1.26	−.318	−.938	−.354	.966	.624
Interest/income	2.07	1.14	2.18	1.56	−.804	−.622
Value of long-term debt/ total market value	.864	2.45	.460	2.31	.646	.859

with this general story. In particular, incompetent management, asset redeployment, free cash flow, taxes, and underpricing of the firm's assets by the market could all invite takeover bids. At the same time, we think the evidence is consistent with the notion that hostile takeovers are motivated by the need for disciplinary action against the target management.

The analysis of this section has said virtually nothing about the targets of friendly bids. Except for the fact that they are on average smaller and six years younger than the rest of the sample (with t-statistics of -1.13 and -1.97, respectively), friendly targets are very similar to the average firm in the sample. Most notably, their Tobin's q is not statistically or substantively different from that of the average firm in the sample, and it is significantly higher than the q of an average hostile target ($t = 2.66$). In a sense these findings are consistent with the view that friendly targets are just regular firms, and their acquisition derives from some idiosyncratic circumstances such as a life-cycle decision of a top officer with a large stake or a match-specific synergy (such as the desire of the acquiring management to enter a particular new business). One interesting feature of friendly targets is that they appear to have higher interest payouts and lower dividend payouts than the average firm in the sample, perhaps indicating that they are starved for capital. But their total outside payouts are very similar to those of the average firm.

The results of this section provide the basic evidence supporting the notion that disciplinary takeovers are more often hostile than the average takeover, while synergistic takeovers are more often friendly. The evidence indicates that hostile targets are older, poorly performing firms, possibly with many old plants or equipment that should be abandoned or more profitably deployed elsewhere. This is exactly what one would expect of the targets of disciplinary takeovers. In contrast, the financial characteristics of friendly targets do not appear to be very different from those of the average firm in the sample. If what attracts acquirers to these targets are match-specific synergies (as well as the target manager's interest in selling), we would not expect to see any real differences in the basic financial variables. In short, the results suggest that the motive for a takeover might well determine its mood. Treating hostile and friendly acquisitions as reflecting the same underlying fundamentals might be very misleading indeed.

4.4 Probit Estimates

The previous section offered evidence suggesting that the motives for hostile and friendly acquisitions might be different. In this section we present results on some further statistical tests of what makes a

firm the target of a friendly takeover and what makes a firm the target of a hostile takeover. This question is different from asking what makes the mood of a takeover of an already selected target hostile or friendly, since the latter question presumes that the characteristics that make firms targets in the first place are the same across moods. If hostile and friendly takeovers typically reflect different motives, it is misleading to think of a firm becoming a general target. Rather, separate considerations are appropriate for predicting which firms are subject to hostile (disciplinary) takeovers and which are subject to friendly (synergistic) ones.

Accordingly, this section presents probit estimates for the whole sample of 1980 Fortune 500 firms, estimates that separately predict hostile and friendly acquisitions. The models are either *prob*(hostile vs. anything else) = f(characteristics), or *prob*(friendly vs. anything else) = g(characteristics). In short, we separately compared hostile and friendly targets with the rest of the Fortune 500 sample.

We did a multivariate analysis because many of the company characteristics we looked at were correlated with one another. For example, the growth rate of the firm's work force was so closely correlated with Tobin's q that it became dominated by q in the regressions. Although we ran several additional probits to identify the separate sources of influence of firm characteristics on the probability of a friendly acquisition and the probability of a hostile acquisition, the results presented below reflect our main findings.

Table 4.4a presents the two probits estimating the likelihood that a Fortune 500 firm would go through a successful friendly acquisition. Mimicking our earlier finding that the friendly targets were just like the sample as a whole, the probits did not reveal particularly strong correlations. Specifically, the probability of a friendly acquisition is not clearly related to the log of the firm's market value, the presence of the founding family, industry q, or Dq. That high market value does not deter friendly acquisitions is inconsistent with the preliminary indications from table 4.3a. This could be because size is negatively correlated with officer ownership, which is, in turn, positively related to friendly bids. In this case, the finding in table 4.3a is spurious. Since friendly bids are often made by large, cash-rich companies and sometimes for stock, it is not entirely surprising that capital market constraints are not particularly binding.

When friendly management buyouts were included in the set of acquired firms, there was some evidence that high officer ownership promoted friendly acquisitions. This result grew weaker when these buyouts were excluded, since, as we show in the next section, firms going through friendly management buyouts often have dominant management ownership. We should also point out, however, that the

Table 4.4a **Probit Regressions of Friendly Acquisition Dummy Variables on Ownership and Financial Variables**

	Dependent Variable	
Independent Variable	Friendly Acquisition = 1	Friendly Non-MBO Acquisition = 1
Intercept	−1.29 (−2.00)	−1.60 (−2.37)
Log of total market value	−.0579 (−.591)	−.0195 (−.191)
Founding family present = 1	−.122 (−.387)	−.162 (−.477)
Proportion of equity owned by top officers	1.50 (1.81)	1.21 (1.34)
Industry q	−.0459 (−.176)	−.0199 (−.749)
Dq	.0531 (.202)	−.108 (−.348)
Number of firms in regression	371	371

Note: t-statistics in parentheses

Table 4.4b **Probit Regressions of Hostile Acquisition Dummy Variables on Ownership and Financial Variables**

	Dependent Variable	
Independent Variable	Hostile Acquisition = 1	Hostile Non-MBO Acquisition = 1
Intercept	.563 (.960)	−.106 (−.177)
Log of total market value	−.184 (−2.00)	−.116 (−1.24)
Founding family present = 1	−.737 (−1.81)	−.604 (−1.50)
Proportion of equity owned by top officers	−1.33 (−1.00)	−.888 (−.689)
Industry q	−.872 (−2.26)	−.734 (−1.92)
Dq	−.701 (−1.53)	−.693 (−1.51)
Number of firms in regression	371	371

Note: t-statistics in parentheses

ownership results were generally weaker in the probits than in the earlier tables because we lost a substantial number of observations due to missing values for q. We had q values for only 20 friendly targets and 31 hostile targets.

The result that as far as assets and performance go, friendly targets are just like other firms is confirmed using both industry q and Dq. Neither industry q nor Dq mattered for predicting friendly acquisitions. These negative results are consistent with the notion that friendly takeovers are motivated by synergy.

The story is very different with hostile acquisitions, the probits for which are presented in table 4.4b. For the sample including hostile management buyouts, the likelihood of a hostile acquisition was negatively related to the log of value, negatively related to industry q, and negatively related (at the 10 percent confidence level) to the presence of a founder. Surprisingly, the negative effect of officer ownership on the probability of a hostile acquisition was not statistically significant.

The result that, controlling for the q variables, high market value deters hostile acquisitions seems likely to reflect capital market imperfections. It suggests that some firms are too large to be acquired through a hostile bid, even when fundamentals dictate that they should be. This result became substantially weaker when hostile management buyouts were excluded from the sample of hostile targets, since these were very small firms. In fact, these buyouts are probably the best case for the argument that poor capital markets limit large transactions. The results in table 4.4b also confirm our earlier finding that hostile targets had low market valuations relative to tangible assets and that the presence of a founder discouraged hostile action, *holding officer stake and valuation constant*. This suggests that founders or their family members fight hostile bids more effectively than other managers, either because they value control more or because they command shareholders' or directors' support.

One important question we could not answer by simply comparing means is whether industry-specific or firm-specific components of performance are related to hostile activity. In our estimated probits industry q had a significant negative effect on the likelihood of a hostile acquisition, whereas Dq had an insignificant negative effect. It appears that industry performance is a more reliable predictor of hostile bids.

Viewed in the context of the mismanagement story, this finding says that hostile activity is often brought on by non-value-maximizing responses to adverse industrywide shocks and less often by company-specific mismanagement in an otherwise healthy industry. The finding that, in predicting hostile action, industry q is more important than Dq may indicate the existence of entire industries whose assets can be profitably redeployed. For example, many steel and textile firms might

be in need of shutdowns and selloffs that do violence to the preferences of existing managers. These managers are not necessarily just trying to shirk or save empires. They may simply be opposed to changes that enrich shareholders at the expense of employees. The point is that hostile acquisitions can be a way to move large quantities of fixed capital into more profitable (and possibly also more productive) uses, as one would expect of disciplinary takeovers.

Although the statistical evidence is fairly weak, it is consistent with our observation that the motive for friendly acquisitions is more likely to be synergistic than disciplinary, and the motive for hostile ones is more likely to be disciplinary than synergistic. Specifically, friendly acquisitions seem to be related to high officer ownership, which suggests that an important impetus for these acquisitions may be a life-cycle decision of a large shareholder. Furthermore, all other basic firm characteristics we have looked at appear to be irrelevant for predicting friendly acquisitions. We might expect this of synergistic or diversification-oriented takeovers. Hostile bids, in contrast, seem to be targeted at firms located in low-q industries. One interpretation of the low q finding is that hostile acquisitions are a way to redeploy tangible assets in a more profitable way. Many of these redeployments can either be unacceptable to managers (such as liquidation and employee dismissals) or can be more painlessly replicated by a white knight or through a management buyout (such as a step-up in depreciable basis and increases in leverage). This, of course, is the story of the disciplinary motive for hostile takeovers.

4.5 Management Buyouts

Management buyouts are an important form of acquisition to think about because we know that the motive behind them cannot be synergistic. Whatever gains realized by management buyout organizers must come either from a more profitable exploitation of the firm's own resources, including its managerial talent, or from the ability of the organizers to buy the firm's assets for less than their intrinsic worth under the existing operating strategy.

Schipper and Smith (1986), Shleifer and Vishny (1988), and Kaplan (1987) have discussed the sources of gains in management buyouts. All of these authors found that tax considerations, especially for leveraging up and stepping up the basis, could justify a large part of the takeover premium. Kaplan estimated that 80 percent of the takeover premium can come from the tax savings. Other prime candidates for the source of gains include buying underpriced assets, improving incentives through higher management ownership and leverage, and the restructuring of declining companies along the lines sought by raiders.

Hence, it is important to distinguish between two types of management buyouts. The first is the buyout that responds to hostile pressure on the target's management. This pressure can take the form either of an outside bid or simply of an acquisition of a beachhead along with a 13d filing to the effect that control might be sought. The fact that managers and their investment banker partners can win the bidding for the firm in such situations suggests that the gains from an acquisition can be realized by them as well as by outside bidders. If these gains come from tax savings or buying underpriced assets, this result is not surprising. But it also seems likely that after a management buyout managers redeploy the target's assets in better uses. Managers may have been unwilling to implement these changes before being forced to make a defensive bid for the firm at a large premium.

The second type of management buyout is the transaction initiated by the managers without any apparent outside threat. We call this a friendly management buyout. One of the motives for these takeovers may be the exit story we developed for friendly deals more generally. In this case the buyout can be a way for a dominant CEO to pass the leadership on to the next generation of managers without dissipating control. Another motive for friendly management buyouts may just be to realize tax gains from leverage and stepping up the depreciable basis of the firm's assets. Although another oft-cited motive for these buyouts is to improve incentives through increased management ownership, this seems less plausible for our sample of friendly management buyouts because that management ownership was already quite high.

A final motive for friendly management buyouts that may be important is for managers to buy the share of the firm's assets they do not already own for less than its true value (either under the existing operating strategy or under a new one). Of course, this story requires that the management have some ability to freeze out minority shareholders once it takes over, so that it can get shareholders to tender for less than the true value of their shares. In addition, the story presumes that competitive bidding from third parties will not drive the profit from this strategy to zero. But both of these requirements seem likely to be met in many cases where managers have much better information than outsiders about the true value of the firm and management already owns a good deal of the stock (as in our sample of friendly management buyouts).

Of the 16 management buyouts in our sample of 82 acquisitions, 8 were hostile in the sense described above and the other 8 were friendly. Table 4.5 presents data on the ownership and financial characteristics of these buyouts. Comparing this table with tables 4.1a and 4.3a we see that hostile management buyouts share many of the features of

Table 4.5 Ownership and Financial Characteristics for Management Buyouts

	Sample	Friendly MBO	Hostile MBO
Founding family present on top management team = 1	.244	.375	.125
Fractional equity ownership by top two officers	.0636	.170	.0135
Fractional equity ownership by the rest of the board	.0454	.131	.0517
Age of board chairman	58.4	59.8	62.5
q	.848	.916	.436
Dq	0	.318	−.0873
Replacement cost	2772.6	450.3	740.5
Growth rate of work force (GL)	.0272	.0205	.0119
Year of Incorporation	1918.3	1924.3	1898.4
Total market value	2092.6	638.1	292.1
Investment/income	.704	.456	.499
Dividends/income	.183	.136	.185
Interest/income	.193	.204	.135
Value of long-term debt/total market value	.248	.373	.310

other hostile transactions. Firms experiencing them have very low Tobin's q's, low growth rates, low investment, large amounts of debt, and relatively low board and officer ownership. The average year of incorporation for a hostile management buyout target is a strikingly low 1898. These companies are much smaller than the run-of-the-mill hostile target, and they have a lower incidence of a founder's presence. Our examination of particular instances of hostile management buyouts confirms the observation that they are often acquisitions of old tangible assets, ones that can be subsequently redeployed more profitably or redepreciated. The picture of hostile management buyouts that emerges is consistent with their being a defensive response to the threat of a disciplinary takeover.

Friendly management buyouts are a very different type of transaction, and it is much less clear how they compare with other friendly deals. These buyouts are management-initiated deals that are not foiled by higher third party bids. Not surprisingly, 37.5 percent of these firms were run by the founding family, and the average board stake before the buyout was over 30 percent.

Since the officers in friendly management buyouts often have virtually complete control of the company, their motives for the transaction may be suspect. Purchasing undervalued shares in the presence of coercion and disadvantaged competitive bidders seems like a distinct possibility. Consider two cases in our sample. One was the buyout of Metromedia at a 100 percent premium, which was followed by the sale

of the parts of the company (previously dictatorially run by the same boss for 30 years) for more than double the acquisition price within 18 months. Another was the management buyout of Beatrice foods, followed by the sale of several divisions that paid for the whole acquisition (Beatrice, however, did not have dominant insider ownership). There were other companies where management initiated a buyout when its voting control was already effectively absolute, such as Levi-Strauss and Questor.

In sum, although we do not have a clear idea of how friendly management buyouts relate to other friendly acquisitions, our consolidation of the hostile management buyouts with the other hostile acquisitions does not seem to do too much violence to the data. Firms undergoing a management buyout in response to hostile threats resemble other hostile targets quite closely. In fact, we can use our knowledge of hostile management buyouts to make inferences about hostile takeovers more generally.

4.6 Concluding Comments

The notion developed in this paper is that the motive for a takeover can have a large influence on its mood. Disciplinary takeovers are likely to be hostile, whereas synergistic takeovers are likely to be friendly.

Compared with the universe of Fortune 500 firms in 1980, firms experiencing hostile takeover bids between 1981 and 1985 were smaller, older, and more slowly growing, and they had lower Tobin's q's, more debt, and less investment of their income. The low q seems to be as much an industry-specific as a firm-specific effect. In addition, the hostile targets were less likely to be run by the founding family and had lower officer ownership than the average firm. A low q value, low market value, low growth and investment, and the absence of a founder were the corporate characteristics most likely to make the firm the target of a hostile bid.

Compared with the universe of Fortune 500 firms, the friendly targets were smaller and younger but had comparable Tobin's q values and growth rates. The friendly targets were more likely to be run by a member of the founding family and had higher officer ownership than the average firm. The decision to retire of a CEO with a large stake in the firm or with a relationship to the founder often precipitated a friendly acquisition. High officer ownership was the most important attribute predicting friendly acquisitions.

We conclude that differences between synergistic and disciplinary takeovers, captured in part by differences in their moods, should be recognized in empirical work. Specifically, studies that fail to distinguish adequately between acquisitions with different motives can be

guish adequately between acquisitions with different motives can be misleading. First, difficulties can arise when disciplinary and synergistic takeovers are analyzed together, presenting the researcher with a mix that may have few common characteristics. Our results suggest that, as a first cut, separating hostile and friendly takeovers can help address this problem. A second difficulty can occur when facts about one type of acquisition are used to make inferences about another. An example of a good study that could be misread is Brown and Medoff's paper in this volume. The authors found that in a large sample of small Michigan companies, employment and wages rose after they were acquired. Since most of their sample seems to consist of friendly acquisitions of very small firms with high management ownership, one cannot conclude from their work that employment and wages do not fall on average after a firm is acquired in a disciplinary takeover. To get at the latter question, one would have to look at hostile targets. The key implication of our study for future work, therefore, is that research results on friendly bids may have little to say about hostile bids, and vice versa.

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Comment Oliver S. D'Arcy Hart

Mørck, Shleifer, and Vishny's paper provides an empirical investigation of the characteristics of Fortune 500 firms that are the target of a takeover bid, with particular emphasis on how those that are subject to a friendly takeover differ from those that are subject to a hostile one. The main results are that, relative to the average Fortune 500 firm, the hostile targets are small, slow growing, in industries with a low Tobin's q, are unlikely to be run by a founding family member, and have low officer ownership. The friendly targets, again relative to the average Fortune 500 firm, are small, have average Tobin's q values and growth rates, are likely to be run by a founding family, and have high officer ownership. The authors argue that these results are by and large reasonable and supportive of the idea that the form or mood of a takeover is largely determined by its motive: In particular, friendly bids are likely to be associated with synergies, while unfriendly bids are likely to be disciplinary in nature.

I found this paper both interesting and instructive. It is one of the first to analyze the differences between friendly and hostile takeovers, and it provides a wealth of useful findings. These should be particularly helpful to researchers who hope to develop a theory of the determinants of different types of takeovers. It is worth noting that we do not now have such a theory. The models on takeovers in the literature focus either on hostile bids or on friendly mergers; they do not consider the choice between the two.[1] Of course, the absence of a theoretical framework makes a detailed interpretation of the authors' results difficult. My attempts in this direction should therefore be regarded as both

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1. For examples of the former see Blair, Gerard, and Golbe (1986), Grossman and Hart (1988), and Harris and Raviv (1988); and of the latter see Grossman and Hart (1986). I should mention a recent paper that does study the choice between friendly mergers and hostile bids: Berkovitch and Khanna (1986).

provisional and tentative. I should also note that my interpretation does not differ greatly from the authors' own.

A reasonable starting point for the authors' analysis is the idea that a hostile bid is costlier than a friendly one, and hence, *ceteris paribus,* an acquirer would prefer a friendly transaction. There are many reasons for this. To mention a few, hostile bids are likely to be costlier because the acquirer may have to overcome various defences and resistance tactics from incumbent management, such as poison pills and lawsuits; the acquirer may have to pay more for the firm than otherwise if management resists by a recapitalization plan or a restructuring or by encouraging a white knight to make a counter-offer (or by engaging in a management buyout); a hostile bid may alienate incumbent managers and may make it difficult for the acquiring firm to work with them after control has changed hands; and the acquirer may find it more difficult to freeze out minority shareholders in a (two-stage) merger without management's approval of the bid as "fair."

The fact that hostile bids are costlier has an interesting implication. In a world of symmetric information and costless bargaining between the acquirer and the target management, no hostile bids should ever take place! This is simply a consequence of the Coase theorem. The argument is clear for the case in which a hostile bid would succeed with certainty: Management, recognizing that the writing is on the wall, will be prepared to agree to a (cheaper) merger in return for a small sidepayment (for example, a golden parachute). But the argument also applies to the case in which the bid outcome is uncertain. In fact, it is a simple consequence of the Coasian idea that two parties will always negotiate to a point on the efficiency frontier. Here, since a hostile bid is more expensive than a friendly bid, an efficient outcome can only be a friendly merger together with some sidepayment, or no merger at all.

We can learn two lessons from this observation. First, to understand the occurrence of hostile bids, we must introduce imperfections into the bargaining process, such as asymmetric information or limits to managerial sidepayments.[2] Second, a bid can appear friendly without being so. If management agrees to a merger because the alternative is to be the subject of a hostile bid, it seems inappropriate to label this as a friendly transaction. Yet that is the way it will appear in the data. Mørck, Shleifer, and Vishny recognize this problem, but there is little they can do about it. It should be borne in mind, therefore, that a

2. These limits may be reasonable. If managers accept a large sidepayment in return for agreeing to a merger, their action might be regarded as a breach of fiduciary responsibility toward the shareholders.

number of the bids the authors have classified as friendly really belong in the hostile category.[3]

As I have noted, a theory that can explain both hostile bids and friendly mergers will have to incorporate such features as asymmetric information and sidepayment limits. Until such a theory is available, one can only guess at the conclusions it will yield. Some plausible predictions, however, are that: the higher the costs of a hostile bid, the less likely it is that such a bid will be attempted; to the extent that hostile bids can be used to coerce management, an increase in the cost of a hostile bid might also be expected to reduce the probability of a friendly bid; and if for some reason managers become less concerned about losing control (because, for instance, they want to retire), the probability of a friendly bid will rise both in absolute terms and relative to a hostile bid (there is no reason to incur the costs of a hostile bid if management will relinquish control voluntarily).

These ideas can help us understand some of the authors' results. Let us accept their point that the motive for a takeover is likely to be either synergistic or disciplinary. A synergistic takeover is more likely to rely on the cooperation of the incumbent managers than a disciplinary takeover. The former is being carried out to take advantage of some externality between the operations of the two firms rather than because the current management is doing a bad job. Replacing the incumbent managers is unlikely to yield significant benefits, and, to the extent that they are good at what they are doing, it may result in significant costs. In contrast, almost by its nature, a disciplinary takeover is unlikely to require the cooperation of the incumbents. A disciplinary takeover is carried out either because the managers are incompetent, in which case getting rid of them will yield a positive benefit, or because they are competent but are enjoying too many managerial perquisites. Although it is true that in the latter case keeping management on with reduced perks might be desirable, when the two cases are taken together, the probability that managerial cooperation is required is likely to be relatively low.

To the extent that a loss of managerial cooperation is one of the disadvantages of a hostile bid (see above), we may conclude that the costs of a hostile bid are higher in a synergistic takeover than in a disciplinary one. Hence, we would expect to see relatively many synergistic takeovers consummated as friendly transactions and relatively many disciplinary bids as hostile ones. The absolute number of friendly

3. This problem is lessened by the fact that the authors classify a bid as hostile if it is initially resisted by management, even if management eventually accepts the bid (or a revised version of it). It would be interesting, by the way, to know how many bids change mood in this way.

disciplinary bids may not be insignificant, however, to the extent that some apparently friendly transactions are actually a form of coercion (the iron fist in the velvet glove).

Of course, if we could distinguish between synergistic and disciplinary transactions in the data, we would have a good test of these ideas. Unfortunately, we cannot. What the authors have done, however, is to identify characteristics of targets that make them likely to fall into one of the two categories rather than the other. For example, slowly growing, low-q firms are arguably badly managed and therefore appropriate targets for a disciplinary takeover. We thus might expect relatively many bids for these firms to be hostile, which indeed they are. On the other hand, firms with high officer ownership may be better run because management operates under a good incentive scheme. As a result, to the extent that these firms are taken over, it is likely to be for synergistic reasons, and we might expect relatively many of these transactions to be friendly. To put it another way, the managers of firms with high officer ownership have a direct interest in the market value of their firm as well as in managerial perks. They are therefore likely to welcome a friendly bid at a premium even if it does involve their losing control. Since the effective cost of a friendly bid is lower for them, we would expect the probability of a friendly bid to rise both relatively (to a hostile bid) and absolutely. This is what is observed in the data.

There is another possible explanation for why officer ownership affects the nature of a takeover. If officer ownership is high, management may have sufficient voting strength to block the takeover. In this case a takeover can succeed only with management's permission, which again argues for a friendly transaction. As the authors note, however, this control idea does not explain why high officer ownership is associated with a higher *absolute* probability of a takeover. In contrast, the previous incentive idea is consistent with this finding.

Other of the authors' results can be explained similarly. For example, the presence of a founding family member is likely to make a hostile bid more difficult to the extent that founders have a stronger preference for control as well as a better ability to resist. It is therefore not surprising that the probability of a hostile bid is seen to fall under these conditions. Interestingly, although one might expect the probability of a friendly bid to fall, too, in the presence of a founding family, this turns out not to be the case.

Of all the authors' results one in particular qualifies as a major paradox. Mørck, Shleifer, and Vishny find that what makes the probability of a hostile bid high is not a firm's q but the q of the industry it is in. This find is quite surprising since one would naturally suppose that a good indicator of managerial competence (or slack)—and hence of

whether the firm is a likely candidate for a disciplinary takeover—is the firm's q relative to that of its industry. Note that I am not suggesting that the industrywide q should not affect the likelihood of a hostile bid. As the authors note, one can imagine general shocks that lead to slack in a whole industry; they give the example of the decline in oil prices, which should have led to a fall in exploration activity but did not. To the extent that this problem arises because the incumbent managers as a whole find it difficult to adapt to a new environment (to learn new tricks), disciplinary takeovers may be called for to replace them with new, more flexible managers (as Jensen 1986 has argued). Nevertheless, it is still very surprising that *only* industrywide q should be important. That is, one would expect idiosyncratic shocks hitting firms to have the similar implication that a disciplinary takeover may be called for to replace outmoded management. This apparently does not show up in the data, however. It would seem very desirable to examine the robustness of this conclusion in future empirical work.

Let me close with a few other suggestions for future work. First, to obtain further information on whether high officer ownership reduces the probability of a hostile tender offer for incentive reasons or for control reasons, researchers may want to study the small number of companies that have dual classes of shares. In these companies management's profit share and its voting strength can be significantly different from each other. In fact, DeAngelo and DeAngelo (1985) found that management typically has more than 50 percent of the votes but a significantly smaller fraction of the shares. It is possible, therefore, to distinguish between the incentive and the control effects among these firms.

Second, the idea that low-q firms are taken over for disciplinary purposes would receive further support if the firms that acquired them had high q values (showing that they were well run). It would be interesting to know if the data reflect this. Third, to the extent that a friendly merger occurs because cooperation from the incumbent management is important, we would expect the incumbent to continue to play a significant role in the new, merged company. Although obtaining evidence on this is likely to be difficult, it would be useful to know if there is even casual support for this idea.

Finally, as I noted above, the development of a formal theory of the choice between hostile and friendly bids would be very valuable. Those embarking on such a theory will find the results of this paper very instructive. The hope is that the relationship will be a two-way one: A formal theory will improve our understanding of the determinants of the different types of bids and sharpen our ideas about the regularities to look for in the data. Let us hope that it is not too long before such a theory is available.

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Comment Michael C. Jensen

The paper by Mørck, Shleifer, and Vishny contributes significantly to our knowledge of the takeover process. Analyzing all 454 publicly traded firms in the Fortune 500 in 1980, they find 82 firms, or 18.1 percent, were taken over in the years 1981–85 (including the 16 firms that went private in management buyouts). Of these 82 transactions 40 started out as hostile contests and 42 were friendly.

The authors analyze the differences between the ownership, asset, and performance characteristics of the targets of friendly bids and those of hostile bids to help identify the sources of the takeover gains. They conclude that combinations motivated by gains from the synergies resulting from combining two firms' assets and operations are more likely to occur with friendly mergers, and that takeovers motivated by the gains associated with disciplining poorly performing managers are more likely to be hostile. The hostile targets were poor performers, as measured by their Tobin's q ratios in 1980. The hostile targets had significantly lower q values than the friendly targets, were concentrated in low-q industries, and tended to have lower q values within their industries.

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The evidence indicates friendly targets are younger and faster growing than hostile targets and are indistinguishable from the sample as a whole on the performance dimension. The authors argue we would not expect the synergy gains from merging the target with another firm to be related to any general performance measures, and they therefore conclude that the average performance of the friendly targets means the gains from these mergers come from synergies. This seems to be a weak argument because the alternative hypotheses are not well specified.

The evidence does indicate, however, that the hostile targets tended to be older, more slowly growing firms, whose market values averaged only 52.4 percent of their replacement cost, whereas that of the friendly targets averaged 79.6 percent. The top two managers of the hostile targets owned considerably less stock of their firms than did the managers of the friendly targets, at 3.2 percent versus 14.5 percent, and they were much less likely to be a founder or members of a founding family. Forty percent of the friendly targets were managed by founders or members of the founding family, whereas 10 percent of the hostile targets and 24.4 percent of the sample as a whole were so managed. The intentional exit of the founding family or of a CEO with a very large stake in the firm seems to be a common cause of friendly acquisitions.

The authors conclude that the motive for friendly acquisitions is "more likely to be synergistic, whereas in hostile ones it is more likely to be disciplinary." Hostile targets were older, slow growing firms that were investing a smaller fraction of earnings than the average firm in the sample and whose capital was valued by the market at less than half its replacement cost—all of which is consistent with the theory of the agency costs of free cash, which predicts that managers will generally disinvest too slowly. I agree with the authors' conclusions, but there are a number of things the authors did not examine that would have considerably improved our understanding of the issues.

The authors did not consider takeover attempts that were unsuccessful, that is, attempts in which the target firm remained independent. Their conclusions apply only to friendly or hostile acquisition targets that were eventually taken over. The authors therefore missed an opportunity to tell us something about firms that were more likely to fail at a friendly deal or more likely to successfully fight off a hostile offer.

I also wish the authors had presented data on the total gains generated from the friendly takeovers versus those from the hostile takeovers. Historical evidence indicates the gains in mergers (which tend to be friendly) are lower than the gains in tender offers (which tend to be hostile). But we do not know what the gains to be explained are in these two different samples. Moreover, Grimm (1986) has shown there

were only 118 contested tender offers over the years 1981–85, and so the 32 hostile offers (eliminating the 8 hostile management buyouts, which the authors define as preceded by a takeover offer or a 13d filing with control intentions) represent only 27 percent of all the hostile offers during the period. It is interesting that such a high proportion of hostile offers occurs among the largest firms. Indeed, the proportion was undoubtedly higher than this because the authors did not report the number of unsuccessful offers for targets that remained independent.

The authors base their conclusions on the performance of hostile vs. friendly targets solely on the differences in q values in 1980 for the 20 friendly and 31 hostile targets for which they have data on q values. It would be useful to have measured performance by prior earnings and stock price changes as well, to see if these measures of performance add anything to our understanding of the differences in these firms. This calculation would also have increased the effective sample size of the targets for which performance data exist. It appears that the targeted firms had a disproportionately large frequency of cases for which no q values existed; 37.3 percent of the firms with no q values were targets, whereas 13.7 percent of the firms with q values were targets. There may be a systematic reason for this and for the fact that only 25 percent of the hostile firms did not have q values, whereas 47.6 percent of the friendly targets did.

Finally, it would also have been useful if the authors had examined in detail the changes that occurred after takeover in each of the firms, to see if there were systematic differences between the hostile and friendly deals. The authors conjecture that the changes that occur after hostile transactions—for example, liquidation of assets or employee dismissals— are less acceptable to the incumbent managers than those following friendly ones and that this explains their opposition to the takeover. The exact nature of the changes in assets, liabilities, management, employment, and operating strategies would give us a much better understanding of the sources of the gains. But this, of course, would be another paper.

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