

# Managerial Turnover and ESOP Performance

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*This paper investigates the impact of a firm's employee stock ownership plan (ESOP) on managerial turnover. Although earlier research suggests that the benefits to shareholders of using ESOPs are mixed at best, an estimated 6 percent of public corporations still use ESOPs. Managers of firms that use ESOPs typically wield more comparative control of their companies than do their peers in similar non-ESOP firms because they possess ESOP voting rights. This greater control may better insulate these managers from the negative effects of poor company performance. We examine whether the greater control exerted by managers of ESOP companies, compared to matching non-ESOP firms, affects managerial turnover. We find that ESOPs do not appear to lead to managerial entrenchment despite greater managerial control afforded by ESOPs. This is good news for ESOPs, indicating that one of their potential managerial misuses does not appear to have consistently occurred.*

## Introduction

In theory, employee stock ownership plans (ESOPs) tend to allow executives to exercise greater managerial control compared to managers of non-ESOP firms with the same sensitivity of compensation relative to company performance.<sup>1</sup> Therefore, managers of ESOP firms may be more able to entrench themselves within their companies and insulate themselves from turnover caused by poor long-term performance.

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<sup>1</sup> Executives typically have effective control over the voting rights of ESOP shares during much of the average vestment period of seven years. Managers may make decisions that provide a net benefit to employees despite decreasing the value of employee shareholdings and shareholder value in general, effectively buying employee votes using shareholder money.

A comparative analysis of firms using ESOPs versus a control sample of non-ESOP firms allows us to examine whether these relationships hold.

Share ownership should align the interests of the CEO and directors with that of shareholders. As the managers increase their share ownership, their ability to control the firm increases while their interests become more aligned with shareholders' interests.<sup>2</sup> As Morck, Shleifer, and Vishny (1988) argue, an optimal level of managerial ownership balances the agency problems of not enough ownership by managers (expropriation of shareholder wealth) with the agency problems of too much control by managers (entrenchment). We extend this basic insight by analyzing the interaction of ESOPs with managerial control.

While theory suggests that ESOPs should create shareholder value through a combination of employee motivation, corporate tax benefits, and increased managerial control, most evidence to date provides minimal support at best for these conduits of shareholder value. [See, for example, Gordon and Pound (1990) and Dhillon and Ramirez (1994).] Given such rather weak results, the important question remains whether these benefits are outweighed by the costs of potential misuse by managers of their greater voting power. Our broad goal is to address this basic question.

Concerning the potential benefit, we focus on an important measure of any corporate action: the impact on shareholder value, with greater stock price appreciation over time being beneficial for employees, shareholders, and managers. Moreover, we consider the impact of managerial voting power on managerial entrenchment (lack of turnover) as the potential cost of using an ESOP. Our assumption is that managerial entrenchment harms corporate value.

We measure shareholder value of ESOPs against comparable non-ESOP firms by calculating the companies' stock price appreciation. In this respect we follow a path different from Iqbal and Hamid (2000), who focus on operating performance to overall value of an ESOP. In contrast, we connect the level of ESOP ownership directly to shareholder value and use a control sample of non-ESOP firms as a baseline for performance.<sup>3</sup>

We initially examine whether lower managerial turnover is associated with ESOPs. Second, we analyze whether the enhanced voting power of executives in ESOP companies is related to managerial turnover while controlling for stock price performance.

Despite the potential for entrenchment, our evidence indicates that the turnover of managers in ESOP companies is equal to or greater than the turnover in the control firms. In the next section we examine the relevance of using ESOPs in

<sup>2</sup> We use the term *manager* to indicate both directors and the CEO.

<sup>3</sup> We develop the control sample using the Barber and Lyon (1997) methodology of matching samples to minimize any impact on relevant variables caused by potential systematic differences between the samples.

evaluating managerial entrenchment and follow that with a review of the relevant research. The following sections explain the methodology and provide results while concluding remarks are contained in the final section.

## Employee Stock Ownership Plans

The use of employee stock ownership plans (ESOPs) has grown dramatically over the past three decades, with a total of about \$500 billion in assets under management as of 2005. Compared to the two ESOP announcements during the past five years of our sample period, the numbers of ESOPs announced during earlier periods were much higher. Given the lack of recent announcements, the valid question arises whether ESOPs are still important in today's corporate culture. In order to provide answers to this question, we first searched Factiva and Lexis-Nexis to locate announcements of any recent ESOP initiations. This search was conducted to verify the lack of announcements during the past decade. For the six months beginning with mid-March 2003, we find no new announcements of ESOPs initiated by publicly traded U.S. companies.<sup>4</sup> Given the lack of announcements, we may wonder whether ESOPs still are being used by substantial numbers of companies before we engage in our analysis.

Relying on 2001 and 2002 data, we provide an answer to this question by randomly selecting 50 corporations and examining their 10Ks and proxy statements to ascertain the percentage of firms that use ESOPs.<sup>5</sup> The data suggest that eight of the 50 firms used ESOPs during that time period. If extrapolated to the population, the results suggest that about 5 percent to 6 percent of public firms use ESOPs during a given year. This percentage range is consistent with National Center for Employee Ownership estimates and indicates that ESOPs still enjoy broad acceptance among corporations. The low number of announcements may indicate that companies are renewing existing ESOPs as they mature, but are not generating renewal announcements.

## Previous Research

An ESOP involves shifting a proportion of the company's ownership from its shareholders to employees. If that decision is to maximize value for shareholders,

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<sup>4</sup> We find a total of 179 news items that mention ESOPs. Of these, two are new ESOPs (one in an Australian firm and the other in a private company), one is an ESOP termination, and ten concern stock option plans.

<sup>5</sup> Seventy other randomly chosen firms also were examined, but they did not have either 10Ks or proxy statements during 2001-2002. We arrive at 6 percent of public firms with ESOPs by assuming rather conservatively that none of these 70 use ESOPs (presuming about 10,000 publicly traded firms, approximately 600 such firms would have ESOPs). The NCEO estimates that about 5 percent of the approximate total of 11,500 ESOPs is in publicly held companies ([http://www.nceo.org/library/eo\\_stat.html](http://www.nceo.org/library/eo_stat.html)).

then the firm will need to perform better over time. This favorable performance will benefit all shareholders, including the employees. Therefore, the crucial justification for using an ESOP is its positive effect on company performance through more motivated employees, tax gains, or other benefits. If such benefits do not appear, it may be either because they do not exist or because some other cost associated with the ESOP, such as managerial entrenchment, cancels some or all benefits provided by the ESOP.

Rosen (1990) and Scholes and Wolfson (1990) survey the research on ESOPs during the 1980s when a relatively large number of public firms first launched ESOPs. They find that previous ESOP research has used two measures of productivity as indicators of corporate performance: (1) operating performance or production functions such as Cobb-Douglas to measure the unexplained increase in productivity which therefore is attributed to the ESOP and (2) the stock price reaction to an ESOP announcement using standard event study methodology.<sup>6</sup> The studies report mixed results concerning the impact of ESOPs on company performance.

The intuitive argument for introducing ESOPs is that they motivate employees. Aside from the direct motivational impact of adding employee compensation, ESOPs indirectly may motivate employees by giving them a stake in the financial health of the company, which would lead to reducing agency costs in the corporation and to greater efficiency. The empirical results to date suggest that the strength of the incentive is minimal and is subject to free-rider problems. Conte and Kruse (1991) report that each employee in an ESOP gains about 2.2 cents for an additional dollar of return, which is high compared to that for CEOs, but it may still not be enough to provide a strong alignment of employee and shareholder interests.<sup>7</sup>

There is, however, another reason for using ESOPs that could reduce or eliminate the observed benefits. Jensen and Meckling (1976) show that when managers do not own substantially all the firm, they can use their position to benefit themselves at the expense of other shareholders. That agency relation balances two effects: ownership and control. The greater the managerial control of the firm, the more the manager is able to entrench. The greater the managerial ownership, the fewer the net benefits of such entrenchment because the manager bears an increasing proportion of the agency costs.

With ESOPs, however, these two countervailing forces become disjointed. An ESOP increases the manager's control without substantially changing his or her ownership, allowing the manager greater ability to entrench without reducing the incentive to do so. Gordon and Pound (1990), Chang and Mayers (1992), and Chap-

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<sup>6</sup> Dunbar and Kumbhakar (1992), Kumbhakar and Dunbar (1993), and Iqbal and Hamid (2000) use variants of the first measure, while Gordon and Pound (1990), Park and Song (1995), and Beatty (1995) employ the second.

<sup>7</sup> Jensen and Murphy (1990) find that the median pay-performance sensitivity to a CEO is 0.25 cents for an additional dollar of corporate wealth.

linsky and Niehaus (1994) examine the possibility that entrenchment may explain the use of ESOPs. But their empirical results yield mixed evidence.

Given the weak or inconclusive previous results, we have chosen to analyze the impact of an ESOP on firms by using stock price changes as our measure of company performance. We believe that such a measure is superior because stock price performance better reflects shareholder evaluation of managerial decisions. Short-term stock price reaction, however, does not necessarily provide information about the timing of the efficiency. Jones and Kato (1995), for instance, suggest that productivity increases may be delayed two to three years after an ESOP is adopted. They analyze Japanese ESOP data and find that productivity decreases immediately around the ESOP introduction. The productivity measures do not become significantly positive until about three years after the ESOP is enacted. Their evidence suggests that examining the long-term benefits to ESOPs in the United States may be informative, as it may capture a parallel pattern in stock returns. Consequently, we analyze stock price appreciation over a five-year period.

Long-term stock price performance can be gauged over time and serve as a measure of productivity. Also, adjustments in market expectations likely will correlate with changes in realized performance; long-term stock prices can alleviate the problem that the time pattern of the impact is uncertain.<sup>8</sup> Our matched sample provides a baseline for comparing long-term stock price changes and managerial turnover. Significant differences between the ESOP group and the matched sample should indicate whether ESOP managers entrench successfully.

Existing literature on long-term stock returns is inconclusive. Although Park and Song (1995) and Pugh, Jahera, and Oswald (2005) find some support for long-term gains in companies that adopt ESOPs, Robinson (1997) argues that ESOP firms suffer from severe long-term underperformance. Using the bootstrap technique of Ikenberry, Lakonishok, and Vermaelen (1995), Robinson finds that the mean three-year buy-and-hold return for the ESOP sample is significantly negative.

Manager entrenchment does not necessarily imply poor future performance. The two may be associated if either the managers entrench when they expect future performance to be poor or if the managers exploit their entrenchment to shirk. Otherwise, it is the sensitivity of turnover to performance that changes. If ESOPs provide significant entrenchment benefits, then the executives of ESOP companies

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<sup>8</sup> Using the Barber and Lyon (1997) matched sample (using size and book-to-market) includes built-in hazards. They themselves have suggested improvements in their methodology—see Lyon, Barber, and Tsai (1999). Given the controversies over the CAPM, multifactor models, and the Barber/Lyon technique, it is not obvious that the choice of an asset pricing model will affect the results substantially. If that choice does bear on the results, one would still be left with the problem of whether it is the asset pricing model or the basic hypothesis that is in question.

should be less likely to lose their positions for a given level of performance than other managers are.

## Data and Methodology

Our sample consists of ESOP announcements by publicly traded firms between 1985 and 1995. To compile the sample, we searched for all ESOP-related announcements beginning in 1985. The final sample includes all announcements that satisfy the following criteria:

1. The corporation announcing an ESOP must not have one in place and cannot have had an ESOP for at least one year prior to the announcement date.
2. The announcement was cited in the Dow Jones News Retrieval or in Lexis-Nexis and there were no conflicting news announcements for the day preceding through the day following the ESOP announcement and no other ESOP announcements for one year after the original announcement.
3. For at least one year prior and five years following the ESOP date, the financial information for the firm is available from Compustat and managerial ownership information is available from proxy statements.
4. The ESOP firms can be matched to non-ESOP control companies with the requisite data.
5. Financial and regulated firms were removed.

A total of 280 ESOP announcements for 236 firms were identified during the sample period. Applying the above criteria, we reduced the final sample to 49 ESOPs and 49 matching firms.<sup>9</sup>

In attempting to detect entrenchment, our strategy consists of two broad steps: (1) examining potential differential turnover between companies that adopt ESOPs and the control firms; and (2) analyzing the relation between long-term performance and turnover for ESOP companies compared to non-ESOP firms to establish if managers are more entrenched after adopting ESOPs. These steps should clarify the relationship between ESOP adoption and managerial entrenchment as well as shareholder value.

For the first step, we measure whether the use of ESOPs is related to managerial turnover. We collect data manually from proxy statements about the identity of board members and management from the year when the ESOP was initiated to five years after the launch for both the ESOP companies and a sample of non-ESOP matched firms. As in Barber and Lyon (1997), the control sample is chosen to match the ESOP sample by selecting the company with the closest book-to-market (B/M) ratio from a set of firms within a 70 percent to 130 percent range of the sample company's

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<sup>9</sup> The 280 announcements were reduced the most when we identified current or former ESOP plans. While this number of firms yields a relatively small sample size, it is consistent with other studies of ESOP companies. Iqbal and Hamid (2000), for instance, rely on a sample size of 76 ESOP firms. See also the results section below.

size (SIZE), calculated as stock price/share multiplied by shares outstanding. This framework exploits the Fama and French (1992, 1998) results suggesting that size and book-to-market values are strongly associated with common stock returns.

The fundamental idea is that matching companies by size and book-to-market value is similar, if not equivalent, to matching firms by risk classes—as a measure of a company's risk that may be as accurate as beta.<sup>10</sup> The matched corporations also must not have ESOPs during the period of one year before to five years after the ESOP announcement of the company to which they were matched. We also control for these two matching variables in our regressions to provide a check for the underlying assumption that selecting the sample automatically controls for risk. In order to control for potential biases in the matching methodology, the size and book-to-market value variables are included in the regressions. Including them as control variables should further remove the effects of risk on the relation between performance and managerial turnover.

Turnover is measured separately for CEOs, inside directors, outside directors, and all directors. The inside directors include both employees of the company and directors with significant relationships to the firm either as family, former employees, or in some other capacity. Outside directors are those without such direct links, although they may have business dealings with the corporation. Total directors include both inside directors and outside directors. The turnover variables are taken as the average annual percentage of executives from a certain category losing their positions. Three- and five-year time horizons are used for the turnover. A three-year window successfully addresses the lag in ESOP effects identified by Jones and Kato (1995). We also chose a longer five-year window to extend the period for estimating turnover.

We examine turnover relative to long-term returns for both ESOP companies and non-ESOP control firms. If managerial turnover is related to performance, long-term stock returns should be a significant factor in explaining such turnover because those returns reflect the new information about the firms that arrives in the market over time. To determine performance, holding period yields (HPYs) are calculated as buy and hold returns to the firm over the long-term periods.<sup>11</sup> Holding period yields are not mathematically adjusted for risk; the book-to-market and size variables are a measure of company risk and, therefore, serve as control variables for riskiness. The analysis of these data should indicate whether ESOP firms tend to have more or less managerial turnover than non-ESOP firms with the same level of performance. The

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<sup>10</sup> Industry matching was not used due to lack of similarly-sized non-ESOP firms for many of the industries in the ESOP sample.

<sup>11</sup> We should note that difficulties associated with HPYs (or BHARs—buy and hold abnormal returns) remain, as discussed in Fama (1998), but these issues are primarily problematic when researchers claim to have discovered an anomaly. We are not making such a claim here.

results should provide insight into the effectiveness of ESOPs as an entrenching device for managers.

Two other control variables are included. Presumably the current proportion of firm shares controlled by managers will affect the degree to which they can successfully entrench. The greater their proportion of control, the easier it is for them to entrench. Therefore, a managerial control variable is included that indicates both the percentage of shares in the ESOP as well as the percentage of shares reported as profitably owned by the CEO and directors. Also, concentrated external shareholders can limit the effectiveness of any attempt to entrench. Because they possess significant blocks of stock, they can address managerial actions to reduce shareholder wealth more readily, either directly by communicating with the company or indirectly by selling to a potential bidder for the firm. We include an institutional ownership variable measuring the percentage of shares controlled by independent holders of 5 percent or more of company shares.

## Descriptive Statistics

Descriptive statistics for the 49 ESOPs announced from 1986 to 1995 are presented in Table 1, Panel A. The average size of the companies during the issue year approaches \$5 billion, with the median slightly below \$2 billion, indicating that the sample firms are in the mid-cap range. The average (median) book-to-market ratio (B/M) of 0.66 (0.59) shows that the ESOP firms tend to be growth firms, when following the interpretation of Smith and Watts (1992) that high MV/BV are proxies for growth (investment) opportunities. Corporate managers own on average 7.71 percent of the company's shares, although median ownership lies only at 2.14 percent. Institutional ownership averages 8.62 percent, but median institutional ownership approaches 0 percent. Finally, the ESOPs own 5.44 percent of the company's common shares on average during the initial year of the ESOP. The characteristics of the control firms are presented in Panel B. Tests of differences in medians suggest no significant variation between the descriptive statistics of the two samples. This lack of significant differences also applies to the long-term performance measures, so no evidence exists that ESOP companies do systematically better or worse than the control firms. The means of the holding period yields appear to be different, but one outlier is a major driver of that difference (a cumulative holding period return of 184.76 percent per year for Home Depot).

## ESOPs and Managerial Turnover

We collect information from the firm's proxy statement about the identity of the CEO and the board members from the preceding year to five years after the announcement of the ESOP, track changes in the executive positions, and then calculate the various rates of turnover.

**Table 1—Descriptive Statistics**

Descriptive statistics during the event year for the 49 ESOP and 49 control firms are provided below. The variables are defined as follows: Firm Size is the market capitalization (market value of equity), Total Assets is the book-value of the firm's assets, Net Sales is the annual revenue; the Book-to-Market Value is the book value of equity scaled by the market cap, Managerial Ownership is the percent of total common shares held by all managers and outside directors, ESOP is percent of total common shares held in the ESOP, and Institutional Ownership is the percent of total common shares held by independent outside blockholders (primarily institutions). The HPY is the average annual holding period yield for three and five years from the date of the ESOP announcement and is calculated by compounding the daily returns

| Variable                | Mean     | Median  | Std Dev  | MIN     | MAX       |
|-------------------------|----------|---------|----------|---------|-----------|
| Panel A: ESOP Firms     |          |         |          |         |           |
| Firm Size (\$M)         | \$4,733  | \$1,636 | \$7,130  | \$5     | \$24,053  |
| Total Assets (\$M)      | \$11,639 | \$3,052 | \$28,585 | \$16    | \$180,545 |
| Book-to-Market Value    | 0.66     | 0.59    | 0.51     | -1.37   | 1.79      |
| Managerial Ownership    | 7.71%    | 2.14%   | 0.11     | 0.00%   | 55.24%    |
| ESOP Ownership          | 5.44%    | 0.00%   | 0.82     | 0.00%   | 31.28%    |
| Institutional Ownership | 8.62%    | 0.20%   | 0.16     | 0.00%   | 92.59%    |
| 3 Year Holding Yield    | 16.60%   | 12.20%  | 0.38     | -31.35% | 201.05%   |
| 5 Year Holding Yield    | 18.08%   | 12.83%  | 0.55     | -17.47% | 184.76%   |
| Panel B: Control Firms  |          |         |          |         |           |
| Firm Size (\$M)         | \$4,570  | \$1,616 | \$6,854  | \$5     | \$28,099  |
| Total Assets (\$M)      | \$6,169  | \$2,112 | \$8,904  | \$6     | \$34,715  |
| Book-to-Market Value    | 0.63     | 0.60    | 0.45     | -0.94   | 1.79      |
| Managerial Ownership    | 12.03%   | 3.18%   | 0.17     | 0.03%   | 55.24%    |
| Institutional Ownership | 9.09%    | 0.00%   | 0.14     | 0.00%   | 57.79%    |
| 3 Year Holding Yield    | 12.05%   | 10.86%  | 0.21     | -27.81% | 71.12%    |
| 5 Year Holding Yield    | 12.34%   | 8.44%   | 0.16     | -15.00% | 51.79%    |

Table 2 presents descriptive statistics for the managerial turnover rates of both the ESOP companies and matching control firms. The chief executive officer cumulative average turnover rates for the ESOPs are not significantly different from their non-ESOP counterparts. A significant difference in cumulative board turnover exists, however, in the three- and five-year window. Over a three-year period, the inside directors lose their positions in an ESOP firm on average 5.02 percent more frequently per year. This difference is marginally significant. In addition, the overall turnover on corporate boards is marginally significant in the three-year window. In the five-year period the turnover of inside directors is significantly greater in ESOP companies, and board turnover is marginally higher as well. The differences in turnover rates displayed in Table 2 demonstrate that managers do not appear to successfully use ESOPs to entrench themselves. Rather, directors with a strong link to the firm are actually subject to greater turnover in ESOP corporations than in the control firms.

Although the higher turnover for directors in ESOP firms suggests no entrenchment, the result does not control for a variety of different factors, so it is possible that entrenchment still exists in a significant number of companies. As a result, we conduct regressions of managerial turnover over three- and five-year periods on two

ownership variables (institutional and managerial), along with several control variables (firm size, book-to-market ratio, an ESOP dummy, and a variable measuring the percent of shares held by the ESOP at initiation). The results of these regressions are not displayed, but they are consistent with the outcomes in Table 2, showing that managers cannot successfully entrench themselves using ESOPs.

**Table 2—Managerial Turnover for ESOP and Non-ESOP Firms**

The *annualized* percentage turnover (TO) rates in the board are reported below for the sample ESOP companies and for the control non-ESOP firms. The indicated years are for the event year (one-year) and for three and five years subsequent to the ESOP. Inside Turnover – one year is the percentage of inside board members (including the CEO) who left the board during the event year (calculated by the number who left the board during the event year divided by total number of insiders that year), Outside Turnover – one year is the percentage of outside board members who left the board during the event year (calculated by the number who left divided by total number of outsiders), Total Turnover – one year is the percentage of total board turnover (calculated by inside + outside who left divided by total number of board members). For the three-year and five-year measures, the percentages reported are annualized values as based upon the cumulative (Cum) percentage turnover. An \* (\*\*) (\*\*\*) indicates significance at the 10-percent (5-percent) [1-percent] level using the Wilcoxon test

| Variable                              | Mean    | Median | Std Dev | N  | MIN   | MAX     |
|---------------------------------------|---------|--------|---------|----|-------|---------|
| Panel A:                              |         |        |         |    |       |         |
| ESOP Turnover                         |         |        |         |    |       |         |
| CEO – 1 Year                          | 11.11%  | 0.00%  | 0.31    | 45 | 0.00% | 100.00% |
| Inside Director – One Year            | 7.93%   | 0.00%  | 0.16    | 45 | 0.00% | 50.00%  |
| Outside Director – 1 Year             | 5.66%   | 0.00%  | 0.09    | 45 | 0.00% | 33.33%  |
| Total Director – 1 Year               | 6.44%   | 0.00%  | 0.09    | 45 | 0.00% | 33.33%  |
| Cumulative CEO – 3 Years              | 13.64%  | 0.00%  | 0.17    | 44 | 0.00% | 66.67%  |
| Cumulative Inside Director – 3 Years  | 14.11%  | 10.02% | 0.16    | 44 | 0.00% | 61.11%  |
| Cumulative Outside Director – 3 Years | 11.33%  | 8.99%  | 0.11    | 44 | 0.00% | 66.67%  |
| Cumulative Total Director – 3 Years   | 11.45%  | 9.17%  | 0.10    | 44 | 0.00% | 58.33%  |
| Cumulative CEO – 5 Years              | 12.73%  | 20.00% | 0.14    | 43 | 0.00% | 40.00%  |
| Cumulative Inside Director – 5 Years  | 16.32%  | 13.33% | 0.14    | 43 | 0.00% | 60.00%  |
| Cumulative Outside Director – 5 Years | 12.70%  | 9.67%  | 0.14    | 43 | 0.00% | 72.00%  |
| Cumulative Total Director – 5 Years   | 12.07%  | 9.82%  | 0.09    | 43 | 0.00% | 59.40%  |
| Panel B                               |         |        |         |    |       |         |
| Non-ESOP Turnover                     |         |        |         |    |       |         |
| CEO – 1 yr                            | 8.70%   | 0.00%  | 0.28    | 46 | 0.00% | 100.00% |
| Inside Director – 1 yr                | 5.46%   | 0.00%  | 0.16    | 46 | 0.00% | 100.00% |
| Outside Director – 1 yr               | 6.68%   | 0.00%  | 0.11    | 46 | 0.00% | 50.00%  |
| Total Director – 1 yr                 | 5.61%   | 0.00%  | 0.08    | 46 | 0.00% | 33.33%  |
| Cumulative CEO – 3 yrs                | 13.77%  | 0.00%  | 0.18    | 46 | 0.00% | 66.67%  |
| Cumulative Inside Director – 3 yrs    | 9.09%*  | 5.56%  | 0.12    | 46 | 0.00% | 66.67%  |
| Cumulative Outside Director – 3 yrs   | 8.78%   | 8.33%  | 0.07    | 46 | 0.00% | 27.78%  |
| Cumulative Total Director – 3 yrs     | 8.65%*  | 9.76%  | 0.06    | 46 | 0.00% | 22.22%  |
| Cumulative CEO – 5 yrs                | 10.00%  | 0.00%  | 0.11    | 46 | 0.00% | 40.00%  |
| Cumulative Inside Director – 5 yrs    | 9.56%** | 8.50%  | 0.09    | 46 | 0.00% | 40.00%  |
| Cumulative Outside Director – 5 yrs   | 9.24%   | 9.72%  | 0.06    | 46 | 0.00% | 21.33%  |
| Cumulative Total Director – 5 yrs     | 9.26%*  | 9.67%  | 0.05    | 46 | 0.00% | 20.00%  |

## Long-Term Performance and Managerial Turnover

The evidence thus far indicates that corporations using ESOPs experience a turnover that equals or exceeds the turnover in the matching control firms, showing that ESOP managers cannot effectively entrench themselves. Although these results show that ESOPs are not systematically used for managerial entrenchment, the question remains whether turnover would have been even higher in the absence of an ESOP.

In order to approach this question, it is useful to examine the relation between turnover and long-term performance. For a given level of long-term performance, if managers were entrenched, they would tend to lose their positions less frequently than managers in other firms. Therefore, over time in ESOP companies the managerial turnover would correlate less with performance. Conversely, ESOPs may not have a significant effect on entrenchment, in which case the relation between turnover and performance will not significantly differ from that of non-ESOP firms. Long-term returns provide a contemporaneous measure of performance by which the managers would presumably be judged. Using it allows us to distinguish low turnover from entrenchment and low turnover from superior performance. Therefore, the analysis of managerial turnover and long-term performance can reveal the impact of ESOPs on such corporate dynamics.

In order to examine these effects, we perform regressions of three- and five-year managerial turnover on measures of performance, ownership, and control variables.<sup>12</sup> Generally, we conclude that no differential performance-turnover sensitivity exists between ESOP companies and the control firms.

We analyze these relationships by regressing cumulative long-term returns on the average managerial turnover rates (percentages). We include cross-terms between the ESOP dummy and the long-term returns to detect any interaction between performance and turnover. Moreover, we include control variables to ensure that any relationship that is discovered depends on the performance relation (and not the control variables). The control variables include the firm's size, book-to-marketratio, percentage of institutional ownership, and its percentage of managerial control.<sup>13</sup>

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<sup>12</sup> Short-term cumulative abnormal returns around the ESOP announcement also were used in regressions, but were not significant. Therefore, short-term performance is excluded as a control variable in Table 3.

<sup>13</sup> The cross terms (HPY\*ESOP) are included to allow for the possibility that only poorly performing companies adopt and maintain ESOPs. If the coefficient estimate for these interactive terms is statistically significant and negative, then such a suspicion would be at least minimally confirmed. Manager ownership plus ESOP size is used as an indicator for managerial control of the firm. The results were robust to the alternate measures of ESOP size and pre-ESOP ownership.

If entrenchment exists, we expect that the cross term of the ESOP dummy and the performance variables will be significant and positive. Such a result would suggest that if performance is low, then the turnover is lower in ESOP companies than in the control firms. The regression results are displayed in Table 3. The evidence in Panel A for the three-year cumulative turnover shows overall performance is negative but insignificant and the coefficients on the cross-term between ESOP and performance are also insignificant, suggesting no evidence of differences in entrenchment. The five-year results in Panel B provide similar results.<sup>14</sup> Here, the cumulative HPY is marginally significant in explaining turnover of inside directors, but no substantial difference exists between the estimator of that factor in ESOP companies and control firms. In sum, no significant evidence for entrenchment exists when we examine the long-term sensitivity of turnover to performance.<sup>15</sup>

### The ESOP Sample: Dropped Firms and Survivors

Of the 48 unique firms in the ESOP sample, eight (16.7 percent) no longer exist nine years after their ESOP announcements. (The firms move from the Industrial to the Research Annual Compustat files.)<sup>16</sup> If these firms went bankrupt and the surviving companies performed poorly over the long run, then it would appear that the introduction of ESOPs turned out to be bad news for the firms. Closer inspection, however, reveals different dynamics at work.

First, we will consider the eight firms that ceased to exist. Five of these companies either merged or were acquired by other corporations. One is no longer a company, and another apparently no longer files with the SEC. Only one of the eight firms went bankrupt. So, while merger and acquisition activity was high (10.4 percent) for the ESOPs, bankruptcies were low at only 1 of 48 (2.1 percent) in a nine-year period.

Nonetheless, we might argue that total mergers and acquisitions, bankruptcy, and other related activities (8 of 48 firms) are signs of less than competent management. Does the market agree? One method for testing the market's ex-ante response

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<sup>14</sup> One consideration of the specification is that the interpretation of the model suggests that turnover would be higher for ESOP firms that performed well. In order to control for this potential problem, we replicate the results using only ESOP observations whose HPYs were below that of the median control firm's HPY. This subsample would reflect only relatively poorly performing ESOP firms. The results are substantially the same.

<sup>15</sup> Survival analysis also is performed. The rate of losses between ESOP and non-ESOP firms is not significantly different, and the only factor that significantly affected the rate over a five-year period was the company's performance after three years. Because the results are consistent with the rest of the analysis, they are not reported.

<sup>16</sup> No corresponding measure is possible for the control firms as they were chosen only from firms that survived through the whole period and, therefore, remained on the Industrial Compustat file. This difference, if anything, should bias the results to suggest a significant difference between the two samples.

**Table 3—Regressions of Managerial Turnover Rates on HPYs and Control Variables**

Panel A: The regressions are estimated by OLS. The dependent variables are 3- and 5-year turnover rates of the CEOs, Inside Board Members, Outside Board Members, and All Board Members for both ESOP and control firms (measured in annualized percentages). The explanatory variables for each firm are defined as: Firm Size is the natural log of the market capitalization, the Book-to-Market ratio is the ratio of the market cap to the book value of equity, Institutional Ownership is the percent of total common shares held by independent outside blockholders (primarily institutions), Managerial Control is the percent of total common shares controlled by all managers and outside directors including the shares of the ESOP, the HPY is the holding period yield of the firm measured three or five years after the date of the ESOP announcement for either the company itself or for the ESOP firm to which it is matched, and is calculated by compounding the daily returns, and the HPY\*ESOP is the holding period yield for 3 or 5 years multiplied by a dummy variable taking the value of one if the firm is in the ESOP sample, and a zero if it is in the control sample. An \* (\*\*) (\*\*\*) indicates significance at the 10-percent (5-percent) [1-percent] level

| Variable                    | 3 Yr CEO<br>Turnover | 3 Yr Inside<br>Turnover | 3 Yr Outside<br>Turnover | 3 Yr Total<br>Turnover |
|-----------------------------|----------------------|-------------------------|--------------------------|------------------------|
| Intercept                   | 0.584<br>(1.83)*     | -0.080<br>(-0.92)       | 0.176<br>(3.15)***       | 0.093<br>(1.92)*       |
| Firm Size                   | 0.001<br>(0.02)      | 0.022<br>(2.39)**       | -0.009<br>(-1.56)        | -0.000<br>(-0.04)      |
| Book-to-Market              | 0.033<br>(0.26)      | 0.057<br>(1.67)*        | 0.005<br>(0.24)          | 0.007<br>(0.37)        |
| Institutional Ownership (%) | -0.005<br>(-0.98)    | -0.000<br>(-0.03)       | -0.000<br>(-0.26)        | 0.000<br>(0.10)        |
| Managerial Control (%)      | -0.002<br>(-0.42)    | 0.001<br>(0.83)         | 0.000<br>(0.08)          | 0.001<br>(1.06)        |
| 3 Yr Holding Period Yield   | -0.167<br>(-1.34)    | -0.044<br>(-1.31)       | -0.002<br>(-0.07)        | -0.010<br>(-0.55)      |
| 3 Yr HPY*ESOP Dummy         | 0.025<br>(0.19)      | 0.024<br>(0.64)         | -0.007<br>(-0.29)        | -0.001<br>(-0.04)      |
| F-statistic                 | 1.068                | 1.703                   | 0.589                    | 0.563                  |
| Adjusted R <sup>2</sup>     | 0.005                | 0.047                   | -0.030                   | -0.032                 |
| # Observations              | 88                   | 85                      | 85                       | 85                     |

to eventual changes by these firms is a t-test (assuming unequal variances). It gauges the difference in means between the abnormal returns (CARs) upon the announcement of the ESOPs of the eight firms that leave the sample against the 41 announcements by the surviving companies (one of the survivors issued two unique ESOP announcements). For all the time frames considered, no statistically significant differences can be detected between the cumulative abnormal returns (CARs) of the firms that leave the sample and the surviving companies. This finding shows that the market does not or cannot distinguish between the firms that will go out of business (i.e., presumably these firms initiate ESOPs because they are in trouble) and those that will survive.

Other relevant differences between the eight vanished firms and the surviving companies include their size and book-to-market ratio (B/M). The average size of the eight firms is \$983M with a median of only \$164M, compared to a mean size of \$5,465B (median of \$2,104B) for the 41 survivors. The B/M ratio for the vanished

**Table 3 (cont.)—Regressions of Managerial Turnover Rates on HPYs and Control Variables**

| Panel B                     |                      |                         |                          |                        |
|-----------------------------|----------------------|-------------------------|--------------------------|------------------------|
| Variable                    | 5 Yr CEO<br>Turnover | 5 Yr Inside<br>Turnover | 5 Yr Outside<br>Turnover | 5 Yr Total<br>Turnover |
| Intercept                   | 0.608<br>(1.66)*     | -0.037<br>(-0.51)       | 0.133<br>(2.55)**        | 0.082<br>(2.54)**      |
| Firm Size                   | 0.013<br>(0.35)      | 0.019<br>(2.48)**       | -0.004<br>(-0.66)        | 0.002<br>(0.66)        |
| Book-to-Market              | 0.174<br>(1.19)      | 0.070<br>(2.44)**       | 0.016<br>(0.74)          | 0.018<br>(0.65)        |
| Institutional Ownership (%) | -0.006<br>(-0.98)    | 0.000<br>(0.10)         | 0.000<br>(0.30)          | 0.000<br>(0.29)        |
| Managerial Control (%)      | -0.004<br>(-0.77)    | -0.000<br>(-0.16)       | -0.001<br>(-0.68)        | 0.000<br>(0.63)        |
| 5 Yr Holding Period Yield   | -0.141<br>(-1.34)    | -0.033<br>(-1.69)*      | -0.007<br>(-0.49)        | -0.012<br>(-0.58)      |
| 5 Yr HPY*ESOP Dummy         | 0.039<br>(0.36)      | 0.025<br>(1.21)         | 0.002<br>(0.14)          | 0.007<br>(0.29)        |
| F-statistic                 | 1.402                | 2.393**                 | 0.418                    | 0.365                  |
| Adjusted R <sup>2</sup>     | 0.028                | 0.091                   | -0.044                   | -0.048                 |
| # Observations              | 84                   | 83                      | 83                       | 83                     |

companies is 0.97 compared to an average of 0.60 for the surviving corporations. In other words, the companies that eventually drop out of the sample are dramatically smaller and have a greater B/M ratio—a measure often understood as indicating fewer growth opportunities. In addition, the vanished firms increased in size, on average, from event year -1 to the announcement year 7.9 percent while the other firms grew 17 percent on average.

A related question concerns the creation or destruction of company value by the firms remaining in the sample over the long term. In the event year, the sum of the sizes (market cap) for all 49 sample firms was \$232B (\$230B for 43 firms that survive for five years). *Five years later* (in contrast to the nine years above), after six companies had dropped out of the sample, the remaining 43 firms held a total value (size) of \$362B, although Home Depot alone accounted for 12 percent of that growth. For the 43 continuing firms, this represents a total five-year holding period gain of 57.4 percent, annualized at 9.5 percent. This initial evidence stands in stark contrast to Robinson's (1997) claim that firms announcing ESOPs suffer from a severe long-term underperformance.

## Summary and Conclusion

This paper examines CEO and director turnover following the launch of an ESOP and relates it to the long-term performance of companies. It finds little evidence that ESOPs can be used to provide significant entrenchment benefits. Rather, the evidence suggests that turnover in ESOP companies is either the same as or greater than that of non-ESOP firms. The evidence confirms that executives of ESOP

corporations do not appear to use ESOPs as entrenchment devices. We also relate turnover to performance to analyze potential differences in the sensitivity of the two variables (between ESOP companies and control firms). An examination of long-term performance suggests that the relation between turnover and company performance does not significantly differ between ESOP companies and control firms. This result also suggests that managers do not successfully entrench themselves with the help of ESOPs.

One factor that cannot be accounted for is the potential that the sensitivity of turnover to performance could have been even higher without an ESOP. The evidence that turnover is greater with ESOPs present may suggest that firms self-select ESOPs to reduce a particularly high turnover-performance sensitivity down to a more normal level. If this were true, entrenchment might exist that remains undetected by our methodology. Measuring this factor would be problematic. By controlling for risk when applying company size and the book-to-market ratio, we should have eliminated the greatest potential source of differential turnover sensitivity. Furthermore, if managers seem more at risk of turnover once we control for performance, contracting to reduce their performance-turnover sensitivity to the levels of other companies might be optimal. Clustering of ESOPs within an industry would be consistent with this explanation.

Despite the shift in the control structure of the firms, we discover no evidence of managerial entrenchment in ESOP companies. If managers were entrenching, then an ESOP announcement would be associated with lower turnover. Further, if managers were entrenching, larger ESOPs would greatly help them to do so and, therefore, potentially lead to even lower turnover. Finally, if managers were entrenching, the companies would tend to perform poorly over time, and managerial turnover would be lower than that of comparable firms. These patterns do not occur.

## References

1. Barber, B.M., and J.D. Lyon, "Detecting Long-Run Abnormal Stock Returns: The Empirical Power and Specification of Test Statistics," *Journal of Financial Economics* (March 1997), pp. 341-372.
2. Beatty, A., "The Cash Flow and Informational Effects of Employee Stock Ownership Plans," *Journal of Financial Economics* (June 1995), pp. 211-40.
3. Buxton, D.C., and R.J. Gilbert, "A Four-Letter Word? Liquidity and Perpetuation Pros and Cons," *Journal of Financial Service Professionals* (November 2004), pp. 84-93.
4. Chang, S., "Employee Stock Ownership Plans and Shareholder Wealth: An Empirical Investigation," *Financial Management* (Spring 1990), pp. 48-58.
5. Chang, S., and D. Mayers, "Managerial Vote Ownership and Shareholder Wealth: Evidence From Employee Stock Ownership Plans," *Journal of Financial Economics* (August 1992), pp. 103-131.
6. Chaplinsky S., and G. Niehaus, "The Role of ESOPs in Takeover Contests," *Journal of Finance* (September 1994), pp. 1451-1470.
7. Conte, M.A., and D. Kruse, "ESOPs and Profit-Sharing Plans: Do They Link Employee Pay to Company Performance?" *Financial Management* (Winter 1991), pp. 91-100.

8. Corrado, C.J., "A Nonparametric Test for Abnormal Security-Price Performance in Event Studies," *Journal of Financial Economics* (August 1989), pp. 385-396.
9. Cowan, A.R., *Eventus Software*, V. 7, Cowan Research LC, Ames, Iowa (2001).
10. Dhillon, U.S., and G.G. Ramirez, "Employer Stock Ownership and Corporate Control: An Empirical Study," *Journal of Banking and Finance* (January 1994), pp. 9-25.
11. Dunbar, A.E., and S.C. Kumbhakar, "An Empirical Investigation of the Association of Productivity with Employee Stock Ownership Plans," *Journal of American Taxation Association* (Spring 1992), pp. 22-39.
12. Fama, E., and K. French, "The Cross-Section of Expected Stock Returns," *Journal of Finance* (June 1992), pp. 427-465.
13. Fama, E.F., "Market Efficiency, Long-Term Returns, and Behavioral Finance," *Journal of Finance Economics* (September 1998), pp. 283-306.
14. Gordon, L.A., and J. Pound, "ESOPs and Corporate Control," *Journal of Financial Economics* (October 1990), pp. 525-555.
15. Ikenberry, D., J. Lakonishok, and T. Vermaelen, "Market Underreaction to Open Market Share Repurchases," *Journal of Financial Economics* (October/November 1995), pp. 181-209.
16. Iqbal, Z., and S.A. Hamid, "Stock Price and Operating Performance of ESOP Firms: A Time-Series Analysis," *Quarterly Journal of Business and Economics* (Summer 2000), pp. 25-43.
17. Jensen, M., and W. Meckling, "Theory of the Firm, Managerial Behavior, Agency Costs and Ownership Structure," *Journal of Financial Economics* (1976), pp. 305-360.
18. Jensen, M., and K.J. Murphy, "Performance Pay and Top-Management Incentives," *Journal of Political Economy* (April 1990), pp. 225-64.
19. Jones, D.C., and T. Kato, "The Productivity Effects of Employee Stock-Ownership Plans and Bonuses: Evidence from Japanese Panel Data," *The American Economic Review* (June 1995), pp. 391-414.
20. Kumbhakar, S.C., and A.E. Dunbar, "The Elusive ESOP-Productivity Link," *Journal of Public Economics* (September 1993), pp. 273-283.
21. Lyon, J.D., B.M. Barber, and C.L. Tsai, "Improved Methods for Tests of Long-Run Abnormal Stock Returns," *Journal of Finance* (February 1999), pp. 165-201.
22. Mikkelsen, W.H., and M.M. Partch, "Withdrawn Security Offerings," *Journal of Financial and Quantitative Analysis* (June 1988), pp. 119-134.
23. Morck, R., A. Shleifer, and R. Vishny, "Management Ownership and Market Valuation: An Empirical Analysis," *Journal of Financial Economics* (January/March 1988), pp. 293-315.
24. NCEO, "A Statistical Profile of Employee Ownership," National Center for Employee Ownership (2001), [www.nceo.org](http://www.nceo.org).
25. Park, S., and M.H. Song, "Employee Stock Ownership Plans, Firm Performance, and Monitoring by Outside Blockholders," *Financial Management* (Winter 1995), pp. 52-65.
26. Pugh, W.N., J.S. Jahera Jr., and S.L. Oswald, "ESOP Adoption and Corporate Performance: Does Motive Really Matter?" *Journal of Business and Economic Studies* (Spring 2005), pp. 76-95.
27. Robinson, L.O., "The Underperformance of Public Firms with Employee Stock Ownership Plans," working paper (1997), Milken Institute, Santa Monica, CA.
28. Rosen, C., "The Record of Employee Ownership," *Financial Management* (Spring 1990), pp. 39-47.
29. Smith C.W., and R.L. Watts, "The Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies" *Journal of Financial Economics* (December 1992), pp. 263-292.

30. Scholes, M.S., and M.A. Wolfson, "Employee Stock Ownership Plans and Corporate Restructuring: Myths and Realities," *Financial Management* (Spring 1990), pp. 12-28.

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