Employee Rewards And The Likelihood
Of A Successful Initial Public Offering

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ABSTRACT

In this paper, we survey employees about human resources practices regarding employee stock ownership plans (ESOPs) and profit sharing plans of firms that have registered for an IPO offering. We find that firms that had ESOPs in place prior to the registration of an IPO have a greater likelihood of eventually launching an IPO than those registered firms who do not. Our results broaden the existing finance literature of IPO analysis as we survey registered companies prior to their attempted IPO launch to determine whether their employee-based compensation structure impacts the likelihood of a successful IPO launch.

INTRODUCTION

A plethora of academic studies in the financial literature exist which attempt to explain a variety of reasons why a privately-held firm would make the decision to launch an initial public offering (IPO, see Ritter and Welch, 2002, for a literature survey). Brau and Fawcett (2006) found strong support for theories arguing that the purposes for IPOs are to create shares for acquisitions (Brau et al, 2003) and to establish a market price and value for the firm (Zingales, 1995 and Mello and Parsons, 2000). In another study, Brau, Ryan, and DeGraw (2006) found growth and liquidity (see also Brau, Li, and Shi, 2005) as the primary reasons for IPOs. Both of these recent studies were conducted on an ex-post basis, and based on perceptions of CFOs.

Another equally interesting issue is the determination of factors that lead to a completed IPO for firms that have registered for such an offering (successful registration does not obligate the company to carry out the public offering of stock). Companies that are currently privately-held that are considering an IPO issue should be keenly interested in factors that will ultimately increase their chances of a successful IPO. Welbourne and Andrews (1996), in a survey of CEOs of firms initiating IPOs, asked if there was anything in the way employees were handled that helped the IPO process. The most frequent response was that employee stock ownership plans (ESOPs) “helped a lot” at the time of the IPO.

In this paper, we explore whether employee-based compensation rewards such as profit sharing and ESOPs have an impact on the likelihood of a company successfully launching an IPO (i.e., the eventual issuing of publicly-traded stock). Managers who are considering initiating an IPO will benefit from knowing what factors are important to consider in increasing the likelihood of successfully launching an IPO. Investors tracking companies who have registered, but not yet executed, an IPO will also benefit from knowledge of whether employee-based rewards have an impact on the subsequent likelihood of a company successfully executing an IPO.

One reason that ESOPs may hold such an important role in the post-IPO period is their ability to reduce agency problems between shareholders and managers, as effectively the managers are part of the shareholder group. Roosenboom and van der Goot (2006) argued that ESOPs reduce the negative effects of agency problems associated with a firm going public. He found that retained ownership decreased significantly from the pre- to post-IPO period and that ESOP opportunities to all employees reduce the agency problems associated with such changes in the ownership structure.
In this paper, we broaden the scope of IPO analysis, surveying registered companies prior to their IPO attempted launch to determine whether their employee-based compensation structure impacts the likelihood of a successful IPO launch. Our paper adds to the literature in this area, because it is the only one that uses data prior to the firms going public.

We hypothesize that there will be a relationship associated with ESOPs and the successful launch of an IPO. ESOPs help to align management and employee goals for a successful IPO. We also hypothesize a relationship between employee profit sharing plans and the successful launch of an IPO. In contrast to ESOPs, since employee profit sharing plans are more immediate and tangible in nature, employees are less likely to have aligned goals with management in terms of pursuing a successfully-launched IPO. Motivations for our hypotheses will be developed in the Literature Review and Motivation and Hypotheses sections.

We find that firms that had ESOPs in place prior to the registration of an IPO have a greater likelihood of eventually launching an IPO than those registered firms who do not. Conversely, we do not find a relationship between firms that had profit sharing plans in place prior the registration of an IPO and the likelihood of launching an IPO. We explore existing literature in the next section, which motivates our hypotheses that follow, followed by a discussion of our sample and methodology, results, and conclusions.

REVIEW OF LITERATURE

In this section, we will review both the financial and human resources motivations for IPOs as well as ex-post empirical literature related to predictors of ultimate success for registered IPOs. These separate, but interdependent, strands of literature provide the necessary background to motivate our hypothesis in Section III.

Financial Motivations For IPOs

Brau and Fawcett (2006) surveyed CFOs to determine, among other things, motivations for their firms going public. Their sample consisted of 212 firms that had not tried a public offering, 87 firms that successfully completed an offering, and 37 firms that withdrew their offering. Consistent with theories offered by Brau et al. (2003), they discovered that the creation of public shares for acquisitions and the establishment of market price or value of the firm as the two most important reasons for going public. Brau and Fawcett found moderate support for IPO creation as a way for existing owners to cash-out (Black and Gilson, 1998), to increase publicity and reputation of a company (Maksimovic and Pichler, 2001; and Bradley, Jordan, and Ritter, 2003), and to disperse their ownership (Chemmanur and Fulghieri, 1999). Conversely, they found little support for theories related to the objectives of minimizing their cost of capital (Scott, 1976 and Modigliani and Miller, 1963), of establishing a pecking order of alternative financing sources (Myers and Majluf, 1984 and Myers, 1984), and of creating an analyst following (Bradley et al, 2003). Brau and Fawcett found moderate support that CFOs are concerned about the effect an IPO will have on ownership dilution. This concern would be more relevant with firms that do not have ESOPs in place prior to an IPO. Reinforcing the idea that going public is in the best long-term interests of employees – and thus, employees are motivated to see the IPO take place, Brau, Ryan, and DeGraw (2006) found an IPO favors ownership retention. In addition, Welbourne and Andrews (1996) found that ESOPs and employee profit sharing increase rate of survival for IPO firms.

Agency problems can exist between inside and outside shareholders in the process of the issuance of an IPO (Beatty and Zajac, 1994; Engel et. al, 2002; Field and Karpoff, 2002; Baker and Gompers, 2003). Jensen and Meckling (1976) stated that insiders, which would include management and employees, may shirk their responsibilities after an IPO launch in the absence of an ownership stake in the firm. Roosenbloom and van der Goot (2006) argued that ESOPs can be used to reduce the negative effect of conflicts of interests associated with a firm’s going public. The presence of an ESOP reduces the possibility of agency problems leading to a change in ownership upon an IPO.

Aisenbrey (1992) proposed that employees with stock ownership plans allow them to identify with the public market and build equity interests at the time of an IPO. Thus, such plans would motivate and reward
employees for improved long-term performance. As a result, investors should hold favorable views toward employee ownership. ESOPs allow employees to bear a substantial part of the wealth consequences of their actions after an IPO, but these consequences are important as well leading up to an IPO. As Ray Link, CFO, for Sawtek, whose ESOP was the dominant shareholder at the time of its IPO stated, “the employees are kings” as the employees have a huge vested interest in the company. In other words, when an employee has ownership, he looks at things differently (Gray, 2000). Alternatively employees of profit sharing plans have less incentive after the IPO because their efforts are diluted in the sense that they are forced to now share profits with more individuals, who they may not feel do not deserve to participate in the success of the firm. Thus, profit sharing is an indication of potential agency cost between IPO investors and employees. Howton (1996) looked at the effect of corporate governance in the post-IPO environment as a means of ascertaining survival rates, but did not consider stock ownership plans or profit sharing plans. Table 1 summarizes the major findings of studies focusing on the topic of what motivates an IPO.

**Human Resource Motivations For IPOS**

During the past 30 years, several organizational experts have expressed the opinion that rewards, which would include a range of reinforcement including bonuses, raises, recognition, etc., do not motivate people, but rather that they can de-motivate. Some have described rewards as a means of controlling the behavior of others and still others have preached that rewards reduce peoples’ task interest and creativity (Eisenberger and Cameron, 1996). Kohn (1993) wrote about the detrimental effects of rewards in both education and business. Particularly targeted by Kohn and others in the area of business management were financial incentives. Pfeffer (1994) also suggested that financial incentives do not motivate and can even hurt the performance and productivity of employees.

However, Eisenberger and Cameron (1996) examined 25 years of research on intrinsic task interest (e.g., an employee’s interest in their work) and creativity (e.g., the use of creativity on the job) and found that a negative effect of rewards occurs only under certain conditions. Their findings suggest that when rewards are given regardless of performance levels, they are detrimental because the individual can begin to feel helpless – unable to control the outcome of a situation. For example, when raises are based strictly on the cost of living, employees do not feel that what they do and how hard they work makes any difference. When the reward was tied to quality performance, it did not have a negative effect on an individual’s interest in the task. In other words, when rewards are based strictly on an individual’s or a team’s job performance, the effect of the reward was positive or led to enhanced future job performance. Eisenberger and Cameron (1996) found that it is essential to understand how classical conditioning actually works in order to understand the effects of rewards. For example, managers who design reward systems in many organizations have never studied psychology and do not understand how rewards actually affect employee work behavior. Many managers reward one behavior while seeking a different type of behavior while controlling the behavior of others and giving reinforcement to the wrong employees. Their findings suggest that when managers understand the theory behind rewards, it is relatively easy to use them to increase performance. In addition, their analysis of the accumulated research suggests that interest in work tasks appears to stay the same after a reward has been given once, even if it isn’t given again. Finally, rewards given for creativity in one situation can increase creativity in others even when no reward is given in the second. For example, if a work team is rewarded for a cost-cutting innovation, they are more likely to be innovative when working on a new product. They conclude that rewards have a positive effect when they are given with a clear and specific link to performance.

Unfortunately, the anti-reward message appears to have taken root in organizations as evidenced by the findings of a recent study. Rynes, Gerhart, and Minette (2004) found that the majority of human resources professionals believe that employees are likely to over-report the importance of pay when asked on employee surveys. In other words, the people who determine and administer compensation practices for organizations do not believe that pay matters even though their employees say it does. The authors suggest that this belief is problematic because, in fact, employees may actually understate the importance of money in order to make themselves appear more noble (i.e., “Interesting work is reward enough.”) and less self-serving (i.e., few people would want to admit that “My goal is to earn a raise.”). These socially desirable responses (in other words, employees often tell managers what they think the managers want to hear) to surveys can be misinterpreted, according to the research. In
other words, Rynes, et al. (2004) suggest that companies which do not provide financial incentives to employees are not going to get the level of performance that those organizations that do use them can expect.

Numerous meta-analyses suggest that financial incentives influence individual productivity (Guzzo, Jette, & Katzell, 1985; Jediesch, 1994; Locke, Feren, McCaleb, Shaw, & Denny, 1980; Stajkovic & Luthans, 1997) and performance (Jenkins, Mitra, Gupta, & Shaw, 1998). Rynes et al. (2004) concluded that pay does little to motivate performance when all employees receive similar pay increases regardless of individual or firm performance. This is consistent with the findings of Eisenberger and Cameron (1996).

In terms of group incentives, like profit sharing and ESOPs, Rynes et al. (2004) found that these pay plans must also be variable in order to motivate, and that there must be differences between employers. If every company provides the same financial incentive, regardless of the quality of the performance (profitability) of the organization, the reward can be detrimental, just the same as if every employee receives the same financial incentive, regardless of the quality of their individual work. One very important finding of the research is that the best (i.e., best in terms of knowledge, skills, abilities, and performance) employees value strong pay-to-performance relationships. In other words, companies that use company-based pay, both individual and group, will attract the top performers.

Two popular employee-based compensation rewards are ESOPs and profit-sharing plans. These are often used by new and developing companies as a way to hire well-qualified employees when competitive wages may not be affordable. As was seen during the dot.com boom of the 90’s, many creative high-performing people will work for these types of rewards and many of those became millionaires as a result.

Pfeffer (1994) identified 13 management practices found in the five companies that provided the greatest return to stockholders from 1972-1992. Three of these practices are high wages, incentive pay, and employee ownership. Profit-sharing and ESOPs are consistent with both incentive pay and employee ownership practices. Both provide incentive pay related to company performance and both provide a sense of ownership to employees. Both reduce conflict between capital and labor. In essence, employees are owners and employees. Other research also suggests that employee ownership can play an important role in organizational success (Rosen, Klein, & Young, 1986).

Predictors Of Success For IPOs

Delery and Doty (1996) found that profit-sharing was significantly correlated to both ROA and ROE. Welbourne and Andrews (1996) examined employee-based compensation rewards in IPOs as a predictor of perceived market potential, Tobin’s Q and Survival (all IPOs still in business at the end of 1993) and found that survival was positively related to employee-based compensation rewards. However, they also found that compensation plans linking company success to employee wages had an important and negative relationship with survival. The authors suggested that investors may not like the idea of giving company profits to employees.

Welbourne and Andrews surveyed CEOs of successful IPOs to rank the degree of importance to the post-IPO success across six categories. These CEOs ranked having a top management team as the most important reason for success and organizational-based rewards as the least important reason. However, a follow-up telephone survey of CEOs of participating companies found that these same executives believed that their success was related to ESOPs and profit sharing plans. They received responses such as the “ESOP at time of offering, so employees were able to participate in success offering; this was a strong help in boosting morale,” ESOP and broad-based profit sharing from top to bottom,” and “ESOP helped to create a feeling that IPO was a culmination of all employees’ efforts – employees were motivated to join a common cause for the common good.” (p. 912). Welbourne and Andrews concluded that level of organizational-based employee rewards create a greater opportunity for survival following an IPO.

One reason that ESOPs hold such important role in the post-IPO period is related to the reduction of agency problems. Roosenboom and van der Goot (2006) argued that ESOPs reduce the negative effects of agency problems associated with a firm going public. He found that retained ownership decreased significantly from the pre-to post-
IPO period and that ESOPs to all employees reduced the agency problems associated with such changes in the ownership structure.

It should be noted that other research does not support the notion of post-IPO success. Loughran and Ritter (1995) found that in the years immediately following an IPO, newly-public firms do not perform well when compared to benchmark firms. In follow-up research, Ritter (http://bear.cba.ufl.edu/ritter/IPOs2004-5years.pdf), found that because of the real compliance costs associated with being public, going public is actually be detrimental for the owners of the company – at least from the perspective of adding value to the company. Block (2004) pointed out evidence of a trend towards public companies reversing course and going private. He identified the high real costs of complying with SEC requirements in the post Sarbanes-Oxley world as the main impetus for this.

Motivation And Hypotheses

Our research should help differentiate between these two types of organization-based incentives on corporate performance. In addition, existing research has focused on executive opinions on the analysis of post-IPO success. An equally interesting question is whether employee-based compensation rewards such as profit sharing and ESOPs have any impact on the likelihood of an a company successfully launching an IPO in the first place. Companies that are currently privately-held who are considering an IPO issue should be keenly interested in factors that will ultimately increase their chances of a successful IPO. Likewise, investors tracking companies who have registered, but not yet executed, an IPO will benefit from knowledge of whether organizational-based rewards have an impact on the subsequent likelihood of a company successfully executing an IPO.

If we can discern such relationships, we have better predictive ability about the success of an IPO, instead of analyzing ex-post whether views held by corporate CFOs explain differences in whether the actual event occurred. For this, we broaden the scope of IPO analysis, surveying registered companies prior to their IPO attempted launch on their employee-based compensation structure.

Based on previous research, we hypothesize that there will be relationship associated with ESOPs and the successful launch of an initial public offering. Employees who participate in an ESOP of a company that is private are getting shares of stock that have no secondary market. Should they ever want to cash out, they have very few options (perhaps only one – sell the shares back to the company). From that angle, employees participating in an ESOP of a private company would benefit from the secondary market that an IPO would create. If successfully launched, the liquidity of their ESOP assets would rise dramatically. Also, they would have the added benefit of knowing and being able to sell their ESOP assets at the market price, which may not be the case pre-IPO. Thus, our first hypothesis is the following:

\[ H_0: \] There is no relationship between ESOPs and a successful IPO launching.
\[ H_1: \] There is a relationship between ESOPs and a successful IPO launching

We also hypothesize a relationship between employee profit sharing plans and the successful launch of an initial public offering. Employees who participate in a profit sharing plan receive no such benefit from an IPO. If the liquidity and market-price information provided by a secondary market are the primary benefits of an IPO, this does nothing for employees who participate in profit sharing. Block (2004) helped explain why employees may prefer to not see their company go public: higher costs from complying with SEC regulations means lower profits, ceteris paribus, which means less profit sharing for the employees. Thus:

\[ H_0: \] There is no relationship between profit sharing plans and a successful IPO launching.
\[ H_1: \] There is a relationship between profit sharing plans and a successful IPO launching.

DATA AND METHODOLOGY

The initial survey instrument was based on a review of the extensive human resource literature. The final survey consisted of 34 questions related to human resource practices relevant to corporate performance including
A survey database between 2001 and 2003. The survey was developed by the authors based on theoretical models and empirical results of academic studies in the human resources literature. The original survey consisted of 34 questions and is available upon request. Only those firms responding to our survey, 52 of these companies did not issue an IPO as of December 31, 2005, while 33 of the companies successfully issued IPOs.

Summary statistics for the sample is shown in Table 2. The firms responding to our survey are, on average, about one-third the size of the firms that responded to the survey in Brau and Fawcett (2006). The average size of our sample is $119.1831M. The average asset base of responding companies are $144.6052M, with average long-term debt of $46.6355M. The mean market value of our sample firm was $893.7148M. Finally, our sample firms had an average of 8.9146M outstanding shares of stock. The largest industry representation, based on one-digit SIC codes, is services, which compromises one-third of our sample. Manufacturing firms are the second largest component of our sample at 15 percent.

We employ a number of statistical measures in order to test our hypotheses. A chi-square test is used to investigate the relationship between two categorical (binary) variables as is the case with our research (the first variable is the presence of either an ESOP or a profit sharing and the second variable is whether the registered IPO was successfully launched). Additionally, we generate a likelihood ratio chi-square as an alternative procedure to test the hypothesis of no association of columns and rows in categorical tabular data.

In order to assess the degree of association between either the presence of an ESOP or profit sharing and the ultimate launch of an IPO, we employ the following variety of measures:

- The phi coefficient is a measure of the degree of association between two binary variables, and is interpreted in a similar manner as the correlation coefficient.
- A contingency coefficient is a measure of association of two nominal variables. It ranges between 0 (no relationship) and 1 (perfect relationship).
- Cramer’s V is a measure of the strength of association among the levels of the row and column variables in a chi-square analysis and is the absolute value of the phi coefficient in a 2 x 2 chi-square contingency table. Like other association measures cited, Cramer’s V is used with categorical variables.

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1 The SEC approval process involves conducting an initial review, preparing audited financial statements to meet federally mandated reporting requirements, and responding to SEC comments on the registration filings.
2 Worldscope tracks information on over 40,000 public companies in over 50 countries and is cited resource in over 200 published academic studies over the past two decades, including a recent publication on IPO underpricing and after-market liquidity by Ellul and Pagano (2006).
3 The survey was developed by the authors based on theoretical models and empirical results of academic studies in the human resources literature. The original survey consisted of 34 questions and is available upon request. Only questions pertaining to the research focus of this paper are included in our analysis.
4 A list of companies who participated in our survey is available upon request from the authors.
5 Of the 33 firms, 14 went public in 2001, 11 went public in 2002, 5 went public in 2003, and 3 went public in 2004. Despite our relatively short time period for analyzing IPO registrations, Helwage and Liang (2004) find that little difference exists in the firm characteristics (e.g., industries, profits, age, or growth potential) of the firms that go public in hot or cold IPO markets. Only the quantity of IPO offerings tends to differ over different market conditions.
6 Market value is determined for those firms that initiate an IPO by calculating the market value of equity (# of outstanding shares x price) at the end of the first day of trading.
7 A complete breakdown of our sample by industry is available upon request.
Unlike ordinal data, statistical significance is not employed in the interpretation of the degree of association (analogous to correlation) of categorical data. The appropriate interpretation (see Agresti, 2002; Cramer, 1999) for Cramer's V values are the following:

- .50 or higher a very strong relationship
- .36 to .49 a substantial relationship
- .20 to .35 a moderate relationship
- .10 to .19 a low relationship
- .00 no relationship

Next, should a statistically significant relationship (based on an alpha of 0.05) exist between either ESOPs or profit sharing plans and a successful IPO launch, we employ additional tests for causation. Logistic regression is a regression model for binomially distributed dependent variables (see Agresti, 2002; Hosmer, 2000) and is the appropriate method for the data used in our study. The dependent variable in this model would be the binary variable related to whether a firm eventually launches and IPO, and the independent binary variable(s) related to whether the firm had an employee-based financial reward in place at the time of the IPO registration. A Wald test is used to test for statistical significance of the remaining coefficients ($\beta$) in the model.

EMPIRICAL RESULTS

Table 3 shows that we find support (at a 95 percent confidence level) for our first hypothesis that a relationship exists between the presence of ESOPs prior to an IPO launch and the successful launch of an IPO. This relationship is affirmed by both the chi-square and the likelihood ratio chi-square tests. The phi coefficient indicates that the relationship between the presence of an ESOP and a successful IPO launch is positive and the extent of the relationship is further confirmed by the contingency coefficient. The interpretation of Cramer’s V is that this relationship would be classified as moderate in scope. For those firms who successfully initiated an IPO, 72.7 percent had an ESOP in place at the time of their IPO registration, versus 50.9 percent of those firms which ultimately did not launch an IPO. Previous research supports the notion that stock ownership helps to align management and employee goals for a successful IPO. Our findings suggest that since employees with ESOPs benefit directly from the company’s future growth and acquisitions, increased liquidity, and the establishment of a potentially higher market value for the firm, their work effort may increase.

Conversely, we do not find consistent support (at the 95 percent confidence level) for a relationship between employee profit sharing plans and the successful launch of an initial public offering. The chi-square statistic, used as a basis for inclusion in the logistic regression model for causality, is not statistically significant at an alpha level of 0.05, although the likelihood ratio chi-square would argue for a marginally significant relationship. The phi coefficient indicates that the relationship between profit sharing plans and the successful launch of an IPO is negative, and this relationship would be classified as moderate. Only 21.9 percent had a profit sharing plan in place prior to a successful IPO launch versus 43.1 percent who had a profit sharing plan in place, which did not launch an IPO after registration. Overall, we can conclude that this difference is not significant at the five percent level. Thus, we do not find consistent support for our hypothesis that profit sharing plans, which result in more immediate and tangible rewards, are related to employees’ goals aligned with management in terms of pursuing a successfully-launched IPO.

As a statistically significant relationship exists between ESOPs and successful IPO launching, we use logistic regression to further examine the relationship between ESOPs and successful IPO launching. Table 4 provides the results of the logistic regression. The Wald test indicates that the ESOP coefficient is significant at an alpha level of 0.05 in explaining the successful launching of an IPO. This is further illustrated in the 95 percent Wald confidence level, which does not include a value of 1.000 in the low-high range.

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8 Only those independent variables exhibiting statistical significance in the chi square tests are permitted into the second-stage modeling for causality in the logistic regression (see Agresti, 2000).
Since the 95% confidence interval around the odds ratio does not include the value of 1.000, the presence of the ESOP is associated with a change in the odds of the successful IPO launch. Thus, the presence of an ESOP is considered a useful predictor in the logistic model.  

CONCLUSIONS

Brau and Fawcett (2006) found moderate support that CFOs are concerned about the effect an IPO will have on ownership dilution. This finding would be more relevant with firms that do not have an ESOP prior to the IPO as employee stock ownership and profit sharing programs favor ownership retention and increase survival rates for IPO firms (Brau, Ryan, and DeGraw, 2006; Welbourne and Andrews, 1996). In this paper, we survey employees about human resources practices regarding employee stock ownership and profit sharing plans of firms that have registered for an IPO offering. We find that there is a greater likelihood that a firm which has an ESOP in place at the time of IPO registration will be more likely to eventually launch an IPO than firms that do not have an ESOP in place. We do not find consistent support for our hypothesis that there is a relationship between profit sharing plans and a successful IPO launch. Our paper contributes to existing literature by providing financial managers, who are considering registering IPOs, information on the likelihood of a successful launch based on existing ESOPs in those firms. In addition, investors may benefit from knowing which IPOs are more likely to successfully go public.

Table 1

<table>
<thead>
<tr>
<th>Study</th>
<th>Finding</th>
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<tr>
<td>Brau and Fawcett (2006)</td>
<td>strong support for theories arguing that the purposes for IPOs are to create shares for acquisitions and to establish a market price and value for the firm</td>
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<td>Brau, Ryan, and DeGraw (2006)</td>
<td>growth and liquidity as the primary reasons for IPOs</td>
</tr>
<tr>
<td>Roosenboom and van der Goot (2006)</td>
<td>ESOPs reduce the negative effects of agency problems associated with a firm going public</td>
</tr>
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<td>Welbourne and Andrews (1996)</td>
<td>ESOPs “helped a lot” at the time of the IPO; survival was positively related to organization-based compensation</td>
</tr>
<tr>
<td>Aisenbrey (1992)</td>
<td>ESOPs allow employees to identify with the public market and build equity interests at the time of an IPO, motivating and rewarding them for improved long-term performance</td>
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Table 2

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<th>Variable</th>
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<th>Median</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>Assets</td>
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<td>Common Shares Outstanding</td>
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<td>Market Value</td>
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<td>1,569.04300</td>
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</table>

Note: All data from Research Insight and CRSP.

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The generalization of our results should be interpreted with caution due to the relatively short time period (2001-2004) of our study.
Table 3

Chi-Square Results
Profit Sharing and IPO Launch

<table>
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<th>Value</th>
<th>Prob</th>
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<td>Phi Coefficient</td>
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<td>Cramer's V</td>
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<table>
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</tbody>
</table>

* - Statistically significant at the five percent level

Table 4

Logistic Regression for Causality
Analysis of Maximum Likelihood Estimates

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DF</th>
<th>Standard Estimate</th>
<th>Error</th>
<th>Wald Chi-Square</th>
<th>Pr &gt; ChiSq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1</td>
<td>-1.0609</td>
<td>0.3867</td>
<td>7.5244</td>
<td>0.0061</td>
</tr>
<tr>
<td>ESOP</td>
<td>1</td>
<td>0.9431</td>
<td>0.4778</td>
<td>3.8962*</td>
<td>0.0484</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effect</th>
<th>Point Estimate</th>
<th>95% Wald Confidence Limits</th>
<th>95% Wald Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESOP</td>
<td>2.568</td>
<td>1.007</td>
<td>6.550</td>
</tr>
</tbody>
</table>

* - Statistically significant at the five percent level

AUTHOR INFORMATION

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REFERENCES


