

CHAPTER 6

CONCLUSIONS, LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Summary and Conclusions

Lack of congruence between the goals of shareholders and the goals of managers result in agency problems (Fama and Jensen, 1983; Fama, 1980). These problems can be reduced through the costly process of monitoring. Monitoring is typically handled through implementation of a set of contracts which align the goals of shareholders and managers (Jensen and Meckling, 1976). These compensation contracts are designed to improve the wealth of the shareholder while also increasing the wealth of management. Actions taken by management to improve shareholder wealth are readily believed to enhance firm performance, as measured by accounting variables.

Questions exist as to the effectiveness of the link between compensation contracts and executive pay. The public has frequently criticized the amount of compensation received by many executives in relation to the change in the value of the firm (Mercer, 1996). Empirical studies have provided conflicting results regarding the relationship between pay and performance.

Efficient markets theory suggests shareholders impound information efficiently and should respond to the adoption of a performance-based component of compensation accordingly. The results of studies that have examined the market's reaction to the adoption of a long-term performance based compensation component have been inconclusive however. Some studies found positive reactions to the adoption of long-term components (Larcker, 1983; Brickley, 1985) while another larger study found negative results (Gaver et al, 1992).

Studies examining the relationship between performance-based compensation components and improved firm performance as measured using accounting variables have been conflicting as well. Some studies have shown that accounting-based compensation components motivate managers to make decisions that increase their own wealth but do not improve firm performance (Healy, 1985; Dechow and Sloan, 1991). Others have shown a significant relationship between improvement in accounting variables and increased executive compensation (Ely, 1991; Abowd, 1990).

Inconsistencies exist in part because a majority of these studies have considered only one accounting measure and have treated this measure as being an equally important across firms. In addition, these studies have predominately measured performance variables for a short time period. The purpose of the present study, then, was to analyze the relationship between adoption of a performance-based compensation component (performance plans or restricted stock) and improved firm performance within specific industries over a short-term period and long-term period.

The research question was analyzed across nine industry categories in three different comparisons. For the first comparison it was hypothesized that firm performance would significantly improve after the adoption of either a performance or restricted stock plan when compared to the pre-adoption period. The accounting variables used were of two types, a general performance variable that was the same across industries, and a set of industry specific variables. The pre-adoption period was compared to a short, three-year post-adoption period and to a five-year period as well. There were two main results from this analysis. First, the industry-specific variables were more statistically significant indicators of firm performance than was the general performance measure. This implies the performance variables chosen for each industry capture information that may not be captured solely by using a general performance measure such as return on equity. Second, improved firm performance after the adoption of either type of plan is industry-specific with five of the nine industries showing improved performance after an adoption.

The second comparison made in this study was to compare the same measures between adopters and non-adopters in the same industry to determine if results from the initial comparison were industry-wide or compensation composition specific. Results are the same - industry-specific variables are more informative than the general performance measure. Only two of the nine industry groups had adopters that outperformed non-adopters however. This suggests that although adoptions of these types of plans may lead to improved firm performance, they do not necessarily improve performance above normal industry performance.

The third comparison was between adopters and peers, as matched on market size. This comparison was made to determine if the results of the second comparison were due to factors other than adoption - for example the size of adopters versus the size of non-adopters. Results indicate for each of the nine industries that peers performed as well as or better than adopters. This further solidifies the conclusion that performance or restricted stock plan adoptions may improve the performance of individual firms but they do not result in firm performance that is improved above the performance of the industry as a whole.

Overall, these results have several implications. First, adoption of a performance based compensation component may improve firm performance, but these adoptions do not seem to ensure that adopting firms will perform as well as the industry as a whole. The question arises as to why this occurs. It is possible that executives of adopting firms make sufficient decisions to improve firm performance just enough to receive the designated reward but not enough to keep pace with industry standards. Thus, adoptions may result in a certain level of complacency by executives. Further research is necessary to evaluate the accuracy of this supposition.

A second implication is that variables such as ROE that are typically used to measure firm performance, and are frequently used in this type of study, are not adequate measures of firm performance. Results from this study imply industry variables provide a greater degree of information than general measures. This suggests future studies in this area may provide more accurate results if less general and more specific measures are utilized.

A final implication is in regards to the composition of a compensation package. This study suggests that industry-specific measures should be used to create goals to be met by executives. It also provides evidence in support of the growing trend of partly basing evaluations on some form of peer comparison (Mercer et al, 1996). Lastly, this study implies that firms in specific industries may need to pay very close attention to whether recent adoptions of long-term

performance based plans are likely to be beneficial to all parties involved given that some industries had no pre-post adoption affect.

Overall, this study adds to the large body of work on the relationship between pay and performance and provides evidence that adoption of a long-term performance based compensation plan does not by default lead to improved firm performance.

Limitations

There are several limitations inherent in this study. One limitation concerns the way the individual companies were categorized into industry groups. Though company placement within an industry based on the criteria of this study seem appropriate, it is possible that a better division of firms exists. In addition, some of the firms in the study are diversified and technically function across several of the industry categories. These firms were analyzed based on their primary SIC code. Rearranging the industry groupings, or more carefully manipulating placement of firms within the industries may change the results of this study.

A second limitation is in regards to the industry-specific variables that were chosen. For any industry grouping, there are a myriad of variables that measure long-term firm performance. The variables used in this study were in part selected for ease of data gathering. Other variables may be better indicators of the relationship between compensation and firm performance, but many of these require non-financial data or financial data that is not readily obtainable, for example, sales per square foot of store space. Using variables that are even more industry-specific than the ones employed in this study may generate different results.

Related to this is a third limitation. The measures chosen for this study were analyzed over a total of twenty-six years for each industry. These variables may not be appropriate measures of performance for the entire time period analyzed.

A fourth limitation of this study is that change in CEO was not considered. It is probable that for at least some of the adopter firms, CEOs changed over the eight year measurement period. As CEOs change, it is likely that compensation packages are altered as well. However, many decisions made by executives have effects beyond the executives' tenure. In addition, when a new CEO enters the firm, the new compensation package is probably established with at least the same level of expectations as the package of the prior CEO. If this is true, changes in CEO over the measurement period analyzed for adopters should not affect the results and may even improve them. However, this is only supposition and without further testing of this notion, it is not possible to know if results of the current study are inadvertently affected by changes in CEOs.

Implications for Future Research

Prior studies in this area have not completely confirmed shareholder response to long-term compensation component adoption. An interesting extension of this study would be to analyze the market response around the time of the announcement of the adoption of either type of plan for all the adopting companies in the sample. First, the adopting sample in this study is larger than that of prior studies, and the sample includes both large and small companies. Most prior studies have predominately consisted of one size of firm and the sample sizes for prior studies have been

considerably smaller. In addition, this study contains adoptions that cover a twenty year time frame, a longer period than other studies have considered. Given these factors, it is possible that this adopting sample may provide clearer results concerning the market response to the announcement of an adoption. It would also be interesting to compare the results of market responses to the results of this study to see if shareholders were able to accurately impound the information regarding the adoption. Since most of the adoptions in this study did not lead to improved firm performance over the long-run, tying this lack of improvement to shareholder response would provide new insight into the perceptions of the effects of compensation packages.

Another extension related to market responses would be to analyze market returns over the eight year period analyzed for each adopter firm, adjusting for overall market improvements and industry changes, and compare the adjusted market performance to the firm performance evaluated in this study to see if the two behaved in a similar manner.

Recent studies on the effects of board composition on corporate governance, as well as studies analyzing the effects of institutional ownership on corporate governance could be incorporated into this study as well. For the various adopting industries, it would be interesting to establish both the ownership structure as well as the makeup of the board of directors to see if there are any consistencies between the results for firm performance and these two variables.

Lastly, employing a much larger group of performance measures and working in only one industry or a smaller set of industries may provide a more accurate picture of the effects of the performance and tenure components of compensation packages.

This study provides insight into the relationship between performance based long-term components of compensation packages and firm performance as measured by accounting variables. Further research in this area is needed before this complex relationship can be understood.