

CHAPTER 3 HYPOTHESES

From an agency theory/contracting perspective, increasing firm performance should be one of the goals of a firm's management. Improved profitability is one measure of performance and a common measure of profitability often used in evaluating compensation contracts is Return on Equity (ROE). Relying on agency theory, there should be significant differences between ROE as measured before and after an adoption. Stated explicitly,

H1A: An improvement in the profitability measure, ROE, follows the adoption of a performance or restricted stock plan.

Secondly, it is important to assess whether the improvements within each firm were brought about because of the adoption of either a performance or restricted stock plan, or whether the changes were seen industry wide regardless of the adoption of either type of plan. Following agency theory, adopters should show greater improvements in performance measures than non-adopters in the same industry. Stated explicitly,

H1B: The percentage change in the profitability measure, ROE, is greater for adopters of a performance or restricted stock plan than for non-adopters in the same industry.

Lastly, companies within a given industry vary significantly in size. Due to the size of the adopting company, it may or may not be as greatly affected by industry changes as the majority of the firms within the industry. Therefore, comparing each adopting firm to a non-adopting peer firm (as defined in the next chapter) should provide the clearest indication of the effect of the adoption of either type of plan on firm performance as this comparison allows for the greatest level of control. Stated explicitly,

H1C: The percentage change in the general profitability measure, ROE, is greater for adopters of performance or restricted stock plans than for their non-adopting peer companies.

The general performance variable analyzed above does not take into consideration differences that arise in firms due to the nature of their industry. A more accurate measure of firm performance involves considering the manager's production environment, or industry. This implies that the performance measures need to be industry-specific. Given agency theory if performance or restricted stock plans work as designed, these industry-specific performance

measures should indicate improvement in firm performance after the adoptions of a performance or restricted stock plan. This leads to the discussion for the second set of hypotheses.

As argued by Ely (1991), firms in the same industry face similar production environments that incorporate technology, product markets, and regulatory environment. Due to differing production environments, industries have different characteristics that affect accounting variables - for example, physical inventories, plant and equipment, and interest bearing liabilities.¹ Production environments should be highly correlated across industries. According to Ely, “The relation between compensation and a given set of firm performance measures is expected to differ for firms with different production environments.” Ely, in looking at short-term compensation, focused on accounting variables that could be measured for firms in all four of her chosen industries. She does not include firm performance measures that might reflect executive performance but are specific to an industry.

Pavlik et al. (1993), in their comprehensive analysis of compensation research, stress the importance of Ely’s work with different industries. They point out that the value of accounting numbers lies partly in their ability to be tailored to more precisely reflect different aspects of managers’ performance conditional on their firms’ circumstances.

Using the same ratios across firms may bias the results for those firms whose production environments are not conducive to the particular measures chosen: therefore, three industry-specific performance measures are used for each industry category. Choosing the measures based on the particular industry allows for industry differences that may affect the decisions of the manager and thus the performance of the firm. Utilization of industry-specific variables should remove any bias that may result from applying the same measurement criteria to those firms whose production environments vary. In the same manner as Ely (1991), industry variables were identified from discussions published by industry analysts and trade journals. Although the measures chosen for this study may differ from those actually outlined in the compensation package as the specified method of evaluation, according to industry analysts these measures are indicative of improved long-range performance for these industries. Chapter 4 provides greater detail on each of the industries and the variables.

The following hypotheses were developed from the above discussions:

H2A: An improvement in industry-specific performance measures follows the adoption of a performance or restricted stock plan.

H2B: The percentage change in the industry specific performance measures is greater for adopters of performance or restricted stock plans than for non-adopters in the same industry.

¹ Ely examined the interindustry differences in the relation between CEO compensation and accounting-based firm performance variables. She considered four kinds of short-term variables - stock returns, accounting returns, sales revenue and net interest income for four industries: banks, electric utilities, retail groceries and oil and gas firms. She found significant interindustry differences in the relation between the four variables and compensation.

H2C: The percentage change in the industry specific performance measures is greater for adopters of performance or restricted stock plans than for their non-adopting peer companies.

Details of variable definitions, as well as how all the hypotheses are analyzed, are discussed in the next chapter.