Management Accounting Research 17 (2006) 198–221

Management Accounting Research

www.elsevier.com/locate/mar

Human capital, pay structure, and the use of performance measures in bonus compensation

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Received 10 March 2004; accepted 4 June 2005

Abstract

Traditional financial measures have been criticized for lacking relevance in today's economy where firms are increasingly competing with intangible assets. However, perhaps this criticism is not detrimental to firms if they take actions to supplement the information contained in financial measures. Thus, it is important to explore whether and when firms recognize this potential deficiency and take action to acquire the appropriate information. This study hypothesizes that two human resource variables, reliance on human capital and the firm's pay structure, are associated with the use of non-financial measures in top managers' bonus compensation contracts since they provide information incremental to that provided by traditional financial measures. Using archival data from 177 firms, I estimate binary and multi-response ordered logit models. The binary logit model provides evidence that labor-intensive firms have a higher probability of placing emphasis on non-financial measures (along with traditional financial measures) and a lower probability of relying solely on traditional financial measures. Moreover, this relationship is moderated by the firm's pay structure. Analysis shows that the relationship is stronger in firms that employ a hierarchical pay structure. Furthermore, the multi-response logit model extends these finding by showing that these firms also have a higher probability of relying on human resource measures.

Keywords: Human capital; Pay structure; Non-financial measures; Bonus compensation; Performance measures

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1044-5005/$ – see front matter
doi:10.1016/j.mar.2005.06.001

1. Introduction

Executive compensation provokes debate on many fronts,[1] one of which is that emphasis on financial measures leads executives to focus on the short-term. Stone (Business Week, December 23, 2002) summarizes the issue by saying,

> The primary problem in Corporate America is not with investors' short-term focus on quarterly results, but with management's desire to achieve short-term goals because of their impact on executive compensation. 'With the obsessive focus on quarterly numbers, management is motivated to make decisions that are pragmatic from a short-term perspective but may impair the long-term health of the organization,' says Jeffrey Evans, president of the New York Society of Security Analysts.

Consider a common decision that executives make regarding investment in human capital. Compensation, training, and other related costs are expensed in the current period. Executives focused on quarterly financial numbers have an incentive to forego labor-related investment in order to enhance the quarterly financial results, even though the disinvestment may be detrimental to the long-term health of the organization (Laverty, 1996). The purpose of this study is to provide evidence on the debate by examining the use of performance measures in executive bonus compensation and determining whether firms that rely heavily on labor to sustain its operations supplement traditional financial measures with non-financial measures.

Executive bonus compensation provides an interesting setting for two reasons. First, it is a significant part of executive pay.[2] Second, it is the portion of executive compensation that is intended to motivate managerial behaviors (Milkovich and Newman, 2002; Balkcom et al., 1997; Vancil, 1979). Traditionally, compensation contracts have been written based on financial accounting measures, especially net income, earnings per share, and return on assets (McKenzie and Shilling, 1998). The prevailing view is that traditional financial measures encourage a short-term focus (Laverty, 1996) while non-financial measures focus managers on making decisions that are healthier for the long run (Kaplan and Norton, 1996). Thus, the design of executive bonus compensation provides a rich setting to study the use of financial and non-financial performance measures.

This study investigates the association between the use of performance measures and the reliance on human capital. Labor, or human capital, is a critical type of intangible asset on which firms increasingly rely (Lev, 2001). The term "human capital" has many different definitions. Economists consider human talent and knowledge to be both a form of wealth and capital (Lev and Schwartz, 1971). Strategists define *strategic human capital* as the portion of the workforce that helps the firm sustain its competitive advantage (Barney and Wright, 1998). The broadest definition of human capital and one found in the organizational behavior literature is that it is the knowledge and/or skills possessed by the firm's workforce (Lev, 2001; Barney, 1991; Becker et al., 2001). Kaplan and Norton (1996, p. 6) state,

[1] Another significant aspect of the debate on executive compensation is the level of pay as illustrated in this quote from the Washington Post (April 3, 1997), which said, "Last year was something of a banner year for corporate chief executives: company profits rose faster than sales, stock prices rose faster than profits and executive pay rose faster than everything." Although the level of pay is an interesting issue to study, it is not one that is included in the current study. I study the use of performance measures and leave the study of the mix and weights of executive compensation to future research.

[2] In this sample, the bonus paid to executives is 1.41 times their base salary, on average. Anecdotal evidence also supports this conclusion. Former Chief Executive Officer George Fisher of Eastman Kodak Co. states, "I get no bonus this year. I don't deserve a bonus this year, and that's half my pay. That's pretty significant" (Hirsch, Wall Street Journal, March 17, 1998).