5 Are executives paid for the complexity of the job they have?

5.1 Towards a framework of complexity and pay

5.1.1 Defining complexity

Complexity can be referred to as a state of being difficult to understand or explain because an entity has many different parts or sub-components. In the context of a corporation and its environment, complexity can arise from a variety of factors. Differing business segments and products, a firm's organizational structure, various functional systems (e.g. HR systems, accounting systems), a multicultural workforce, different national regulations, the structure of product markets and supplier relationships, the differing demands of various stakeholder groups, a politicized environment or a high reliance on activities with an uncertain payoff such as research and development all are elements of a CEO's job complexity.

5.1.2 Complexity as a determinant of pay level and structure

There is reason to believe that executives are paid for the level of complexity they must manage. The allocation of more able CEOs to more complex firms through the managerial labor market should translate into higher pay as a compensation for a higher marginal product (Rosen, 1982). Furthermore, job complexity enters as a determinant of pay in compensation consultants' work and is likely to translate into higher compensation levels for more complex positions.

Marginal productivity theory holds that an individual should be paid commensurate to his or her net incremental value to an organization (Fama, 1980). If the firm's marginal return to executive talent increases with complexity, an efficient market for managerial talent will generate higher compensation at more complex firms. These equilibrium effects of complexity on compensation can be illustrated in a simple matching model, where managers with higher ability are matched with positions in which the marginal return to ability is higher (Rosen, 1982; Himmelberg and Hubbard, 2000). In this model, the top manager contributes to the productivity of all other workers, and more-able managers make a larger contribution than less-able managers. The marginal return to

ability realized by the firm is the increment to productivity caused by hiring a person of higher ability in a given position and is a characteristic of the firm. Characteristics that increase the marginal return to ability in the position will have two equilibrium effects: the ability of those selected to fill the position will be greater, and the compensation associated with the position will be higher. In Rosen's (1982) model, this characteristic is firm size, but a similar argument can be made for other elements of complexity such as internationalization or diversification.

Furthermore, job complexity plays a pivotal role in job evaluation concepts of major compensation consulting companies and recommendations of compensation consultants are likely to translate into managers' compensation (Baker et al., 1988; Crystal, 1991). For instance, the job evaluation criteria used by the HR consultancy *HAY Group* to define the value of a particular job include factors such as the thinking challenge (problem-solving and creativity) or the thinking environment (operative and strategic thinking) inherent in a job. More complex jobs should therefore be valued more highly and be associated with higher levels of compensation. For CEO compensation, Hay Group uses company size measured in terms of employees and revenues, the technological complexity and the diversity of the market as an indication for higher pay (Hay Group, 2003). All of these variables have also been identified to represent the complexity of the managerial job by academic scholars (Henderson and Fredrickson, 1996; Sanders and Carpenter, 1998).

5.1.3 Prior operationalizations of complexity

Although complexity was early on suggested as an important determinant of CEO pay (Finkelstein and Hambrick, 1989), it has received very little theoretical and empirical attention in prior research on executive compensation (e.g. Gomez-Mejia, 1994). Few studies have explicitly invoked a complexity explanation for CEO pay. Moreover, operationalization of complexity has by and large been limited to firm diversification (Finkelstein and Hambrick, 1989), a firm's degree of internationalization (Sanders and Carpenter, 1998) or both of them (Bushman et al., 2004). As much of the variation in executive pay remains unexplained (Tosi et al., 2000), a conceptualization of complexity and an empirical test of its influence on executive pay is warranted.