

**COMPENSATION RISK BORNE BY CHIEF EXECUTIVE OFFICERS AFTER REFOCUSING:
THE IMPACT OF DIVESTMENT INTENSITY, R&D INTENSITY, AND BOARD
COMPOSITION**

Seemantini Pathak
Arizona State University
Department of Management
Box 874006
Tempe, AZ 85287-4006
480-612-5734
Fax 480-965-8314
seemantini.pathak@asu.edu

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ABSTRACT

Although refocusing is a popular strategy for firms to rejuvenate themselves, change strategic direction and improve performance, empirical research has been inconclusive about the benefits of restructuring. Instead of examining firm performance, this study investigates the impact of refocusing on the compensation risk borne by top managers. This dissertation draws on agency theory to suggest that firms that significantly reduce diversification might, through such refocusing, shift risk to managers. For such firms, overcoming managers' risk aversion is important to achieve strategy change and good performance. Thus, the conceptual arguments in this dissertation suggest that firms that have recently refocused might increase top managers' pay levels in order to compensate them for increased risk and information processing. The extent of this increase is hypothesized to be related to the intensity of divestitures during refocusing. Additionally, the risk associated with the competitive situation (as measured by R&D intensity) and board of directors' vigilance (represented by board composition) is suggested to moderate the impact of divestment intensity on pay level.

This dissertation contributes to agency theory by pointing out the importance of managers' risk aversion, and studying the antecedents of managerial risk-bearing. It shows how risk-bearing concerns enable top managers' pay to rise even in the absence of opportunism. Through examining the impact of R&D intensity on pay level and mix, it underscores the importance of firm context. Finally, in studying the role of board composition on managers' risk-bearing, this dissertation suggests that there are situations, such as refocusing, when director independence may actually act counter to the firm's interests.

Research question

How would a firm's strategy of refocusing through divestitures impact its CEO's compensation risk-bearing? What influence would the firm's R&D intensity and the proportion of its outside directors have on this relationship?

Hypotheses:

Hypothesis 1: A firm's divestment intensity will be positively associated with the level of its CEO's cash compensation.

Hypothesis 2: A firm's divestment intensity will be positively associated with the level of its CEO's long-term compensation.

Hypothesis 3: Relative R&D intensity will positively moderate the relationship between divestment intensity and CEO cash compensation such that cash compensation will be higher in high relative R&D situations.

Hypothesis 4: Relative R&D intensity will positively moderate the relationship between divestment intensity and CEO long-term compensation such that long-term compensation will be higher in high relative R&D situations.

Hypothesis 5: The proportion of outsiders on the board of directors will negatively moderate the relationship between divestment intensity and CEO cash compensation such that CEO cash compensation will be lower for a board with a high proportion of outside directors.

Hypothesis 6: The proportion of outsiders on the board of directors will positively moderate the relationship between divestment intensity and CEO long-term incentive compensation such that CEO long-term incentive compensation will be higher for a board with a high proportion of outside directors.

Sample

The sample will be a cross-industry set of firms during the period from 1986 to 2001 starting with the most recent firm restructurings. Using a cross-industry sample will increase the

generalizability of the findings, and also ensure variance in R&D intensity. I will only include firms with at least \$50 million in sales, as restructuring is a phenomenon associated with large firms. The sample will consist of firms that have voluntarily refocused, in the absence of a tender offer (Hoskisson et al, 1994). Firms will be classified as refocusing if they have divested at least two businesses or at least ten percent of their total assets. These criteria have been used by other researchers examining refocusing (Johnson et al, 1993; Hoskisson and Johnson, 1992; Hoskisson et al, 1994).

I propose to identify firms that have engaged in refocusing through an examination of 10Q and 10K forms filed with the SEC, as well as a search of media sources including the Wall Street Journal Index and LEXIS-NEXIS. Here I expect to identify between 150 and 200 refocusing firms from among publicly-traded firms. Of these firms, I would then choose those that have the data required in the COMPUSTAT and SDC databases, and Proxy Statements. Missing data would be likely to reduce the final sample size.

Dependent variable

The CEO's compensation is the dependent variable in this study. I use post-refocusing compensation as evidence of managerial risk-bearing; the two indicators of managerial risk-bearing are the level of cash compensation (salary plus bonus) and the level of long-term incentive compensation. These will be collected from EXECUCOMP and proxy statements. There will be a one-year time lag between the R&D and board of director (BOD) data and the post-refocusing compensation data.

Independent variables

This study's independent variables are divestment intensity, R&D intensity, and board composition.

Divestment intensity. In accordance with the procedure carried out by Hoskisson and colleagues (1994), I will measure divestment intensity with three variables that tap into different aspects of this construct: (1) number of business units divested (through sell-offs, leveraged or

management buyouts, equity carve-outs, or spin-offs), (2) percentage of sales or assets divested, and (3) time required to refocus. The year that refocusing is completed will be denoted as time t .

Relative R&D intensity. R&D intensity will be measured relative to the industry. Relative R&D intensity is the ratio of firm R&D intensity to industry average R&D intensity. Firm R&D intensity will be measured as the ratio of corporate R&D spending to each \$1000 of sales. The R&D spending / sales measure has been widely used in different contexts (e.g. Baysinger & Hoskisson, 1989; Hambrick & MacMillan, 1985). I will measure industry R&D intensity as a weighted average of industry R&D spending in all industries in which a firm operates (similar to the measure used by Baysinger and colleagues (1991)). The measure will be calculated as:

$$\sum_{j=1,n} P_{ij} RD_j$$

Here RD_j is R&D spending relative to the sales of industry j , P_{ij} is the percentage of firm i 's total sales in industry j , and n is the number of different industries (two-digit SIC codes) in which firm i operates. The relative R&D intensity measure will be averaged over two years ($t+1$ and $t+2$) in the post-restructuring period. The data will be obtained from the COMPUSTAT database.

Board composition. The proportion of outsiders on the board will be measured at time $t+1$, one year after completion of refocusing. It will be operationalized as the number of outsiders divided by total board size (Morck, Shleifer, & Vishny, 1989). Outsiders are those directors that have no past or present personal or professional relationship with a firm other than the position of director (Cochran, Wood & Jones, 1985). Accordingly, I will eliminate all outside directors who have an affiliation with the firm such as lawyers, bankers, suppliers or customers.

Control variables

Empirical evidence suggests that a number of factors relating to the firm, top managers, and directors, but not of primary interest to this research, influence managerial compensation. Therefore, I propose to control for these factors in the statistical analyses. Control variables include the year, firm size, accounting performance, leverage, liquidity, CEO factors (power, equity and tenure and succession), the presence of a golden parachute clause, outside director

equity holdings, the composition of the compensation committee, and the firm's pre-restructuring diversification levels.

Analysis

I shall use ordinary least-squares (OLS) regression to test my hypotheses, using a number of different regression models. Moderator effects (Hypotheses 3, 4, 5 and 6) will be tested using Baron & Kenny's (1986) recommendations. These authors recommend that in order to conclude that a moderator effect exists, the statistical analysis must measure and test the differential effect of the independent variable (here, divestment intensity) on the dependent variable (here, CEO compensation) as a function of the moderator (relative R&D intensity or proportion of outsiders on the board of directors). Therefore, I shall try to establish a significant interaction between divestment intensity and relative R&D intensity (for Hypotheses 3 and 4) and between divestment intensity and the proportion of outsiders on the board of directors (for Hypotheses 5 and 6).

Current status

About 30% of the data collection has been carried out. Data collection is expected to be complete by September 2006 and analysis to be complete by December 2006.