Corporate Diversification and CEO Compensation: Evidence from the Moderating Effect of Firm Performance

Abstract

This study explores whether firm performance moderates the relationship between corporate diversification and CEO compensation. A sample of 2,448 CEO compensations across 1,622 firms from 1997 to 2002 was used to test several hypotheses. Corporate diversification was divided into two categories (international and industry) and firm performance was defined using both market-based and accounting-based measures. For the relationship between international diversification and CEO compensation, our results indicate that both market-based and accounting-based firm performance had a significant negative effect on that relationship. Furthermore, accounting-based firm performance was a better predictor of international diversification and CEO compensation than market-based firm performance. For the relationship between industry diversification and CEO compensation, however, our results show that only market-based firm performance had a significant negative influence whereas accounting-based firm performance did not have any significant influence.

Keywords: corporate diversification, CEO compensation, firm performance, international diversification, industry diversification.

I. INTRODUCTION

Prior empirical research (Sanders & Carpenter, 1998; Duru & Reeb, 2002) indicates that firm performance is positively associated with CEO compensation. For example, Duru & Reeb (2002) explored the relationship between corporate diversification and CEO compensation and found that geographic diversification provides a compensation premium, while industry diversification is associated with lower levels of CEO pay. In addition, a number of researchers have found a link between incentive compensation and performance (Jensen & Murphy, 1990, Kaplan, 1994). The results in Duru & Reeb (2002) also suggest that firm performance has a moderating effect on the relationship between corporate diversification and CEO compensation.

Our study seeks to expand existing research by using firm performance as a moderating variable for international diversification and industry diversification and for influencing CEO compensation. This distinction is important for understanding the interactive effects of firm performance on both international and industry diversification and CEO compensation. Our results indicate that firms with lower accounting-based and market-based performance produce larger interaction effects to increase international diversification and total compensation pay to CEOs, and firms with lower market-based performance produce larger interaction effects to increase industry diversification and total compensation pay to CEOs. Therefore, our study provides new evidence that firm performance positively influences and moderates the relationship between both international diversification and industry diversification and CEO compensation.
II. LITERATURE REVIEW

To conduct our research, we relied on metrics used in prior research. Gaver & Gaver (1995) provide a definition of total compensation as the sum base salary plus annual bonus plus long-term compensation where long-term compensation equals gains from the exercise of stock options or stock appreciation rights plus the value of restricted stocks grants plus the value of performance awards or other long-term awards plus the present value of current stock options or grants. Moreover, Duru and Reeb (2002) divide executive compensation into total compensation, short-term compensation, and long-term compensation. Short-term compensation includes salary and cash bonuses whereas long-term compensation includes stock options, restricted stocks, and other long-term compensation.

Past research has measured corporate diversification as both international and industrial (Duru & Reeb, 2002; Kim et al., 2001). This distinction is important because Duru & Reeb (2002) found that international diversification is positively associated with CEO compensation whereas industry diversification is negatively associated with CEO compensation (Duru & Reeb, 2002). They also find that increased diversification is, on average, associated with increases in firm value as measured by shareholder wealth. Research by Balkin et al. (1992), Grossman & Hoskisson (1998), and Duru & Reeb (2002) indicates that companies in different industries are likely to have different measures of firm performance. Two types of company performance measures that have been identified are accounting-based and market-based measures.

Previous studies suggest that accounting-based performance measures are incrementally useful over market-based measures in executive compensation contracts (Baber et al., 1996; Duru & Reeb, 2002). However, when accounting returns are less informative with respect to executive actions, there is a greater reliance on market-based measures than on accounting-based measures (Smith & Watts, 1992; Gaver & Gaver, 1993; Baber et al., 1996; Bryan et al., 2000). Executives have discretion in choosing among various accounting or reporting alternatives, which can be used to manipulate accounting earnings. Consistent with prior research the accounting-based measure of performance used in this study annual earnings before interest and taxes (EBIT) and the market-based measure of performance is common stock return at the end of the fiscal year.

These research studies results suggest that the level of firm performance may be the primary reason for shareholders accepting the level of CEO compensation (Sanders and Carpenter, 1998). A higher level of firm performance may also affect the relationship between other variables and total compensation. For example, the relationship between international diversification, industry diversification, and total compensation may change as firm performance improves. More specifically, the influence of both international diversification and industry diversification on total compensation may increase as firm performance increases. Consequently, firm performance may moderate the relationship between international diversification, industry diversification, and total compensation such that when a firm performing better with a higher level of international diversification and industry diversification may be related to a higher total compensation pay (Duru & Reeb, 2002). This study employs firm performance as a moderating variable to explore its
influence on the relationship between international diversification and industry diversification and total compensation.

III. HYPOTHESES

Based on the preceding literature review, this study identified two hypotheses examining whether market-based firm performance acts as a moderating variable on the relationship between international diversification or industry diversification and total CEO compensation. Likewise, two additional hypotheses examine whether accounting-based firm performance acts as a moderating variable on the relationship between international diversification or industry diversification and total CEO compensation. In summary, the four hypotheses are:

Hypothesis \( H_{1A} \): Market-based measures of firm performance will moderate the relationship between international diversification and total CEO compensation.

Hypothesis \( H_{1B} \): Market-based measures of firm performance will moderate the relationship between industry diversification and total CEO compensation.

Hypothesis \( H_{2A} \): Accounting-based measures of firm performance will moderate the relationship between international diversification and total CEO compensation.

Hypothesis \( H_{2B} \): Accounting-based measures of firm performance will moderate the relationship between industry diversification and total CEO compensation.

IV. RESEARCH METHODOLOGY

4.1. Regression Model

To test the hypotheses, multiple regression analysis was employed to examine firm performance and, in turn, firm performance as a moderator variable on the relationship between international diversification and industry diversification and CEO total compensation with tenure, age, duality, and gender as control variables:

\[
TC_{ei} = \alpha_0 + \alpha_1 INTD + \alpha_2 INDD + \alpha_3 RET + \alpha_4 ACE + \alpha_5 IO + \alpha_6 INTD \times RET \\
+ \alpha_7 INTD \times ACE + \alpha_8 INDD \times ACE + \alpha_9 INTD \times RET + \alpha_{10} Tenure \\
+ \alpha_{11} Age + \alpha_{12} Duality + \alpha_{13} Gender + \varepsilon_{ei}
\]

The dependent variable is total compensation (TC) measured as the sum of salary, bonus, value of restricted stocks granted, stock appreciation rights, value of stock options granted (Black-Scholes model), long-term incentive payouts, and other total compensation using Standard & Poor’s Compustat ExecuComp database. Table 1 summarizes both the independent and control variables included in the model as well as the measure and source for each variable. In total, the model includes five independent variables (INTD, INDD, RET, ACE, IO), four moderating variables (INTD \times RET, INTD \times ACE, INDD \times RET, INDD \times ACE), and four control variables (tenure, age, duality, gender).
Table 1
Independent and Control Variables in Regression Model

| Variable               | Measure (Source)                                                                 |
|------------------------|----------------------------------------------------------------------------------|
| INTD = International   | Firm classified as multinational if it has foreign sales reported; otherwise,    |
| Diversification        | classified as domestic. (Compustat Geographic Segment File)                     |
| INDD = Industry        | Firm classified as multi-segment if it has more than one business segment;       |
| Diversification        | otherwise, classified as single-segment. (Compustat Industry Segment File)       |
| RET = Market-Based Firm| Common stock return at the end of the fiscal year.                               |
| Performance            | (CRSP)                                                                           |
| ACE = Accounting-Based | Annual earnings before interest and taxes (EBIT).                                |
| Firm Performance       | (Compustat)                                                                     |
| IO = Investment        | Research and development expenditures divided by the market value of the firm.  |
| Opportunity            | (Compustat)                                                                     |
| Tenure                 | Years current CEO has held current position at the end of the fiscal year       |
|                        | (ExecuComp).                                                                     |
| Age                    | Age of CEO at the end of the fiscal year.                                       |
|                        | (ExecuComp).                                                                     |
| Duality                | Considered 1 if the CEO is also the chairman; otherwise, 0.                     |
|                        | (ExecuComp)                                                                     |
| Gender                 | Considered 1 if CEO is male; otherwise, 0 if female.                            |
|                        | (ExecuComp)                                                                     |

4.2. Sample and Data Collection

The sample consisted of secondary data collected from three databases and supplemented with additional data from the Securities and Exchange Commission (SEC). Company stock return data from the Center for Research in Security Prices (CRSP) along with financial statement data made available from Standard & Poor's Research Insight was included. For CEO data, Standard & Poor’s (S&P) Compustat ExecuComp (hereafter, ExecuComp) database, based on the S&P 400, S&P 500, and S&P 600 indices composed of large, mid, and small-cap firms, was selected to alleviate the difficulty of extracting specific information from proxy statement and individual company reports. However, there is often missing data in ExecuComp, particularly relating to age and employment starting dates for CEOs. Thus, it was sometimes necessary to find that information using LexisNexis.

CEO compensation data was collected from ExecuComp from 1997-2002 and covers both total compensation and current compensation such as salary and bonuses. The data also contains long-term compensation such as long-term incentive plans, restricted stocks, stock appreciation rights, and stock options granted. Most studies of CEO compensation rely upon secondary data from filings with the Securities and Exchange Commission (Miller, 1995). Two Compustat files were used as databases to classify firms based on international diversification and industry diversification. Compustat's Geographic Segment File was used to classify a firm as multinational if it had any foreign sales reported; otherwise, it was classified as a domestic firm. Similarly, Compustat’s Industry Segment File was used to classify a firm as multi-segment if it had more than one business segment; otherwise, it was classified as a single-segment firm.
4.3. Descriptive Statistics

Each sample firm was classified into its primary Standard Industrial Classification (SIC) Code according to the 10-K product breakdown and then classified each firm according to the industry classification scheme suggested by Lippert & Moore (1995) and further modified in this study. To identify CEOs, we implemented a similar sample selection criterion as Murphy (1985). A CEO was included only if that individual was listed on the firm’s financial statement during 1997-2002 and remained with the same firm for at least five years. This sample selection method is also consistent with Miller (1995). For this study 2,448 CEOs across 1,622 firms during the period 1997-2002 were identified. Frequency statistics for sample firms are presented in Tables 2 and 3.

Table 2

| Panel A: Filing Year | Observations | %   |
|----------------------|--------------|-----|
| 1997                 | 113          | 7.0 |
| 1998                 | 145          | 8.9 |
| 1999                 | 1067         | 65.9|
| 2000                 | 193          | 11.9|
| 2001                 | 100          | 6.3 |
| 2002                 | 4            | 0.0 |
| Total firms          | 1622         | 100.0|

| Panel B: Type of Industry | SIC Codes | Observations | %   |
|---------------------------|-----------|--------------|-----|
| Aerospace and shipbuilding| 3720-3829 | 65           | 4.0 |
| Agriculture and metal     | 0000-1099, 1400-1499 | 18 | 1.1 |
| Cars                      | 3711-3716 | 26           | 1.6 |
| Chemical, tire, and leather| 2800-2821, 3011-3199 | 42 | 2.6 |
| Commodity                 | 4812-4899 | 36           | 2.2 |
| Computer and software     | 3570-3579, 7370-7389 | 180 | 11.1|
| Construction, wood, furniture, and house| 1500-1799, 2400-2599, 2840-2844, 3200-3299 | 58 | 3.6 |
| Electric                  | 3661-3699 | 115          | 7.1 |
| Entertainment             | 7000-7369, 7400-7999 | 62 | 3.8 |
| Finance                   | 6000-6799 | 141          | 8.7 |
| Food and tobacco          | 2000-2199 | 42           | 2.6 |
| Health, education, and law| 8000-9999 | 64           | 3.9 |
| Machinery                 | 3510-3569, 3580-3652 | 88 | 5.4 |
| Medical, photo, and other | 3841-3999 | 54           | 3.3 |
| Paper and publishing      | 2600-2673, 2711-2780 | 54 | 3.3 |
| Petroleum and refinery    | 1220-1389, 2911-2999 | 64 | 3.9 |
| Retail and wholesale      | 5000-5999 | 201          | 12.4|
| Steel                     | 3300-3496 | 62           | 3.8 |
| Textile                   | 2200-2399 | 25           | 1.5 |
| Transportation            | 4011-4799 | 42           | 2.6 |
| Utility                   | 4911-4991 | 106          | 6.5 |
| Other                     | 2833-2836, 2851-2891 | 77 | 4.7 |
| Total firms               | 1622       | 100.0        |
Table 3
Frequency Statistics for Sample CEOs (n=2,448)

| Panel A: Filing Year | Observations | %   |
|----------------------|--------------|-----|
| 1997                 | 335          | 13.8|
| 1998                 | 414          | 16.9|
| 1999                 | 828          | 33.8|
| 2000                 | 438          | 17.9|
| 2001                 | 362          | 14.9|
| 2002                 | 71           | 2.9 |
| Total CEOs           | 2,448        | 100.0|

| Panel B: Type of Industry | SIC Codes | Observations | %   |
|---------------------------|-----------|--------------|-----|
| Aerospace and shipbuilding| 3720-3829 | 96           | 3.9 |
| Agriculture and metal     | 0000-1099, 1400-1499 | 34 | 1.4 |
| Cars                      | 3711-3716 | 42           | 1.7 |
| Chemical, tire, and leather| 2800-2821, 3011-3199 | 73 | 3.0 |
| Commodity                 | 4812-4899 | 47           | 1.9 |
| Computer and software     | 3570-3579, 7370-7389 | 299 | 12.2|
| Construction, wood, furniture and, house | 1500-1799, 2400-2599, 2840-2844, 3200-3299 | 86 | 3.5 |
| Electric                  | 3661-3699 | 161          | 6.6 |
| Entertainment             | 7000-7369, 7400-7999 | 93 | 3.8 |
| Finance                   | 6000-6799 | 190          | 7.8 |
| Food and tobacco          | 2000-2199 | 69           | 2.8 |
| Health, education, and law| 8000-9999 | 93           | 3.8 |
| Machinery                 | 3510-3569, 3580-3652 | 138 | 5.6 |
| Medical, photo, and other | 3841-3999 | 81           | 3.3 |
| Paper and publish         | 2600-2673, 2711-2780 | 81 | 3.3 |
| Petroleum and refinery    | 1220-1389, 2911-2999 | 87 | 3.6 |
| Retail and wholesale      | 5000-5999 | 306          | 12.5|
| Steel                     | 3300-3496 | 102          | 4.2 |
| Textile                   | 2200-2399 | 34           | 1.4 |
| Transportation            | 4011-4799 | 61           | 2.5 |
| Utility                   | 4911-4991 | 160          | 6.5 |
| Other                     | 2833-2836, 2851-2891 | 115 | 4.7 |
| Total CEOs                | 2,448     | 100.0        |

V. RESULTS AND DISCUSSION

5.1. Statistical Tests

The current study makes use of several statistical tests provided by SPSS as follows:
1) Descriptive Statistics: means and standard deviations.
2) Pearson correlation coefficients were calculated to determine whether multicollinearity among the dependent variables is severe or not.
3) Multiple regression analysis was employed to examine firm performance to influence and moderate the relationship between corporate diversification (both international and industrial) and total compensation.
5.2. Descriptive Statistics

Table 5 presents the following statistics for the variables in our regression model: mean, median, standard deviation, and minimum and maximum. The sample statistics are divided into the dependent variable and five independent variables (Panel A), control variables (Panel B) and firm characteristics (Panel C) for the period 1997-2002. The average CEO in the sample was approximately 57 years, had been in the CEO position approximately 14 years, and had total compensation of approximately $2.35 million. A vast majority were male and about two-thirds of sample CEOs also were held the Chairman position.

Table 5
Descriptive Statistics

|                                                      | Observations | Mean  | Median | Std. Deviation | Minimum | Maximum |
|-------------------------------------------------------|--------------|-------|--------|----------------|---------|---------|
| Total Compensation                                    | 2,434        | 5,198.95 | 2,354.79 | 11,795.97 | 0.00   | 273,415.47 |
| International Diversification                        | 2,448        | 3.29  | 3.00   | 1.11   | 0.00   | 5.00    |
| Industry Diversification                             | 2,448        | 2.55  | 2.33   | 1.57   | 1.00   | 10.00   |
| Market-based Performance                             | 2,448        | 0.01  | 0.00   | 0.04   | -0.13  | 1.03    |
| Accounting-based Performance                         | 2,448        | 525.29| 99.47  | 2,140.96| -10,537| 39,093.50|
| Investment Opportunities                             | 1,465        | 0.05  | 0.02   | 0.10   | 0.00   | 1.82    |

Panel B: Control Variables

|                                                      | Observations | Mean  | Median | Std. Deviation | Minimum | Maximum |
|-------------------------------------------------------|--------------|-------|--------|----------------|---------|---------|
| Tenure (days)                                         | 1,069        | 2,947.66 | 2,192.00 | 2,774.43 | 13.00  | 19,935.00 |
| Age (years)                                           | 1,288        | 56.91 | 57.00  | 7.75   | 36.00  | 89.00   |
| Dualityc                                              | 2,448        | 0.56  | 0.67   | 0.45   | 0.00   | 1.00    |
| Genderd                                               | 2,448        | 0.96  | 1.00   | 0.18   | 0.00   | 1.00    |

Panel C: Firm Characteristics

|                                                      | Observations | Mean  | Median | Std. Deviation | Minimum | Maximum |
|-------------------------------------------------------|--------------|-------|--------|----------------|---------|---------|
| Assets                                                | 2,448        | 7,994.00 | 1,199.97 | 35,813.94 | 8.66   | 692,789.00 |
| Sales                                                 | 2,448        | 4,346.94 | 1,102.44 | 11,799.42 | 0.00   | 180,041.33 |
| Capital Expend. / Sales                               | 2,426        | 312.11 | 51.39  | 1,270.14 | 0.00   | 31,672.50 |
| EBIT/Sales                                            | 2,445        | 89.7   | 51.51  | 796.75  | -10,537.00 | 30,877.00 |
| R&D/Sales                                             | 1,464        | 0.22   | 0.03   | 2.70   | 0.00   | 96.10    |
| Capital Expend. / Sales                               | 2,423        | 0.13   | 0.05   | 1.75   | 0     | 85.68    |
| Market Value/ Capital Expend.                         | 2,364        | 64.27  | 24.1   | 264.19  | 0.05   | 10,996.64 |

- Compustat’s Geographic Segment file limits the number of global segments to five; - Compustat’s Industry Segment file limits the number of global segments to ten; a CEO is not chairperson; 1= CEO is also chairperson; 0=female, 1=male; in $ thousands

5.3. Test for Multicollinearity

Because multicollinearity between independent variables can cause large variances and covariances for the estimators of the regression coefficients, it becomes difficult to distinguish their relative influences. This problem is addressed by deriving the correlation coefficient matrix shown in Table 6 using the Pearson correlation coefficients test. The
correlation matrix shows that the strongest correlation coefficient among the variables was 0.37 age and tenure and the next highest correlation coefficient was 0.35 international diversification and investment opportunities. Gujarati (1988) suggests that correlations between independent variables should not be considered “harmful” unless they exceed 0.80 or 0.90. The Pearson correlation coefficients in Table 6 suggest that multi-collinearity is not severe for this study.

| Variables                      | 1   | 2     | 3     | 4      | 5     | 6     | 7     | 8     | 9     | 10  |
|--------------------------------|-----|-------|-------|--------|-------|-------|-------|-------|-------|-----|
| 1-Total Compensation           | 1   |       |       |        |       |       |       |       |       |     |
| 2-International Diversification| 0.85**| 1     |       |        |       |       |       |       |       |     |
| 3-Industry Diversification     | 0.07**| 0.15**| 1     |        |       |       |       |       |       |     |
| 4-Market-based Performance     | -0.06**| -0.01| -0.01| 1     |       |       |       |       |       |     |
| 5-Accounting-based Performance | 0.26**| 0.08**| 0.33**| -0.09**| 1     |       |       |       |       |     |
| 6-Investment opportunities      | 0.02**| 0.35**| 0.08**| -0.05| -0.30**| 1     |       |       |       |     |
| 7-Gender                       | -0.04| 0.01| -0.01| -0.02| 0.06**| -0.03| 1     |       |       |     |
| 8-Age                          | 0.07**| -0.02| 0.13**| -0.01| 0.17**| 0.12**| 0.11**| 1     |       |     |
| 9-Duality                      | 0.10**| -0.02| 0.25**| 0.00| 0.11**| 0.27**| 0.02| 0.27**| 1     |     |
| 10-Tenure                      | -0.03| -0.05| 0.20**| -0.12**| 0.34**| 0.09**| 0.13**| 0.37**| 0.30**| 1   |

*p<0.01; **p<0.05

5.4. Multiple Regression Analysis and Hypotheses Testing

Hierarchical regression analysis was used to test the four hypotheses on the moderating effects of firm performance on the relationship between international diversification, industry diversification, and CEO compensation. Three steps were taken to enter the variables into the regression equation model. In the first step (Model 1), total compensation and the four control variables were entered: tenure, age, duality, and gender. In the second step (Model 2), the five predictor variables - international diversification (INTD), industry diversification (INDD), market-based performance (RET), accounting-based performance (ACE), and investment opportunities (IO) - were added to the previous regression. Finally, in step three (Model 3), the four moderating variables measured as cross products - INTD*RET, INTD*ACE, INDD*RET, INDD*ACE - were added to obtain the full regression model used to test the hypotheses.

The results of the three regression models are presented in Table 7. In Model 1, all four control variables were significant. In Model 2, all the control variables remained significant and three of the predictor variables were significant (INTD, ACE, IO) while two of the predictor variables were insignificant (INDD, RET). In Model 3, the control and predictor variables retained their significance from Model 2 except that market-based performance became significant and all of the moderating variables were significant except INDD*ACE. Therefore, three of the four hypotheses are supported as follows.
Concerning the interactive effects of international diversification and firm performance on total compensation, Hypothesis H1A is supported by the regression results which provide evidence that market-based performance significantly and negatively moderates the relationship between international diversification and total compensation (p<0.05). Hypothesis H1B is similarly supported: accounting-based firm performance also significantly and negatively moderates the relationship between international diversification and total compensation (p<0.01). Consistent with previous research findings, the significance of the accounting-based firm performance measure is more significant than the market-based performance measure (Holmstrom, 1979; Banker & Datar, 1989; Bushman & Indjejikian, 1993; Baber et al., 1996; Duru & Reeb, 2002).

For the interactive effects of industry diversification and firm performance on total compensation, Hypothesis H2A is supported as the regression results. Similar to international diversification, market-based firm performance significantly and negatively moderates the relationship between industry diversification and total compensation (p<0.10). However, the regression results do not support H2B. Contrary to international diversification, no significant relationship was found on the moderating effect of accounting-based firm performance on the relationship between industry diversification total compensation.

### Table 7
#### Results of Regression Models

| Variable (Coefficient) | Model 1 Beta Value (t-statistic) | Model 2 Beta Value (t-statistic) | Model 3 Beta Value (t-statistic) |
|------------------------|----------------------------------|----------------------------------|----------------------------------|
| INTD = International Diversification (a1) | 0.103*** (5.631) | 0.135*** (6.849) |
| INDD = Industry Diversification (a2) | 0.007 (.353) | 0.022 (0.976) |
| RET = Market-based Performance (a3) | 0.006 (.370) | 0.160* (1.763) |
| ACE = Accounting based Performance (a4) | 0.482*** (24.072) | 0.874*** (9.381) |
| IO = Investment Opportunities (a5) | 0.084*** (4.426) | 0.079*** (4.154) |
| INTD*RET (α6) | -0.165* (-1.847) | -0.372*** (-4.047) |
| INTD*ACE (α7) | 0.012 (0.509) | -0.049† (-1.501) |
| INDD*RET (α8) | -0.049† (-1.796) | -0.052** (-2.915) |
| INDD*ACE (α9) | 0.006** (3.263) | 0.036* (2.021) |
| Tenure (α10) | -0.067** (-3.263) | 0.033* (1.814) |
| Age (α11) | -0.036† (-1.796) | -0.052** (-2.915) |
| Duality (α12) | 0.173*** (8.384) | 0.055** (2.990) |
| Gender (α13) | -0.063** (-3.152) | -0.053** (-3.025) |
| Adjusted R² | 0.039 (3.152) | 0.036* (2.021) |
| Change in adjusted R² | 0.041*** (8.384) | 0.026 (2.990) |

* When the predicted sign is unknown, the t-value is a two-tailed test; † p<0.100; * p < 0.050; ** p <.010; ***p<.001
V. CONCLUSION

This study examines the role of firm performance as a moderating variable on the relationship between corporate diversification and CEO compensation. We found that lower market-based firm performance produces larger interaction effects to increase diversification (both international and industrial) and CEO compensation. Although accounting-based firm performance had a similar negative moderating effect relationship for international diversification and CEO compensation, contrary to prior research, no relationship with industry diversification and CEO compensation was found for accounting-based firm performance.

These findings may help decision-makers, such as the Board of Directors, construct optimal compensation contracts that reduce agency cost and maximize shareholder wealth by understanding the interaction between firm performance, corporate diversification, and CEO compensation. Future research could investigate other moderating variables besides firm performance that help in understanding the relationship between these corporate characteristics.

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