THE IMPACT OF CHIEF EXECUTIVE OFFICER'S COMPENSATION ON AGENCY COSTS: THE ROLE OF GOOD CORPORATE GOVERNANCE

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Abstract

Exploring the interplay between managerial compensation, agency costs, and corporate governance, this study investigates how chief executive officer (CEO) duality (combined CEO and chairman roles) moderates the relationship. Using data from Vietnamese listed industrial firms (2013–2022), the research reveals that under weak governance (CEO duality), compensation has no significant impact on agency costs. However, with strong governance (separate CEO and chairman roles), compensation's influence on agency costs weakens. Building on this analysis, the study proposes recommendations for enhancing corporate governance practices and mitigating the influence of remuneration on agency problems.

Keywords: Agency Cost, Executive Compensation, Corporate Governance, Duality

1. INTRODUCTION

In the business activities of enterprises, shareholders and business owners cannot manage everything, especially state-owned enterprises and large-scale joint stock companies. Therefore, the relationship between shareholders and corporate managers is fraught with conflicts of interest arising due to the separation between ownership and control, different management and shareholder goals as well as information asymmetry between managers and shareholders (Dey, 2008). Due to these conflicting interests (agency conflicts), managers have the incentive and ability to maximise their own benefits at the expense of the company's shareholders, thereby incurring agency costs.

Agency costs are costs that arise when there is a lack of consensus between the goals of managers and owners in a company.

To reduce the agency problem, providing managers with appropriate incentives is necessary. According to the optimal contract perspective, boards of directors act in the interests of shareholders, attempting to provide cost-effective incentives to managers through compensation. Optimal compensation contracts may result from effective direct negotiations between the board and executives or from market constraints that lead parties to accept such contracts even when there is no equal bargaining (Bebchuk & Fried, 2003). However, the results from optimal contracts do not always achieve the expectations, it can be influenced by board members or by the manager's own power thereby creating opposite results, and increasing agency costs (Bebchuk et al., 2002).

Another approach to reducing the agency problem is the firm's management and monitoring system because optimal contracts alone are not always sufficient to resolve these conflicts (Hart, 1995). Therefore, owners (and in some cases managers themselves) have reason to establish mechanisms to monitor management activities and limit undesirable management behaviour (Jensen & Meckling, 1976). In other words, effective and efficient corporate governance mechanisms can help control the rift between management and shareholders (Haroon & Zaka, 2023; Thamaree & Zaby, 2023; Sehrawat et al., 2019; Kostyuk, 2003).

In conclusion, we focus on the following research questions:

RQ1: Can compensation reduce agency costs?

RQ2: What is the role of corporate governance in the previously identified negative or positive relationship between manager compensation and agency costs?

The research results are expected to contribute to the overview of research in many areas related to manager compensation, agency costs and corporate governance and suggest policymakers to make recommendations for businesses to minimise agency costs, thereby maximising business value.

Our paper is structured as follows. Firstly, this paper shows the literature review of agency cost and compensation with respect to the hypothesis that we want to test in the empirical results (Section 2). Secondly, we provide methodology regarding data and methodology (Section 3). Section 4 of this paper is structured to presents research results. Section 5 concludes the paper.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The agency problem was first mentioned by Smith (1776), who said that managers cannot monitor the company as conscientiously as with private enterprises or joint ventures (at which time the manager is also the business owner). Although mentioned earlier, this hypothesis was established and refined by Jensen and Meckling (1976). Agency theory discusses conflicts and problems of interest between two subjects: 1) the principal and 2) the agent. There have been many studies that have proposed different ways to measure agency costs, including next: 1) the ratio of operating costs to annual revenue; 2) the ratio of annual revenue to

total assets (Ang et al., 2000); 3) asset utilization rate; and 4) operating expense ratio (Singh & Davidson, 2003). In this study, the authors use the operating cost ratio formula to measure agency costs. However, their second measure uses the ratio of selling, general, and administrative (SG&A) expenses to total revenue instead of the ratio of operating expenses to annual revenue as in Ang et al. (2000). According to Singh and Davison (2003), this formula is supposed to represent the degree of managerial discretion in spending the firm's resources. Greater agency costs are indicated by a greater SG&A expenditure to revenue ratio.

Drawing upon agency theoretic principles, the current study investigates the proposition that incentive pay structures are most effective when linked to relative performance compared to comparable organizations, rather than solely relying on absolute performance measures. Supporting this notion, Shibly and Weerasinghe (2019) posit that financial compensation serves as the most potent instrument for organizations to motivate employees towards achieving established goals. However, due to the inherent heterogeneity in company size within the sample, the authors measure the manager's compensation variable (*COM*) by the ratio of the chief executive officer's (CEO's) total income to the company's annual revenue, thereby controlling for size discrepancies and enabling meaningful statistical comparisons. This formulation not only reflects the absolute compensation level offered to the CEO but also captures the proportion of compensation contingent upon revenue performance, acting as a proxy for potential incentive components within the pay structure.

The relationship between managerial compensation and agency costs has been examined and demonstrated in numerous studies, with conflicting results. Two main approaches dominate this field: 1) optimal contracting theory and 2) managerial power theory (Bebchuk et al., 2002).

Optimal contracting theory posits that managerial compensation can mitigate agency costs by incentivizing CEOs to act in the best interests of the firm's owners. This is also supported by the agency theory of Jensen and Meckling (1976). Pepper and Gore (2015) describe in prospect theory that individuals will be averse to losses below a certain reference point, leading them to accept more short-term risk. This reinforces the argument that agents will accept short-term risks such as corruption or cutting corners when they feel their compensation is not corresponding with their effort. Furthermore, managerial compensation can also reduce commitment costs because if compensation is appropriately divided between fixed and variable components, managers will have higher responsibility and risk when making important decisions (Bao & Xue, 2023; Hundal et al., 2022).

Finally, residual loss is also reduced because if compensation is a true reflection of a manager's ability and contribution, the manager will have the ability and motivation to seek out and exploit new business opportunities. Notably, high performers and individuals with high self-efficacy are more interested in performance-based pay plans than any other group (Rynes, 2004).

H1: Managerial compensation mitigates agency costs, implying a negative relationship between managerial compensation and agency costs.

In practice, optimal contracting outcomes may not always be achieved, as they can be influenced by the board of directors or by managerial power itself, leading to an alternative approach to the issue (Bebchuk et al., 2002). Managerial power theory suggests that when a manager has more power, they will use it to increase their compensation and reduce their work effort. Consequently, managerial compensation is often higher and/or less sensitive to performance when managers have more power (Bebchuk & Fried, 2003; Bogus, 1993). Excessive compensation packages also increase agency costs and incentivize CEOs to act in their own interests. To their advantage, CEOs are motivated to increase the firm's cash holdings. According to Blanchard et al. (1994), when productivity remains constant, an increase in the firm's cash holdings will increase managerial compensation. Given the above arguments, compensation can not only mitigate agency costs but also be a component of agency costs when CEOs hold more power than they should.

H2: Managerial compensation increases agency costs, implying a positive relationship between managerial compensation and agency costs.

As mentioned above, corporate governance has a significant impact on executive compensation, as compensation is typically determined by negotiations between the owner and the CEO or the compensation committee (if available). In addition, corporate governance is considered a measure to reduce agency costs. According to Sutedi (2011), good corporate governance acts as a tool to align the interests of stakeholders, including the board of directors and company executives, with the aim of improving organizational performance and achieving corporate goals. This is based on the key principles of transparency, accountability, and independence. Companies with large shareholders are less likely to face agency problems and have lower agency costs (Zheng, 2013). Corporate governance is measured by many factors, including CEO duality. According to Brick et al. (2006), when a CEO also holds the position of chairman of the board, it increases their ability to entrench themselves, making it difficult to replace them when performance declines. Additionally, CEOs who hold dual positions also tend to receive higher compensation, which reflects weak corporate governance. Therefore, it is better to separate these two roles to avoid the concentration of power in one individual and to ensure separate leadership of the board of directors from the management of the company (Higgs, 2002). Hence, since CEO duality is an important measure of the level of corporate governance of a company (which impacts performance), the authors decided to use this measure for the entire study.

A gap exists in the literature regarding the interaction effect between the three variables of good corporate governance, executive compensation, and agency costs. The National Association of Corporate Directors (NACD) highlights that corporate governance encompasses determining executive compensation. This could lead to the tentative assumption that increased compensation reduces agency costs. However, if a firm continues to enhance its corporate governance practices, the efficacy of increased compensation might diminish. This is because one of the key elements of good corporate governance

(executive compensation) has already been addressed. Consequently, the authors posit the following hypothesis:

H3: Effective corporate governance weakens the negative relationship between managerial compensation and agency costs.

On the contrary, in the case of manager salary and agency costs having a negative relationship, good corporate governance, meaning the CEO does not concurrently hold the position of chairman of the board of directors, has been proven to reduce agency costs. face (Sehrawat et al., 2019). More specifically, in their research Mehmood et al. (2019) demonstrated that in South Asian countries, investors, especially institutional investors, tend to choose companies that have effective management, thereby reducing agency costs. Based on conventional mathematical reasoning, we can assume that while managers' compensation increases agency costs, good corporate governance that reduces agency costs will help restrain (reduce) that growth. That is the basis for the fourth hypothesis of the study:

H4: Effective corporate governance weakens the positive relationship between managerial compensation and agency costs.

3. DATA AND METHODOLOGY

3.1. Data

Research data is secondary data collected in the consolidated financial statements of 165 Industry companies listed on the Vietnam Stock Exchange (Hanoi Stock Exchange (HNX) and Ho Chi Minh City Stock Exchange (HOSE)) from 2013 to 2022. In which, the *salary* variable is the total income of the current CEO of each company over the years, including salary, bonuses and allowances (if any).

During the collection process, some observations were removed due to a lack of information on CEO income. After screening, the total number of observations in the study is 511 observations collected from 90 industry companies from 2013 to 2022.

3.2. Research methodology

We use quantitative methods to analyse the relationship between manager compensation and agency costs, thereby evaluating the impact of corporate governance. Data was collected from 90 companies in the industry listed on the Vietnam Stock Exchange from 2013 to 2022 in the form of panel data. Then, the data were imported into Stata software for analysis with three recovery methods: 1) pooled ordinary least squares (OLS); 2) random effects model (REM) and 3) fixed effects model (FEM). From there, the research team derived two models as follows:

Model 1

$$ACOST = \beta_0 COM + \beta_1 ROE + \beta_2 CDUAL \\ + \beta_3 CASHR + \beta_4 FOWN + \beta_5 SOWN + \beta_6 LEV \qquad (1) \\ + \beta_7 SIZE + \beta_8 GDP + \varepsilon_{it}$$

Model 2

$$ACOST = \beta_1 COM + \beta_2 DUAL + \beta_3 DUACOM \\ + \beta_4 ROE + \beta_5 CASHR + \beta_6 FOWN + \beta_7 SOWN \\ + \beta_8 LEV + \beta_9 SIZE + \beta_{10} GDP + \varepsilon_{it}$$

(2)

where,
- β_0: dependent — intercept (constant term);
- β_1, $\beta_2 \ldots \beta_8$: slope coefficients for each independent variable;
- ε: model error (residuals);
- i: company;
- t: year t.

Table 1. Summary of variables

Variables	Formula	Source
Dependent variable		
ACOST	Selling general and administrative expenses / total asset	Fiinpro
Independent variables		
COM	CEO compensation / total asset	Annual report of listed company
ROE	Profit after tax / total equity	Fiinpro
CDUAL	= 1 if the chairman of the board of directors holds the position of CEO; = 0 if the chairman of the board of directors does not hold the position of CEO.	Annual report of listed company
DUACOM	CDUAL * COM	Fiinpro
CASHR	(Cash + equivalents) / current liabilities	Fiinpro
FOWN	Foreign ownership	Fiinpro
SOWN	State ownership	Fiinpro
LEV	Total debt / total equity	Fiinpro
SIZE	Ln (total asset)	Fiinpro
GDP	Ln (GDP)	Fiinpro

4. EMPIRICAL RESULTS

4.1. Descriptive statistics

In this study, agency costs are calculated based on the ratio of SG&A expenses to total revenue. According to Table 2, the average value of agency costs (*ACOST*) in 511 observations is 8.17%, with a standard deviation of about 6.07%. According to Thuy et al. (2014), agency costs often increase with company size (*SIZE*) while the opposite trend will occur when the state ownership (*SOWN*), foreign investor ownership (*FOWN*) and the company's financial leverage ratio (*LEV*) increase.

The average CEO's salary (*COM*) accounts for about 0.21% of revenue, but has large fluctuations, with a standard deviation of 30.3%. This shows that

industrial enterprises have very different salaries for their CEO. The corporate governance variable (*CDUAL*) has an average value of 11.7%, showing that most CEOs do not concurrently hold the position of chairman of the board of directors. The average cash payout (*CASHR*) ratio is 47.2%, but there is wide variation, with a standard deviation of 83.8%.

Return on equity (*ROE*) has a mean value of 12.03%, with a standard deviation of 9.81%. This level is considered good, but there are significant fluctuations. State-owned capital (*SOWN*) is often higher than foreign-owned capital (*FOWN*), possibly due to regulations on foreign capital investment limits. The two indicators of financial leverage (*LEV*) and company size (*SIZE*) have large differences between sample businesses.

Table 2. Descriptive statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
ACOST	511	0,0816853	0,0607174	0,0036	0,359
COM	511	0,2086106	0,3034537	0,01	2,03
ROE	511	0,1203438	0,0981337	-0,1192	0,4682
CDUAL	511	0,1174168	0,3222318	0	1
CASHR	511	0,4722051	0,8383713	0,006	5,0531
FOWN	510	0,080511	0,1147481	0	0,49
SOWN	510	0,2974906	0,2401319	0	0,7822
LEV	511	1,393713	1,226219	0,0556	5,8908
SIZE	511	11,73722	0,5271818	10,5583	12,9714
GDP	511	26,6108	0,6186855	26,0879	28,5753
DUACOM	511	0.0231703	0.1130752	0	1.53

Table 3. Correlation matrix

	ACOST	*COM*	*ROE*	*CDUAL*	*CASHR*	*FOWN*	*SOWN*	*LEV*	*SIZE*	*GDP*	*DUACOM*
ACOST	1.0000										
COM	0.4470	1.0000									
ROE	-0.0276	-0.1280	1.0000								
CDUAL	-0.1416	-0.0134	0.1044	1.0000							
CASHR	0.0594	0.2142	0.0768	-0.0827	1.0000						
FOWN	0.0705	-0.0176	0.200	-0.0001	0.1066	1.0000					
SOWN	-0.0254	0.0665	-0.0358	-0.1942	-0.1378	-0.1862	1.0000				
LEV	-0.0805	-0.2301	-0.2253	0.1175	-0.3756	-0.2648	-0.0095	1.0000			
SIZE	-0.0445	-0.5452	0.0870	-0.0657	-0.2361	0.2090	-0.1168	0.1787	1.0000		
GDP	-0.0034	-0.0108	0.0093	-0.0030	0.0585	-0.0184	0.0067	0.0072	0.0493	1.0000	
DUACOM	0.0229	0.2473	0.0283	0.5623	-0.0579	-0.0479	0.0115	-0.0041	-0.1076	0.0096	1.0000

Table 3 shows the correlation coefficients of all variables measured in this study. The correlation coefficient has a value ranging from -1 to 1. In particular, if the correlation coefficient is equal to 1, it means that this pair of variables has an absolutely close correlation. On the contrary, if the correlation coefficient of a pair of variables is 0 or approximately 0, the pair of variables is considered uncorrelated. Besides, the signs of the correlation coefficients show the trend of the relationship: 1) the sign (+) represents a positive relationship (both variables increase or decrease), and 2) the sign (-) represents a negative relationship. inverse system (when one variable increases, the other variable decreases and vice versa).

A few points can be drawn from Table 3: agency costs have a negative correlation with the measurement of corporate value but a positive correlation with manager compensation. This means that when agency costs increase, business value decreases and manager compensation increases. Regarding the relationship between variables, most correlations are at medium and low levels: the absolute value is always less than 0.5, indicating that it is unlikely to cause multicollinearity.

4.2. Multivariate results

Table 4 gives the results of estimating the multiple regression model of Model 1, with the dependent variable being the agency cost (*ACOST*). The regression equation can be estimated by three methods: 1) pooled OLS, 2) REM, and 3) FEM.

To select the most appropriate regression method, the regression results were tested using the Breusch and Pagan Lagrangian multiplier test and the Hausman test. In particular, the Breusch and Pagan Lagrangian multiplier test (using the *xttest0* command) shows that the p-value coefficient is 0.0000, which proves that the pooled OLS method is not as appropriate as the REM. Next, the Hausman test (using the *xtoverid* command) shows that the p-value coefficient is 0.0046, proving that the FEM is the most appropriate of the three regression methods.

In Model 1, the estimated coefficient on *COM* is negative and significant at the 5% level, which may suggest that high managers' compensation is connected with high managerial discretionary expenses (high agency costs).

Table 4. Impact of executive compensation on agency costs

Variables	Pooled OLS	REM	FEM
COM	0.1208801*** (0.0093451)	0.0787404*** (0.0245711)	0.0622839** (0.0346794)
ROE	0.0289361 (0.0251035)	-0.0407463 (0.0456791)	-0.0558778 (0.0490731)
CDUAL	-0.0264155*** (0.0075274)	-0.019971** (0.0104334)	-0.0215328** (0.0112286)
CASHR	-0.0016267 (0.0031058)	0.0026335 (0.0023306)	0.003335* (0.0023519)
FOWN	0.0109679 (0.0222866)	0.1286656** (0.0482514)	0.140888** (0.0603441)
SOWN	-0.0154076* (0.010231)	-0.0122993 (0.0226539)	-0.0252062 (0.0332888)
LEV	0.0018678 (0.0022107)	0.0018496 (0.0033812)	0.0032125 (0.00045256)
SIZE	0.0286271** (0.0055703)	-0.0036989 (0.0167005)	-0.0319525 (0.0289217)
GDP	-0.0007958 (0.0037514)	0.0006408 (0.0016049)	0.0014953 (0.0015333)
Const	-0.2569611** (0.1158733)	0.0883408 (0.2199253)	0.4032344 (0.3523645)
Numbers of obs.	511	511	511
R-squared	0.2763	0.3158	0.1988

*Note: Dependent variable is ACOST; *** at 1% significance level; ** at 5% significance level; * at 10% significance level.*

Table 5 gives the results of estimating the multiple regression model of Model 2, which will be estimated by three methods: 1) pooled OLS, 2) REM, and 3) FEM.

Using the Breusch and Pagan Lagrangian multiplier test and the Hausman test, the p-values are 0.0000 and 0.0046, which means the FEM is the most appropriate method

Model 2 shows that when the *CDUAL* variable = 1, the coefficient of the *COM* variable will be 0.0851 and the coefficient of the *DUACOM* variable will be-0.0877, which is approximately 0.

This result explains the impact of corporate governance on the relationship between manager compensation and agency costs. In contrast, when the *CDUAL* variable = 0, the coefficient of the *COM* variable will be 0.0851. This result shows that the *COM* variable and the *ACOST* variable have a positive relationship, or when the *COM* variable increases, the *ACOST* variable will also increase. So, with *CDUAL* = 0, or when corporate governance is good, increased manager compensation will increase agency costs.

Table 5. The impact of corporate governance on the influence of executive compensation on agency costs

Variables	Pooled OLS	REM	FEM
COM	0.1235732*** (0.0098183)	0.0950475*** (0.012571)	0.085121** (0.0156619)
ROE	0.0287942 (0.0251089)	-0.0416863 (0.0231689)	-0.0564686 (0.0245492)
CDUAL	-0.0216107*** (0.0092435)	-0.0033907 (0.0077809)	-0.0034007 (0.0080396)
DUACOM	-0.0235162 (0.0262469)	-0.079045** (0.0201209)	-0.0876578** (0.0207888)
CASHR	-0.0018276 (0.0031345)	0.0021836 (0.0028065)	0.0030632* (0.0029238)
FOWN	0.0110238 (0.0222922)	0.1349465** (0.0294743)	0.1499337** (0.0379763)
SOWN	-0.014888* (0.0102495)	-0.0069822 (0.0123461)	-0.0176678 (0.0148139)
LEV	0.0017747 (0.0022136)	0.0015997 (0.0025684)	0.0027515 (0.0030281)
SIZE	0.0291097** (0.0055974)	-0.0015485 (0.0083363)	-0.0289593 (0.0128092)
GDP	-0.0007367 (0.0037528)	0.0009921 (0.0023414)	0.0018799 (0.0023425)
Const	-0.2646934** (0.116217)	0.0491261 (0.1118734)	0.3508803 (0.1543475)
Number of obs.	511	511	511
R-squared	0.2775	0.1866	0.1222

*Note: Dependent variable is ACOST; *** at 1% significance level; ** at 5% significance level; * at 10% significance level.*

4.3. Effect of chief executive officer compensation on agency costs

CEO compensation has a positive relationship with agency costs. In theory, optimal contracts with high compensation will make managers more responsible, reducing agency costs. However, according to the theory of management power, the more power they hold, the more self-interested they will be, reducing their effort at work (Zhang et al., 2016; Bebchuk et al., 2002). It will be difficult to have an optimal contract or an optimal salary level for managers. Even if a manager has a very high compensation, when not carefully designed and monitored, compensation can still lead to self-interest problems, giving rise to agency costs. This is completely consistent with the research of Jensen (1986), which suggests that when salary packages are increased, managers will tend to act for personal gain while increasing agency costs.

4.4. Impact of corporate governance on the influence of executive compensation on agency costs

When the chairman of the board of directors concurrently holds the position of CEO, which means poor corporate governance, the manager's salary does not affect agency costs. The explanation for this result is the stewardship theory mentioned above (Davis et al., 1997). Simultaneously holding the position of chairman of the board of directors and CEO makes managers pay more attention to long-term plans, focusing on the common interests of the business and shareholders, thereby reducing agency costs. It can be seen that when managers are self-aware, responsible, and not self-interested, their salary is no longer a factor affecting their productivity, so the agency costs are not affected.

On the other hand, when corporate governance is strong, effective manager compensation raises agency costs. This result is contrary to what was shown in the theory that if manager compensation increases agency costs then good corporate governance will weaken the relationship between manager compensation and agency costs, meaning that good corporate governance will reduce the impact of manager compensation on agency costs. This finding can be explained by two theories of managerial power theory and agency theory. According to managerial power theory, the more power a manager holds, the less sensitive compensation is to performance (Bebchuk & Fried, 2003). So, when a manager or CEO holds a lot of power, an increase in salary does not mean that his/her performance will increase. Reinforcing this argument, agency theory states that a manager's goal is to increase salaries, bonuses, and other personal benefits (Jensen & Meckling, 1976). When the CEO is not the chairman of the board of directors, he/she will care about personal and short-term interests rather than putting the interests of shareholders first. Based on these two theories, the authors found that a CEO's increased salary does not mean that the CEO's performance will increase, and therefore, salary will no longer be the driving force that motivates the CEO to make decisions based on benefits. shareholders maximum. The portion of compensation that is increased while performance does not increase will become agency costs, thereby increasing compensation will increase agency costs.

5. CONCLUSION

Drawing upon prior research that identified both negative and positive associations between managerial compensation and agency costs, our research team formulated two initial hypotheses based on these contrasting relationships. The study employed data gathered from the financial statements of 165 companies within the industrial sector listed on the Vietnam Stock Exchange from 2013 to 2022. Our findings reveal that when the CEO concurrently holds the position of chairman of the board of directors, signifying weak corporate governance, managerial compensation does not

exert a significant influence on agency costs. Conversely, when the CEO and chairman roles are distinct, indicating good corporate governance, it weakens the influence of managerial compensation on agency costs.

Based on the findings, we propose recommendations aimed at enhancing corporate governance and mitigating the potential attenuation of the positive association between executive compensation and agency costs observed under strong corporate governance. The primary recommendation entails altering, or partially replacing, managerial compensation with bonus shares. This realignment aims to better harmonize the interests of CEOs with those of the company's

owners. Additionally, to foster a robust corporate governance environment, the research team advocates for CEO participation on the board of directors, while simultaneously discouraging their concurrent appointment as chairman of the board.

The limitations of this study are data and variables. The interpretation of data and results may be influenced by scope because we used only 90 companies in this study to explore the relationship between compensation and agency cost. Moreover, models used to analyze compensation and agency costs may oversimplify complex relationships and may not capture all relevant factors.

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