Effects of ownership Concentration, Executive Characteristics and Firm Performance on Executive Cash Compensation for Thailand: 2009-2013

Kannikar Namwong
College of Innovation Management, Rajamangala University of Technology Rattanakosin, Nakhonpathom, Thailand

ABSTRACT

This paper aims to examine relationship among ownership concentration, executive characteristics, and firm performance; and their impacts on executive compensation. Panel data of eight industries of listed companies, including Agro & Food Industry, Consumer products, Resources, Technology, Services, Industrials, Property & Construction, and Finance, during 2009 to 2013 were collected from firm's annual reports, 56-1 forms, and SETSMART database. Based on agency concept, executive compensation is constructed and estimated using fixed effects method. The study findings reveal that firm performance, measured by Tobin's Q, significantly and positively related with executive compensation in Consumer products, Technology, Services, and Financial sectors. Characteristics of executives significantly affected executive compensation. Male executive earned higher compensation than female.

Keywords: firm performance, executive compensation, executive characteristics

1. INTRODUCTION

Executive compensation is used as an incentive to maximize profits (Becker, 2004) in forms of salary and bonus that are increased with executive performance. Executives are motivated to achieve a good management, so that they receive a good compensation in return (McConnell & Brue, 2005).

Performance represents the annual performance of a business measured from return on assets (ROA), return on equity (ROE) and ratio of market value of equity (Tobin's Q). Effective firm performance increases the ability to pay compensation (Richard, 2009; Jiang & Habib, 2009; Tobin, 1969).

Executive characteristics are known to be related with compensation. Male executives can deal with decision making and managerial risks better than female. As such, male executives may receive more compensation (Niederle & Vesterlund, 2007). Executives' level of academic education may affect their management. Executives with higher education have better skills and ideas of management than executives with lower education (Lam, 2013). Agents (executives) that have a family member as a large block shareholder suggest a stronger management by which executives are well entrusted and favorably cooperated by shareholders. These executives are motivated to operate to the utmost because their family members are stakeholders. Thus compensation pay is higher than that of businesses with no interested person in executives' families (Fama & Jensen, 1983).

2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1. Theoretical Framework

2.1.1 Motivation Theory

Motivation Theory (Herzberg, 1968; McClelland, 1976) is a theory that explains thought processes of motivating expectations and believes; managers who exert a high level of effort to achieve the goals and receive compensation from their performances will induce inspiration to succeed and develop their performances, as to be socially acceptable, prideful, compensated and appropriately awarded. Performance of operation is measured from the efficiency of firm performance (Lunenbury, 2011).

2.1.2 Agency Theory

Agency theory is the theory that explains relationship between two persons, the principal and the agent, that have different management perspectives. Executives desire to act in their own best interests that are not complied with the agreement leading to an occurrence of conflicts of interest between the principal and the agent. Conflicts of interest are categorized into 4 types, according to McColgan (2001).

a) Moral-Hazard is a situation arisen from ethical issues. Executives (the agent) perform with regard to their own interests rather than interests of shareholders and not complied under the contract of employment. The long-term contract leads to the management not being performed with full effort and the likelihood of distortion may arise, such as numerical manipulation on financial report that is difficult to monitor by external auditors. As executives hold more information over shareholders, asymmetric information exists between the agent and the principal. Inefficient performance is a cause of the reduction of the firm value.

b) Earnings Retention is a conflict concerning firm size. Executives are willing to operate by increasing the size of the firm to have more obligation and more responsibilities on management. A search for internal financing (retained earnings) is preferred over external financing (liabilities) to protect them from being monitored externally. Using such capital structure causes a lower compensation paid to shareholders which affects compensation pay from investments. Shareholders prefer external funds rather than internal financing to increase investment returns and wealth to shareholders.

c) Time Horizon has arisen from investment horizon in which shareholders will emphasize on long-term investments that offer higher returns, while administrators will give priority to short-term investments over long-term ones at the time of their tenure.

d). Managerial Risk Aversion is the tendency to avoid investment risks because executives have no interest in case of executive compensation is a fixed salary. Whilst shareholders prefer executives to make decisions on risky investments as investment returns are higher which, in turn, it increases returns for shareholders.

The agency problem exists between executives (agents) and shareholders (principals) that have conflicts of interest on asymmetric information (Jensen & Meckling, 1976). Shareholders cannot directly control the administration of executives. As a result, executives operate the management for their personal interests rather than interests of shareholders that causes a moral-hazard. Supervision by the board of committee is required for administrators to perform efficiently; however, it is difficult to control due to covering up of information causing complication on inspection which results in agency cost. Therefore, a way to cope with the agency problem for effective

management and good performance is to have a good compensation plan.

Compensations include salary and bonus. A fixed salary is paid when executives achieve the goals set in the agreement. As if executives have competency of management beyond the predestined goals, they will receive award or bonus as incentives for higher level of effectiveness (Bebchuk & Fried, 2003).

Salary and bonus will be paid as cash compensations (Mehran, 1995), in which it can be measured as follows. First, it is evaluated by firm performance. If the company has a good firm performance, executive compensations will be at a high rate. Firm performance is measured from ROA and ROE that are then compared between ROA, ROE and Tobin's Q (Tobin, 1969). Second, it is determined by executive characteristics that are related with compensation plan such as academic education, gender and family ownership. Male executives are less risky on management than females (Khan &Vieito, 2013). Third, it is measured from ownership concentration by determining from the first five large block shareholders. Bonus pay is in a form of cash compensation. Bonus compensation is an incentive for employee's loyalty to the organization for the best outcome of administration and beneficial for shareholders. Executives will manage to make profits and stock is increased, so that they have advantages from increased value of shares because they are also one of the owners (Bergman & Jenter, 2007)

Furthermore, shareholder structure with ownership concentration is beneficial on performance of executives, votes and executives being acknowledged to shareholders. As family members are shareholders, it is an incentive for executives to exert a high level of effort to effectively operate for the best benefit and wealth of family members as shareholders (Stanca, 2009).

2.2 Hypotheses

Independent Firm Performance

Executive compensation will be at a high rate when a company has a good performance, by using ROA, ROE and Tobin's Q as a measures.

H1: Firm performance is related with executive cash compensation

Executive characteristics

Executive characteristics include gender, academic education and family ownership. Gender is involved in compensation paying in which male executives can manage decision makings more efficiently than female, thus receive a higher rate of compensation. Academic education is taken as a factor for compensation paying in which executives with a higher level of education receive more payment. Family ownership is also determined. Five percent of equity ownership within the firm are family members of executives, as present in annual reports, are measured.

H2: Executive characteristics are related with executive cash compensation

Ownership concentration

Ownership concentration includes the first five large block shareholders by measuring the percentage of total issued and paid-in shares.

H3: Ownership concentration is related with executive cash compensation

3. METHODOLOGY

3.1 Data collection and Sample

The data of companies listed of the Stock Exchange of Thailand (SET), including Agro & Food industry, Consumer products, Resources, Technology, Services, Industrials, Property & Construction and Financials, during 2009-2013 (total of 5 years) were collected from the website of the Securities and Exchange Commission (SEC) Moreover, annual reports and the Form 56-1, financial information in the financial statements, information for executive compensation were also collected from SETSMART.

3.2 Model Specification and variables

Model estimated with Random Effect model can be expressed as

$$Y_{1it} = \beta_0 + \beta_1 x_{1,it} + \beta_2 x_{2,it} + \beta_3 x_{3,it} + \beta_4 x_{4,it} + \beta_5 x_{5,it} + \beta_6 \text{Size}_{it} + \beta_7 \text{IND}_{it} + \beta_8 \text{Age}_{it} + \varepsilon_{it} \tag{1}$$

where:

I	=	Individual dimension (t=1,…, N)
t	=	Time dimension (t=1,…, T)
β	=	Unknown parameters
ε	=	Error term
Y_{1it}	=	Salary plus bonus compensation of the company i at time t
X_1	=	Firm performance measured by ROA, ROE and Tobin's Q
X_2 (WOMEN)	=	Gender
X_3 (MASTERS)	=	Academic education
X_4 (FAMILY5%)	=	Family ownership
X_5 (OWNER)	=	Ownership concentration
X_6 (LNSIZE)	=	Firm size measured from Natural Logarithm of total assets at the end of year. There are a number of employees in a large company resulting in more responsibilities for executives, hence more compensation (Wu, 2013; Veprauskaite & Adams, 2013; Sompson, 2008).
X_7	=	Firm industry. Different types of industries suggest different responsibilities, thus different compensation payment (Veprauskaite & Adams, 2013; Wu, 2013; Cichello, 2005; Sompson, 2008)
X_8 (AGE)	=	Firm age measured from Natural Logarithm of the number of registered years. It is a quantitative variable that indicates the age of firm registered in SET. A newly listed company may not have a steady performance, therefore executives have more responsibilities. Hence, executive compensation is also dependent upon firm age (Veprauskaite & Adams, 2013; Cao, Pan & Tian, 2011; Sompson, 2008)

4. RESULTS

Estimation results with Fixed Effects are shown in Table 1. As estimated using fixed effects method, it was found that relationships between executive compensation and firm performance in Consumer products, Technology, Services and Financials were positive, in which firm performance was measured through Tobin's Q. This is complied with the H1 hypothesis. However, Agro&Food Industry, Resources, Industrials and Property& Construction did not show any correlation between executive compensation and firm performance.

According to the H2 hypothesis, in Technology industry, female executive was in a negative relationship with compensation, in which compensation is at a higher rate than that of males. Unlike Technology group, the rest of industry groups pay more compensation to male executives than females. Family ownership (5% shares) was significantly found to be negatively correlated with executive compensation in Property & Construction. Family ownership in other industries had no relationship with executive compensation. For ownership concentration as in the H3 hypothesis, there was no relationship found with executive compensation.

Firm size had an effect on executive compensation in which the relationship is positive in companies with large total assets. Large-sized firms are likely to pay a high rate of executive compensation, but firm size was not correlated with compensation in Agro & Food Industry.

By using ROA and ROE, there was no statistical relationship found between firm performance and executive compensation. However, only firm performance of Industrials that was significantly associated with executive compensation at $p<0.1$.

Table 1 Relationship between executive compensation and firm performance measured from Tobin's Q in each industry

Industry	…o&Food	Consumer Products	Resources	Technology	Services	Industrials	Property& Construct
	718	0.877***	0.0188	0.0932**	0.100**	0.136	0.258
	)115***	-0.00471	-0.00805	0.00670*	-0.00426	-0.00691	-0.0231**
	)031	-0.00289	-0.0017	-0.000813	-0.0011	0.00208	0.00307
	)0349	-0.00511	0.0415	0.0435	0.00547	-0.00549	-0.0981**
	)0878	0.00108	0.00126	-0.00829	0.000298	-0.00103	-0.00371
	239	0.0792**	0.374***	0.261***	0.176***	0.407***	0.0540*
	208	-0.00208	0.00719	0.0117	0.00822	0.000119	0.0341**
	13***	14.97***	11.16***	13.12***	14.13***	10.62***	16.67***
		106	74	116	257	229	236
		26	19	29	60	50	50
		106	74	116	257	229	236
	68	15.94	37.17	37.2	30.47	41.11	61.62
	71	0.0842	0.605	0.339	0.372	0.264	0.43
	73	0.184	0.249	0.223	0.0523	0.096	0.0459
	49	0.037	0.61	0.337	0.372	0.343	0.507

*** $p < 0.01$

Table 2 Relationship between executive compensation and firm performance measured from ROA in each industry.

	Agro&Food Industry	Consumer Products	Resources	Technology	Services	Industrials	Property&Construct
	0.00307	-0.00151	0.00375	0.00181	0.00621	0.00954	0.00774
	-0.0112***	-0.00191	-0.00780	0.00802**	-0.00372	-0.000729	-0.0228**
	-0.00340	-0.00331	-0.00160	0.000961	-0.000558	0.00237	0.00313
	-0.00502	-0.00196	0.0406	0.0484	0.00874	-0.000958	-0.0988**
	-0.00916	0.000176	0.00189	-0.00559	0.00250	-0.00141	-0.00293
	0.0124	-0.00600	0.369***	0.192**	0.158***	0.416***	0.0515*
	0.0207	0.00953	0.0100	0.0273	0.0140	0.00207	0.0388***
	17.41***	16.77***	11.15***	13.83***	14.26***	10.57***	16.73***
	182	106	74	116	257	229	234
	39	26	19	29	60	50	50
	257	229	234	234	257	229	234
	34.53	2.634	38.92	28.57	24.06	44.45	60.79
	0.168	0.0549	0.589	0.278	24.06	44.45	60.79
	0.172	0.0797	0.265	0.185	24.06	44.45	60.79
	0.148	0.0639	0.597	0.271	24.06	44.45	60.79

$* < 0.05, *** p < 0.01$

Table 3 Relationship between executive compensation and firm performance measured from ROE in each industry.

Agro&Food Industry	Consumer Products	Resources	Technology	Services	Industrials	Property&Construct
0.00000530	-0.000149	0.00552	0.000546	0.00266	0.00444*	-0.000810
-0.0109***	-0.00186	-0.00914*	0.00910**	-0.00218	-0.00788*	-0.0231**
-0.00325	-0.00322	-0.00116	0.000951	-0.00172	0.00282	0.00308
-0.00674	-0.00116	0.0276	0.0473	0.0137	-0.00818	-0.0991**
-0.0115*	0.000507	-0.00164	-0.00560	0.00402	-0.00194	-0.00315
0.0152	-0.00628	0.319***	0.172*	0.293***	0.423***	0.0466*
0.0153	0.00926	0.0239	0.0308	0.00415	0.00374	0.0384***
17.64***	16.75***	12.06***	14.08***	12.31***	10.52***	16.91***
179	106	73	115	252	228	234
39	26	18	29	59	50	50
179	106	73	115	252	228	234
36.96	2.864	40.19	29.41	39.57	45.95	58.24
0.187	0.0586	0.559	0.251	0.400	0.275	0.418
0.182	0.0788	0.304	0.205	0.0475	0.109	0.0518
0.166	0.0666	0.573	0.243	0.400	0.362	0.483

05, *** $p < 0.01$

5. CONCLUSION

The study of the relationship between executive compensation and firm performance by measuring Tobin's Q is to determine the increased market value of equity resulting in an increase in executive compensation. Statistically, by using ROA and ROE, firm performance was not significantly related with executive compensation. This is consistent with the Motivation theory (Herzberg, 1968; McClelland, 1976) and studies of Tobin (1969) (Jiang & Habib, 2009; Riachi & Schwienbacher, 2013; Mehran , 1995; Wu, 2013; Veprauskaite & Adams, 2013).

For characteristics of executives, female executives earn a lower compensation than male executives. In Thailand, gender inequality widely exists and varied across different industries. This is consistent with studies of Gustafsson & Sai (2000), Lam (2013) and Niederle &Vesterlund (2007).

Ownership concentration of the first five shareholders was significantly associated with compensation in Agro & Food industry, by which ROE was in a negative relationship with executive compensation while ROA and Tobin's Q measurements were not correlated with compensation (Jiang & Habib, 2009; Hartzell & Starks, 2003; Cheung, 2005; Amoako-Adu, 2011; Gallego & Larrain, 2012).

Firm size had an effect on executive compensation in which the relationship was positive in all industries. A company with large total assets or large firm size is likely to pay a high level of executive compensation, apart from that of Agro&Food industry which firm size did not affect. Large companies have responsibilities more than small companies, thus can pay more compensation (Wu, 2013; Veprauskaite & Adams, 2013; Sompson, 2008).

Statistically, firm age had a significant effect on executive compensation in only Property & Construction, while there was no relationship found in other groups (Veprauskaite & Adams, 2013; Cao, 2011; Sompson, 2008).

Suggestion on further studies could be the relationship between executive experience and executive compensation, in listed companies of SET and the similar methodology could be used.

REFERENCES

[1] Amoako-Adu Ben, Baulkaran Vishaal and Smith F. Brian. (2011). Executive compensation in firms with concentrated control: The impact of dual class structure and family management, *Journal of Corporate Finance*, 17, pp.1580-1594.

[2] Bebchuk A. Lucian and Fried M. Jesse. (2003). *Executive Compensation as an Agency Problem, Law and Economics Workshop*, Berkeley Program in Law and Economics, UC Berkeley.

[3] Becker S. Gary. (2004). *Deadweight Costs and the Size of Government*, International Review of Economics Education, 3, (1), pp.55-62.

[4] Bergman K. Nittai and Jenter Dirk. (2007). Employee sentivent and stock option compensation, *Journal of Financial Economics*, 84, (2007), pp.667-712.

[5] Canarella Giorgio. (2008). *New insights into executive compensation and firm performance*, Managerial Finance, 34,(8), pp.537-554.

[6] Cao Jerry, Pan Xiaofei and Tian Gary. (2011). Disproportional ownership structure and pay-performance relationship: Evidence from China's listed firms, *Journal of*

Corporate Finance, 17, pp.541-554.

[7] Cheung Yan-Leung, Stouraitis Aris and Wong W.S. Anita. (2005). Ownership concentration and executive compensation in closely held firms: Evidence from Hong Kong, *Journal of Empirical Finance*, 12, pp.511-532.

[8] Cichello S. Michael. (2005). The impact of firm size on pay-performance sensitivities, *Journal of Corporate Finance*, 11, pp.609-627.

[9] Coles L. Jeffrey, Lemmon L Michaes and Meschke Filix. (2011), Structura Models and Endogeneity in Corporate Finance: The Link Between Managerial Ownership and Corporate Performance, *Journal of Financial Economics*, pp.103, (1), pp.149-168.

[10] Combs G. James and Skill S. Maura. (2003). The Impact of Family Representation on CEO compensation, *The Journal of Political Economy*, 107, pp.65-105.

[11] Duru Augustine, Iyengar J. Raghavan and Zampelli M. Ernest. (2012). Performance choice, executive bonuses and corporate leverage, *Journal of Corporate Finance*, 18, pp.1286-1305.

[12] Elston A. Julie and Goldberg G. Lawrence. (2003). Executive compensation and agency costs in Germany, *Journal of Banking & Finance*, 27, (7), pp.1391-1410.

[13] Fama F. Eugene and Jensen C. Michael. (1983). Separation of ownership and control, *Journal of Law and Economics*, 26, (2), pp.301-325.

[14] Fama F. Eugene. (1980). Agency problems and theory of the firm, *Journal of Political Economy*, 88, (2), pp.288-307.

[15] Gallego Francisco and Larrain Borja. (2012). CEO compensation and sarge shareholders: Evidence from emerging markets, *Journal of Comparative Economics*, 40, pp.621-642.

[16] Goergen Marc and Renneboog Luc. (2011). Manageral Compensation, Journal of Corporat Finance, 17, pp.1068-1077.

[17] Guo Wen Chung. (2006). Stock bonus compensation and firm performance in Taiwan, *Managerial Finance Journal*, 32, (11), pp.863-885.

[18] Gustafsson Bjorn and Sai Ding. (2000). Economic transformation and the gender earnings gap in urban China. *Journal of Population Economics* 13, (2), pp.305-329.

[19] Harris Dawn and Helfat Constance. (1997). Specificity of CEO human capital and compensation. *Strategic Management Journal*, pp.895-920.

[20] Hartzell C. Jay and Starks T. Laura. (2003). Institutional investors and executive compensation, *The Journal of Finance,* 58, (6), pp.2351-2374.

[21] Herzberg Frederick. (1968). *One more time: How do you motivate employees? Harvard Business Review*, 46, 53-62.

[22] Jensen C. Michael and Meckling H. William. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3, (4) pp.305-360.

[23] Jinag Haiyan and Habib Ahsan. (2009). *The effect of ownership concentration on CEO compensation-firm performance relationship in New Zealand*, Prcific Accounting Review 21, (2), pp.104-131.

[24] Jones-Bassett Nigel and Lloyd C. Geoffrey. (2004). Does Herzberg's motivation theory have staying power?, *Journal of Management Development*, 24, (10), pp.929-943.

[25] Kato Takao, Kim Woochan and Lee H. Ju. (2007). Executive compensation, firm performance, and Chaeblos in Korea: Evidence from new panel data, *Pacific-*

Basin Finance Jounal 15, pp.36-55

[26] Khan A. Walayet and Vieito P. Joao. (2013). Ceo gender and firm performance, *Journal of Economics and Business*, 67, pp.55-66.

[27] Lam C.K. Kevin, McGuinness B. Paul and Vieito P. Joao. (2013). CEO gender, executive compensation and firm performance in Chinese-listed enterprises, *Pacific-Basin Finance Journal*, 21, pp.1136-1159.

[28] Lunenbury C. Fred. (2011). Expectancy Theory of Motivation: Motivating by Altering Expectations, *International Jonrnal of Management, Business, and Administration*, 15, (1), pp.1-6.

[29] McClelland C. David. (1976). *The achieving society*, New York, NY: Irvington Publishers.

[30] McColgan Patrick. (2001). *Agency theory and corporate governance*: a review of the literature from a UK perspective.

[31] McConnell R. Campbell and Brue L. Stanley. (2005). *Econocics: Principles, Problems, and Policies*, (16th ed.) New York: McGraw-Hill Irwin. pp.220-256.

[32] Mehran Hamid. (1995). Executive compensation structure, ownership, and firm performance, *Journal of Financial Economics*, 38, pp.163-184.

[33] Niederle Muriel and Vesterlund Lise. (2007) Gender Differences in Competition, *Negotiation Journal*, 10, pp.44-463.

[34] Porter E. Michael. (1980). *The Contributions of Industrial Organization To Strategic Management*, Academy of Management Review, 6, (4), pp.609-620.

[35] Riachi Ilham and Schwienbacher Armin. (2013). Securitization of corporate assets and executive compensation, *Journal of Corporate Finance*, 21, pp.235-251.

[36] Richard J. Pierre, Devinney M. Timothy, Yip S. George and Johnson Gerry. Measuring Organizational Performance: Towards Methodological Best Practice.(2009). *Journal of Management,* 46, (4), pp.650-675.

[37] Sampson-Akpuru Michael. (2008). Does an lvy League Education Amount to Higher CEO Pay?, *Lethbridge Undergraduate Research Journal*, 3, (1), pp.1-9.

[38] Stanca Luca, Bruni Luigino and Corazzini Luca. (2009). Testing theoryes of reciprocity: Do Motivations matter?, *Journal of Economic Behavior & Organization*, 71, pp.233-245.

[39] Tobin James. (1969). A General Equilibrium Approach to Monetary Theory, *Journal of Money, Credit, and Banking,* 1, (1), pp.15-29.

[40] Veprauskaite Elena and Adams Mike. (2013). *Do powerful chief executives influence the financial performance of UK firms?,* The British Accounting Review 45, pp.229-241.

[41] William R. Tracey. (2003). *The Human Resources Glossary, Third Edition: The Complete Desk Reference for HR Executives, Managers, and Practitioners*, pp.1-350.

[42] Wu Chen-Hui. (2013). Family ties, board compensation and firm performance, *Journal of Multinational Financial Management*, 23, pp.255-271.

[43] Young Chaur-Shiuh and Tsai Liu-Ching. (2008). The sensitivity of compensation to social capital: Family CEOs vs. nonfamily CEOs in the family business groups, *Journal of Business Research*, 61, pp.363-374.