JOURNAL OF MARITIME RESEARCH

Vol XX. No. III (2023) pp 157–162

ISSN: 1697-4840, www.jmr.unican.es

Empirical Analysis of The Effect of Administrative Internal Cost on Value of Maritime Firms in Nigeria

Omorho Humphrey Onoriode[1,*], Edefetano Lucky Oboreh[2]

ARTICLE INFO

Article history:
Received 3 Aug 2023;
in revised from 24 Aug 2023;
accepted 16 Sept 2023.

Keywords:
Administrative Cost, Corporate Board Cost, Employee Bonus, Firm Value.

ABSTRACT

This study evaluates the relationship between Administrative Internal Cost and value of Maritime firms in Nigeria between 2018 and 2022 (five years). The study adopted ex-post facto research design and used panel data collected from the financial report of the firms under the Maritime sector within the period covered by the study. The Administrative Internal Cost was proxy by: Corporate Governance Board Cost, Audit fee, Corporate reporting cost, and Employee bonus/incentive as explanatory variables (administrative internal cost) while firm value was used as response variable. The data collected were analyzed using regression analysis, however the study conducted some preliminary analysis such as descriptive statistics, correlation analysis, and variance inflator analysis to ascertain the normality and check for the presence of multi-co linearity among the variables used. The study finds that administrative internal costs have positive influence of about 41.2% on the level of firm value among maritime firms in Nigeria. The specific finding shows that corporate governance board cost has positive and significant relationship with firm value. Audit fee has positive and significant relationship with firm value. Employee bonus incentive has positive and significant relationship with firm value. Corporate reporting cost has negative and insignificant relationship with value of maritime firms in Nigeria. The study recommends among others that adequate allocation should be given to the corporate board to enable them discharge their oversight function which enhances the value of maritime firms in Nigerian..

1. Introduction.

Modern corporations are characterized by a separation of ownership and control, with the owners appointing professional managers to oversee their companies. This separation of ownership and management is the foundation of the agency theory. Ownership becomes increasingly passive, while management is given a sufficient degree of autonomy to pursue objectives that may or may not be in line with the interests of the owners or principal of the company (Xiao, 2009). The owners (the principal) employ the services of a professional manager (the agent). As a result of the separation, the role of the owners has become more passive, while the manager is relatively free to pursue objectives that are not necessarily in line with the objectives of the owners. Both the principal and the agent consider wealth maximization to be objective (rational people). The agent has the authority to make essential decisions regarding the operations of the firm, but may select alternatives that directly benefit them at the expense of the shareholders. Managers may, for example, be tempted to take advantage of resources that are not in the company's best interest and utilize them for personal gain. According to Xiao (2009), the separation between management and ownership in contemporary corporations provides the manager with the incentive and opportunity to engage in activities

[1]PhD in Business Administration, Department of Business Administration, Faculty of Administration and Management Sciences, Delta State University of Science and Technology, Ozoro, Delta State, Nigeria. E-mail:onoriodehumphrey74@gmail.com.

[2]PhD in Business Administration, Department of Business Administration, Faculty of Administration and Management Sciences, Delta State University of Science and Technology, Ozoro, Delta State, Nigeria. E-mail: oborehlucky2014@gmail.com.

[*]Corresponding author: Omorho Humphrey Onoriode. E-mail Address: onoriodehumphrey74@gmail.com.

that are in the company's interest rather than those that are in the owners' interest. This has led to the emergence of an agency issue. Ammari (2016), Ammari (Amdouni (Zemzem (Ellouze)) and Ammari (Ellouze) (2016) state that the primary source of the agency issue is the disparity between the objectives of the owners and those of the owners. In a corporate structure in which the owners are not integrated into the management structure, the likelihood of conflict is increased. In order to ensure that the objectives of the manager are in line with the objectives of the owners, owners may adopt certain incentive or monitoring measures. These measures necessitate the expenditure of a significant amount of money, commonly referred to as agency costs. These cost implications can have an impact on the owners' wealth. However, as previously discussed, these costs can arise if the advantages to be gained outweigh the costs incurred. According to the authors of the opinion paper "Administrative Cost as All Costs Billed by Shareholders to Encourage Managers to Maximise Shareholder Wealth Rather Than Act in Their Self Interest", monitoring managers and incentives should be implemented to align both interests. On the basis of the foregoing, the administrative costs include; monitoring (e.g. audit, governance, information asymmetry reduction, etc.), bonding costs (e.g., bonus, stock option, etc.), and residual loss-losses that arise from legal costs associated with conflicts of interest between principals and agents. How these costs affect the firms' value is the subject of this study. The specific objectives of this study are as follows:

1. Examine the relationship between corporate governance costs and firm value,
2. Determine the extent of the relationship between auditor's fees and firm value.
3. Assess the relationship between corporate reporting costs and firm value.
4. Evaluate the relationship between employee bonuses and firm value.

In order to accomplish these goals, the following hypotheses were formulated in a form of null; corporate governance cost, auditor's fee, corporate reporting cost, employee bonuses / incentives do not have a significant positive impact on the firm's value.

2. Literature Review.

2.1. Firm Value.

Firm value is a measure of a firm's value in the eyes of its stockholders or investors. It is a measure of the price at which the firm's stock would be traded in a competitive market. Firm values are typically measured through the Tobin Q model. A firm's value is typically measured through Tobin's Q. The Tobin Q model is a model that relates investment to a firm's stock firm valuation. It is intended to reflect the present discount rate of expected future profits. Chen (2019) cited Scott (2000) as an example of a statistic that would be sufficient for investment rates for perfectly competitive firms with consistent returns to scale technology. Scott (2000) shows that average Q is the ratio of the firm's maximized value to its replacement cost of its current capital stock. The standard empirical measure, commonly referred to as Tobin's Q, further supposes that the optimal value of a firm can be determined by the stock firm valuation. On the assumption that the stock firm valuation captures all relevant information regarding expected future profitability, substantial coefficients on cash-flow variables after adjustment for Tobin's Q cannot be attributed to further information about current expectations. However, if the conditions of the Tobin's Q are not met, or if the stock firm's valuations are affected by 'bubbles' or any other factor other than the current discounted value of the expected future profits, then Tobin's Q would not provide all pertinent information regarding the expected future return on current investment.

2.2. Administrative Cost.

Bhat (2018) defines administrative costs as the internal costs associated with the reduction of information asymmetry and the reduction of conflicts of interest among principals and agents within a firm.

2.3. Corporate Governance Board Cost.

Corporate governance is the system of rules, procedures and processes by which a company is managed and regulated (Chen, 2019). The board of directors is responsible for influencing corporate governance, as it represents the balance of interests of the various stakeholders of the company. The board is primarily responsible for making essential decisions, which have a direct impact on the firm's short and long-term viability, among other factors. The corporate board is responsible for acting on behalf of shareholders, and monitors and limits the activities of managers. (Krishnan, 2008; Chen, 2019). This is to guarantee that managers' actions are in the best interests of shareholders, thus maximizing shareholder value. Monitoring cost is the cost of running and maintaining a board of directors. It is the cost of maintaining the board and ensuring that they fulfill their duties. The company allocates a considerable amount of resources to the Board of Directors, such as: sitting allowances, travelling allowances, postage, telecommunications, etc. As members of the Board are drawn from various occupations and geographical locations, the meetings of various sub-committees of the Board necessitate funding. The corporate board cost is the total expenditure required to enable the board to perform its duties and discharge its responsibilities in an appropriate manner.

2.4. Auditor's Fee.

An audit fee is an amount of money that a public accountant charges a client for the services rendered to the client in the context of an audit or financial statement review. It is the amount of money a professional accounting firm charges a client for an annual audit and review of financial statements (Scott, 2000). The cost of an audit fee is determined by the complexity of the services rendered, the amount of work to be completed, the risk associated with the services, the level of expertise required, and other relevant professional factors. In the context of this study,

the audit fee represents the amount of money an auditor charges a client to complete an audit assignment. The audit fees charged for auditing assignments may reflect the amount of time needed to carry out the audit work, which according to the opinion of the group of auditors Mohammad Asghar, Asgar, Safdar and Hamid (2015), is related to the size of the audited company, as per the opinion of the same group of auditors (Hossein Zohreh, Roghaieh, 2013). The auditor is employed to review the report prepared by management and to provide its professional opinion on whether the report provides a true and equitable view. The auditor examines the annual report to determine if it meets all applicable standards.

2.5. Employee Bonuses/Incentives.

An employee bonus is an additional benefit an employee receives from the firm in exchange for the services rendered during the period considered, as defined by Kiamehr (Moghaddam & Alipour, 2015) and others. Employee bonuses may be paid in cash, in kind or in the form of a stock option. Employee bonuses are provided to employees as a means of motivating them and as a reward for loyalty and achievement of objectives. Sang, Mooweon & Jongchul (2018) stated that bonus payments act as a performance-enhancing tool. Consequently, the correlation between bonus payments and firm performance is likely to differ from sector to sector. According to Bhat, Chen, Jebran, and Bhutto (2018), top executives receive bonuses as compensation for putting forth a quality effort on the job. The authors also pointed out that benefits like meals, entertainment, and travel expenses assist businesses in forging beneficial relationships with key decision-makers and business partners. Employee bonuses are simply the monetary compensations and other non-monetary rewards that employees of a company receive in recognition of their service to the organizations. Typically, it consists of a combination of bonuses, shares of, or call options on, the company's stock that has been tailored to take into account governmental regulations, tax law, the preferences of the company and the employee, as well as rewards for performance.

3. Theoretical Framework.

Agency theory is the foundation for this study. The agency theory, developed by Jensen and Meckling in 1976, is one of the theoretical tenets guiding the relationship between the shareholder (principal) and the director (agent). According to this theory, a company's managers act as both the principal and the principal's agent. Although investors have extra money to invest, they hire managers to help them because of limitations like a lack of time and managerial expertise. Managers who receive compensation for their efforts run this fund, which invests in successful businesses in order to generate good returns. But agency issues developed as a result of the separation of ownership and management, as well as the conflicting interests of the owners and the managers they hired. The principal-agent problem refers to the difficulty of persuading one party to act on behalf of another. The principal-agent problem occurs when a principal pays an agent to carry out specific tasks that are advantageous to the principal but costly to the agent, and when there are aspects of the performance that are expensive to watch. According to Jensen and Meckling (1976), this is the degree to which the owners who make up the residual claimants (the owners) receive returns that are less than what they would be if the owners had direct control over the company. As long as they will profit financially, managers are free to start stripping assets and then go on to buy lower-value assets. In order to align the manager's and owners' goals of maximizing wealth, agency problems can be handled or reduced by using administrative costs.

4. Methods.

The longitudinal research design and pooled data were both used for the study. The study makes no attempt to change the nature or value of the data used to evaluate the effect of administrative internal costs on maritime firms in Nigeria. The data used, which has time series and cross sectional characteristics, was the primary factor in the ex-post facto design decision. In this study, ten maritime businesses that operate in different parts of Nigeria were used. These companies are situated in the states of Lagos and Rivers, respectively. All maritime businesses operating in Nigeria as of December 2022 make up the study populations. Firms with the necessary data during the study period make up the sample size. The companies used are: United Africa Lines (Rivers State), African European Lines (Nig) Limited (Lagos State), Air Sea Freighter Limited (Rivers), Alan Caray Technical Ltd (Lagos State), Bhn Transport & Logistics Limited (Rivers), Blue Star Shipping Line Limited (Lagos), East Atlantic Cargo & Marine Services Limited (Rivers), Equatorial Marine Oil & Gas Company Limited (Lagos), Gasop Nig. Limited (Rivers) and Gulf Agency& Shipping (Nig.) Limited (Lagos). The study also used cross-sectional data. Suitable descriptive and inferential statistics were used to analyze the data collected.

4.1. Model Specification.

The model of this study was adopted from the work of Chen, (2019). The Chen model is MB = (CGC,ADF), where MB is market to book value of the firm, while CGC = corporate governance cost, and ADF = auditor fee. The model was modified to suit the variables to be used. Hence the model for the study was based on the variables of the study.

$$TOBIN = f(CBCOS, AUDFE, REPCOS, EMBON) \quad (1)$$

This can be econometrically expressed as:

$$TOBIN_{it} = \beta_0 + \beta_1 CBCOS_{it} + \beta_2 AUDFE_{it} + \beta_3 REPCOS_{it} + \beta_4 EMBON_{it} + \mu_{it} \quad (2)$$

Equation 1 is the linear regression model used in testing the null hypotheses.

Where:

TOBIN = Tobin q;

CBCOS = Corporate governance board cost;
AUDFE = Auditor's fee;
REPCOS = Corporate reporting cost;
EMBON = Employee/incentives bonus;
β_0,= Constant;
β_1, to β_4, = are the coefficient of the regression equation.
μ = Error term;
i= is the cross section of firms used;
t = is year (time series).

Table 1: Normality test.

Variable	Obs+	W	V	z	Prob>z
TOBIN	110	0.2044	14.048	6.2254	0.02010
CBCOS	110	0.7576	311.36	44.886	0.00000
AUDFE	110	0.3457	425.93	52.038	0.00000
REPCOS	110	0.3452	557.85	56.004	0.00000
EMBON	110	0.2565	63.046	16.223	0.00000

Source: STATA 13.

The Shapiro normality test shows that auditors fees, reporting cost, employee incentives, and corporate board cost, are normally distributed at one percent significance; while firm value is normally distributed at 5 percent significant level. The normality test result reveals that all the variables used are normally distributed. This indicates that the result of the analysis can be relied upon in making generalization and policy formulation. The result of the Shapiro normality test is similar to the normality test result produce by the Jarque-Bera statistics probability.

Table 2: Correlation Analysis.

	TOBINQ	CBCOS	AUDFE	REPCOS	EMBON
TOBINQ	1.000000				
CBCOS	0.121906	1.000000			
AUDFE	0.203808	0.005490	1.000000		
REPCOS	0.021132	0.242134	0.047053	1.000000	
EMBON	0.163810	0.162505	0.211155	0.215082	1.000000

Source: Researchers Summary of e-view 9 (2023).

The findings from the correlation analysis table shows that firm value (tobin q) have positive association with Board cost (0.12), corporate reporting cost (0.02), employee bonuses (0.16) and audit fee (0.20). The positive association reveals that audit fee, corporate Board cost, corporate reporting cost and employee bonus incentives positively associate with firm value. In checking for multi-co linearity among the variables used, the study noticed from the correlation analysis result that no two explanatory variables were perfectly correlated. This indicates the absence of multi-co linearity problem in the model used for the analysis and also justifies the use of the ordinary least square. This was confirmed by the result of the variance inflation factor (VIF) below.

Table 3: Variance Inflation Factor Test.

Variable	VIF	1/VIF
TOBIN	1.01	0.99009
CBCOS	1.10	0.91009
AUDFE	1.00	0.90990
REPCOS	1.01	0.88007
EMBON	1.30	0.76923
Mean VIF	1.082	----

Source: Authors.

The Variance inflation factor test result table above shows the mean value of 1.082. The mean value is less than 10 rejection benchmark. The mean value indicates the absence of multi- co linearity in our model. This result (Variance inflation factor test result) confirms the finding from the correlation analysis which shows the absence of multi-co linearity using 75 percent acceptance region in determining the level of association among the variables used.

Table 4: Hypotheses Testing.

Dependent Variable: TOBIN

Method: Panel Least Squares

Date: 12/08/20 Time: 9:18

Sample: 2011 2020

Periods included: 10

Cross-sections included: 11

Total panel (balanced) observations: 110

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13.71579	2.546013	5.387164	0.0000
REPCOS	-1.361401	2.188265	-0.622137	0.5347
AUDFE	4.565215	0.929530	4.911317	0.0000
EMBON	0.095388	0.041948	2.273958	0.0163
CBCOS	2.573406	0.799674	3.218069	0.0015

R-squared	0.439350	Mean dependent var	0.890335
Adjusted R-squared	0.412112	S.D. dependent var	3.489996
S.E. of regression	24.30988	Akaike info criterion	4.843317
Sum squared resid	1603.389	Schwarz criterion	5.288589
Log likelihood	337.2551	Hannan-Quinn criter.	5.023512
F-statistic	13.22928	Durbin-Watson stat	2.13300
Prob(F-statistic)	0.004693		

Source: Researchers summary of OLS regression Analysis from E-view 8 (2023).

In the regression table above, the study observed from the firm value (tobin q) model result an R-sq of 0.439 and R-sq (adj) of 0.412, respectively. The R-sq adjusted value indicates that the selected Agency internal cost variables jointly have about 41.2 percent impact on the reporting lag of firm used in the study. The F-statistics value of 13.23 and its probability value of 0.000 shows that the regression model is well specified and the specification is statistically significant at 1% levels. The Durbin Watson which reveals the presence of autocorrelation, it value of 2.133 (approximated into 2) reveals the absence of autocorrelation in our model. Hence the variables used in model can be relied upon as administrative internal cost variables in driving firm value (tobin q).

Hypothesis 1: Corporate Governance board cost has no significant effect on Firm value

The analysis result showed a coefficient value of 2.57 and a P-value of 0.0015. The coefficient value shows that Corporate Governance board cost has a positive effect on firm value (tobin q). This reveals that increase in Corporate Governance board cost can increase the value of the firm. The probability value reveals that Corporate Governance board cost has significant effect on the firm value (tobin q) of maritime firms in Nigeria. Based on the result, the study rejects the null hypothesis and accepts the alternate hypothesis, which says that, corporate governance board cost has significant effect on firm value (tobin q).

Hypothesis 2: Audit fees has no significant effect on firm value (tobin q).

The analysis result showed a coefficient value of 4.57 and a P-value of 0.000. The coefficient value reveals of 4.57 shows that that audit fees has positive influences on the level of firm value (tobin q). This indicates that the higher the fee paid to auditor, the thorough they tend to carry out their responsibility the better the user relied on the report the higher the value of the firm. The probability value shows that the relationship between audit fee and firm value (tobin q) of maritime companies in Nigeria is statistically significant. This means increase in Audit fee positively and significantly leads to increase the firm value. Based on the analysis result, the study rejects the null hypothesis and accepts the alternate hypothesis. The study concludes that Audit fee has significant relationship with firm value (tobin q) of maritime firms in Nigeria.

Hypotheses 3: Corporate reporting cost has no significant effect on Firm value.

The analysis result showed a coefficient value of -1.361 and a P-value of 0.534. The coefficient value which reveals the degree of influence corporate reporting cost has on firm value (Tobin q) shows a negative value. This means that corporate reporting cost negatively influences the level of firm value (Tobin q) among maritime firms in Nigeria. The high cost of publishing the corporate annual reporting if invested in project with positive net present value can enhance the profitability and the value of the firm. This shows that higher corporate reporting cost can lead to lower firm value. The probability value of 0.534 shows that the effect of corporate reporting cost has on firm value (Tobin q) among maritime companies in Nigeria is insignificant. Based on the analysis result, the study rejects the alternate hypothesis and accepts the null hypothesis. The study therefore concludes that corporate reporting cost has negative insignificant effect on the firm value of maritime firms in Nigeria.

Hypotheses 4: Employee bonus incentive has no significant effect on Firm value.

The analysis result showed a coefficient value of 0.095 and a probability value of 0.016. The coefficient value which reveals the degree of influence employee bonus incentives has on firm value (Tobin q) is positive value. This means that employee bonus incentive positively influences the level of firm value. This shows that higher employee bonus incentives can lead to higher firm value among maritime firms in Nigeria. The probability value of 0.016, shows that the relationship between employee bonus/incentive and value of maritime companies in Nigeria is significant. Based on the analysis result, the study rejects the null hypothesis and accept the alternate hypothesis, it therefore concludes that employee bonus incentive has significant effect on firm value among maritime firms in Nigeria.

5. Discussion of Findings.

The finding reveals that corporate governance board cost has a positive and significant cause effect relationship with the firm value of companies in Nigeria. The operations and activities of the board require funding. For the board to effectively carry out its responsibility, it requires adequate funding and diligent use of available resources. The more funding makes available for the board to carry out its function, the more likely they will contribute the growth of the firm and the value of the firm. This finding is in line with the finding from similar studies like that of Chen (2019), Bhat, Yan, Khalil and Bhutto (2018) and Ammari, Sarra, Zemzem and Ellouze (2016) on Corporate governance, cost and firm value.

Auditors' fee has a strong positive significant effect relationship with value of maritime companies in Nigerian. A highly paid auditor will seems to be more thorough compare to auditor who accepted the offer as a means to meet need. This finding suggests that allocating high amount for audit assignment can attract high quality auditor irrespective of the size of the firm, and using such high quality auditor give more confidence to the user and investors. This can lead to an improvement in the firm value. This result is in line with the finding from similar study of Martinez and Moraes (2014), Vasconcelos (2017) study finding. The study also finds that corporate reporting cost has a negative causal effect relationship with firm value among maritime companies in Nigeria. This shows that increasing the cost of producing annual report can have negative impact on the value of maritime firms in Nigerian. The finding also shows that employee bonus/incentives have a positive significant effect on value of firms in Nigeria. This finding demonstrates that the form of audit firm used will positively affect the degree of firm value for auditors. The findings are in line with the findings of similar study of Scott (2000).

Conclusions.

The company law separate ownership from control / management. This separation has lead to the desire to achieve divergent interest by the owners and the manager they hired. To align these interests, policy makers establishes reporting and monitoring mechanism as a way of reducing information asymmetry and ensure adequate disclosure of operating activities to the owners. However, this has not fully solved the problem. To reduce the problem, the owners incurred additional cost like, cost of corporate governance cost, cost of engaging auditor, granting of bonus incentive and cost of publishing their annual report. The findings of this study have indicated that the administrative internal cost is a key driver of firm value among maritime companies in Nigerian. The study therefore recommends that adequate allocation should be given to the corporate board to enable them discharge their function which enhances the value of maritime companies in Nigerian. Also, to enhance their value, maritime companies should consider paying auditor above other industry (however, consideration should be given to their financial performance). Managers should consider reducing the cost of publication of annual report by adopting e-reporting, as the cost of printing is negatively impacting on their firm. Furthermore, maritime companies in Nigerian should consider increasing their employee bonus/ incentive as it will lead to better firm value.

References.

Ammari A., Amdouni S., Zemzem A & Ellouze A (2016). The effect of monitoring committees on the relationship between board structure and firm performance**.** *Journal of Risk and Financial Management 4(1), 44-60.*

Bhat, K, Chen, Y, Jebran, C & Bhutto, N (2018) Corporate governance and firm value: a comparative analysis of state and non-state owned companies in the context of Pakistan. *The International Journal of Business in Society* 3 (1), 31-48.

Chen (2019). Corporate board and their responsibilities in china. *International journal of economics 3(2) 71-83.*

Chrisostomos F. & Ozkan, A. (2004). Agency costs and corporate governance mechanisms: Evidence for UK firms. Department of Economics and Related Studies, University of York, Heslington, York, YO10 5DD, UK.

Hoang, L., Tran M., Pham V., Tran P. & Phuong, T (2019). Impact of agency costs on firm performance: evidence from Vietnam. *Organizations and Markets in Emerging Economies* 10 (2) 294–309.

Hossein J, Zohreh H, & Roghaieh L. (2013). Investigation of the effect of agency costs on firm performance of listed firms in Tehran Stock Exchange. *European online journal of natural and social sciences* 2(3), 771-776.

Kalim B, Yan C, Khalil J & Niaz A (2018). Corporate governance and firm value: a comparative analysis of state and non-state owned companies in the context of Pakistan. *The International Journal of Business in Society* 3, (5), 30-44.

Kiamehr1., M., Moghaddam A., Alipour, S &, Hajeb, H. (2015). Examining the impact of institutional ownership on monitoring cost: the case of Iranian firms listed on Tehran stock Exchange. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 5(4) 22-39.

Krishnan, G., & Visvanathan, G. (2008). Does the sox definition of an accounting expert matter? The association between corporate board directors' accounting expertise and accounting conservatism, 827-857.

Martinez A. & Moraes, A (2014). Association between independent auditor fees and firm value: a study of Brazilian public companies. *Journal of Modern Accounting and Auditing, 10(4), 442-450.*

Mohammad K., Asghar A., Safdar A., & Hamid R (2015). Examining the impact of institutional ownership on monitoring cost: the case of Iranian firms listed on Tehran stock Exchange. *International Journal of Academic Research in Accounting, Finance and Management Sciences* 5(4) 22-39.

Sang C., Mooweon R., & Jongchul Y. (2018). Foreign monitoring and audit quality: evidence from Korea. *European online journal of natural and social sciences* 2(3), 771-776.

Scott J. (2000). Executive compensation and firm performance: Big carrot, small stick. *Stanford Institute for Economic Policy Research. Stanford, CA*. 94305.

Vasconcelos, M. (2017). Agency costs, firm value, and corporate investment agency. *A thesis to obtain the degree of Doctor from the Erasmus University Rotterdam.*

Xiao, S (2009). How do agency costs affect firm value? evidence from China. *European Online Journal Of Natural And Social Sciences* 2(3), 771-776.