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MODERATION EFFECT OF SIZE ON THE RELATIONSHIP BETWEEN OWNERSHIP STRUCTURE AND FIRM VALUE

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Abstract

Firms differ in sizes and manifest varied ownership patterns that can lure agency costs and affect shareholders value. The size of a firm can be modelled to explain when the link between ownership patterns and value changes. Therefore, this paper provide insights on the effect of size on the relationship between ownership structure and value of listed *firms at the Nairobi Securities Exchange.* The study population consist all the 64 quoted firms as at 31st December 2017. Panel corrected standard errors estimation was adopted for the analysis. The study findings reveal that the size of an entity aggravates the negative relationship between managerial ownership and value while foreign ownership and entity value has a positive enhancing effect on value. Meanwhile, the nature of relationship between institutional ownership and entity value does not depend on size. The findings revives the debate on the practice effectiveness of employee share ownership schemes for big firms directors. Further, a policy insight that large entities can enhance governance mechanism by attracting foreign investors in their shareholder constituents but not for institutional investors.

Keywords: Ownership Structure, Managerial ownership, Institution Ownership, Foreign Ownership, Firm Value, Firm Size, Interaction Term Effect

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Introduction

Corporate governance is a contemporary corporate finance issue of great significance. The separation of ownership and management can yield agency costs due to divergence of interests between owners and firm management (Jensen & Meckling, 1976). In the absence of agency conflicts, firm management can pursue investments that can maximize shareholders wealth. Firms differ in sizes and manifest varied ownership patterns that can lure agency costs and affect firm value (Hu & Izumida, 2008). Moreover, ownership structure assumed by firms can explain value of firms but a debate on exact nature and direction of the link is still puzzling among scholars output. In this case, different levels of firm sizes are adopted to investigate whether any change in the nature of relationship between ownership structure and value occur due to size influence.

Firm value is determined by the present worth of future anticipated cash flows generated by firm's assets (Damodaran, 2002). Moreover, the maximization of shareholders wealth is a significant goal for every firm (Demsetz & Villalonga, 2001). Ownership structure represents the interest of different constituents of shareholders such as managerial, institutional and foreign shareholding in a firm (Welch, 2003). Managerial holding relates to ownership by corporate insiders of board members and firm managers (Kao, Hodgkinson & Jaafar, 2019). Institutional shareholding is ownership by entities such as investment firms, commercial banks, insurance industries, pension funds, mutual funds and other institutions including government and foreign firms (McKnight & Weir, 2009). Foreign shareholding represents ownership by non-local investors (Thanatawee, 2014). Firm size is a feature that gives magnitude of an organisation in reference to market capitalization, assets, revenues, profits and number of employees (Abreu, 2016). The size of a firm determines the level of economies of scale, market power or access capability to capital markets (Isik & Soykan, 2013). Larger firms are characterized by high asymmetric information, but have sufficient resources to adopt quality governance systems which can enhance value. Indeed, Li, Zhang and Jia (2017) argue that the larger the firm size, the more it hampers operations for firms with highly concentrated ownership.

Firms listed at the Nairobi Securities Exchange trade their shares in an organized securities market (Nairobi Securities Exchange, 2018). The firms have separate ownership from management occasioning aspects of agency problems. The classes of owners among the listed firms include the executive and director owners, foreign and institutional investors. The firms' shares are freely transferable through trading at the bourse resulting to varied ownership structures. Further, owners activate monitoring to streamline management interest and efficacy of resources utilization that affects firms' cash flows. The varying sizes of listed firm can be modelled to explore the circumstances under which the ownership structure-value relationship apply or is modified.

Empirical studies have widely investigated how ownership by managers, institutions and foreign investors influence the firm value. Vast conflicting results have been reported in corporate finance literature on the ownership structure-value link. Where the firm size is incorporated, a dilemma arises whether the initially reported relationship between ownership structure and value is altered. Although studies exist modelling firm size as a control variable, the motivation for this article is to explore how the mechanisms that explains the link between ownership structure and value is altered when size of firms is modeled as an interaction variable. In that case, this article offer ancillary insights on whether for firms with varying sizes, the ownership-value conceptual relationship would be altered for listed firms in the Kenyan context. This paper attempts to fulfill this gap.

Objective of the Study

To determine the effect of firm size on the relationship between ownership structure and value of *companies listed at the Nairobi Securities Exchange.*

The remainder of this paper is designed as outlined. Section 3 presents the theoretical and empirical literature backing up the interactions between ownership structure and value of firm. Section 4 details the methodology framework. Section 5 describes analysis, findings and discussion. Section 6 outlines the conclusions, recommendation and possible future research extensions.

Literature review

Jensen and Meckling (1976) espoused the agency theory which explains the conflict that exists between listed firms shareholders and agents (managers) due to the separation of firm ownership and management. While shareholders always strive to maximize the firm value, managers might at times seek to pursue their own interests. As firm size becomes larger, the separation between ownership and control widens and agency problems beckons. On other view, stewardship theory by Donaldson and Davis (1991) advance the view that steward executives are only inspired by commissioning optimal investment choices and efficient resource utilization that is in the best interest of the firm. Managerial monitoring and entrenchment status for managers describe the mechanisms for governance effectiveness. In line with stewardship theory, the different classes of investors including managers, are viewed to act in a way that benefit the firm.

Vast documented empirical research explore the link between the ownership structures and firm value and report inconsistent results. Some studies document positive relation between ownership and firm performance (Mokaya & Jagongo, 2015; Ongore (2011); McConnell & Servaes, 1990; Ahmad & Jusoh, 2014 while Haniffa and Hudaib (2006); Saleh, Zahirdin and Octaviani (2017); and Andow and David (2016) found a negative relationship. Besides, other studies by Demsetz and Villalonga (2001) and Fahlenbrach and Stulz (2008) conclude no link exists between ownership and value. Yet studies by Bradley and Wallace (2009); McConnell, Servaes, & Lins, 2008; and Davies, Hillier and McColgan (2005) conclude a curvi-linear relationship between the ownership structures and firm value.

Moreover, some studies model size as a moderator so as to explain the ownership-value link. To start with, an analysis centered on listed pharmaceutical companies in China by Li, Zhang and Jia (2017) evaluate the relationship among ownership concentration (proportion of top five shareholders), large shareholders, and firm performance while incorporating firm size as a moderator. The results reveal that as size becomes larger for firms with increasingly concentrated ownership, it impedes firm performance. Moreover, Ratnawati, Hamid and Popoola (2016) affirmed that size as an interaction variable, trend a positive effect on managerial ownership link to earnings management. Further, Helwege, Pirinsky and Stulz (2009) establish that as size increase, it were plausible for entities to experience great decrease in managerial ownership and in effect value. In contrast, this study extends size effects insight for firms with foreign, institution and managerial shareholding.

Further several studies integrate the size of firm as a control variable so as to isolate its effect when evaluating the effect of ownership structure on the value of firm. For instance, Nazir and Afza (2018) analyzed the role of corporate governance in enhancing value for 162 listed corporations of Pakistan Stock Exchange and used 1944 firm year observations in a panel regression model that incorporated corporate governance indicators, size and leverage. The results show insider ownership by board members and institutional equity ownership manifest negative impact with value for both large and small firms. However, small foreign owned firms had positive but not statistically significant effect on value. In contrast ownership by foreigners was statistically significant in respect to large firms valuation. In another case, Andow and David (2016) reveal managerial and foreign shareholding negatively impact the performance of Nigerian listed conglomerate firms while firm size positively impacted performance. Similarly, Saleh, Zahirdin and Octaviani (2017) confirm that institutional and managerial ownership have a negative significant effect on the performance of real estate public companies. In all cases, firm size was modelled as a control variable. An analysis by Ongore (2011) establish a direct connection between institutional ownership and performance but does not consider interaction effect extensions.

In addition, Kansil and Singh (2017) found that firms with controlling foreign ownership had higher market value than those with non-controlling foreign stake and that foreign investors target to invest in prosperous and bigger Indian listed firms. Nakano and Nguyen (2013) examined the effect of foreign ownership on value of Japanese firms from 2005 to 2011. Firm characteristics amidst firm size were modelled as control variables for the dynamic panel data estimation. The study reported a positive influence of foreign ownership on electronics firms' value plus the size of the firm exhibited a positive association with foreign ownership. Similarly, Mishra (2014) established the relationship between ownership by foreigners, size and value of 32 Australian mining and oil and gas producer firms from 2000 to 2005. The study confirm a positive link of foreign ownership on entity value. Together, the studies considered the effect of only foreign ownership on the value, in contrast to the current case incorporating shareholding by institutions, foreigners and managers in the Kenyan context. .

The extant documented studies pursue the nature of link between specific ownership structure dimension of managerial, institutional and foreign holdings on value of entities modelling firm size mainly as control variable. On the contrary, this article provides an extension on the changes in direction of the firm ownership-value conceptual prediction by modelling the size of firm as an interaction term. Interaction relates to logical arguments on when an interaction variable alters the nature of existing relationship between an independent and dependent variable (*Baron & Kenny, 1986*). Subsequently, this paper in a Kenya context tested the following null hypothesis:

H_0: The moderation effect of firm size on the relationship between ownership structure and value of companies *listed at the Nairobi Securities Exchange* is not significant.

Data

The study population consisted of 64 listed firms as at 31st December 2017. Nevertheless, adequate data for 54 firms was obtained yielding 397 firm-year observations for the period of study from 2010 to 2017. Data was collated from several sources including listed firms' annual integrated financial reports, licensed Share Registrars, Capital Markets Authority statistical bulletins, company offices and websites. Share market prices was sourced the Nairobi Securities Exchanges. Panel data was preferred for the analysis as it enables capture rich multiple observations data for each firm unit so as to obtain robust and reliable approximation results. (Wooldridge, 2013).

Research Variables and Proxies

The measurement of the variables in the study is adopted from previous literature. The dependent variable is the firm value while the independent variable is the ownership structure and firm size as the interaction variable. Table 1 present the summary of variable definitions in incorporated in the regression models.

Table1: Research Variable Measurement

Variable	Abbreviation	Proxy
Foreign Ownership	FO	Ratio of foreign share ownership
Institutional Ownership ownership Managerial Ownership ownership	IO MO	Proportion of institutions share Ratio of board members and CEO
Firm Size	TA	Total assets
Firm Value	TQ	Ratio of market to book value of equity

Interaction Effect

The test of the hypothesis was at onset based on the main relationship between three ownership structure indicators and firm value. Subsequently, an interaction effect was modelled on the primary effect of ownership structure dimensions on firm value. Interaction captures the conditions under which the main effect between ownership structure and value of firm varies with the size of the firm (Preacher, Rucker & Hayes (2007). The interaction term was a product of mean centered ownership structure indicator and firm size. Mean centering involved subtracting

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the mean from every score in a data distribution. Centering ownership structure and firm size variables enable to lessen multicollinearity among the explanatory variables (Aiken *& West, 1991)*. Interaction was deemed to have occurred if the coefficient of interaction term of the ownership dimensions and firm size was significant. *Baron and Kenny (1986) two steps methodology was adopted to evaluate the moderating effect of size based on the following models.*

Step 1: The direct effect of ownership structure and value of firm as based on model 1

$$FV_{it} = \beta_{f0} + \beta_{311}MO_{it} + \beta_{312}IO_{it} + \beta_{313}FO_{it} + \varepsilon_{it} \quad \ldots\ldots 1$$

In the second model, size of the firm was modelled as an interaction term and estimation undertaken in the second step where f*irm size, product term between ownership structure indicators and firm size were included in the regression estimation as follows:*

$$FV_{it} = \beta_{f0} + \beta_{311}MO_{it} + \beta_{312}IO_{it} + \beta_{313}FO_{it} + \beta_{314}TA_{it} + \beta_{ta31}\left(MO_{it}^{c}.TA_{it}^{c}\right) + \beta_{ta32}\left(IO_{it}^{c}.TA_{it}^{C}\right) + \beta_{ta33}(FO_{it}^{c}.TA_{it}^{c}) + \varepsilon_{it} \quad \ldots\ldots 2$$

Where,

$\left(MO_{it}^{c}.TA_{it}^{c}\right)$ represent the centered interaction term between indicator of managerial equity holding and total assets,

$\left(IO_{it}^{c}.TA_{it}^{C}\right)$ represents the centered interaction term between institutional ownership and total assets

$(FO_{it}^{c}.TA_{it}^{c})$ is the centered interaction term between foreign holding and total assets

Descriptive Analysis

The summary descriptive statistics to show data distributions are summarized in Table 2.

Table 2: Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Firm value	0.10	7.40	1.51	1.30	1.96	4.58
Managerial ownership	0.00	0.82	0.13	0.20	1.70	1.88
Institutional ownership	0.01	0.95	0.48	0.25	-0.19	-1.21
Foreign ownership	0.00	0.94	0.28	0.28	0.61	-1.10
Firm Size Sh.(million)	158.3	646,668	70,909.62	108,275.46	2.30	5.93

The listed firms Tobin’s Q value varies from 0.10 to 7.40, revealing a significant variation in valuation among the listed firms. The firms mean value was 1.51 with a standard deviation of 1.30. Tobin’s Q maximum and minimum values were 7.40 and 0.10, a pointer to heterogeneity in value among firms. Tobin’s Q is positively skewed at 1.96. The distribution is more fairly peaked with a kurtosis of 4.57

revealing that some listed firms were highly valued.

The minimum value of managerial ownership was zero an indication that some board members which do not own any shares in the firms which they manage. The maximum value of 0.82 reveals that some managers held a significant number of shares in the listed companies. Managerial share interest positive skewness of 1.7 denote that substantial firm managers hold small number of shares in many listed firms. A kurtosis value of 1.88 reveals a fairly mesokurtic distribution of members of the board interest in entities ordinary shares. The institutional equity holding mean value is 0.48 while the minimum value is 0.01. The maximum shareholding by institutional investors was at 95 per cent an indication that some firms were owned almost exclusively by the institutional investors.

The maximum equity holding by foreign investors stood at 94 per cent, a sign that the ownership structure of listed firms is greatly concentrated in the hands of foreign shareholders. On average the ownership by foreign investors was at 29 per cent of total equity holding for the listed firms. The skewness score is 0.61 for the foreign ownership while the kurtosis score of -1.10. Firm size as has a mean worth of Sh.70.9 billion and standard deviation of 108.26 billion which discloses that listed firms vary significantly in size. The minimum and maximum values of listed firm size were Sh.158 million and Sh.646.6 billion denoting greater firm heterogeneity.

Correlation Analysis

The nature and strength of the relationship between firm value and study variables is summarized in correlation matrix table 2.

	TQ	MO	IO	FO	Firm Size
TQ	1				
MO	-.235**	1			
	.000				
IO	-0.36	.352**	1		
	.470	.000			
FO	0.126*	-.374**	-.802**	1	
	.012	.000	.000		
Firm Size	-0.098*	.217**	-.0.90	.187*	1
	0.043	.000	.072	.011	

* Significant at ρ < 0.05 level

** Significant at ρ < 0.01 level

Table 2 results show statistically significant negative link between firm value and managerial ownership (r=-.235, p=00). On the contrary, there was a positive correlation between value and foreign equity holding (r=.126, p=00), indicating that value of firm improves as foreign holding increased. The institutional equity holding demonstrated an inverse but insignificant association (r=- 0.36, p=.400) with the value of firm. In, addition, firm size show significant negative association with the value of firm (r=-0.098, p=0.043)

Hypothesis Testing Results

To start with, diagnostic tests for linear regression analysis were undertaken. The pair-wise correlation tested for multi-collinearity among the ownership dimension and interaction term variables. The mean centering technique of transforming variables by subtracting the mean calculated for each variable series from every data point was adopted to derive product terms in an attempt to mitigate any collinearity violations (Preacher, Rucker & Hayes, 2007)

Heteroscedasticity assessment was centered on the Breusch-Pagan test while auto correlation check relied on the Wooldridge Chi-square test. Heteroscedasticity test was gauged on the null hypothesis of constant variance. Autocorrelation test was premised on the hypothesis that no autocorrelation exist (Wooldridge, 2013). The heteroscedasticity and autocorrelation test summary results are displayed on Table 3.

Table 3: Breusch-Pagan and Wooldridge Tests Results

	Model 1	Model 2
Breusch-Pagan Test	20.21	25.353
P-value	(0.0005)	(0.0006)
Wooldridge Test ($\chi2$)	177.51	175.59
P-value	(0.000)	(0.000)

Table 3 results highlight the violation of the regression assumptions. Subsequently, panel corrected standard errors regression was adopted for the appropriate model fit. The standard errors sandwich estimator by Newey and West (1987) was adopted so as to achieve standard errors correction. The test results on the interaction effect of firm size on the relationship between ownership structure and value are presented in Table 4.

Table 4: Panel Corrected Standard Errors Regression Results

	Model 1	Model 2
Intercept	0.9779**	1.3243
	(0.0015)	(0.2697)
Managerial ownership	-1.4807***	-1.352***
	(0.0000)	(0.0002)
Institutional ownership	1.02022*	1.1994
	(0.0171)	(0.0501)
Foreign ownership	0.87575*	1.0118*
	(0.0218)	(0.0209)
Firm Size		-0.012
		(0.6960)
Interaction term of managerial equity holding and size		-0.2054**
		(0.0087)
Interaction term of institution equity holding and size		0.1399
		(0.5207)
Interaction term of foreign equity holding and size		0.0036*
		(0.0390)
R-Squared	0.0642	0.0745
F Statistic	10.1198	5.59479
Prob >Chisq	0.000	0.000
Observations	397	397

Signif. Codes: ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 P-values are in parentheses below the respective coefficients

Table 4 reports the F-value for both model 1 and 2 that are significant at 5% level. Further, the results of model 1 in the same table 4, indicate that managerial ownership (β=-1.4807, p=0.0000) has a significant negative effect on firm value while foreign (β =0.8758, p=0.0218) and institutional equity holding (β=1.0202, p=0.0171) show a significant positive effect on value of entities. Model 1 documents the primary negative relationship between managerial ownership and value and on the contrary reflect a positive link between foreign and institution and firm value.

In addition, the results of model 2 show that upon addition of the interaction terms, the coefficient of the product term of managerial ownership (β=-0.2054, p=0.0002) and foreign holdings (β=0.0036, p=0.0389) were still statistically significant when compared to coefficients of the primary effect estimation. The results reveal a significant interaction effect ($p < 0.05$) on the relationship between managerial ownership and value and foreign ownership and value. Thus the sub-hypothesis that the interaction effect of firm size on the relationship between managerial and value; and foreign ownership and value of companies is not significant was rejected. Therefore, the effect of managerial and foreign ownership on value is different for varying firm sizes. Indeed, the results denote that the size of an entity has an interaction effect on the relationship between managerial ownership, and foreign equity holding and entity value. Specifically, the size of entity enhances the main negative effect of managerial equity holding on the value of firm. In other case, large corporation improves the link between foreign holdings and entity value. On the contrary, the results of model 2 reveal that the product term between institutional ownership and size (β= -0.1399, p=0.5207) on value was not significant. Hence allowing to support the sub-hypothesis that the interaction effect of firm size on the relationship between institutional ownership and firm value is not significant. This denotes that size of an entity has no effect on the link between institutional holding and value.

The study findings reveal an enhancing negative effect of size of an entity on the link between managerial equity holdings and value. This signifies that for bigger firms where managerial equity holdings proportions are substantial, the value of firm is greatly reduced. In this case, large firms owned by management probably have ineffective monitoring mechanisms and managers seem to pursue their own interests that diminish value. This findings concur with Nazir and Afza (2018) study analysis that increased insider ownership by board members manifest negative impact with value for large firms. On the contrary, the results conflict Ratnawati, Hamid and Popoola (2016) affirmation that firm size trends a positive effect on managerial ownership link to earnings management.

Furthermore, the findings also indicate that the size of firm strengthens the link between foreign equity holdings and the value of entity. In this way, large firms owned by foreign investors implement effective monitoring mechanisms that improve firm value. The findings are in congruence with Mishra (2014) that foreign investors' interest for big firms can transfer superior managerial skills and attract international capital enhance value for entities. Similarly, Nakano and Nguyen (2013) provide evidence of the synergy interaction between foreign ownership and size that strengthen the positive link with the entities value. However this contradicted the findings of study by Mishra (2014) that as firm increases in size and attracted higher foreign equity holdings, the performance of such firms declined. As regards the institutional holding-value link, the findings confirm that size of an entity has no effect on the link between institutional holding and value of corporation. Specifically, varying the size of firm does not influence the institutional ownership-value link. The findings contrast Nazir and Afza (2018) study result for listed corporations in Pakistan that institutional equity ownership manifest negative impact on the value for both large and small firms. Similarly, the findings do not support Li, Zhang and Jia (2017) arguments that, as firms with increasingly concentrated ownership grow in size, it is detrimental to firm performance.

Conclusion and Recommendation

This article provides insightful extensions on the interaction effect of size on the relationship between ownership structure and firm value rather than mere direct effect of size on value. The study advances arguments for consideration by management and regulators on the need to integrate the size of firms on policy decisions affecting ownership structures choices. Certainly, the effect of ownership holdings on value is different for varying level of firm sizes. The interaction effect in case of large firms owned by the managerial team reflects a potent additive effect that further reduces value. As the size of a corporation increases, it strengths the link between foreign equity holdings and value. In that case, policy makers can design policies so as to attract foreign investors including continually cross listing so as to boost value for large firm. Further, management executives can pursue growth strategies and practices which results in increase in size of firms owned by foreigners so as to maximize the value of firms. The relation between institutional holdings and value do not change across all levels of firm size. In this way, policy guidelines can activate ownership for all firms by institutional equity holders who enhances value irrespective of the size of the firm.

Limitations and Future Research Direction

Future research direction could consider disaggregating institutional shareholding into its constituents such as mutual funds and other organizations so as to expand empirical predictions on the institutional investors. Moreover, considerations for other variable such as age, leverage among other to enrich arguments on the relationship between ownership structure and firm value prediction. This study is limited to listed firms in Kenya.

References

Abreu, R. (2016). From accounting to firm value. *Global Conference on Business, Economics, Management and Tourism,* Rome, Italy, 39, 685 – 692

Ahmad, A. C., & Jusoh, M. A. (2014). Institutional ownership and market-based performance indicators: Utilizing generalized least square estimation technique. *Paper presented at the International Conference on Accounting Studies, Kuala Lumpur, Malaysia*, 164, 477 – 485

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Ang, J. S., Cole, R. A. & Lin, W. J. (2000). Agency costs and ownership structure. *Journal of Finance,* 55, 81-106.

Andow, H. A., & David, B. M. (2016). Ownership structure and the financial performance of listed conglomerate firms in Nigeria. *The Business and Management Review,* 7(3), 231- 240

Baron, R. M., & Kenney, D. A. (1986). The moderator-mediation variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182

Benson, B.W., & Davidson. W. N. (2009). Reexamining the managerial ownership effect on firm value. *Journal of Corporate Finance*, 5(15), 573-586

Damodaran, A. (2002). *Investment Valuation: Tools and techniques for determining the Value of any Asset* (2nd ed.). New York: John Wiley & Sons

Davies, J.R., Hillier, D., & McColgan, P. 2005. Ownership structure, managerial behavior and corporate value. *Journal of Corporate Finance*, 11, 645-660.

Demsetz, H. & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance,* 7, 209–233.

Fahlenbrach, R. & Stulz, R. M. (2008). Managerial ownership dynamics and firm value. *Journal of Financial Economics*, 92, 342-361

Haniffa, R. & Hudaib, M. (2006). Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance & Accounting,* 33(7) & (8), 1034 -1062

Helwege, J., Pirinsky, C. & Stulz, R. (2009). Why do firms become widely held? An analysis of the dynamics of corporate ownership. *Journal of Finance,* 62, 995–1028

Hu, Y. & Izumida, S. (2008). The relationship between ownership and performance: A review of theory and evidence. *International Business Research Journal,* 4, 72-81

Isik, O., & Soykan, M. (2013). Large shareholders and firm performance. Evidence from Turkey. *European Scientific Journal,* 9(25), 23–37

Jensen, M. C., & Meckling, W. H. (1976). Theory of firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics,* 3, 305-360

Kansila, R. & Singh, A. (2017). Firm characteristics and foreign institutional ownership: Evidence from India. *Journal of Institutions and Economies,* 9(2), 35-53

Kao, M. F., Hodgkinson, L., & Jaafar, A. (2019). Ownership Structure, Board of Directors and Firm Performance: Taiwan Evidence. *Journal of Corporate Governance,* 19(1), 189-216

Li, L., Zhang, D., & Jia. Q., (2017). Ownership structure, firm size, and performance: a panel data investigation of pharmaceutical manufacturing industry in China. *Advances in Economics, Business and Management Research*, 33, 814- 826

Mishra, A.V. (2014). Foreign ownership and firm value: Evidence from Australian Firms. *Asia-Pacific Financial Markets*, 21, 67–96

McConnell, J., Servaes, H. & Lins, K. (2008). Changes in insider ownership and changes in the market value of the firm. *Journal of Corporate Finance*, 14, 92-106

McKnight, P. J. & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. *Quarterly Review of Economics and Finance,* 49, 139-158

Mokaya, M. A, & Jagongo, A. (2015). The effect of ownership structure on the financial performance of firms listed at the Nairobi Securities Exchange. *International Journal of Finance and Accounting*, 4(11), 1-17.

Nairobi Stock Exchange PLC (2018). *Integrated Report and Financial Statements*. Nairobi: Nairobi Securities Exchange

Nakano, M. & Nguyen, P. (2013). Foreign ownership and firm performance: evidence from Japan's electronics industry. *Applied Financial Economics*, 23, 41-50

Nazir, M. S., & Afza, T. (2018). Does managerial behaviour of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market, *Future Business Journal*, 4,139-156

Newey, W. K., & West, K. D. (1987). A Simple, Positive Semi-definite,Heteroskedasticity and Autocorrelation Consistent Covariance Matrix. *Econometrica*, *55*(3), 703–08

Ongore, V.O. (2011). The relationship between ownership structure and firm performance: An empirical analysis of listed companies in Kenya. *African Journal of Business Management,* 5(6), 2120-2128.

Preacher, K. J., Rucker, D. D., & Hayes, A, F. (2007). Addressing moderated mediation hypothesis: Theory, methods and prescriptions. *Multivariate behavioral research*, 42(1), 185-227

Ratnawati. V., Hamid, M .A. & Popoola. O.M. (2016). The interaction effect of institutional ownership and firm size on the relationship between managerial ownership and earnings management. *Journal of Accounting Studies*, 10, 303-310

Saleh, M., Zahirdin, G., & Octaviani, E. (2017). Ownership structure and corporate performance: evidence from property and real estate public companies in Indonesia. *Investment Management and Financial Innovations*, 14(2), 252-263

 ISSN - 2224-2023
July 2020 Vol 10 No 3 Pgs 1-13

Thanatawee, Y. (2014). Institutional ownership and firm value in Thailand. *Asian Journal of Business and Accounting*, 7(2), 1-22

Welch, E. (2003). The relationship between ownership structure and performance in listed Australian companies. *Australian Journal of Management*, 28, 287–305

Wooldridge, J. M. (2013). *Introductory Econometrics. A Modern Approach. (*5th ed.). Mason, OH: South-Western Cengage Learning Cengage