OWNERSHIP STRUCTURE, AUDIT QUALITY AND FIRM PERFORMANCE MODERATING AND DIRECT-EFFECT MODELS: AN EMPIRICAL STUDY

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Abstract

This paper had two main objectives, with the first being to examine the direct impact of concentration and managerial ownership on firm performance (ROA) among non-financial firms in Oman for the years 2010 until 2014. Secondly, this paper aimed to examine the moderating impact of audit quality on the ownership concentration, managerial ownership-firm performance relationship of the same sample. The study made use of leverage as the control variable. Moreover, in order to test the direct relationship between independent variables and dependent variable, this study used OLS regression. Aside from this, the study focused on the non-financial sector owing to the distinction between the structure and regulations between the two sectors (financial and non-financial sector) for the years 2012-2014. More importantly, this study revealed that the ownership concentration has a positive and significant effect on ROA. In the same path, the managerial ownership has a positive but insignificant association with ROA. Moreover, the study failed to find a moderating effect of the audit quality on the relationship between ownership concentration and managerial ownership, and firm performance of Omani companies. Lastly, the study listed and discussed the study limitations and recommendations for future studies.

Keywords: Ownership Concentration, Managerial Ownership, Firm Performance, Audit Quality

1. INTRODUCTION

Corporate governance is a topic that has been exhaustively examined by studies in literature as a mechanism to mitigate managers-investors conflicts, in order to protect the rights of capital owners. This is supported by Abdurrouf (2011), Jensen and Meckling (1976), Pandya (2011), Pfeffer (1972), Shleifer and Vishny (1986). They revealed that corporate governance guarantees that management achieves the interests of stakeholders, particularly shareholders. This has made corporate governance mechanisms and regulations popular in the circles of researchers and practitioner around the world, especially regarding its ability to produce benefits for individuals and organizations (stakeholders) (Hsu & Petchsakulwong, 2010). More importantly, investors, both foreign and local are inclined towards investing in firms that adopt corporate governance mechanisms. This is because the effective utilization of such mechanisms can prevent financial issues from arising and it can mitigate corruption and lead to enhanced firm growth and ultimately, the improved development of the economy (Al-Matari et al., 2012).

Researchers, firms and institutions are of the consensus concerning the role of corporate governance in decreasing conflict of interest, and in minimizing the right of control, and providing managers the autonomy to multiply the wealth of shareholders. Corporate governance mechanisms also provide the directors the right to make effective decisions directed towards the shareholder's welfare shareholders' and while meeting managers' objectives (Shleifer & Vishny, 1997). In this line of study, Irina and Nadezhda (2009) highlighted the firms' need modify their corporate scale for superior performance. In relation to this, this study proposes a comprehensive model to examine the factors that enhance the corporate governance mechanisms in terms of their effectiveness and the performance among the firms in Oman.



As an external governance mechanism, the external auditor ensures that the financial statements forwarded to the board of directors and shareholders are authentic and accurate (Mautz & Sharaf, 1961). Additionally, the external auditor also works towards mitigating the possibility of asymmetry of information to arise between management and shareholders (Fama, 1980), addresses agency issues, and rectifies manipulated earnings in the financial statements (Jensen & Meckling, 1976; Watts & Zimmerman, 1983), and mitigates the ownership gap and firm control (Fama & Jensen, 1983).

In this line of explanation, the relationship between external shareholders and managers is full of moral hazard and opportunism that stems from the information asymmetry and to this end, financial reporting is expected to the harmony between control and ownership (Wan, Shahnaz & Nurasyikin, 2008).

Despite the consensus reached by majority of studies on the importance of ownership structurefirm performance relationship, only few studies have empirically evidenced such relationship, with some studies (e.g., Barontini & Caprio, 2006; Chen et al., 2006) revealing a positive relationship and others (Brown & Caylor, 2004) revealing a negative relationship. Some other authors evidenced no relationship at all (e.g. Masood, 2011). The obtained mixed findings are motivations for further studies re-examine the relationship and this call for more studies was heed by Abdurrouf (2011), Al-Matari et al. (2012), Kajola (2008), Liang et al. (2011) and Millet-Reyes and Zhao (2010). Moreover, the importance of ownership structure is clearly evident in aligning the owners' interest with that of management and thus, this study examines some ownership structure characteristics namely concentration ownership and managerial ownership.

This study attempts to lessen the gap in literature by looking into the ownership structure characteristics (ownership concentration and managerial ownership) and their relation with Omani firms' performance. The study also attempts to investigate the moderating role of audit quality on the ownership structure-firm performance relationship. An extensively explanation of the procedures employed in the study is provided in the next sections.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Ownership Concentration and Firm Performance

According to Azam et al. (2011), ownership concentration is a factor that safeguards and provides legal protection to minority shareholders in firms in different parts of the globe. It is described as the proportion of the firm shares held by a certain number of majority shareholders (Sanda et al., 2005) and it can be measured by obtaining the fraction possessed by five majority shareholders or by obtaining the significant number of shareholders (Karaca & Eksi, 2012; Obiyo & Lenee, 2011).

The pioneering work that revealed a positive relationship between ownership concentration and the performance of the firm in their conceptual study was conducted by Berle and Means (1932). Meanwhile, Shleifer and Vishny (1997) and others stressed on ownership concentration and legal protection as two main corporate governance determinants. Additionally, majority shareholders can help minority shareholders to prevent shares expropriation and asset stripping activities of management. In relation to this, concentrated ownership in the firm may minimize the intention of management to carry out strategic decision making and expose the firms to risks in order to gain advantage (Brickley et al., 1997; Bushee, 1998; Pound, 1988). Also, Clarke (1998) revealed that a significant total share of equity may stem from enhanced majority shareholders' oversight role.

Juxtoposing the explanation to the resource dependent theory, it can be stated that company ownership invest a certain amount of resources that may prevent the partnership of the firm with external investors, and ultimately limits the external resources from the government and other financial entities. The investment percentage between foreign investors and ownership should be similar in order to achieve the objectives of the firm and to set up wealth forms that mitigate risks that the firm is exposed to. This may also be invaluable in furnishing experiences linked to external environment in the form of internal and external partnerships to improve firm performance (Pfeffer, 1972).

Theoretically, ownership concentration influence on the performance of firms is still inconclusive in the context of developed as well as developing countries. A preview of the inclusive findings is discussed in the next sections based on the agency theory and resource dependence theory. Although several empirical studies have been dedicated to examining the ownership concentration-performance relationship, the results are still mixed with some authors evidencing a positive relationship in the context of developed countries like Siala et al. (2009) and Wang and Oliver (2009) and developing countries like Azam et al. (2011), Kraca and Eksi (2012), and Obiyo and Lenee (2011), whereas others evidenced a negative relationship in the case of developed countries like Hu et al. (2010) and Millet-Reves & Zhao (2010) and developing ones (e.g., Roszaini & Mohammad, 2006).

In other studies focused on developed countries, the authors showed no relationship between the two variables (e.g., Shan & McIver, 2011) – the same holds true for developing countries (e.g., Fazlzadeh et al., 2011; Najjar, 2012; Wahla et al., 2012). The above mixed findings call for further studies to re-examine the relationship and as such, this study contributed to literature by proposing the testing of the following hypothesis;

H1: There is a relationship between the ownership concentration and firm performance.

2.2. Managerial Ownership and Firm Performance

The managerial ownership construct is measured in literature through the proportion of firm shares held by insiders and members of the board (Liang et al., 2011; Wahla et al., 2012). This type of ownership is viewed to play an effective role as corporate governance mechanism. In the study by Jensen and Meckling (1976), they found that the construct may play the role as a potential incentive to align management interests with those of shareholders.

Nevertheless, in some studies (e.g., Khan et al., 2011; Shleifer & Vishny, 1986), high managerial ownership was expected to lead to management entrenchment as the board do not have full control over them.

Due to its importance, the managerial ownership-firm performance relationship has been examined by theoretical as well as empirical researches but unfortunately, the findings reported are still ambiguous owing to the differences among them. This sub-section discusses the details regarding the findings for this relationship.

According to the agency theory as explained by Jensen and Meckling (1976) agency conflicts that arise between owners and management can be mitigated by managerial ownership because if management owns a considerable proportion of the shares of the company, he is motivated to maximize his performance and ultimately, the firm performance. An argument to the contrary came from Demsetz (1983) and Fama and Jensen (1983) who stated that management entrenchment has been noted in firms with high managerial ownership, exacerbating agency problems.

In the viewpoint of the resource dependence theory, partnership with external resources is boosted to allow the company to access various external resources and experiences to increase the achievement of shareholders' and stakeholders' rights in the company. The theory also focuses on confiscated resources with which the goals of the company beneficiaries are achieved. Therefore, according to Pfeffer (1972), managers and board members significant ownership can lead to enhanced performance of the company.

Based on the above discussion, the findings regarding the managerial ownership-firm performance are evidently mixed and ambiguous. In this regard, some studies showed a positive relationship between the two variables in the developed countries (e.g., Juras & Hinson, 2008; Leung & Horwitz, 2010) and developed ones (e.g., Chung et al., 2008; Ehikioya, 2009; Hasnah, 2009; Sing & Sirmans, 2008; Uwuigbe & Olusanmi, 2012).

Meanwhile, other authors showed a negative relationship between the two variables of managerial ownership and firm performance in developed nations in studies including Irina and Nadezhda (2009) and Juras and Hinson (2008). This negative relationship was supported in studies dedicated to developing nations including those of Liang et al. (2011), Mandac and Gumus (2010), Tsegba and EziHerbert (2011) and Wahla et al. (2012). Some others evidenced no relationship at all between the two; for instance, Juras and Hinson (2008), Siala et al. (2009), Nazli Anum (2010), Nuryanah and Islam (2011) and Mohd (2011) both in the developed and developing nations. Thus, in this study, the following hypothesis is proposed for testing;

H2: There is a relationship between the managerial ownership and firm performance.

2.3. The Moderating Effect of the Audit Quality on the Relationship between Ownership Structure and Firm Performance

There is a general assumption that external auditor ensures the reliability of the financial statements provided by the Board of Directors to the shareholders (Mautz & Sharaf, 1961). Additionally, the external auditor exerts efforts to lessen the information asymmetry between management and shareholders as explained by Fama (1980), to resolve agency problems and to prevent manipulation of accounting information (Jensen & Meckling, 1976; Watts & Zimmerman, 1983). In other words, the external auditor is crucial in maintaining the gap between ownership and control of the firm (Fama & Jensen, 1983).

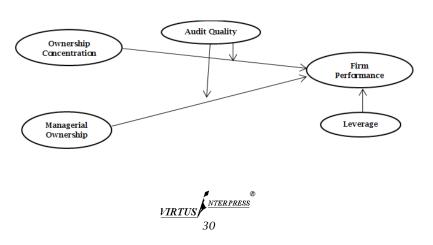
The relationship between external shareholders and management is rife with moral hazard and arises from information opportunism that asymmetry. To this end, the social role of financial reporting contributes to the control-ownership separation (Wan et al., 2008). This is supported by Kane and Velury's (2004) study that found higher degrees of institutional ownership to lead to the higher potential of firms to purchase audit services from major auditing firms for quality of audit. In this regard, a positive relationship was reported between professional audit and quality of audit by Chanawongs et al. (2010) but Dehkordi and Makarem (2011) reported no relationship between size and quality of audit.

Therefore, this study expects that audit quality enhances corporate governance tools generation of improved performance and therefore, the study proposes the following hypotheses for testing;

H3: The audit quality moderates the relationship between ownership concentration and firm performance.

H4: The audit quality moderates the relationship between managerial ownership and firm performance.

Figure 1. Research Framework



3. RESEARCH METHODOLOGY

In this study, the sampling comprises of 81 nonfinancial sectors in both industry and service sectors for one year, and hence, the total sampling was 162 companies (3 years from 2012-2014). Data was collected from annual reports of firms listed in the Muscat stock exchange.

Table 1. Summa	ry of Variables Measurement
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No	Variables	Acronym	Operationalisation
	Dependent Variables (DV)		
1	Return on Assets (%)	ROA	Earnings before tax divided by total assets of the company.
	Independent Variables (IV)		
2	Ownership Concentration (%)	OWCONCE	The fraction owned by the five largest shareholders.
3	Managerial Ownership (%)	MANAGOW	The proportion of shared owned in the firm by insiders and board members.
	Moderators Variables (MV)		
4	Audit Quality	AUDQUALI	Dummy variable 1 if auditing by big 4 and 0 others.
	Control Variables (CV)		
5	Leverage (%)	LEVERAG	The ratio of total liabilities to total assets.

4. DATA ANALYSIS AND RESULTS

4.1. Descriptive Statistic and Normality Test

The descriptive statistics employed on the continuous variables covered the mean, standard deviation and minimum and maximum, which were carried out through SPSS, version 22.

Moreover, the correlation analysis was conducted through multiple regression analysis. In regards to this, Pallant (2011) contended that correlation analysis is employed to provide a description of the linear relationship between two variables strength and direction. He added that normality is the development of the symmetrical curve at the highest scores frequency towards the small and middle frequencies extremes. Along a similar contention, Kline (1998) and Pallant (2011) also explained that the distribution of normality scores for independent and dependent variables can be established through their kurtosis and skewness values.

In social science field, the construct's nature is rife with scales and measures that can be positively or negatively skewed (Pallant, 2011). On the other hand, kurtosis refers to the distribution scores that show the level of gathering observations around the central mean. The analysis for skewness revealed normality of data with output values of (± 3) and the kurtosis analysis revealed normality of data with output values of (± 10) as recommended by Kline (1998).

Table 2. Descriptive Statistics of Continuous Variables

	Ν	Minimum	Maximum	Mean	Std. Deviation	Skev	wness	Kurt	osis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
OWCONCE	243	.000	.980	.453	.332	305	.156	-1.402	.311
MANAGOW	243	.000	.730	.054	.126	2.769	.156	8.298	.311
LEVERAGE	243	.020	1.720	.483	.276	.744	.156	1.088	.311
ROA	243	340	.320	.056	.097	-1.008	.156	3.225	.311

4.2. Correlation Analysis

The study also conducted a correlation analysis through the multiple regression analysis, where

based on Pallant's (2011) study, this analysis is often ran to provide a description of the linear relationship between the variables in light of their strength and direction.

Table 3.	Results	of l	Pearson	Correl	lation	Analysis
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Variable		OWCONCE	MANAGOW	LEVERAGE	ROA
OWCONCE	Pearson Correlation	1			
MANAGOW	Pearson Correlation	.145**	1		
LEVERAGE	Pearson Correlation	.033	.059	1	
ROA	Pearson Correlation	.076	064	449***	1

***:p<0.01;**:p<0.05;*:p<0.10

5. REGRESSION RESULTS BASED ON ACCOUNTING MEASURE

5.1. Regression Results of Model (Based On Accounting Measure)

On the basis of the obtained results regarding the adjusted coefficient of determination (R^2), the independent variable explained 0.212% of the

variation in the dependent variable. In other words, the firm performance variation (ROA as proxy) was accounted for by the regression equality and Table 4 lists the results of the model's significance with F value obtained to be (F=21.45, p<0.01) indicating the model validity. Added to this, the researcher made use of the Durbin-Watson (DW) test for the detection of autocorrelation (1.5-2.5). In this study, the value of Durbin-Watson was found to be 1.789, an acceptable value that indicates independence of



observations. Additionally, the tolerance value and VIF was used to examine collinearity – in regards to

this, no issue was found. Table 4 presents the hierarchical multiple regression analysis results.

Variables	Standardized Coefficients	T-value	Sia	Collinearity Statistics		
vuriables	Beta	1-value	Sig.	Tolerance	VIF	
Ownership Concentration (OWCONCE)	.099	1.701	.090	.978	1.022	
Managerial Ownership (MANAGOW)	052	893	.373	.976	1.024	
LEVERAGE (LEVERAG)	449	-7.800	.000	.996	1.004	
R2			0.212			
Adjusted R2			0.202			
F-value			21.450			
F-Significant			0.000			
Durbin Watson statistics			1.789			

Table 4. Regression Results of Model (Dependent= ROA)

***:p<0.01;**:p<0.05;*:p<0.10

5.2. Hierarchical Multiple Linear Regression Results

In the third phase that involved the third model, the audit quality was examined in terms of its power of predicting firm performance (ROA). Based on the model results, audit quality is a significant predictor with (F=22.151, p<0.01) and with adjusted R² of 22%. Despite the significance of the model at 0.01, it did not improve the explanatory power of the model, as R² was found significant at 0.000 and p<0.01. The model has a single variable that has a predictive power over ROA, which is leverage with (β = -0.451,

t= -7.877, p<0.01). In the next step, the audit qualityownership concentration interaction was examined for moderating impacts and the model reported significant interaction at 0.01 level of significance with (F=16.546, p<0.01). Nevertheless, for the moderating effect, the result was insignificant at (R² change= .000, p<0.01). Table 6 presents that leverage was a significant predictor of ROA with the indicators of (β = -0.451, t= -7.855, p<0.01). Moreover, audit quality's had an insignificant moderating effect on the relationship with (β = -0.01, t= -0.084, p>0.1).

 Table 5. The Moderating Effect of the Audit Quality on the Relationship between ownership concentration and ROA

			Step3			Step4		
Model	Variables	Moderator variable			With interaction			
		Beta	Т	Sig.	Beta	Т	Sig.	
2	LEVERAG	-0.451	-7.877	0.000	-0.451	-7.855	0.000	
	OWCONCE	0.085	1.472	0.142	0.091	0.968	0.334	
	AUDITQUALI	0.09	1.569	0.118	0.096	1.032	0.303	
	Interaction				-0.01	-0.084	0.933	
	F value	22.151			16.546			
	F Sig.	0.000			0.000			
	R ²	0.218			0.218			
	Adjusted R ²	0.208			0.204			
	R ² change	0.007			0.000			
	Significant F change	0.118			0.933			
	Durbin Watson	1.815						

***:p<0.01;**:p<0.05;*:p<0.10

In the next step of the third model, audit quality was tested for its predicting power of firm performance (ROA) and the results showed that it was a significant predictor at (F=21.409, p<0.01) and adjusted R² at 21%. Despite the significance of the model at the 0.01 level of significance, it failed to improve the model's explanatory power as R² change was significant at 0.000, p<0.01. The model has a single variable that has a predictive power over ROA, which is leverage with the indicators (β = -0.446, t= -7.752, p<0.01).

Moreover, the interaction between audit quality and managerial ownership was examined for moderating impacts in the fourth step of the third model, after which the model revealed significant interaction at the level of significance of 0.01 at (F=15.995, p<0.01) but for the moderating impacts, the model revealed insignificant effects (R² change=.000, p<0.01). The leverage significantly prediction of ROA with the following indicators (β = -0.446, t= -7.729, p<0.01) is presented in Table 6. Finally, audit quality's moderating impact on the relationship was found to be insignificant (β = -0.013, t= -0.134, p>0.1).

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			Step3			Step4		
Model	Variables	Moderator variable			With interaction			
		Beta	Т	Sig.	Beta	Т	Sig.	
3	LEVERAG	-0.446	-7.752	0.000	-0.446	-7.729	0.000	
	MANAGOW	-0.037	-0.64	0.523	-0.027	-0.284	0.776	
	AUDITQUALI	0.096	1.672	0.096	0.099	1.588	0.114	
	Interaction				-0.013	-0.134	0.894	
	F value	21.409			15.995			
	F Sig.	0.000			0.000			
	\mathbb{R}^2	0.212			0.212			
	Adjusted R ²	0.202			0.199			
	R ² change	0.009			0.001			
	Significant F change	0.096			0.894			
	Durbin Watson						1.865	

 Table 6. The Moderating Effect of the Audit Quality on the Relationship between Managerial Ownership and ROA

***:p<0.01;**:p<0.05;*:p<0.10

6. DISCUSSION OF RESULTS

Based on the above report of results, this part is going to discuss the results of this study. As mentioned earlier, this study is an attempt to investigate the two main objectives, firstly, to examine the direct relationship between ownership structure (ownership concentration and Managerial Ownership) and firm performance (ROA). The second essential objective is to investigate the moderating effect of audit quality on the relationship between ownership structure and firm performance. So, this study reveals that the ownership concentration has a positive and significant association to ROA and therefore supporting the hypothesis 1 (H1). This study is similar with prior research that found a positive and relationship significant between ownership concentration and firm performance in both developed countries like Siala et al. (2009), Wang and Oliver (2009) and developing countries like Azam et al. (2011), Karaca and Eksi (2012) and Obiyo and Lenee (2011).

The positive and significant relationship ownership concentration hetween and the performance of the firm can be attributed to the fact that minority shareholders may benefit from the majority ones as the majority ones holds the power and motivation to prevent expropriation or asset stripping by management. Added to this. concentrated ownership of firms may mitigate management freedom to make strategic decisions and expose the firm to risks in order to leverage opportunities (Brickley et al., 1997; Bushee, 1998; Pound. 1988).

However, the study failed to find a positive and significant connection between Managerial Ownership and ROA and therefore, this result rejected the second hypothesis (H2).

Moreover, this study is similar with previous studies that found no significant between managerial ownership and ROA in developed nations like Juras and Hinson (2008), Siala et al. (2009) or developing nations like NazliAnum Anum (2010), Nuryanah and Islam (2011) and Mohd. (2011).

According to the above findings, the lack of significant relationship between managerial ownership and ROA may be attributed to the encouraged partnership for external resources for the firms' multiple sources and different experiences – this works towards maximizing shareholder rights and all the relevant parties. This also brings about the involvement of the entire confiscated resources and combines them to make the most of the experience to assist in goal achievement of the company beneficiaries. Hence, concentrated ownership by managers and board members did not assist in the companies' performance (Pfeffer, 1972).

Added to the above results, no moderating effect of audit quality was found on the managerial ownership-firm performance relationship. This may be attributed to the fact that the external auditors were not expert in their fields – this is supported by the fact that 33% of the total firms in the sample did not use the Big 4 to review their annual reports so policy makers are advised to enforce listed companies to employ the Big 4 in order to ensure that information provided to investors for their decisions are accurate. Also, when they employ the Big 4 to review their annual reports are more trusting on the reports and they will willingly invest their resources with ease and without concern of the future investment risks.

7. CONCLUSION

As we spotlighted earlier, this study tried to achieve two main objectives, the first objective is to examine the direct relationship between ownership structure namely ownership concentration and managerial ownership, and firm performance among nonfinancial companies in a period of three years (2012-2014). The second objective is to explore the moderating effect of audit quality on the relationship between ownership structures namely ownership concentration and managerial ownership, and firm performance.

Moreover, this study used many assumptions to test the relationship between independent variables, moderator variable and dependent variable including multiple linear regression, hierarchical multiple linear regression, among others.

The analysis results showed a positive and significant association between ownership concentration and firm performance but no significant effect of managerial ownership on firm performance.

Moreover, this study found that there was no moderating effect of audit quality on the relationship between both ownership concentration and managerial ownership, and firm performance.

8. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study is similar to any previous studies in that it has its limitations. The study examined two variables of ownership structures namely ownership concentration and managerial ownership and therefore, this study advices future researchers to take into account other variables like government institutional ownership, ownership, foreign ownership and others. Moreover, as we mentioned above, this study examined the relationship of ownership structures to firm performance and thus, we suggest future researchers consider other variables of internal corporate governance variables such as, board of directors characteristics, audit risk committee characteristics, committee characteristics, purchase committee characteristics, board diversity, internal audit characteristics and so on that have the potential to improve the level of performance of companies. This study concentrated on Omani companies and therefore, this study strongly urges future studies to make a comparison among the results obtained from the GCC region.

Furthermore, this study considered ROA as the dependent variable so future researchers are advised to integrate between account measurement and market measurement that could give an even clearer picture on the firm performance.

Finally, this study was conducted to explore the moderating effect of audit quality on the relationship between ownership structure and firm performance so future researchers are advised to take into account other moderator variables such as, culture, CSR, political turmoil, board diversity and their effect on the relationship between corporate governance and firm performance in general.

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