

# THE OWNERSHIP STRUCTURE EFFECT ON FIRM PERFORMANCE IN SOUTH AFRICA

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## Abstract

This research investigates the effect of corporate governance through ownership structures; ownership concentration, managerial ownership and government ownership on firm performance. A multiple regression analysis was employed on sample data collected over ten years from 2001-2010 from 80 South African companies to test the magnitude of their influence to company performance as measured by return on assets (ROA). This study found a positive and significant correlation between ownership concentration, government ownership and firm performance. Results also showed a negative relationship between insider ownership and firm performance. To this account, the research concludes that managerial ownership is a single factor that significantly weighs down company performance. In validating the significance of the performance determinance model, evidence shows that companies that maintain the recommended King Report shareholding structure have an average to above average performance. Hence, corporate governance is a critical catalyst for company performance.

**Keywords:** Corporate Governance, Ownership Structure, Performance, Return On Assets

## 1. INTRODUCTION

Corporate governance has developed to become one of the most important subjects in business management. It has drawn so much attention to researchers, corporate managers and multinational investors as a mechanism to avoid conflicts of interests between management and shareholding (Shleifer and Vishny 1986). The main objective of corporate governance is to safeguard the interests of capital owners and other stakeholders from unethical business practices, making sure that management exert reasonable efforts to achieve the shareholders' goals (Jensen and Meckling, 1976). As a result, corporate governance mechanisms and regulations have been provided significant attention on a global scale as they improve the overall economic capability for the benefit of all stakeholders. Evidence has shown that, both local and foreign investors are considerably attracted to companies with good corporate governance structures. The proper implementation of minimum corporate governance guidelines can prevent disputes, minimise agency problem, reduce the corruption and thus enhance the overall firm growth that collectively stimulates the country's overall economic growth and development.

A number of empirical studies have shown evidence that governance mechanism has a direct effect on the firm's value. Hence, a good corporate governance structure separates ownership and control at the same time minimising the agency cost (Fama and Jensen, 1983). Corporate governance mechanisms and controls are therefore designed to reduce the inefficiencies that arise from moral hazard and adverse selection.

The resource dependence theory postulates that ownership is considered as a source of power that can

be utilized to reinforce or go against management according to how concentrated it is and how it is applied. Hence, ownership structure plays a key role in corporate governance and provides insights to decision makers to improve the corporate governance system (Zhou, 2001).

Vishny and Shleifer (1986) present evidence that in developed countries, ownership structure is greatly dispersed whereas the ownership structure in developing countries is highly concentrated. They noted that highly concentrated ownership structures are a result of weak legal systems in developing countries which exposes minority investors' interests. Evidence has shown that ownership structure affect corporate performance, however studies have largely ignored the analysing the role of ownership structure on firm performance.

Despite the attention being awarded to corporate governance, there are no empirical findings about the ownership structure and firm performance relationship in South Africa. While Juras (2008) find a positive relationship, Kim and Lu (2011) argue that there is a negative relationship between the two variables. On the contrary, Thompson (2011) finds no relationship between the two variables. These mixed findings prompted research to further examine the relationship between ownership structure and firm performance. This is critical to shareholders in aligning their relationship with management. Ownership characteristics will be examined in a number of ownership structures including concentration ownership, managerial ownership, government ownership, institutional ownership and foreign ownership against corporate performance in South Africa. This study examines these relationships by testing the following hypotheses;

H1: There is no correlation between the ownership concentration and firm performance.

H2: There is no correlation between the managerial ownership and firm performance.

H3: There is no correlation between the government ownership and firm performance.

## 2. LITERATURE REVIEW

History has shown that minority shareholders are vulnerable to adverse decisions passes by the majority due to imbalanced corporate ownership structures. Before the introduction of the King Report on Corporate Governance in South Africa in 1994 (King I), 2002 (King II) and 2009 (King III), boards manipulations through ownership concentration was a common phenomenon. These unethical business practices made it difficult for various statutes to legally protect minority shareholders. Hence the King Report is regarded as the most important and effective summary of best international practices in corporate ownership and control.

The relationship between ownership concentration and performance was first explored by Zhou (2001) who finds a positive association between these variables. Shleifer and Vishny (1997) concur with Zhou (2001) in stressing that ownership concentration and legal protection are considered the two determinants of key corporate governance. Concentrated ownership is most likely to minimize the freedom of management to carry out merit based strategic decisions and its proper due diligence in potential business opportunities (Shleifer and Vishny, 1997).

Jensen and Meckling (1976), proponents of the agency theory, assert that corporate ownership is dispersed among shareholders with the control rights pooled in management hands. Hence, the consequent separation of control and ownership may give rise to agency problems. On the contrary, Shleifer and Vishny (1986), the resource dependence theory proponents argue that if company shareholders invest limited resources, it negatively impact the company's partnerships with external investors and thus reducing the supply of external resources from other parties like the government or financial institutions. Therefore, shareholders should invest a significant percentage in equity to minimize risk exposure and establish experiences linked to external partnerships which generally helps the firm to enhance its performance.

There are theoretical and empirical studies that have investigated the relationship between managerial ownership and firm performance and they have provided conflicting evidences. Jensen and Meckling (1976) hypothesise that corporations with managerial ownership, shares owned by insiders and board members, are potentially the most effective mechanism of corporate governance. Hence, it improves agency conflicts between owners and management because a manager owning a large portion of the company shares has ample incentives to maximize job performance to guarantee better performance of the company. They substantiate this assertion citing that, it provides a potential incentive to align the management interests to that of shareholders. Contrarily to Jensen and Meckling (1976), Shleifer and Vishny (1986) argue that high

managerial ownership may lead to management entrenchment because they are less subjected to board of directors' governance and to market discipline for corporate control.

Fama and Jensen (1983) concur with Shleifer and Vishny (1986) against managerial ownership. They pointed out that management entrenchment has been known to arise in firms with high managerial ownership which in turn worsens agency problem. They conclude that wide external ownership is encouraged for multiple sources of resources and different experiences which work to maximize shareholder rights and all parties associated with the company. Therefore, large managerial ownerships negatively affect performance of companies.

Jensen and Meckling (1979), the proponent of government ownership, measured by the ratio of the government owned shares in the firm, suggest that government ownership holds the solution to the issue of information asymmetry resulting from the imperfect information provided to investors concerning the firm value. They add that state owned shares can be used to align the owners and management's interests because government generally gathers information from other sources and they are more privy to various channels of financing compared to their non-state counterparts. Hence, the selection of suitable governance mechanisms among management and owners ensures the interest alignment of principal and agent.

There are however a number of systemic problems that is very difficult to address amongst them; demand for information, monitoring costs and supply of information. In order to influence the directors, the shareholders must combine with others to form a voting group which can pose a real threat of carrying resolutions or appointing directors at a general meeting. While the contribution by Shleifer and Vishny (1986) and Jensen and Meckling (1979) are acknowledged, their findings in literature regarding these relationships are not conclusive. Fama and Jensen (1983) notable contribution to this subject is not applicable to the South African corporate environment. This study therefore attempts to contribute to literature regarding this relationship by analysing the proposed hypotheses.

## 3. RESEARCH METHODOLOGY

This study analysed a sample of 80 companies; 40 of them listed on the Johannesburg Stock Exchange (JSE) and the other 40 are private companies with a balance sheet of more than US\$500 000. The data is categorised into eight, with each category having ten companies from each sector in the economy for an equal sample representation. The sampling period was ten years (2001 to 2010) because this is the period when corporate governance began to develop to be a critical issue in business management backed by the King Report. The data was collected from annual financial reports on the JSE, for listed companies and from respective companies' websites. Corporate performance was measured by Return on Assets (ROA) with a model specified as follows;

$$ROA = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \mu$$

**Table 1.** Summary of Model Variables

No	VARIABLE	ACRONYM	OPERATIONALISATION
<b>Dependent Variable</b>			
1	Return on Assets	ROA	$\frac{\text{Net earnings} + \text{Tax shield}}{\text{Total Assets}}$
<b>Independent Variables</b>			
2	Ownership Concentration	$X_1$	$\frac{\text{Value of five largest shareholders}}{\text{Total Shareholders}}$
3	Managerial Ownership	$X_2$	$\frac{\text{Value of managerial shareholders}}{\text{Total Shareholders}}$
4	Government Ownership	$X_3$	$\frac{\text{Value of five government shareholders}}{\text{Total Shareholders}}$
5	Coefficients	$\beta_i$	As given by regression outputs
5	Error term	$\mu$	stochastic error
<b>Control Variable</b>			
6	Leverage	$X_4$	$\frac{\text{Total Liabilities}}{\text{Total Assets}}$

Multiple regression analysis was applied to determine the coefficients of the five independent variables. The Durbin-Watson test is employed as a statistical test to detect autocorrelation among the independent variables to avoid variable redundancy. And finally the methodology tests normality of the residuals using skewness and kurtosis to ensure that all the explanatory variables have the correct functional form and the important variables are included in the model.

#### 4. DATA ANALYSIS

Analysis of the multivariate data gives the outputs as given by the descriptive statistics of the explanatory variables below; the mean, standard deviation, and minimum, maximum.

**Table 2.** Descriptive Statistics of Explanatory Variables

Explanatory Variables	Minimum	Maximum	Mean	Std. Deviation
Ownership Concentration ( $X_1$ )	0.06	0.88	0.35	0.42
Managerial Ownership ( $X_2$ )	0.06	0.61	0.15	0.43
Government Ownership ( $X_3$ )	0.07	0.78	0.07	0.11
Leverage ( $X_4$ )	0.09	1.62	0.38	0.29
Return On Assets (ROA)	-0.38	0.62	0.16	0.19

The analysis of correlation on the data to determine the linear relationship between any combination of two explanatory variables in terms of strength and direction was done. The results show

that there was no multicollinearity in the correlation matrix, all outputs are less than  $\pm 0.5$  indicating that Gujarati and Porter's (2009) recommendation was met.

**Table 3.** Correlation Analysis

Explanatory Variables	$X_1$	$X_2$	$X_3$	$X_4$
Ownership Concentration ( $X_1$ )	1			
Managerial Ownership ( $X_2$ )	0.151***	1		
Government Ownership ( $X_3$ )	0.118	-0.042	1	
Leverage ( $X_4$ )	0.131	0.232	-0.278***	1
Return On Assets (ROA)	0.073	-0.078	0.341***	-0.342***

\*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

**Table 4.** Results of Skewness and Kurtosis Test for Normality

Explanatory Variables	Skewness		Kurtosis	
	Stat	Std. Error	Stat	Std. Error
Ownership Concentration ( $X_1$ )	-0.33	0.11	-1.77	0.31
Managerial Ownership ( $X_2$ )	2.75	0.12	8.68	0.39
Government Ownership ( $X_3$ )	2.01	0.13	5.77	0.37
Leverage ( $X_4$ )	0.66	0.11	1.01	0.32
Return On Assets (ROA)	-1.10	0.11	3.01	0.37

In testing the normality of the residuals, skewness and kurtosis were carried out to test the normality of residual distribution as displayed in Table 4.

Table 4 of results shows that the value of skewness is located within the ranges of  $\pm 3$  and  $\pm 10$

for kurtosis. This shows that, according to the Pearson's first skewness coefficient, the data is fairly normal assuming that the data is unimodal.

The multi-regression model results of the multivariate multiple regression analysis are presented in Table 5.

Table 5. Multiple regression model output

R <sup>2</sup>	0.733
Adjusted R <sup>2</sup>	0.420
F-value	18.113
F-Significant	0.561
Durbin Watson statistics	1.810

Explanatory Variables	Std. Coeffs	t-value	Sig.	Collinearity Stat.	
	Beta			Tolerance	Var ( $\hat{\beta}$ )
Ownership Concentration( $X_1$ )	0.294	0.638	0.101	0.917	1.013
Managerial Ownership( $X_2$ )	-0.748	-0.812	0.401	0.935	1.015
Government Ownership( $X_3$ )	0.353	2.538	0.214	0.991	1.016
Leverage ( $X_4$ )	-0.204	-1.115	0.215	0.988	1.018

The multi-regression of the X variables by sum of squared deviations shows a coefficient of determination ( $R^2$ ) of 73.3%. Hence the model is a good fit for the data as 73% of the variation in ROA is explained by the four independent variables. The F-value test statistic was above 0.5 showing that the model as a whole has statistically significant predictive capability with its four predictive variables. Finally, the Durbin-Watson (DW) test was employed as a statistical test to detect autocorrelation. Results show an output of 1.8 which is within the recommended autocorrelation range of 1.5-2.5, hence observations was independent.

Results of the Variance inflation factor ( $Var(\hat{\beta})$ ) and the Tolerance value test quantifies the severity of multicollinearity in an ordinary least squares regression analysis. It provides an index that measures how much the variance (the square of the estimate's standard deviation) of an estimated regression coefficient is increased because of collinearity. The results of the variance inflation factor test for all the predictor variables were less than one. This means that the standard error for the predictors' coefficients will remain the same even if the predictor variables were correlated with the other predictor variables.

## 5. DISCUSSION OF RESULTS

On account of the results presented in this study, there is a positive and significant correlation between ownership concentration, government ownership and company performance as measured by ROA. These results are in line with previous empirical findings by Siala et al. (2009 and Karaca (2012) whose studies were based on European countries. This could be attributed to shareholder influence on the board of directors which directly affect decisions made. The results also show strong inverse relationship between managerial ownership and ROA contrary to Juras (2008) and Mohd (2011) who found no relationship between the two variables in developed countries' data. This can be interpreted to be the quality of

decisions made by owner managers which are most likely to be poor. This study uniquely revealed that managerial ownership in a single variable that the grossly compromise the performance of an entity. This may be driven by lack of due diligence before arriving at a merit backed decision.

## 6. CONCLUSION

For future research to add other ownership structure like foreign ownership and institutional ownership that maybe help in improving firm performance, it is advised for future research to add some internal corporate governance mechanisms such as, board of directors, audit committee, risk committee, executive committee, corporate governance committee, remuneration committee, nomination committee and others and their role in improving firm performance.

## REFERENCES

- Jensen, M. C., and Meckling, W. H. (1976). *Theory of the firm: Managerial behaviour, agency costs and ownership structure*. Journal of Financial Economics, 3(4), 305-360
- Juras, K. (2008). *Multiple Regressions: A Primer*. Thousand Oaks, CA: Pine Forge Press.
- Karaca, M. (2012). *Applied Linear Regression Models* (4th Ed.). McGraw-Hill Irwin.
- Kim, E. H. and Lu, Y. (2011). *CEO ownership, external governance, and risk-taking*. Journal of Financial Economics, 102(2), 272-292
- Mohd, A. (2011). *Multivariate Data Analysis*. Upper Saddle River, NJ.
- Shleifer, A. and Vishny, R. W. (1986). *Large shareholders and corporate control*. The Journal of Political Economy, 461-488
- Thompson, S. B. (2011). *Simple formulas for standard errors that cluster by both firm and time*. Journal of Financial Economics, 99(1), 1-10.
- Zhou, X. (2001). *Understanding the determinants of managerial ownership and the link between ownership and performance*. Journal of Financial Economics, 62(3), 559-571.