

Measuring the Relationship between Board Composition; the Proportion of Non-Executive Directors on Board, Board Size and CEO Duality, and Performance. A Case of Zimbabwe Stock Exchange Listed Banking and Financial Firms

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Abstract

This research seeks to measure the relationship between board composition (the proportion of NEDs on board, board size and CEO duality) and performance using ROA and ROE: A case of listed Banking and Financial firms in Zimbabwe. The Zimbabwean Banking and Financial sector financial crisis of 2002-2005 resulted in many Banking and Financial firms being liquidated and some placed under curatorship. This crisis prompted the RBZ to offer guidelines to restructure boards in this sector recommending a minimum of five directors made up with at least 60% NEDs and CEO non-duality. Despite all these regulations, the failure rate in this sector is still very high. Therefore this research was seeking to establish whether it is a matter of board composition or they are other factors which influences the performance of Banking and Financial firms in Zimbabwe. Previous studies produced inconclusive results regarding the relationship between board composition and performance with some finding a significant relationship and others not finding any relationship. The research used explanatory and case study research designs in drawing out findings using Chi-square and OLS regression models to validate or invalidate hypotheses. Primary data was drawn from a sample of twelve experts in the Banking and Financial sector using questionnaires and structured interviews. Secondary data was drawn from the financial statements of six listed Banking and Financial firms over a period from January 2009-December 2012. Using Chi-square test, the results indicated that performance is not related to board composition. On the other hand using OLS method, only board size was found to be significantly related to performance.

Keywords: Corporate governance, Board composition, Board Size, CEO duality, Performance

1 Introduction

Corporate governance has received much attention in the current studies all over the world especially after many corporate scandals and the failures of some biggest firms around the world such as Commercial Bank (1991), Enron (2001), HIH Insurance Company (2001), Adelphia (2002) and World Com (2002) (Mizruchi, 2004). This resulted in the implementation of corporate governance codes and principles such as the US Sarbanes-Oxley Act (2002) which was considered to be the most sweeping corporate governance regulation in more than seven decades (Byrnes et al, 2003).

Studies carried out on the collapsed firms revealed that the board of directors and its committees lacked good supervision on the management. For example Enron manipulated its financial statements through off balance sheet financing. Therefore the board was unable to disclose the distorted statements as it lacked independence from senior executives (Deakin & Konzelmann, 2004). WorldCom materially overstated its earnings and finally filed for bankruptcy. The investigations showed that the audit committee failed to effectively see the managers' duties (Weiss, 2005).

Less consideration was given to the study of the Banking and Financial firms. The major reason cited is that the financial industry is a regulated industry; therefore corporate governance in this industry is not as important as in other industries (Hermalin & Weisbach, 2003).

However the Asian financial crisis of 1997 and the 2008 global financial turmoil which triggered Banking and Financial Institutions failures in both developed and developing countries have made the world to become aware of the bad corporate governance consequences (Mambondiani, 2012).

In Zimbabwe, from 1980-1990, banks operated under a semi-command economy dominated by foreign banks up until 1991 when the financial sector was liberalized as part of the Economic and Structural Adjustment Program (ESAP) (Mambondiani, 2012). During this phase less attention was being paid to Banking and Financial firms' corporate governance and risks were kept at minimal with less bank failures. The liberalisation measures were prescribed to open up and de-regulate the financial sector in an attempt to promote financial development in particular and economic growth in general. The turn of the millennium saw an emergence and expansion of indigenous banks in Zimbabwe which were declaring super profits at the close of each financial year from operations which were later to be declared illegal by monetary authorities such as illegal foreign currency dealings (Muranda, 2006)

However, there was ownership concentration in newly licensed indigenous banks, with the founders and their families as controlling shareholders and represented in top management and the board of directors (Mumvuma et al, 2003).

The instability in the Zimbabwean economy during the late 1990s and the early 21st century as a result of hyperinflation resulted in the collapse of 13 banking institutions, all of which were indigenous, licensed after the financial liberalization of 1991 (Mambondiani, 2012).

Although the banking sector was heavily affected by macro-economic factors, the issue of bad corporate governance has been a major concern.

Table 1 Summary sample of failed banks

<u>Bank</u>	<u>Status</u>	<u>Reason</u>	<u>Cause</u>	<u>Date/Period</u>
United Merchant Bank (UMB)	Liquidated	Liquidity constraints. Financial distress	Poor risk management. Board Absence. Insider lending. Non-payment of loans.	1996
Trust Bank	Under curatorship	Under-capitalisation. Liquidity constraints.	CEO dominance & abuse of power. Non-banking activities. Unserviceable insider loans. Fraud. Poor risk management.	27/07/12
Royal Bank	Liquidated	Undercapitalization. Chronic liquidity challenges. Persistent losses.	Poor Board oversight. Poor Management Information Systems. Non-performing loans.	27/07/12
Barbican Bank	Liquidated	Liquidity constraints. Under-capitalisation.	CEO dominance & abuse of power. Imprudent banking behaviours	25/02/13
Interfin Bank	Under curatorship	Under-capitalisation. Liquidity constraints.	Concentrated shareholding. Abuse of corporate power. Non-performing insider loans. Poor board and management oversight	11/06/12
Genesis Bank	Liquidation	Under-capitalization Liquidity challenges.	Incompetent Board of Directors.	11/06/12
Century Bank	Liquidation	Liquidity constraints. Manipulation of financial statements.	Poor Board oversight. Poor asset and risk management.	2004

The RBZ prescribed new regulations that require an individual not to exceed 10% of the bank's shareholding so as to improve corporate governance in banks through a shift from owner-controlled to manager-controlled banks.

The regulations demand banks to have a minimum of 5 directors with at least 60% independent NEDs and it also recommends the separation of the roles of CEO and Board Chairperson [Bank Licensing, Supervision and Surveillance Guideline Number 1 (2004) on corporate governance].

2 Literature Review and Hypothesis Development

The Cadbury Committee Report (1992) broadly defined corporate governance as the system by which companies are directed and controlled and how the corporate activities and expectations of stakeholders are aligned. This system involves the combination of the board of directors, management and controls that guide the firm and is concerned with holding goals (Borerwe, 2004). The Cadbury Report is based on the agency theory which recommends that boards should have a majority of outside directors who are truly independent in nature. It also recommends CEO non-duality, and that board size is an important aspect for effective corporate governance.

2.1 Corporate Governance in Zimbabwe

Corporate governance depends on the quality of the country's macro-economic environment in terms of regulatory, fiscal, institutional and judicial structures, which in turn are influenced by a given country's political dispensation (Beck et al, 2001). After the Enron saga, a lot of questions have been raised regarding the effectiveness of such arrangements in an emerging setting such as Zimbabwe, which is characterized by an even less sophisticated investing public, paucity of financial information and, monopoly of financial knowledge and skills by a limited number of people (Tshumba, 2002).

Corporate activity in Zimbabwe is based on common law, with some Roman Dutch influence. Corporate Law was first embodied in the Companies Act (1951) and in the Zimbabwe Stock Exchange Act (1996). All registered companies in Zimbabwe, whether private or public are subject to the Companies Act. The Minister of Justice and the Registrar of Companies are empowered to investigate potential violation of the Act (Tshumba, 2002). The Zimbabwe Stock Exchange (ZSE) is a body corporate established by an Act of Parliament and has extensive regulatory powers. The body is under the direction of the Ministry of finance and is a self regulatory authority.

Zimbabwe is yet to have a developed system for measuring corporate governance as other economies. For this reason, it is highly recommended that a system for measuring corporate governance is implemented in Zimbabwe alongside a National Corporate Governance Code (Chimanya, 2012).

In Zimbabwe corporate governance has been gaining roots in response to initiatives by some stakeholders such as The Institute of Directors Zimbabwe (IODZ) who strongly believes that Zimbabwe should have its own national code on corporate governance that should take into account the country's peculiar corporate governance challenges. Notwithstanding these developments, it must be indicated that more formal corporate governance structures and institutions are relatively not widespread though a number of laws provide for governance structures for companies in Zimbabwe. These include:

- The companies Act (Chapter 24.03), which provides for governance of all companies incorporated in Zimbabwe.
- The Securities & Exchange Commission Act (Chapter 24.25), which provides among other things for governance of the stock exchange, investment advisors, security dealers, and collective investment schemes licensed by the Securities & Exchange Commission (SEC) in Zimbabwe.

In Zimbabwe, a number of corporate governance studies have been carried out in the financial sector. Studies by Chimombe (1983), Tshumba (2002), Muranda (2006), Njanike et al (2011) and Mambondiani (2012) revealed a series of poor corporate governance practices among a sample of surveyed banks in corrupt practices and dealings outside the scope of the banking industry and which banks were unwilling to disclose.

2.2 Corporate governance and Banking and Financial Institutions

The Banking and Financial industry is the most heavily regulated sector worldwide due to its sensitive role that it plays in the economic system as liquidity guarantors, originators of non-market finance, information brokers between lenders and borrowers and payment system operators (Gorton and Winton, 2003). Therefore economic

prosperity and advancement heavily depend on the services provided by banks and its efficiency lowers the capital costs of firms, increase capital formation and boost productivity growth (Levine, 2004).

The failure of an individual bank may affect the whole Banking and Financial sector in the economy either via inter-bank linkages with the ailing bank or because of the panic provoking bank runs on other non-distressed banks in the same economy thereby destabilizing the economic system as a whole (Calomiris, 2007).

Therefore Banking and Financial firms need to align the interests of shareholders and other stakeholders including depositors and the government thereby making their corporate governance of great importance to the financial system of any country. This determines the key role of the Board of Directors and senior management for the safety and soundness of their operations. This places more emphasis on the board structure that promotes efficiency on the appointment of adequate board of directors capable of exercising independent judgments of the views of management, political interests or inappropriate outside interest (Basel committee on Banking Supervision, 2006).

2.3 Non-Executive Directors (NEDs) and bank performance

The Cadbury Report (1992) states that a firm's degree of independence is measured by the presence of NED's who are perceived to be independent of executive directors and thus have more incentive to do their role more effectively.

Previous studies which investigated the relationship between board composition and banks performance as measured by ROA and ROE provided inconsistency results. AlManaseer et al (2012) and Pathan et al (2007) found a positive relationship between bank performance and NEDs in Jordan and Thailand respectively concluding that more board independence is associated with better performance.

On the other hand, a negative relationship has been found in Jordan (Bino and Tomar, 2012) and Ghana (Biekpe, 2006) all using ROA and ROE as measures of performance.

However, Praptiningsih (2010) in four Asian countries found no significant relationship between the proportion of NEDs and bank performance using ROA and ROE. Belkhir (2004) using the same performance measure found that the relationship was still insignificant in the years leading to the inception of the Sarbanes-Oxley Act (1997-2002) in USA.

However, these studies were carried out in countries with developed Corporate Governance systems governing firm operations. This study seeks to measure the same aspects of Banking and Financial firms' performance using ROA and ROE in Zimbabwe a country with a less developed corporate governance system.

Therefore from the above literature, the following hypothesis can be drawn

- H1: There is no significant relationship between the proportion of NEDs and the performance of Banking and Financial firms in Zimbabwe.

2.4 Board size and firm performance

Board size is another important attribute of corporate governance and studies identified it as having an impact on the effectiveness of the board in accomplishing its responsibilities (Prabowo, 2010). In corporate governance, the earliest literature on board size is by Lipton and Lorch (1992) and Jensen (1993) and they both emphasized its importance in the accomplishment of tasks.

Andres and Vallelado (2008) studied 69 commercial banks operating in Spain, Italy, US, Canada, UK and France over the period 1995-2005. Their findings concluded that the inclusion of more directors in boards is positively associated with better performance, as measured by ROA. Ruigrok et al (2006) added that large boards have higher chances of linking the firm with external resources thereby bringing external information from the outside to help in decision making.

On the other hand, (Neill & Dulewicz, 2010) argued that large boards usually affect team relationship and cohesion. Pathan et al (2007) using a dataset of commercial banks in Thailand over the period 1999-2003, also obtained a negative relationship between board size and performance measured by ROA and ROE.

However, Zulkafli and Samad (2007) in their analysis of a sample of 107 listed banks in nine countries of Asian Emerging markets (India, Singapore, Taiwan, Korea, Indonesia, Malaysia, Philippines, Thailand, Hong Kong), concluded that board size is not significantly correlated with performance measures such as ROA.

In the Zimbabwean context, the Board of Directors of Trust Bank of Zimbabwe in 2004 though large claimed that they were unaware of a scenario where a significant amount of bank loans were non-performing and were granted without any formal agreement facilities.

Therefore from this literature, the following hypothesis can be drawn

- H2: There is no significant relationship between board size and the performance of Banking and Financial firms.

2.5 CEO Duality and Firm Performance

The Cadbury Committee Report (1992) recommends the separation of the role of CEO and Board Chairperson so as to ensure a clear division of responsibilities and thus combining the two roles indicates bad corporate governance. This is because the board is expected to monitor the operations of the CEO and his management team. The Agency theory predicts that CEOs as agents of shareholders do not always act in the best interest of shareholders and may abuse power as they may have unfettered powers in decision making (Fonteyn 2002).

On the other hand, the stewardship theory supports CEO duality citing that it may improve firm performance. Larcker and Tayan (2011) added that CEO duality allows firms to make speedier decisions and react promptly to new information than non-duality as the former eliminates an extra chain of command.

However, Dalton et al. (1998) conducted a meta-analysis of 31 studies, concluding that CEO duality does not affect performance and also that firm size does not moderate the duality-performance relation. Dahya and Travlos (2000) review ten studies on CEO duality and found the same results.

Although these different empirical studies carried out in different economies produced mixed results, non duality has received considerable support as a corporate governance mechanism in resolving agency problems. The Banking Act of Zimbabwe (Chapter 24:20) also recommends non-duality. However under these regulations, the Zimbabwean Banking sector is still struggling as evidenced by the closure of many Banking and Financial firms.

Therefore from this literature, the following hypothesis can be drawn

- H3: There is no significant relationship between Role duality and the performance of Banking and financial firms.

The issue of corporate governance is considered to involve a number of complex indicators, which face substantial measurement error due to the complex nature of the interaction between governance variables and performance indicators. However, the purpose of this study is to examine selected corporate governance variables namely Board composition, Board size and CEO duality and how they influence performance based on ROA and ROE. The study also gives due recognition to the control variables of bank size and debt, and the variables are carefully chosen because of data availability and measurement.

3 METHODOLOGY

3.1 Research Design

The study used an explanatory research design to determine if there is a relationship between board composition (the proportion of NEDs on board, board size and CEO duality) and performance (ROA & ROE). A case study design was also suitable as the study focused on studying a case of Banking and Financial firms listed on the ZSE.

3.2 Sample and Data

Secondary data related to performance measures, board composition characteristics and control variables from 2009 to 2012 were collected from the ZSE website. For the six (6) Banking and Financial firms listed on the ZSE, 24 observations were obtained as shown in Appendix 1.

INSERT APPENDIX 1

Appendix 2 summarizes the dependent, independent and control variables and their proxies.

INSERT APPENDIX 2

Primary data was drawn from a sample of twenty two (22) experts in the Banking and Financial Sector using closed ended questionnaires and structured interviews. Twelve (12) respondents completed and returned the questionnaires and also responded to interviews giving a response rate of 55.55%. Baruch (1999) indicated that a response of approximately 35% is reasonable.

3.3 Data presentation and Analysis

The relationship between the independent variables and the dependent variables were presented on scatter graphs. Primary data was analysed using the Chi-squared test in order to determine if there is any relationship between board composition and performance. Pearson correlation analysis was performed in order to obtain an understanding of the relationship among the independent variables, dependent variables and control variables in the research study. To measure the relationship among these variables, the study used the Ordinary Least Squares (OLS) regression model. Statistics of frequencies such as; percentages, means, standard deviation, maximum and minimum are used to describe the patterns of data.

4 Results

4.1 Linear representation of Secondary data

The graphs below represent the linear relationship between the explanatory variables (X-axis) and the explained variables (Y-axis)

Both X-axis and Y-axis represents percentages (%)

4.1.1 Linear representation of NEDs and ROA

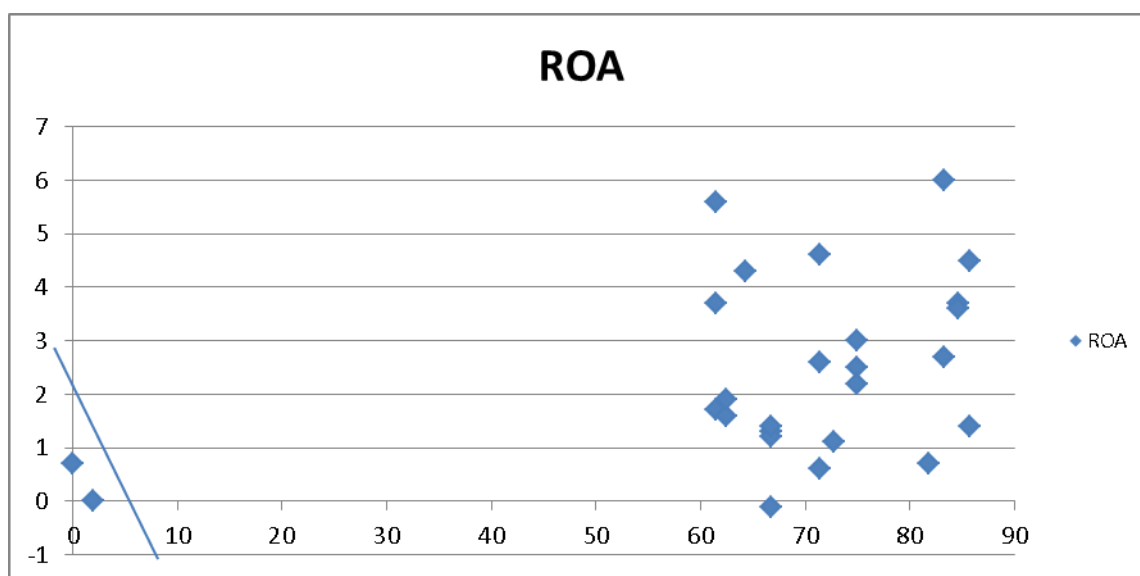


Fig 1 NEDs & ROA ($y = 0.067 + 0.034x$)

4.1.2 Linear representation of NEDs and ROE

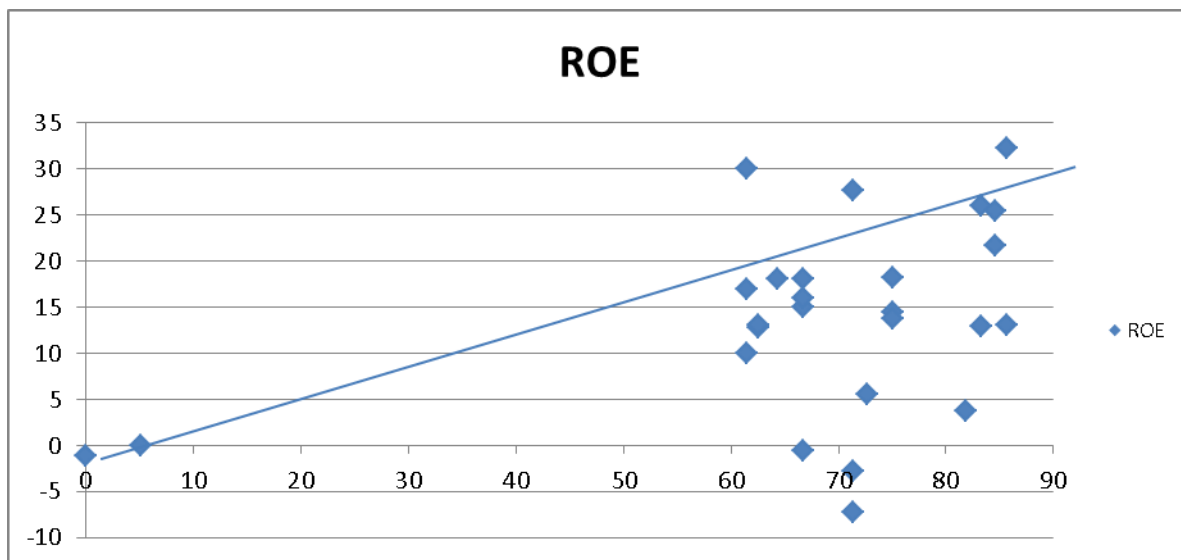


Fig 2 NEDs & ROE ($y = -1.12 + 0.22x$)

Figs 1 & 2 show that there is no linear relationship between the proportion of NEDs, ROA and ROE respectively as represented by the scatter points which are scattered away from the lines of regression $y = 0.067 + 0.034x$ and $y = -1.12 + 0.22x$ respectively.

4.1.3 Linear representation of Board Size and ROA

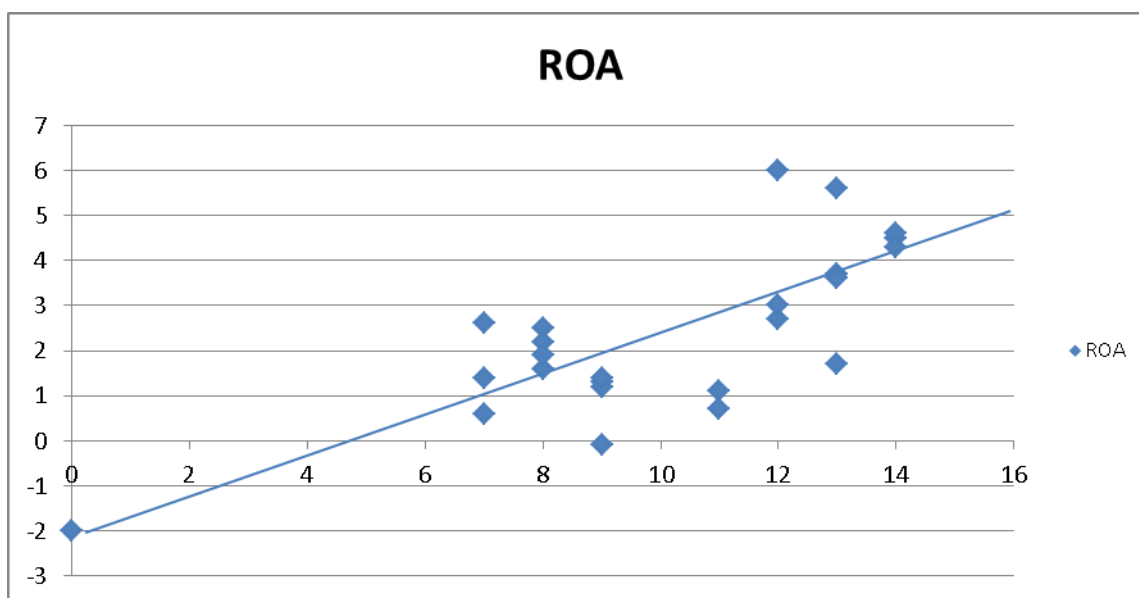


Fig 3 BSIZE & ROA ($y = -2.04 + 0.44x$)

Fig

4.1.4 Linear representation of Board Size and ROE

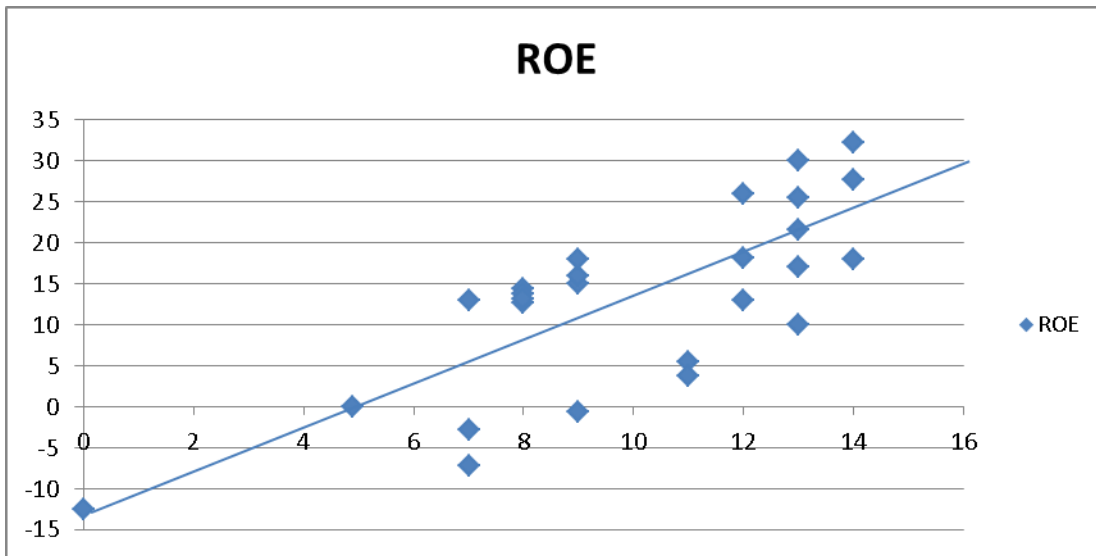


Fig 4 BSIZE & ROE ($y = -12.5 + 2.57x$)

Figs 3 & 4 shows that, though not very strong, there is a relationship between Board Size (BSIZE), ROA and ROE respectively as represented by scatter points scattered around the line of regression $y = -2.04 + 0.44x$ and $y = -12.5 + 2.57x$ respectively.

4.1.5 Linear representation of Role and ROA

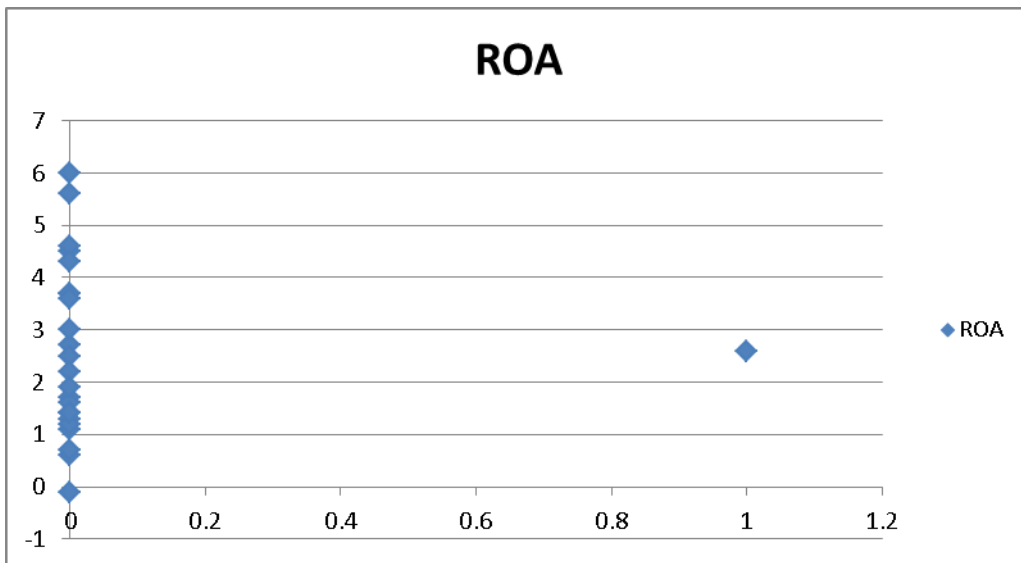


Fig 5 ROLE & ROA ($y = 2.57 + 0.03x$)

4.1.6 Linear representation of Role and ROE

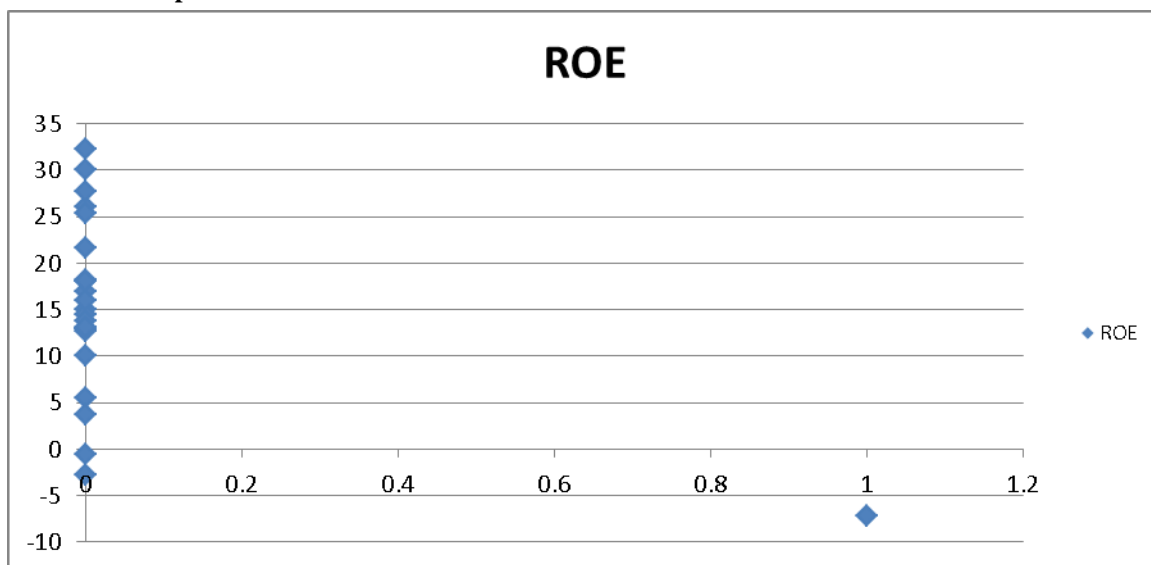


Fig 6 ROLE & ROE ($y = 15.69 - 22.89x$)

Figs 5 & 6 show that there is co-linearity among the scatter points and lines of regression ($y = 2.57 + 0.03x$) for ROA and $y = 15.69 - 22.89x$ for ROE cannot be plotted. This indicated no relationship between the explanatory variable (ROLE) and the explained variables ROA and ROE respectively.

4.2. Analysis of variables from secondary data

4.2.1. Pearson correlation coefficient of variables

Table 2 Pearson correlation coefficient

Variables	ROA	ROE	NEDs	BSIZE	ROLE	BAS	DEBT
ROA		0.5953	0.1844	0.6782	-0.001	-0.0417	-0.0921
ROE			0.1899	0.6474	0.0142	0.2508	0.3674
NEDs				0.1321	-0.0028	0.5161	0.281
BSIZE					0.3031	-0.1376	-0.0312
ROLE						0.2022	0.5831
BAS							0.03

Table 3 indicates a positively weak association between the explanatory variable proportion of NEDs and both explained variables ROA (0.1844) and ROE (0.1899). This indicates that an increase by one non-executive director will only increase the current ROA mean by 18.44% and ROE mean by 18.99%.

A strong positive association is found between the explanatory variable Board size and both explained variables ROA (0.6782) and ROE (0.6474). This indicates that an increase in board size by a single individual will increase ROA by 67.82% and ROE by 64.74%.

Role duality was found to have a very weak negative relationship both on ROA (-0.001) and ROE (0.0142).

4.2.3 Distribution of variables

TABLE 3 Variables distribution

VARIABLE	Obs	Mean	Std.Dev	Mean	Max
ROA	24	.0257333	.0162356	-.0008	.06
ROE	24	.1473583	.1000208	-.0721	.322
NED	24	.7257292	.0872296	.6154	.8571
BSIZE	24	10.58333	2.518051	7	14
ROLE	24	0.0416667	.2041241	0	1
BAS	24	8.582021	.5107323	7.5989	9.779
DEBT	24	.8262208	.0774152	.6143	.9333

Table 4 shows an average bank performance of 2.57%, ranging from -0.8% to 16.24% under ROA; average bank performance is 14.74%, ranging from -7.21% to 32.2% under ROE. From these descriptive statistics, it appears that banks have lower performance as compared to non-financial firms. Al-Sahid (2010) in Kuwait found that the mean value for ROA and ROE is 9% and 25% respectively in non-financial firms. This could be related to the fact that the world financial crisis starting in 2007 affected banks more than non-financial firms.

The average proportion of NEDs is 72.57% ranging from 61.54% to 85.71% suggesting that NEDs represent the majority of the Zimbabwean bank boards. The mean value is above the 60% which is recommended by the Banking Act (chapter 24.20) meaning that on average the listed banks are complying with the rules and regulations of the banking sector

CEO duality has a mean value of 0.0417 indicating that in the period under study, Zimbabwean listed Banking and Financial firms were complying with the rules and regulations for non-duality.

The average Board size is 10.58 members, ranging from 7 to 14 members. The Cadbury report recommends an average of eight to ten directors for effectiveness suggesting that Zimbabwean Banking and Financial firms prefer large boards.

For the control variables, the mean debt ratio of 82.62% ranging from 61.43% to 93.33% indicating that banking and financial institutions in Zimbabwe are heavily financed by debt capital. The base assets mean value of 8.582 (expressed as a logarithm of total assets) indicating that the banking and financial institutions in Zimbabwe have a higher asset base.

4.3 Regression analysis of variables

4.3.1 Chi-squared regression on NEDs and performance

H1: there is no significant relationship between the proportion of NEDs and performance of Banking and Financial firms in Zimbabwe.

$$X^2 \text{Statistics } (0.05)(16) = 26.296$$

Reject H0 if X^2_{cal} is greater than 26.296

See appendix 3 & 4 for more information

Since X^2_{Cal} (17.95) is less than $X^2(0.05)$ (16) result of 26.296, the null hypothesis (Ho) is accepted and concluded that at 5% level of significance, there is no significant relationship between the proportion of NEDs and performance of Banking and Financial firms in Zimbabwe.

These results were supported by the OLS regression results which also found no significant relationship between the proportion of NEDs and performance.

4.3.2 OLS Regression on NEDs and performance

Table 4 Regression on NEDs on performance

ROA	Coef	Std.Err	t	p>t	[95% Conf. Interval]
NED	.0298815	.0328409	0.91	0.375	-.0391148 .0988778
ROE					
NED	.0332673	0.1898567	0.18	0.863	-.3656067 .4321414

See Appendix 9 & 10

Based on the t-statistic values on ROA (0.91) and ROE (0.18) which are less than 2, the proportion of NEDs on board is insignificant to performance and the null hypothesis is accepted. Though positive coefficients on ROA (0.03) and ROE (0.033) are obtained, they are very small and insignificant to influence the relationship.

The above results indicates that in Zimbabwe increasing the proportion of NEDs on boards of Banking and Financial firms will not necessarily translate to the improvement of performance in terms of ROA and ROE. The results contradict the agency theory which argued that the presence of more NEDs on board improves firm performance.

Although no significant relationship was found between NEDs and performance, further tests were carried out on Board size in order to find out if the size of the board influences performance in the Banking and Financial sector of Zimbabwe.

4.3.3 Chi-squared regression of Board Size and Performance

H2: there is no significant relationship between board size and performance of Banking and Financial firms in Zimbabwe.

$$X^2(0.05)(16) = 26.296$$

Reject H0 if X^2_{cal} is greater than 26.296

See appendix 5 & 6 for more information

Since X^2_{Cal} (14.59) is less than 26.296, the null hypothesis (H_0) is accepted and concluded that at 5% level of significance, there is no significant relationship between board size and performance of Banking and Financial firms in Zimbabwe.

However, these results contradict the findings of the OLS regression which found a significant relationship between board size and performance.

4.3.4 OLS Regression on board size and performance

Table 5 OLS Regression on board size and performance

ROA	Coef	Std.Err	t	p>t	[95% Conf. Interval]
BSIZE	.0043618	.0011607	3.76	0.001	.0019232 .0068003
ROE					
BSIZE	.0252481	0.00671	3.76	0.001	.0111508 .0393453

See Appendix 9 & 10

Based on the t-statistic values on both ROA (3.76) and ROE (3.76), the null hypothesis is rejected indicating a significant relationship between board size and performance. Board size has positive coefficients both on ROA (0.0043) and ROE (0.025) indicating that an increase by one board member will result in an increase on ROA and ROE by 0.4% and 2.5% respectively. This indicates that although there is a significant relationship between board size and performance the level of significance is very low. Therefore Banking and Financial firms in Zimbabwe are better off if they maintain the current sizes of their boards rather than adding more directors.

Further tests were carried out to find out whether performance is affected by role duality.

4.3.5 Chi squared for Role and Performance

H3: there is no significant negative relationship between role duality and performance of Banking and Financial firms in Zimbabwe.

$$X^2(0.05)(16) = 26.296$$

Reject H0 if X^2_{cal} is greater than 26.296

See appendix 7 & 8 for more information

Since X^2_{Cal} (13.97) is less than 26.296, the null hypothesis (H0) is accepted and concluded that at 5% level of significance, there is no significant relationship between role duality and the performance of Banking and Financial firms in Zimbabwe.

These results support the findings of OLS regression which found the same results.

4.3.6.OLS Regression on Role and performance

Table 6: The relationship between role duality and performance

ROA	Coef	Std.Err	t	p>t	[95% Conf. Interval]
ROLE	.0058667	.0184128	0.32	0.754	-.0328171 .0445505
ROE					
ROLE	-.0647657	0.106446	-0.61	0.550	-.2884005 .1588691

See Appendix 9 & 10

Based on the t-statistic values on ROA (0.32) and ROE (-0.61) the null hypothesis is accepted concluding that Role duality is not significantly related to performance. These results support H3 which predicted the same. However, based on the coefficients of the model, Role duality is negatively associated with ROE (-0.0648) and positively related to ROA (0.0059). However the magnitudes of the coefficients are very small to influence any changes.

However, results from the research indicated that the above measured variables cannot account for the absolute performance of Banking and Financial firms. During the period under study, other variables were also found to have influenced the performance of Banking and Financial firms in Zimbabwe.

4.4. R-Squared value analysis

The R-squared value of regression is the fraction of the variation in the dependent variable that is accounted for (or predicted by) the independent variables. The difference between R-squared and one is accounted by some other factors outside the scope of the study (Gujarati, 2004).

TABLE 7 R-Squared value analysis

Regression on	No. of obs	F(5,18)	Prob>F	R-Squared	Adjusted R-Squared
ROA	24	4.17	.0108	0.5366	0.4079
ROE	24	5.22	0.003	0.5919	0.4786

See Appendix 9 & 10

The results indicated that 53.66% of the dependent variable (ROA) and 59.19% of ROE results are being interpreted by the independent variables under study (proportion of NEDs, BSIZE & ROLE). Therefore 46.34% of ROA and 40.81% of ROE are being accounted for by other factors which are outside the scope of this study. Information drawn from the primary research indicated that the performance of the Banking and Financial sector in general was heavily being affected by macro-economic factors which include;

4.4.1. Political uncertainty

The period under study, Zimbabwe was under the Government of National Unity (GNU) made up of parties with different political and economical ideologies. The RBZ is under the ministry of finance which was headed by the MDC-T. On the other end, ZANU-PF headed the Indigenization and Youth Empowerment Ministry which was advocating for the indigenisation of the foreign owned banks an idea which was being opposed by the Finance Ministry in collaboration with the RBZ Governor. Three banks under study (Baclays, BANC abc and NMB) have foreign ownership.

Political risk is a key factor for capital flow and financial markets, implying that political instability may significantly affect both bank development and operational efficiencies.

4.4.2. Economic challenges

Results from the research indicated that economic challenges such as low liquidity levels that hit Zimbabwe for a decade (1998-2008) left a big dent that is difficult to erase from the economic setup. This restricts other activities which are meant to increase the capacity of banks and boost their operations.

4.4.3. Social problem

Low income levels and high cash withdrawals mainly after month-end salaries leave the banks with limited funds to generate income contributing to operational problems in the Banking and Financial sector of Zimbabwe. Results from the research indicated that an estimated amount of \$4 billion dollars is believed to be circulating in the informal sector thereby affecting the operations of the Banking and Financial firms in Zimbabwe. In developing nations most people do not keep their money in the banks.

4.4.4. Technological challenges

Periodic changes in technology are also a challenge to Zimbabwean Banking and Financial firms in trying to match international standards. Results from the study indicated that the banks under study have an average size of 8.58 (expressed as a logarithm of assets) almost the same as Kuwait 8.62 (Al-Sahid, 2010) which is quite high in an economic setup like Zimbabwe. This large asset base lowers the ROA ratio.

4.4.5. Legal challenges

Banking and Financial firms in Zimbabwe are finding it hard to meet the \$100 million regulatory requirements on capital, liquidity and credit restrictions by the end of 2013. Although this helps to stabilize the banking operations in the near future, Banking and Financial firms are struggling to meet the target.

5 Conclusions

Based on the results drawn from the Chi square test and the OLS regression models which concluded that there is no relationship between the proportion of NEDs on board and the performance of Banking and Financial firms in Zimbabwe, the research can conclude that the Banking Act (Chapter 24:20) recommendation of a minimum of 60% representation by NEDs on board is just a matter of numbers which is failing to translate to the improvement in performance. Based on the weaker association of NEDs on both ROA and ROE, the research can conclude that an increase or decrease in the proportion of NEDs will have a very small insignificant change in performance under the same measures.

Based on the results drawn from the Chi square test which concluded that there is no relationship between board size and performance, the research can conclude that respondents in the Banking sector do not value the size of the board as a contributor to performance. On the other hand, the results based on the information drawn from the financial statements and measured under OLS regression, board size greatly influences performance of Banking and Financial firms. Therefore the research can conclude that board size influence performance of banks in Zimbabwe.

However, based on the small coefficients on the regression, an increase in the size of the board will not greatly improve performance and the firms under study are better off if they maintain their current board sizes.

Based on the results drawn from the Chi square test and OLS regression which concluded that there is no significant relationship between Role duality and performance, the research can conclude that the separation of the roles of CEO and Board Chairperson though good, does not necessarily translate to improved performance in Zimbabwean Banking and Financial sector.

However the results from the study also indicate that factors which are outside the scope of this study accounts for the largest part of the performance of Banking and Financial firms.

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APPENDIX 1

Banking and Financial firms' information

CBZ	ROA	ROE	ED	NED	BSIZE	ROLE	BAS	DEBT
2009	0.0268	0.1285	0.1667	0.8333	12	0	8.6556	0.8602
2010	0.037	0.216	0.1538	0.8462	13	0	8.8369	0.8753
2011	0.036	0.254	0.1538	0.8462	13	0	9.0235	0.887
2012	0.045	0.322	0.1429	0.8571	14	0	9.0875	0.8686

ZB	ROA	ROE	ED	NED	BSIZE	ROLE	BAS	DEBT
2009	0.0256	-0.0721	0.2857	0.7143	7	1	8.0971	0.6143
2010	0.0064	-0.0279	0.2857	0.7143	7	0	8.2979	0.7682
2011	0.0246	0.1441	0.25	0.75	8	0	8.4355	0.8002
2012	0.022	0.1381	0.25	0.75	8	0	8.5142	0.7994

NMB	ROA	ROE	ED	NED	BSIZE	ROLE	BAS	DEBT
2009	0.06	0.26	0.1667	0.8333	12	0	7.5989	0.7842
2010	0.007	0.037	0.1818	0.8182	11	0	8.0122	0.8169
2011	0.03	0.1818	0.25	0.75	12	0	8.2235	0.8603
2012	0.0462	0.2772	0.2857	0.7143	14	0	8.3551	0.8634

FBC	ROA	ROE	ED	NED	BSIZE	ROLE	BAS	DEBT
2009	0.0365	0.1	0.3846	0.6154	13	0	8.2156	0.701
2010	0.0173	0.3	0.3846	0.6154	13	0	8.3734	0.7387
2011	0.0561	0.17	0.3846	0.6154	13	0	8.4465	0.7345
2012	0.0431	0.18	0.3571	0.6429	14	0	8.5933	0.7752

ABC	ROA	ROE	ED	NED	BSIZE	ROLE	BAS	DEBT
2009	0.014	0.13	0.1429	0.8571	7	0	9.6452	0.9059
2010	0.013	0.15	0.3333	0.6667	9	0	9.779	0.9272
2011	0.012	0.16	0.3333	0.6667	9	0	9.0888	0.9333
2012	0.014	0.18	0.3333	0.6667	9	0	9.2369	0.9138

BARC	ROA	ROE	ED	NED	BSIZE	ROLE	BAS	DEBT
2009	0.0105	0.055	0.2727	0.7273	11	0	8.3597	0.865
2010	-0.0008	-0.0057	0.3333	0.6667	9	0	8.2277	0.8096
2011	0.0164	0.1274	0.375	0.625	8	0	8.415	0.8711
2012	0.0189	0.1312	0.375	0.625	8	0	8.4495	0.856

APPENDIX 2

Summary of Variables Measurement

Name of variables	Acronym	Measurement
Independent variable		
Non-executive directors	NED	The proportion of NEDs to total number of directors on board.
Board Size	BSIZE	The total number of directors on the board.
CEO Role Duality	ROLE	The proportion of CEOs who doubles as the chairperson of the board.
Dependent Variables		
Return On Assets	ROA	Earnings Before Interest and Tax (EBIT) divided by the net book value of assets
Return on Equity	ROE	Earnings Before Interest and Tax (EBIT) divided by the book value of equity and reserves.
Control Variable		
Bank Size	BAS	The book value of total assets of the bank.
Leverage/Debt proportion	DEBT	The percentage of total liabilities to total assets

APPENDIX 3

The relationship between the proportion of NEDs and performance

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Size (n)	Total points	Mean Points
Likert Scale Variables	5	4	3	2	1			
NEDs with 60% proportion improves financial performance	2	4	3	2	1	12	40	3.33
NEDs are good monitors of management (Agency theory)	3	4	2	3	0	12	43	3.58
NEDs act independently to improve performance	2	2	4	3	1	12	37	3.08
NEDs evaluate and put Executive directors under pressure	2	3	3	4	0	12	39	3.25
NEDs have full knowledge of their duties as directors	0	2	2	3	5	12	25	2.08
Grand Totals	9	15	14	15	7	60	184	3.07

**APPENDIX 4
 CHII SQUARED CALCULATED FOR NEDs**

Observed (O)	Expected (E)	O-E	(O-E) ²	(O - E) ²
				E
2	1.8	0.2	0.04	0.022222222
3	1.8	1.2	1.44	0.8
2	1.8	0.2	0.04	0.022222222
2	1.8	0.2	0.04	0.022222222
0	1.8	-1.8	3.24	1.8
4	3	1	1	0.333333333
4	3	1	1	0.333333333
2	3	-1	1	0.333333333
3	3	0	0	0
2	3	-1	1	0.333333333
3	2.8	0.2	0.04	0.014285714
2	2.8	-0.8	0.64	0.228571429
4	2.8	1.2	1.44	0.514285714
3	2.8	0.2	0.04	0.014285714
2	2.8	-0.8	0.64	0.228571429
2	3	-1	1	0.333333333
3	3	0	0	0
3	3	0	0	0
4	3	1	1	0.333333333
3	3	0	0	0
1	1.4	-0.4	0.16	0.114285714
0	1.4	-1.4	1.96	1.4
1	1.4	-0.4	0.16	0.114285714
0	1.4	-1.4	1.96	1.4
5	1.4	3.6	12.96	9.257142857
TOTAL				17.95238095

APPENDIX 5

The relationship between Board size and performance

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Total points	Size (n)	Mean
	5	4	3	2	1			
Large Board size influence financial performance	3	4	4	1	0	45	12	3.75
Board size influence skills diversity	3	4	3	2	1	45	12	3.75
Larger boards perform better than smaller boards	2	2	4	3	1	37	12	3.08
Larger boards do not lead to conflict of interests	1	2	2	3	4	29	12	2.42
Larger boards influence strong board committees	4	3	3	2	0	45	12	3.75
Grand Totals	13	16	15	11	6	202	60	3.35

Source: Primary data

**APPENDIX 6
 CHI SQUARED CALCULATED FOR BOARD SIZE**

Observed (O)	Expected (E)	O-E	(O-E) ²	$\frac{(O - E)^2}{E}$
3	2.6	0.4	0.16	0.061538462
3	2.6	0.4	0.16	0.061538462
2	2.6	-0.6	0.36	0.138461538
1	2.6	-1.6	2.56	0.984615385
4	2.6	1.4	1.96	0.753846154
4	3.2	0.8	0.64	0.2
4	3.2	0.8	0.64	0.2
2	3.2	-1.2	1.44	0.45
2	3.2	-1.2	1.44	0.45
3	3.2	-0.2	0.04	0.0125
4	3	1	1	0.333333333
3	3	0	0	0
4	3	1	1	0.333333333
2	3	-1	1	0.333333333
3	3	0	0	0
1	2.2	-1.2	1.44	0.654545455
2	2.2	-0.2	0.04	0.018181818
3	2.2	0.8	0.64	0.290909091
3	2.2	0.8	0.64	0.290909091
2	2.2	-0.2	0.04	0.018181818
0	1.2	-1.2	1.44	1.2
1	1.2	-0.2	0.04	0.033333333
1	1.2	-0.2	0.04	0.033333333
4	1.2	2.8	7.84	6.533333333
0	1.2	-1.2	1.44	1.2
TOTAL				14.58522727

APPENDIX 7

The relationship between Role duality and performance

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree	Size (n)	Total points	Mean
	5	4	3	2	1			
CEO duality negatively affects performance	4	4	3	1	0	12	47	3.92
CEO duality enhances CEO board dominance	4	5	2	1	0	12	48	4
CEO duality reduces board independence	3	3	4	1	1	12	42	3.5
Non-duality enhances the power of the board	4	3	3	2	0	12	45	3.75
CEO duality speeds decision making	2	2	2	3	3	12	33	2.75
Grand Totals	17	17	14	8	4	60	215	3.58

Source: Primary data

**APPENDIX 8
 CHII SQUARED CALCULATED FOR ROLE DUALITY**

Observed (O)	Expected (E)	O-E	(O-E) ²	$\frac{(O - E)^2}{E}$
4	3.4	0.6	0.36	0.105882353
4	3.4	0.6	0.36	0.105882353
3	3.4	-0.4	0.16	0.047058824
4	3.4	0.6	0.36	0.105882353
2	3.4	-1.4	1.96	0.576470588
4	3.4	0.6	0.36	0.105882353
5	3.4	1.6	2.56	0.752941176
3	3.4	-0.4	0.16	0.047058824
3	3.4	-0.4	0.16	0.047058824
2	3.4	-1.4	1.96	0.576470588
3	2.8	0.2	0.04	0.014285714
2	2.8	-0.8	0.64	0.228571429
4	2.8	1.2	1.44	0.514285714
3	2.8	0.2	0.04	0.014285714
2	2.8	-0.8	0.64	0.228571429
1	1.6	-0.6	0.36	0.225
1	1.6	-0.6	0.36	0.225
1	1.6	-0.6	0.36	0.225
2	1.6	0.4	0.16	0.1
3	1.6	1.4	1.96	1.225
0	0.8	-0.8	0.64	0.8
0	0.8	-0.8	0.64	0.8
1	0.8	0.2	0.04	0.05
0	0.8	-0.8	0.64	0.8
3	0.8	2.2	4.84	6.05
TOTAL				13.97058824

APPENDIX 9

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	24	-.0257333	-.0162356	-.0008	-.06
ned	24	-.7257292	-.0872296	-.6154	-.8571
hsize	24	10.58333	2.518051	7	14
role	24	-.0416667	-.2041241	0	1
has	24	8.582021	-.5107323	7.5989	9.779
debt	24	-.8262208	-.0774152	-.6143	-.9333

. reg roa ned hsize role has debt

Source	SS	df	MS	Number of obs =	24
Model	.003253162	5	.000650632	F(5, 18) =	4.17
Residual	.002809512	18	.000156084	Prob > F =	0.0108
Total	.006062673	23	.000263594	R-squared =	0.5366
				Adj R-squared =	0.4079
				Root MSE =	.01249

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
ned	-.0298815	-.0328409	0.91	0.375	-.0391148 -.0988778
hsize	-.0043618	-.0011607	3.76	0.001	-.0019232 -.0068003
role	-.0058667	-.0184128	0.32	0.754	-.0328171 -.0445505
has	-.0013416	-.0071013	0.19	0.852	-.0135776 -.0162608
debt	-.0512745	-.0611459	-0.84	0.413	-.1797372 -.0771881
_cons	-.0115083	-.0518535	-0.22	0.827	-.1204484 -.0974318

REGRESSION ON ROA

APPENDIX 10

REGRESSION ON ROE

. sum

Variable	Obs	Mean	Std. Dev.	Min	Max
roe	24	-.1473583	-.1000208	-.0721	-.322
ned	24	-.7257292	-.0872296	-.6154	-.8571
hsize	24	10.58333	2.518051	7	14
role	24	-.0416667	-.2041241	0	1
has	24	8.582021	-.5107323	7.5989	9.779
debt	24	-.8262208	-.0774152	-.6143	-.9333

. reg roe ned hsize role has debt

Source	SS	df	MS	Number of obs =	24
Model	.136198873	5	.027239775	F(5, 18) =	5.22
Residual	.093896911	18	.005216495	Prob > F =	0.0039
Total	.230095785	23	.010004165	R-squared =	0.5919
				Adj R-squared =	0.4786
				Root MSE =	.07223

roe	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
ned	-.0332673	-.1898567	0.18	0.863	-.3656067 -.4321414
hsize	-.0252481	-.00671	3.76	0.001	-.0111508 -.0393453
role	-.0647657	-.106446	-0.61	0.550	-.2884005 -.1588691
has	-.0378264	-.0410531	0.92	0.369	-.0484228 -.1240757
debt	-.2274244	-.3534901	0.64	0.528	-.5152307 -.9700796
_cons	-.6538248	-.2997699	-2.18	0.043	-1.283618 -.0240317