AN EMPIRICAL TEST OF COMPETING CORPORATE GOVERNANCE THEORIES ON THE PERFORMANCE OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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Abstract
The focus of this study was on linking these variables to the contrasting and competing theories of Corporate Governance such as Agency Theory, Stewardship Theory, and Resource Dependence Theory, among others. The role of the Board as a corporate governance tool is widely acknowledged in much of the literature on Corporate Governance. Scholars and practitioners have sought to understand the relationship between various board composition variables and some measure of performance as a means of establishing what the significant board composition variables are and the likely effect of adding or dropping some of these variables in the process of establishing effective boards. This study investigated significance of the board composition variables of size of the board, proportion of outside directors, proportion of inside directors, and the role of CEO duality on firm performance. This study found that the overall regression models for firm performance for both the Return on Assets and Tobin Q ratio are significant. This means that the board composition variables cited above are important predictors of firm performance. The study also found that the significance of the individual variables in the overall specification models have differing significant variables on the basis of the measure of performance selected for the firm. For example, when firm performance is measured by the Return on Assets, the significant variable in the model is the size of the board. Under the Tobin Q ratio firm performance measure, on the other hand, proportion of outside directors is the significant variable. These
results imply that under the ROA, there seems to be a dominance of the Resource Dependence Theory while under the Tobin Q ratio, the Agency Theory dominates. The study also found that most surveyed firms tended to favour outside directorships over inside directorships. The prevalence of outside directorships was twice as much as for inside directorships and is in favour of the Agency Theory. The study also found that surveyed firms tended to favour having different persons occupying the two positions of CEO and that of the Chairman of the Board which is in line with the Agency Theory.

**Keywords:** Corporate Governance, Firm Performance, Listed Firms, Nairobi Securities Exchange & Kenya

**Introduction**

In the history of the Firm, the concept of corporate governance has never been so topical that it has attracted the attention of a variety of groups; Scholars, investors, public, clerics, management, governments etc. This has come because of the awareness that bad governance can indeed lead to economic destruction when institutions fail. Enron is a case in point. Board composition seen as an internal mechanism has been on focus as a tool of governance. Boards of corporate entities are therefore extremely important in an organization’s success. With this acknowledgement of the importance of Board, the question that follows is how to constitute an effective Board.

Metrick and Ishii (2002) define corporate governance from the perspective of the investor as “both the promise to repay a fair return on capital invested and the commitment to operate a Firm, efficiently given investment”. Defining corporate governance this way means that corporate governance has an impact on the Firm’s ability to access the capital market. The famous Cadbury Committee (1992) defines corporate governance system as “the systems by which companies are directed and controlled”.

Corporate governance is a fairly recent topic which is rapidly growing and fast gaining recognition globally to the point of being referred to as the science of organization. The most recognized theoretical perspective applied in corporate governance studies is Agency Theory (Dalton, Daily, Ellstrand and Johnson 1998; Shleifer and Vishny, 1997) which originated from Berle and Means (1932) thesis titled “The Modern Corporation and Private Property”. The thesis described the fundamental agency problem inherent in modern Firms where separation of ownership and control exist. Since that seminal work of Berle and Means (1932), the conflict between the owner and the manager of the Firm has been in the spotlight. The importance of corporate Board composition as a mechanism of corporate governance has
been a matter of considerable academic debate in both theoretical and empirical literature. These issues have received renewed attention among the policy makers in both developed and developing countries engaged in reforming initial corporate governance systems, particularly after Asian financial crisis and recent corporate debacles involving giant corporations like Enron and WorldCom.

The contemporary business environment, both internal and external, is turbulent. In such a dynamic environment, Boards become very important for smooth running and functioning of organizations. Board are expected to perform certain functions, which include but are not limited to, monitoring of management (Eisenhardt, 1989; Shleifer & Vishny, 1997), hiring and firing of management (Hermalin & Weisbach, 1998), provision and access to resources (Hillman, Canella & Paetzold, 2000; Hendry & Kiel, 2004), grooming the CEO (Vancil, 1987) and providing strategic direction for the Firm (Tricker, 1984). This is a clear demonstration of the place of Board in contributing to Firm performance in an increasingly complex environment.

Corporate competitiveness depends on the ability of Boards to apply focused intelligence to generate innovative ideas, acquire and apply the knowledge and know how to push and integrate their corporation into the competitive global market (CCG Kenya, 2006). The positive effect of good corporate governance on different stakeholders ultimately is a strengthened economy, and hence good corporate governance is a tool for socio-economic development. After East Asian economies collapsed in the late 20th century, the President of the World Bank advised that sustainable development was dependent on good corporate governance. The economic health of a nation depends substantially on how sound and ethical businesses are.

There are a number of studies that have been done which enhance our understanding of the role of Board. The structure, role and impact of Board on Firm performance has been studied by scholars from different disciplines such as law, economics, finance, sociology, and organizational theory (Kiel and Nicholas, 2003) resulting to a number of contrasting theories. The theories with relevance to the functioning of the Board include Agency Theory, Stewardship Theory and Resource Dependence Theory. As noted by Kiel and Nicholas in their study, the common aim of many of the theories has been to posit a link between various characteristics of the Board and Firm performance. A review of various theories demonstrate how two theories come out as really contrasting with reference to how Board should be constituted in order to positively impact on performance of a Firm. Two such theories which form the basis for study are the Agency Theory and Stewardship Theory.
Agency Theory is based on the idea that in a modern corporation, there is a separation of ownership and management, resulting in agency costs associated with resolving the conflict between the owners and the agents (Berle & Means, 1932; Jensen and Meckling, 1976). This implies that management cannot be trusted, thereby calling for strict monitoring by the Board in order to protect shareholders’ interest. The main concern of Agency Theory therefore, is effective monitoring which is achieved when Board have majority of outside and ideally independent directors. The position of Chairman and CEO should be held by different persons. In contrast, Stewardship Theory takes a diametrically different view. It looks at directors and managers as stewards of the Firm. As stewards, they are essentially presumed to be trustworthy individuals and therefore good stewards of the resources entrusted to them, which makes monitoring redundant (Donaldson and Davis, 1991). With regard to the Board, proponents of Stewardship Theory contend that superior corporate performance will be linked to a majority of inside directors and that the position of Chairman and CEO should be held by same person since this provides clear leadership (Donaldson and Davis, 1991). From the foregoing discussion, it can be demonstrated that there are two competing views about CEO duality and Board composition as seen from the perspective of Stewardship and Agency Theories. With this kind of scenario where there are two competing theories, it is probably fair to have an understanding of which theory is superior. The superiority will be measured in terms of corporate performance which accrues upon adoption of the recommendations of each of the theory.

A number of studies on outside directors support the Agency Theories recommendations of monitoring and advisory functions to Firm shareholders (Brickley and James, 1987; Weisbach, 1988). The premise for agitating outside directorship is that Board independence is the critical element determining the ability of a Board to monitor. Sheppard (1994) proposes that outside directors “provide an indicator of the Board’s orientation towards its external environment and thus, its ability to respond to change”. The inability to respond to change is one of the major causes of corporate decline. Board dominated by independent directors are more likely to act in the best interest of shareholders and that they will safeguard the interest of owners against managers who will serve their own interests at the expense of the owners (Berle and means, 1932) and Williamson (1935). The agency relationship is described in the work of Jensen and Meckling (1976). The Agency Theory identifies the agency relationship where one party, the principal (The Company), delegates work to another party, the agent (Board of Directors). In the context of corporations and issues of corporate control, Agency Theory views corporate governance mechanisms as being
an essential monitoring device in ensuring that any problems that may be brought about by principal – agent relationships are minimized. Agency Theory is the most dominant theoretical framework in corporate governance research (Eisenhardt, 1989; Jensen and Meckling, 1976; Hermalin and Waisbach, 2002). Therefore Agency Theory is an important set of proposition in the organizational economics discipline. The theory is founded on the assumption that when ownership is separated from the control of a large Firm, the manager is acting as an agent on behalf of the owner-principal is prone to creating moral hazards such as shirking and seizing wealth at the expense of the principal. Hence, the theory suggests that the principal builds appropriate ex ante incentive mechanisms to deter the agent from indulging in such behavior therefore, from the view point of shareholders, the agency perspective on the Board composition is primarily concerned with creating independent Boards.

The Resource Dependency Theory is the result of studies on Board composition by sociologists who have focused on the study of interlocking directorates and their implication on institutional and societal power (Pettigrew, 1992.) It has its origins in the open system theory as such organizations have varying degree of dependence on the external environment, particularly for the resources they require to operate. Uncertainty and dependence propel an organization to proactively manage the environment (Pfeffer and Salancki, 1978) and the effect this has on financial and customer outcomes when a contextual factor, high Firm power is taken into consideration. Corporate Board are viewed as means to manage external dependency (Pfeffer and Salancik,1978), reduce environmental uncertainty (Pfeffer, 1972) and transaction costs associated with the environmental interdependency (Williamson, 1984).

The implication of this theory is that corporate Boards will reflect the environment of the Firm (Boyd, 1990; Hillman, et al, 2000; Pfeffer, 1972) and that corporate directors will be chosen to maximize the provision of important resources to the Firm. Each director may bring different linkages and resources to a Board. Board composition will thus theorize to reflect a matching of the dependencies facing an organization to the resources acquisition potential of its Board members (Hillman, et al, 2000). From the foregoing discussion, it can be seen clearly that unlike the Agency Theory, Resource Dependency Theory ignores alternative activities of the Board such as providing advice (Westphal, 1999; Lorsch and Maclver, 1989),) and strategizing (Kesner and Johnson, 1990).

Stewardship model or theory, ‘Managers are good stewards of the corporations and diligently work to attain high levels of corporate profit and shareholders returns’ (Donaldson and Davis 1994). Tricker (1969) points out that “underpinning company law is the
requirement that directors show a fiduciary duty towards the shareholders of the company”
Inherent in the role of directors having a fiduciary duty is that they can be trusted and will act as stewards over the resources of the company. Proponents of this theory contend that superior corporate performance will be linked to a majority of inside directors as they work to maximize profit for shareholders. The reason so far advanced for this, is that inside directors understand the business they govern better than outside directors and therefore make superior decisions (Donaldson and Davis, 1991; Donaldson, 1990).

Stewardship Theory views agents as stewards who manage their Firm responsibly to improve its performance (Donaldson & Davis, 1991; Muth & Donaldson, 1998). Resource Dependency Theory considers management as well as the Board as a resource since they would provide social and business networks and influence the environment in favour of their Firm (Pearce & Zahra 1992; Johnson, Daily & Ellstrand, 1996). A study of the impact of Board on Firm performance from number of theoretical perspectives will give insights into the contribution of Board to Firm performance. Stewardship Theory suggests that managers should be given autonomy based on trust, which minimizes the cost of monitoring and controlling behaviour of the managers and directors. A review of the literature gives an indication of how each of the theories give primacy to a particular view on how Board impact Firm performance and how they should deal with Board’ decisions.

Underlying the Stewardship Theory perspective is the assertion that since managers are naturally trustworthy there will be no major agency costs (Donaldson and Preston, 1995; Donaldson, 1990). Stewardship theorists go further to argue that senior executives will not disadvantage shareholders for fear of jeopardizing their reputation (Donaldson and Davis, 1994). The implication of this theory on Board composition is that the Board should have a significant proportion of inside directors to ensure more effective and efficient decision making. Similarly, CEO duality is seen as a positive force leading to better performance since there is a clear leadership for the company (Donaldson and Davis, 1991). Proponents of Stewardship Theory and Agency Theory, see each theory as contradicting the other. Donaldson and Davis raise the possibility that there is some deficiency in the methodologies for the numerous studies they cite which provide support for both theories, concerning the relationship between, for example, the proportion of outside directors or CEO duality and corporate performance.

In defining Stakeholder Theory, Clarkson (1994) states; “The Firm is a system of stakeholders operating within the larger systems of the host society that provides the necessary legal and market infrastructure for the Firm’s activities. The purpose of the Firm is
to create wealth or value for its stakeholders by converting their stakes into goods and services”. This view is supported by Blair (1995). This theory states that managers should make decisions that take account of the interest of all the stakeholders in the Firm.

Stakeholders Theory has its roots in sociology, organizational behaviour and the policies of special interest. The Theory takes account of a wider group of constituents rather than focusing on shareholders.

Chew and Gillan (2006) in their book of articles titled Corporate Governance at the Cross-roads, argue that Stakeholder Theory does not provide single corporate objective, but directs managers to serve many “Masters”. They went further to point out that without the clarity of mission provided by a single valued objective function; companies embracing stakeholder theory will experience managerial confusion, conflict, inefficiency and perhaps even competitive failure. They conclude that multiple objective is no objective.

Neo – institutional Theory asserts the importance of a normative framework and rules in guiding, constraining and empowering behaviour. Firms are regarded as consisting of cognitive, normative and regulative structures and activities that give meaning to social behaviour (Scott, 1995). Societal norms have been seen to influence Board decisions regarding CEO selection and executive compensation (Zajac and Westphal, 1996) and how Boards explain the adoption of CEO incentive plans to shareholders. Institutional theory argues that Board composition will be determined largely by the prevailing institutionalized norms in the organizational field and society. Theories of institutional isomorphism (Di Maggio and Powell, 1983; Hawley, 1968) or the propensity of an organization in a population to resemble other organizations that operate under similar environmental conditions, suggest that Boards of organizations in the same institutional set will tend to be similar to each other compared to Boards of organizations outside of their set.

Boards of companies are critical to the success of the Firm as measured by the maximization of the supreme goal of the Firm, shareholder wealth. The nature of Board composition that would deliver this success must be constituted optimally. The researcher appreciates that it is one thing to point a direction and a totally different issue whether that direction works calling for a need to empirically test those mechanisms. The study undertook to test the recommendations of each theory by examining the degree of relationship between Board characteristic variable proposal and performance variables as estimated by correlation coefficients. These correlations were compared to the theorem of each theory under investigation.
Board of companies consist of a team of individuals, who combine their competencies and capabilities, that collectively represent the pool of social capital for the Firm which is contributed towards executing the governance function (Carpenter & Westphal, 2001). Given the increasing importance of Board, it is critical to identify the characteristics that make one Board more effective than another.

Ancient and current works in the area of corporate governance starting with Adam Smith (1776) to different theories viz., Agency, Stewardship and Resource Dependence has highlighted the importance of Board. Adam Smith (1776), in his landmark work, *The Wealth of Nations*, suggested that a manager with no direct ownership of a company would not make the same decisions, nor exercise the same care as would an owner of that company. This view is in line with the Agency Theory proposed by Berle and Means (1932) and Jensen and Meckling (1976). Other theoretical perspectives such as stewardship, resource dependency and stakeholder theories also enhance understanding of the role of Board, (Hillman & Dalziel, 2003).

An example is Board duality and in this regard there are two competing views about CEO duality based on the perception of whether a Firm is best served by strong leadership (Stewardship Theory), or by effective monitoring (Agency Theory). The intent of this dichotomy is to serve as a proxy for how much independence the Chairman possesses. A person who holds both the positions of CEO and the Chair is expected to provide a centralized focus in achieving the goals, and to provide strong leadership to the Firm. Review of different perspectives clarifies that there is need to take an integrated approach rather than a single perspective to understand the effect of corporate governance on Firm performance.

The Cadbury Report in the UK contains a variety of specific recommendations concerning Board composition and the responsibilities of the Board of Directors. The Cadbury report which is the report of the committee on the financial aspects of corporate governance, 1992 chaired by Sir Adrian Cadbury, had far reaching ramifications. It can then be said that since the publication of the Code of Best Practice in the UK, it has touched off an explosion of similar codes around the globe. Some of the key recommendations of the Code are that Board of publicly traded companies have at least three outside directors. The position of the CEO and the Chairman of the Board are held by two different individuals. Most of these Codes specify a minimum standard for the representation of outside directors on Board of publicly traded companies. In some countries, Kenya included, they are framed as a minimum fraction of outside directors. This shows the influence of the Agency Theory in the formulations of these Codes of Best Practice. It can thus be said, that the presumption that
appears to underlie this movement towards more outside directors, is that Board with more outside directors will lead to better Board decisions and, as consequence, better corporate performance. From various literatures there seems to be no evidence of this assumption.

The essence of corporate governance is to make sure that the key shareholder objective of wealth maximization is implemented. Shareholders want companies to hire managers who are able and willing to take whatever legal and ethical actions they can to maximize stock prices. Corporate governance theories have varying utility as demonstrated by their respective recommendations. In the current world, the biggest question will not be the superiority of any of them but rather, identifying under which conditions each is more applicable. This is the reason why the researcher in this study undertakes to test the utilities of two contrasting theories. This is clearly clarified in Pfeffer (1981) while commenting on Graham Allison’s work on analysis of the Cuban Missile Crisis, “One of the points of Allison’s (1971) analysis of the Cuban Missile crisis is that it is not necessary to choose between analytical frameworks. Each may be partly true in a particular situation, and one can obtain a better understanding of the organization by trying to choose out of the models rather than choosing among them…Allison’s argument is that insight can be gained from the application of all the frameworks in the same situation”

Since the late 1970’s, corporate governance has been the subject of significant debate the world over with most countries basing their formulations on Agency Theory perspective. The efforts to reform corporate governance have been driven, in part, by the needs and desires of shareholders to exercise the rights of corporate ownership and to increase the value of their shares and ultimately, wealth. Board of Directors play key roles in corporate governance. It is their responsibility to endorse the organization’s strategy, develop directional policy, appoint, supervise and remunerate senior executives and ensure accountability of organizations to its owners and authorities. In corporations, the shareholders delegate decision rights to managers to act in the principal’s best interest. This separation of ownership from control implies a loss of effective control by shareholders over managerial decisions. Partly as a result of this separation between the two parties, a system of corporate governance control is implemented to assist in aligning the incentives of managers with those of shareholders. Monks and Minow (2001) describe the main function of a Board as follows, “the existence of a Board is based on the premise that they oversee management, select executives who will do the best job and tell them when they don’t”. With regard to Board composition, Agency Theory recommend that Board should have a majority of outside and, ideally, independent directors and that the position of Chairman and CEO should be held by
different persons (OECD, 1999, Capital Markets Authority, 2002). Yermack (1996) argue that, Firms are more valuable when the CEO and Board Chair positions are separate. Duality reduces the effectiveness of Board monitoring.

Jensen (1993) and Lipton and Lorsch (1992) argue that large Board are less effective and are easier for a CEO to control. “Directors of companies being managers of other people’s money, it cannot well be expected that they will watch over it with the same anxious vigilance with which partners in a corporate company watch over their own” (Smith, 1776). The recommendations, of Agency Theory are contrasting to that of Stewardship Theory. Stewardship Theory claims that managers are essentially trustworthy individuals and therefore good stewards of the resources entrusted to them (Donaldson and Davis, 1991, 1994). Proponents of this theory contend that superior corporate performance will be linked to a majority of inside directors.

Accordingly, the Board should have a significant proportion of inside directors to ensure more efficient and effective decision making. Stewardship Theory view is that, if one person is in both roles, this may improve Firm performance since such structure removes any internal and external ambiguity regarding responsibility for the Firm’s process and outcomes (Finkelstein and D’Aveni, 1994; Donaldson, 1990). Resource Dependence Theory maintains that the Board is an essential link between the Firm and the external resources that a Firm needs to maximize its performance (Pfeffer and Salancik, 1978). Resource Dependence Theory would recommend larger Board since larger Board bring greater opportunity for more links and hence access to resources. A number of studies have been inconclusive with respect to Board composition and duality and Firm performance. However, some isolated studies can be found to support the predictions of both Agency and Stewardship Theories.

The Sarbanes Act of 2002 in the U.S. was triggered by a series of frauds in companies like Enron, WorldCom and Tyco. This act seeks to protect investors and check corporate and accounting frauds. In Kenya, a number of institutions have been in the forefront on this issue of corporate governance. A study by Private Sector Governance Trusts (PSCGT, 1999) on Principles for Corporate Governance in Kenya pointed out that there is an increasing acceptance of good corporate governance practices by companies in the country. Others include, Nairobi Securities Exchange Market in collaboration with Capital Markets Authority and Central Bank of Kenya.

The Capital Markets Act (Cap 485A) guidelines on corporate governance practices by public companies in Kenya, defines corporate governance as process and structure used to direct and manage business affairs of the company towards enhancing prosperity and
corporate accounting, with the ultimate objective of realizing shareholders’ long-term value while taking into account the interest of other stakeholders. The CMA guidelines on corporate governance cover such areas as; the rights of shareholders; equitable treatment of shareholders; role of stakeholders; disclosure and transparency; and Board responsibilities. The CMA Code of Best Practice is prescriptive on Board characteristics for companies listed at the NSE.

In the next section, further discussions of the problem statement is highlighted, which calls for the need for an integrated theoretical study in Kenya, in order to address the knowledge gap, where we have had studies on Board composition from one perspective, the Agency Theory. This integrated approach is facilitated by testing two competing governance theories. In order to succeed in this study, the researcher undertook the following. Firstly by use of descriptive statistics, the researchers describes the Board composition of the companies that form part of the study. Secondly, the researchers by correlation analysis, thereafter studies the correlates of the various Board characteristics variables. The final task was to link Board characteristic and Firm performance, based on the relationship as shown by correlations. This with the results of hypothesis testing, was further be screened and interpreted with reference to perspective of both Stewardship and Agency Theories. However, it is important to make it clear that, it is the relationship between Board characteristics and corporate performance that eventually informs the contrasting and sometimes competing governance theories’ recommendations.

Problem of Research

Interest in corporate governance was fuelled by the international crisis in the latter part of the 1990’s particularly in East Asia, where it was demonstrated that the macro-economic difficulties could be exacerbated by a systematic failure of corporate governance. Kenya had her share of failed corporations especially in the 1980’s where there were massive bank failures. These failures are a manifestation of a number of structural reasons why corporate governance has become more important for economic development and more importantly, for policy issues in many countries.

Monks (2002) lends a lot of credence to the increasing significance of corporate governance, “corporation determines far more than any other institution the air we breathe, the quantity of water we drink, even where we live yet they are not accountable to anyone”. John and Senbet (1998) argue that Board are more independent as the proportion of their outside directors increases. A number of studies from an Agency Theory perspective on outside directors support the beneficial monitoring and advisory function to Firm
shareholders. It is therefore critical to note that whereas Agency Theory has been dominant in corporate governance research, there is no empirical claim of its superiority in terms of positive outcome between its normative recommendations, implementation and Firm performance. The understanding of other theories in terms of their Board characteristics advocacy, will lead to a better understanding of how Board impact performance.

Two major contrasting theories are products of research by scholars from fields of finance (Agency Theory) and sociology (Stewardship Theory) with each proposing how Board should be constituted in order to maximize shareholder wealth. These proposals are often competing and contrasting, thus calling for an integrated study of the two theories. Studies both locally (unpublished MBA projects) and internationally on the relationship between corporate governance and Firm performance, have tried to find an empirical answer to the question ‘Does Board composition affect Firm performance?’ These studies are undertaken in different countries with obviously different economic and cultural settings. To date, a definitive answer to this question has been elusive and thus the reason for continuous academic debate on corporate governance research agenda. This study examines the relationship from two theoretical perspectives. There are a number of theories on corporate governance (Agency Theory, Stewardship Theory and Resource Dependency Theory) are discussed in detail in the second chapter of this research project.

Mwangi (2004) in his study titled, “Determinants of Corporate Board Composition in Kenya: An Agency Theory Perspective”, reports outside director representation of 71%. The empirical findings of the study are consistent with implication of the Agency Theory literature. The question that demands an answer is whether such representation translates into better performance. Stewardship Theory roots for higher representation on the Board by inside directors. Agency Theory concentrates on controlling the function role of the Board. Smith (1776) described agency problem as follows, “like the stewards of a rich man, they (managers) are apt to consider attention to small matters as not for their master’s honour, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of such a company”.

Baysinger and Butler (1985) and Rosenstein and Wyatt (1990) showed that the market rewards Firms for appointing outside directors. Brickley et al., (1994) in his study found a positive relation between proportion of outside directors and stock market reactions to poison bill adoptions. Agrawal and Knober (1996) suggest that Boards expanded for political reasons often result in too many outsiders on the Board, which does not help performance. In their paper they surmise that Boards of US Firms may be expanded for political reasons and
that these outsiders “either reduce performance directly or indirectly by proxy for the underlying political constraints that led to their receiving Board seats”. In the same paper they conducted cross-sectional regression with a sample of 383 large US Firms for which they had Board data for 1987, with Tobin Q as the dependent variable. Initially, they report a significant negative correlation between fraction of outside directors and Tobin Q. However, in their later work of 2001, with same sample and control variables, the significance of the relationship disappears.

Hermalin and Weisbach (1991) studied a sample of 134 NYSE Firms at three year intervals over the period 1981 through 1983. They did not find performance to be significantly correlated with the fraction of outside directors. Bhagat and Black (2002) analyze the relationship between Board composition and four different measures of corporate performance (Tobin Q, ROA etc) using a sample of 828 US Firms. They report that Firms that experience poor performance tend to appoint more outside directors, but the maneuver does not lead to an improvement in performance. Yermack (1996) also showed that outside directors do not significantly affect Firm performance. Lawrence and Stapledon (1999) fail to find consistent evidence that a direct relationship exist between the proportion of independent outside directors and Firm value in a sample of listed Australian Firms.

The essence of agency problem is that self-interested managers may squander corporate resources over uneconomic, value destroying projects and activities. Agency costs are incurred because managers may not act in the best interest of shareholders. The primary purpose of corporate is to reduce the agency costs by effectively monitoring and bonding the managers (Jensen and Meckling 1976; Bere and Means, 1932). The clear implication of research agenda for Board composition from an Agency Theory perspective is that monitoring should be intensified. It would therefore mean that Board should have higher representation of outside and ideally independent directors. The position of the Chairman and that of Chief Executive Officer should be held by different persons. Most Codes of Best Practice so far advanced by different bodies and countries including the CMA have some kind of leaning towards implementing the Agency Theory recommendations.

The other theories that are predominant in Board composition research are Stewardship Theory and Resource Dependence Theory. The Dependency Theory concentrates on the Board providing access to resources, while the Stewardship Theory concentrates on the role of the Board in giving advice or strategies. Since the Resource Dependence Theory concentrates on the Board providing access to resources, it recommends higher representation of inside directors. This clearly contradicts the recommendations of the Agency Theory.
Stewardship Theory, which looks at managers as trustworthy individuals, roots for Board composition that is absolutely opposite from that of Agency Theory and recommends more insider representation, and the CEO should also be the Chair of the Board.

Previous local studies, mostly the unpublished MBA projects, investigating the link between Board composition and Firm performance are done from one view, the Agency Theory perspective. Such studies have concentrated on the monitoring role of the Board which forms the basis of the variables used in those studies which is largely the impact of ‘outside directors’ on Firm performance. They include a study by Jebet (2001) in which she set out to determine the existing corporate governance structures in publicly quoted companies in Kenya. Other Researches include; Mwangi (2004), Determinants of Corporate Board Composition in Kenya: An Agency Theory Perspective; Okiro (2006), The Relationship between Board Size and Board Composition on Firm Performance: A Study of Quoted Companies at the NSE; Mululu (2003) A study on The Relationship between the Board activity and Firm Performance of Firms quoted at NSE

Muriithi A. M. (2004), in a study of 44 Firms listed at the NSE between 1999 and 2003, used a number of governance variables which included, block ownership, family ownership, foreign ownership, Board size and Board composition. Board composition variable under consideration in his study was the proportion of non-executive directors. In this study, the researcher found out that there was no significant relationship, in case of non- executive Board of directors. Murithi A.M. (2004), went further to conclude that, “No measure of Firm performance has a significant relationship with the percentage of non-executive Board members. Though the importance of independent directors should not be put to doubt, the outcomes of this study conflict with the conventional wisdom that suggests that a Board’s principle task is to monitor management and only independent directors’ can be effective monitors.” The study by Muriithi (2004) is largely skewed to the position of Agency Theory on the monitoring role of the Board which roots for outside director representation.

Kerich R.L. (2006) undertook a study of 47 listed companies between 2000 and 2005. In this study, the researcher investigated four governance variables which included frequency of Board meetings, Board size, executive compensation and Board composition. The proxy for Board composition in this study was the proportion of outside directors on the Board. Lang’at R.K. (2006), found a positive relationship between the ration of outside directors to total directors and Firm performance. All the studies reviewed have looked at the role of the Board from one theoretical perspective which roots for monitoring role. There are a number of roles that Board of Directors perform and various operationalization of Board composition
will capture distinctly different aspects of the Board’s roles which include resource
dependence, counseling and expertise and control.

A consideration of multiple theories in evaluating the performance advantages of
suggested corporate governance reforms may lead to a more complete understanding of the
subtleties which characterize the relationship between Board composition and Firm
performance (Dalton and Daily, 1998). Important to note that because various researchers
have defined “outside directors’ differently, the ratio of inside directors is not the
complement of the ration of outside directors.

This paper sought to establish if there is any relationship between Board demographic
variables and corporate performance from a multi theoretical perspective. It undertook an
empirical tests of the two most competing and contrasting theories in order to establish how
to constitute Board to better impact Firm performance. Further, the study aims to fill the gap
in the existing literature on corporate governance which has tended to concentrate on
monitoring role of the Board as explained by the Agency Theory. The researcher is not aware
of studies that seek to understand the relationship between Board of directors and Firm
performance in its entirety, by empirically testing two contrasting and competing theories.

This is what this research set to accomplish in order to breathe more to the research
debate on corporate governance. The significance and the urgency of this study is guided by
the foregoing discussion.

Research Focus

There is a relationship or association between insider representation and performance
(Baysinger and Hoskinsson, 1990) and Hoskinsson et al., (1994) on the basis that insiders
have Firm specific knowledge and expertise unavailable to outsiders. Wagner et al., (1998),
on meta-analysis found positive significant correlation between Board composition and
of 54 empirical studies find that there is little evidence of a systematic relationship between
Board composition and performance. In conclusion, therefore, these performances related
studies remain inconclusive. Gayal and Park (2002) examined a sample of US companies and
found that the sensitivity of CEO turnover to Firm performance is lower for companies
without CEO duality. Sanda et al., (2003) found positive relationship between Firm
performance and separation of the functions of the CEO and the Board Chairman. Jensen
(1993) and Cadbuy (2002) report that duality entrenches the CEO and hinders the Firm’s
ability to perform its monitoring functions. CMA guidelines on corporate governance and
Cadbury (2002) recommend separation to “ensure a balance of power or authority and
provide for check and balance such that no one individual has unfettered power decision – making”.

Vefeas (1999) suggests that the number of other directorships held by outside directors may be a proxy for the value of the reputation capital. The threat of damaging this capital may therefore prevent outside directors from colliding with management. Shivdasani and Yermack (1999), however suggest that the benefits of outside directorship may be non – linear declining for the highest directorships levels as busy directors have less time available to monitor management properly. Fama and Jensen (1998; p 235) state that outside directors have a particular incentive to monitor managers on behalf of shareholders because their reputation and in the value of their human capital depend on their acumen as decision control specialists.

Dowen (1995) documents that interlock as measure of directorship quality play no part in company performance contribution. Weir et al., (2002) and Gilson (1990) maintain that there is a link between outside director reputation and overall value of the human capital. Gilson (1990) is of the opinion that directors who resign from the Boards of financially distressed Firms subsequently hold fewer positions as outside directors of other Firms. Kaplan and Reishus (1990) found that executives of Firms that reduce dividends also subsequently hold fewer outside Board positions. Mace (1972) states that many companies, in selecting directors, regard the tittles and prestige of candidates as of primary importance.

This is an analytical study that tested two competing theories on Board composition. The theories are Agency Theory and Stewardship Theory. The formulation of Codes of Best Practice by Firms may to a large extent be influenced by the normative recommendations of each theory. The decision to adopt the recommendations of one theory depends on the utility of the suggestions, and by way of empirically testing each theory in terms of the link between Board characteristics rooted for and Firm performance. To achieve this objective, the population of interest for the research is the Firms listed at the Nairobi Securities Exchange (NSE) over a period of four years. The data over these four years was analyzed in order to establish the nature of relationship between Board characteristics and Firm performance. The nature of the relationship informs the theories under investigation in the study. The other theories on corporate governance and more so, the Resource Dependency Theory are also discussed later in this study. It is important to note that, Resource Dependency Theory, like the two theories mentioned above, has posited some kind of link between the Board and the environment within which the Firm operates in. This theory advocates for more representation by inside directors in the Boards of companies.
The main objective of this study is to examine the link between Board characteristics and Firm performance. These Board characteristics include Board composition, leadership structure, Board interlock and Board size. Lastly, the study examined how the link informs the two contrasting theories on corporate governance. The competing theories studied in this paper are agency theory and stewardship theory.

**Methodology of Research**

**General Background of Research**

This study investigates from the point of two Governance Theories (Agency Theory and Stewardship Theory), whether there is relationship between Board attributes and performance. Each of these theories has varying recommendations on how the Board composition impacts Firm performance. This is an analytical study of the relationship between Board composition and Firm performance of companies listed at the NSE. It involved the use of descriptive statistics and testing of hypothesis in order to answer the research questions.

**Sample of Research**

The population of interest for the purpose of this study will be all companies quoted at the NSE. The study covers a period of four years from 2004 to 2007. The study sample included Firms which have been actively trading over the period of the study. Companies which have been de-listed were not being included in the study. Banks and other financial institutions are excluded from the study because of their unclear debt structure. The major assets of banks are loans and advances which are drawn from customer deposits. These are consistent with studies by Faccio and Lasfer (2000). However banks and financial institutions were included while looking at multiple directorships, since this cuts across all Firms listed at the NSE.

**Instrument and Procedures**

This study utilized secondary data based on the annual financial statements and reports of all the companies in the sample. The use of listed Firms is due to data availability and reliability because all quoted companies are required by law and NSE rules to file reports with the exchange and also the CMA. Data on leadership structure, Board composition and directorate interlock will be obtained from companies annual reports filed with the CMA library.

The Independent Variables for this study were the Board Characteristics variables. They include Board composition attributes. Board size is defined as the total number of members serving on a Firm’s Board at any particular period of time. Board Composition was classified as either executive (inside) or non-executive (outside) directors. This allowed the
researcher to calculate the percentage representation of outsiders on the Board of each listed company in the sample, whereas inside director representation (IND) was computed as the total number of inside directors divided by the total membership of the company’s Board. Outside director representation (OUTD) is defined for the purpose of this study, as the number of external directors divided by total Board membership. Leadership Structure (CEO Duality) as a dummy variable which acts as a proxy for duality and it takes the value of 1, where the CEO combines as the Board Chairman and 0 if there are different people occupying the two positions [of CEO and Board Chairman].

The Dependent Variables constitutes the Corporate Performance variables in this study. In this study, the researcher employs two performance measures. Tobin’s Q (TOBQ) a measure named after Nobel Prize Laureate James Tobin, is defined as the ratio of market value to replacement value of a Firm’s assets.

\[
\text{Tobin’s Q ratio (TOBQ)} = \frac{\text{Market value of equity} + \text{Book Value of Debt}}{\text{Book Value of Total Assets}}
\]

Return on Assets (ROA) as an accounting based measure and is computed as follows

\[
\text{ROA} = \frac{\text{Profits after Tax \ [Net Income]}}{\text{Book Value Total Assets}}
\]

The control variable utilized were company size, asset structure and the level of leverage (debt structure). The Firm Size (CSRE) is represented by book value of total assets (BVTA). This is therefore the Firm’s size as measured by value of its assets base. For purpose of regression analysis, natural logarithm of BVTA was used to account for inherent skewness of this variable i.e. the researcher took the log of assets because the values were be widely spread. The Asset Structure (ASTR) as the ratio of fixed assets to total assets measured how much of the asset base represents fixed assets and for that matter, structure and equipment. The Debt Structure (LEV) was given as

\[
\text{LEVR} = \frac{\text{Total Debts (both long-term and short – term)}}{\text{Book Value of Total Assets}}
\]

The essence of the control variables is to give recognition to the fact that the performance of a Firm may be influenced by several factors. For example, Firm size and degree of leverage use are two determinants of Firm performance (Dalton et al; 1999; De Jong et al; 2002).

**Model Specification**

The methodological approach mostly used in previous works examining the relationship between corporate governance and Firm performance utilizes multiple
regressions. This study employed a version of the econometric model of Miyajima et al; (2003) which is stated as;

\[ \text{CORP}_t = \beta_0 + \beta_1 \text{BC}_t + \beta_2 \text{CONT}_t + e \]

Where;

\( \text{CORP}_t \) – Represents Firm performance variables for Firm I in time t

\( \text{BC}_t \) – is a vector of corporate governance variables

\( \text{CONT}_t \) – is a vector of control variables

\( e \) – Represents error term

From this general equation we have the following multiple regression equations.

\[ \text{ROA}_t = \beta_0 + \beta_1 \text{BODSZ} + \beta_2 \text{OUTD} + \beta_3 \text{IND} + \beta_4 \text{CEO} + e \]

\[ \text{TOBQ}_t = \beta_0 + \beta_1 \text{BODSZ} + \beta_2 \text{OUTD} + \beta_3 \text{IND} + \beta_4 \text{CEO} + e \]

**Hypotheses Development and Data Analysis Methods**

The study sought to establish from the discussion on each of the theories in the literature review of this research proposal, the following hypotheses can be identified.

*Proportion outside Directors and Firm Performance:* There exist opposing views by both Agency and Stewardship Theories. Secondly, empirical findings on this characteristic have been inconclusive. In the face of this, the researcher adopts a null hypothesis.

**Hypothesis 1:** The proportion of outside directors is uncorrelated with Firm performance.

**HA**: The proportion of outside directors is correlated with Firm performance

*CEO Duality and Firm Performance:* Two competing views based on the perception whether a Firm is best served by strong leadership (Stewardship Theory) or by effective monitoring (Agency Theory). Empirical studies found no impact of leadership structure on Firm performance lending some support to Stewardship Theory (Donaldson Davis, 1991) but Boyd (1995) suggest that neither Agency nor Stewardship Theories can predict the impact of CEO duality on Firm performance. Again, the researcher adopts a null hypothesis.

**Hypothesis 2:** Board Duality is uncorrelated with Firm performance.

*Board Size and Firm Performance:* Since Agency Theory roots for effective monitoring, larger Boards will better serve this purpose. Jensen (1993), suggests that there is a limit to the size of a Board, and put it at around eight directors. Large numbers may impact performance negatively by interfering with group dynamics and decisions. Agency theorists would not necessarily look at the size, but the number of outside directors. Stewardship Theory view, will basically be the ratio of inside directors since they are the source of beneficial and superior information. A number of empirical studies on Board size include Yermack (1996) who reports a strong inverse relationship between size and performance.
Other studies include that by Dalton et al., (1999) and Chaganti et al., (1985). From these studies, there seems to be some evidence that strong positive relationship especially for smaller Firms. Therefore, the researcher adopts the following hypothesis.

**Hypothesis 3:** The size of the Board is positively correlated with Firm performance.

**Board Size and Firm Size:** Agency Theory perspective commands that larger companies require a higher number in order to monitor and control management and Firm’s activities. Stewardship Theory is not clear with respect to Board size but, Resource Dependency Theory roots for larger Boards since it provides access to a range of resource. Furthermore, it is acknowledged that Board size and Firm size are correlated (Dalton et al 1999). With these, the researcher proposes the following hypothesis.

**Hypothesis 4:** There is a positive correlation between Company size and Board size.

**Data Analysis Methods**

This study seeks to understand from the point of the three corporate governance theories (Agency Theory, Stewardship Theory and Resource Dependence Theory), how various Board characteristics impacts Firm performance.

This study had two objectives. The first one was to examine the link between Board attributes and Firm performance. In order to achieve this objective, the study makes use of regression analysis. Board composition characteristics are analyzed using descriptive statistics of dependent and independent variables particularly the mean, median, standard deviation etc. The descriptive statistics will enable the researcher describe the corporate governance environment for Kenya’s companies included in the study.

The second objective examined how the link between the various Governance variables and selected firm performance variables informs the two contrasting theories on corporate governance. Panel data was preferred to either time series or cross section data. Time series regression may face the formidable problems of autocorrelation whereas cross-sectional regressions normally suffer the problem of heteroskedascity. Panel data allows the researcher to combine the two and have a longitudinal data set which is then organized and fed into SPSS software. In order to test the hypothesis the researchers employed GLS (Generalized test squares) random effects model. In this study both parametric and non-parametric methodology was employed. The regression was then run in a panel manner.

**Results of Research**

The methodological approach used in examining the relationship between corporate governance and firm performance utilizes the multiple regression model. This study takes the underlying assumptions of the linear regression model as assumed. These are: For each value
of the firm performance indicator (Return on Assets and Tobin Q ratio), the distribution of
the various independent variables is normal. The test for normality for firm performance as
represented by the Return on Assets (ROA) is shown by the histogram in Chart 1 next:

**Chart 1 Exploring for Normality Assumption for Return on Assets**

The Chart shows that firm performance data is approximately normal when the Return
on Assets is the dependent variable. The normality plot for data for the Tobin Q ratio
performance indicator in Chart 2 shows that the data is not as normally distributed as for the
ROA indicator. However, since the distribution is reasonably normal, it is taken that the
assumptions of linear regression are valid and on this basis the models are developed.

**Chart 2 Exploring for Normality Assumption for Tobin Q Ratio**

The Chart shows that firm performance data is approximately normal when the Return
on Assets is the dependent variable. The normality plot for data for the Tobin Q ratio
performance indicator in Chart 2 shows that the data is not as normally distributed as for the
ROA indicator. However, since the distribution is reasonably normal, it is taken that the
assumptions of linear regression are valid and on this basis the models are developed.
It is further assumed that, for all the independent variables, the variance of the distribution of firm performance (i.e. the dependent variable) is constant. The models also assume that the relationship between firm performance and the various independent variables is linear, and that all observations are independent.

The independent variables for both models are given as size of the board, proportion of outside directors, proportion of inside directors, and CEO duality. The specification of the two multiple linear regression models are developed while controlling for the variables of firm size, asset structure, and debt structure (or leverage).

**Summary Measures for Corporate Governance and Firm Performance**

The study found the mean Return on Assets (ROA) to be 0.0768 with a standard deviation of 0.0666. The coefficient of variation is, therefore, 86.72% which is considered large. This large variation may be explained by a number of factors among them the large disparities in earnings for the various firms included in this study, the changes in earnings for various time periods and the differences in firms caused by industry variables unique to each sector. There is also the issue of time that has its own influence on the various firms, management structures and processes, and growth of firms. The Tobin Q ratio had a mean of 1.4796 with a standard deviation of 1.1416.

The mean size of the board was 7.7339 members with a standard deviation of 2.7083. The coefficient of variation for the size of the boards is 35.02% and represents a relatively small dispersion when compared with the other relative dispersions for the other variables. The proportion of outside directors was 0.6126 with a standard deviation of 0.3101 while that of inside directors was 0.3014 with a standard deviation of 0.2489. This information is shown in Chart 3 next:

**Chart 3: Board composition on basis of inside and outside directorships**

![Chart 3](source: Research Data)
The chart shows that surveyed firms tended to favour outside directorships in line with the Agency Theory rather than inside directorships, which is advocated for by the stewardship theory. The survey also showed that the mean value for CEO duality was 0.1290 with a standard deviation of 0.3366. The CEO duality data represents a tending towards having different people occupying the two positions of CEO and board chairman, which is in line with the agency theory.

The summary statistics for the control variables of firm size, asset structure, and debt structure are shown in the next table:

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm size (represented by BVTA)</td>
<td>21.2331</td>
<td>1.5539</td>
</tr>
<tr>
<td>Asset structure</td>
<td>0.5713</td>
<td>0.2140</td>
</tr>
<tr>
<td>Debt structure</td>
<td>1.1618</td>
<td>0.1735</td>
</tr>
</tbody>
</table>

**Source:** Research Data

**Significance of Correlations between Board Composition Variables and ROA**

Part of the objectives of the study was to test for the significance of the correlations between board composition variables and the firm performance indicator of Return on Assets. Return on Assets is an accounting based measure which is historical in nature. Specifically, the following hypotheses were formulated and tested:

**Hypothesis 1:**

- $H_0$: The proportion of outside directors is not correlated with firm performance
- $H_a$: The proportion of outside directors is correlated with firm performance

Mathematically:

- $H_0: \beta_1 = \beta_2 = 0$ (There is no significant correlation between the proportion of outside directors and firm performance as measured by ROA)
- $H_a: \beta_1 \neq \beta_2$ (There is a significant correlation between the proportion of outside directors and firm performance as measured by ROA).

**Hypothesis 2:**

- $H_0$: The proportion of inside directors is not correlated with firm performance
- $H_a$: The proportion of inside directors is correlated with firm performance

**Hypothesis 3:**

- $H_0$: CEO duality is not correlated with firm performance
- $H_a$: CEO duality is correlated with firm performance

**Hypothesis 4:**

- $H_0$: Board size is not correlated with firm performance
- $H_a$: Board size is correlated with firm performance
(All these hypotheses are tested at the 95% significance level and at one-tail distribution)

Table 2 next summarizes the correlation statistics for correlation coefficients and their p-values for the hypothesized variables. The table also indicates whether these are significant or not. Significant variables require that the null hypothesis be rejected in favour of the alternative hypothesis. This is shown next:

<table>
<thead>
<tr>
<th>Board composition variable</th>
<th>Correlation coefficient</th>
<th>p-value</th>
<th>Significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of board</td>
<td>0.272</td>
<td>0.001</td>
<td>Yes</td>
</tr>
<tr>
<td>Outside directors</td>
<td>0.101</td>
<td>0.132</td>
<td>No</td>
</tr>
<tr>
<td>Inside directors</td>
<td>-0.190</td>
<td>0.017</td>
<td>Yes</td>
</tr>
<tr>
<td>CEO duality</td>
<td>-0.162</td>
<td>0.036</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Research Data

From table 2, the proportion of outside directors is not significantly correlated with firm performance as measured by ROA. The rest of the board composition variables, namely: the proportion of inside directors, CEO duality, and board size are significantly correlated with firm performance as measured by ROA when these are considered on an individual basis.

Significance of Correlations between Board Composition and Tobin Q ratio: The next table summarizes the results for significance tests of correlations between board composition variables and the Tobin Q ratio performance measure.

<table>
<thead>
<tr>
<th>Board composition variable</th>
<th>Correlation coefficient</th>
<th>p-value</th>
<th>Significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Board</td>
<td>0.058</td>
<td>0.261</td>
<td>No</td>
</tr>
<tr>
<td>Outside directors</td>
<td>-0.264</td>
<td>0.002</td>
<td>Yes</td>
</tr>
<tr>
<td>Inside directors</td>
<td>0.078</td>
<td>0.194</td>
<td>No</td>
</tr>
<tr>
<td>CEO duality</td>
<td>0.003</td>
<td>0.485</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Research Data

From the table 3, only the proportion of outside directors is significantly correlated with firm performance. The rest of the board composition variables are not significantly correlated with firm performance as measured by Tobin Q ratio. Thus, the proportion of inside directors, CEO duality, and board size variables are not significantly correlated with firm performance.

Significance Test of Correlation between Firm Size and Board Size: The study also tested the significance of the correlation between firm size and board size. The p-value for these two variables is 0.000 at the 95% significance level, indicating that the correlation between firm size and board size is highly significant. Further, there is a high positive
correlation between firm size and board size \((r = + 0.787)\). This means that large firms have bigger boards and smaller firms have smaller board sizes.

**Significance of the Regression Models for Return on Assets and Tobin Q ratio**

The study found that the overall regression model (Model 1 in Table 4) is significant. This means that the independent variables of board size, outside directors, inside directors, and CEO duality considered together significantly explain firm performance as measured by the Return on Assets and Tobin Q ratio, as shown in Table 4 where the \(p\)-value is 0.036. The table for Tobin Q ratio is identical to Table 4 next.

**Table 4** Significance of the regression model for Return on Assets

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>(F)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>.545</td>
<td>4</td>
<td>.111</td>
<td>2.664</td>
<td>.036&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>.501</td>
<td>119</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.545</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Regression</td>
<td>.082</td>
<td>5</td>
<td>.016</td>
<td>4.190</td>
<td>.002&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>.463</td>
<td>118</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.545</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Regression</td>
<td>.122</td>
<td>6</td>
<td>.020</td>
<td>5.631</td>
<td>.000&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>.423</td>
<td>117</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.545</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- \(a\). Predictors: (Constant), ceo duality, size of board, proportion of outside directors, proportion of inside directors
- \(b\). Predictors: (Constant), ceo duality, size of board, proportion of outside directors, proportion of inside directors, asset structure
- \(c\). Predictors: (Constant), ceo duality, size of board, proportion of outside directors, proportion of inside directors, asset structure, debt structure
- \(d\). Dependent Variable: return on assets

**Source:** Research Data

Further, the model summary for the regression model has a correlation coefficient of 0.287 when the variables of board size, outside directors, inside directors, and CEO duality are considered.

**Table 5** Model summary for the Model and the Controlling Variables

<table>
<thead>
<tr>
<th>Model</th>
<th>(R)</th>
<th>(R^2)</th>
<th>Adjusted (R^2)</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.287&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.082</td>
<td>.051</td>
<td>.064859</td>
</tr>
<tr>
<td>2</td>
<td>.388&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.151</td>
<td>.115</td>
<td>.062653</td>
</tr>
<tr>
<td>3</td>
<td>.473&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.224</td>
<td>.184</td>
<td>.060143</td>
</tr>
</tbody>
</table>

- \(a\). Predictors: (Constant), ceo duality, size of board, proportion of outside directors, proportion of inside directors
- \(b\). Predictors: (Constant), ceo duality, size of board, proportion of outside directors, proportion of inside directors, asset structure
- \(c\). Predictors: (Constant), ceo duality, size of board, proportion of outside directors, proportion of inside directors, asset structure, debt structure
- \(d\). Dependent Variable: return on assets

**Source:** Research Data

The correlation coefficient increases to 0.388 when the model takes up the additional variable of asset structure and to 0.473 when both asset structure and debt structure are included as shown in Table 5.
Firm Performance Model Specification for Return on Assets (ROA)

The model specification for the Return on Assets firm performance measure is:

$$\text{ROA} = 0.04385 - 0.005632 \text{BODSZ} - 0.00488 \text{OUTD} - 0.0219 \text{IND} - 0.00812 \text{CEOD}$$

Using this model, it is possible to predict the ROA and to understand the various relationships between the firm performance measure of ROA and the independent variables of size of the board, proportion of outside directors, proportion of inside directors, and CEO duality. All the independent variables have negative impact on Return on Assets. The CEO duality (CEOD) and Size of Board (BODSZ) have the highest impact.

The individual independent variables in the above model are, however, not significant with only the size of the board being significant (p-value is 0.021) as shown in Table 6 next:

<table>
<thead>
<tr>
<th>Board composition variable</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Board - BODSZ</td>
<td>0.021</td>
</tr>
<tr>
<td>Proportion of outside directors - UTD</td>
<td>0.831</td>
</tr>
<tr>
<td>Proportion of inside directors - IND</td>
<td>0.517</td>
</tr>
<tr>
<td>CEO duality - CEOD</td>
<td>0.711</td>
</tr>
</tbody>
</table>

Source: Research Data

The table shows that though the overall model is significant, the individual variables are themselves not significant (except for the size of the board).

Firm Performance Model Specification for Tobin Q Ratio

The model specification for the Tobin Q performance measure is:

$$\text{TOBQ} = 1.890 - 0.04987 \text{BODSZ} - 1.215 \text{OUTD} - 0.0739 \text{IND} - 0.228 \text{CEOD}$$

The size of the board was the single most important explanatory variable when the overall model for firm performance was analyzed by ROA. On the other hand, the proportion of outside directors was the single most important explanatory variable from the perspective of the Tobin Q ratio in the overall model. The overall model is significant although most of the individual board composition variables are not. Only the proportion of outside directors is significant as shown in Table 7 next:

<table>
<thead>
<tr>
<th>Board composition variable</th>
<th>Significance (measured by p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Board - BODSZ</td>
<td>0.227</td>
</tr>
<tr>
<td>Proportion of outside directors - UTD</td>
<td>0.002</td>
</tr>
<tr>
<td>Proportion of inside directors - IND</td>
<td>0.898</td>
</tr>
<tr>
<td>CEO duality - CEOD</td>
<td>0.542</td>
</tr>
</tbody>
</table>

Source: Research Data

Thus, the significance of the individual variables varies between the Return on Assets and the Tobin Q ratio performance measures. Under the ROA, size of the board is the only significant variable in the model while under the Tobin Q ratio, the proportion of outside
directors is the significant variable. This has implications for the competing theories as discussed in the Literature Review chapter.

**Modeling Firm Performance from the Perspective of the Competing Theories**

From the results, board size is the significant variable in the firm performance model represented by the Return on Assets while the proportion of outside directors is significant under the Tobin Q ratio firm performance model. From these results, the study seems to give weight to the Resource Dependence Theory when the ROA is used as the firm performance indicator and the Agency Theory when the Tobin Q ratio is used as the performance indicator. It can be also concluded that available data does not seem to support the validity of the other competing theories of Stewardship, Stakeholders, and Institutional Theories.

**Conclusion**

This study sought to empirically test the relationship of the various board composition variables on firm performance, from the perspective of the various competing theories such as Agency Theory, Stewardship Theory, and Resource Dependence Theory. The study found that the overall regression models for firm performance for both the Return on Assets and Tobin Q ratio are significant, which means that the independent variables of board size, outside directors, inside directors, and CEO duality are important predictors of firm performance. The study also found that the significance of the individual variables in the overall specification models have differing significant variables on the basis of the measure of performance selected for the firm. When firm performance is measured by the Return on Assets, the significant variable in the model is the size of the board. Under the Tobin Q ratio firm performance measure, the proportion of outside directors is the significant variable. These results have implications for the various competing theories. Under the ROA, the results seem to point to dominance of the Resource Dependence Theory while under the Tobin Q ratio, the results give weight to the Agency Theory.

The following conclusions were made based on the objectives of the study.

The study found that the two specifications models of ROA and Tobin Q were significant in capturing the variables that explain Board Composition from the perspective of the competing theories. However, the size of the board was the single most important explanatory variable when the overall model for firm performance was analyzed by ROA. On the other hand, the proportion of outside directors was the single most important explanatory variable from the perspective of the Tobin Q ratio in the overall model.

Most surveyed firms tended to favour outside directorships over inside directorships. The prevalence of outside directorships was twice as much as for inside directorships. This
tends to favour the competing theory of Agency Theory over Stewardship Theory. Further, the study showed that surveyed firms tended towards having different persons occupying the two positions of CEO and board chairman and this is in line with the Agency Theory.

The study found a strong positive correlation between firm size and size of the board. Large firms therefore tended to have large sizes of the board while smaller firms had smaller sizes of the board.

**Recommendations**

This study identifies that value creation for the shareholders is paramount and the basis for this is value decision making processes which discriminates and settles on projects with positive net present values. This is where the board comes in. The researcher suggests further research into the relationship between performance and Governance variables by incorporating qualitative aspects like skills, level of education, years of experience, individual competencies and the character of individuals serving in the Boards of Firms. This is basically the board’s intellectual resources in individuals and it impacts on performance.

On the consideration that companies do not operate in a vacuum, the researcher further suggests a research that looks extensively at other theories not relevant to board composition like the stakeholder theory and institutional theory.

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