INVESTIGATION OF DIVIDEND POLICY, CORPORATE GOVERNANCE AND AGENCY COSTS ON THE JOHANNESBURG STOCK EXCHANGE

By:

NTS'ELISENG QOPANA

1462505

DEGREE PROGRAMME: Masters Finance

in the

SCHOOL OF ECONOMIC AND BUSINESS SCIENCES

at the

UNIVERSITY OF THE WITWATERSRAND

Supervisor: PROF CHIMWEMWE CHIPETA

Date of submission: 27 March 2018

SCHOOL OF ECONOMIC AND BUSINESS SCIENCES

Declaration Regarding Plagiarism

I (full names & surname):	Ntseliseng Qopana
Student number:	1462505

Declare the following:

1. I understand what plagiarism entails and I am aware of the University's policy in this regard.
2. I declare that this assignment is my own, original work. Where someone else's work was used (whether from a printed source, the Internet or any other source) due acknowledgement was given and reference was made according to departmental requirements.
3. I did not copy and paste any information directly from an electronic source (e.g., a web page or electronic journal article) into this document.
4. I did not make use of another student's previous work and submitted it as my own.
5. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his/her own work.

Ntseliseng Qopana — 27/03/2018

Signature — Date

TABLE OF CONTENTS

ABSTRACT

Dividend policy has been an issue of much financial, economic and literature analysis for many years, and remains one of the most debated topics in the field of corporate finance to date. This study attempts to investigate the impact of dividend payments on the agency costs of companies listed on the Johannesburg Stock Exchange. It further explores the role of ownership structure and corporate governance in mitigating agency costs in such publicly listed firms. The study uses a sample of 179 firms during the period 2005-2016, collected from Inet BFA and company websites. The regression explores the different market conditions, that is, during the 2008-2009 global financial crisis and outside of the financial crisis. Three agency cost proxies are used, namely; Asset Turnover Ratio, Free Cash Flow and Sales & Management Expense Ratio. The explanatory variables for ownership structure are the largest shareholder and institutional ownership and corporate governance mechanisms and are measured by board composition, board size, and director remuneration. Dividends are found to be significant in reducing agency costs when both Free Cash Flow and Sales & Management Expense Ratio measures are used. A positive but non-significant relationship is observed between dividends and the Asset Turnover Ratio. Institutional ownership is found to be significantly related to lower agency costs under only two agency cost measures: Asset Turnover Ratio and Free Cash Flow. In analysing the impact of corporate governance mechanisms on their efficacy in mitigating agency costs, only director remuneration is found to mitigate agency costs when regressed on the Asset Turnover Ratio. When dividends are used in conjunction with corporate governance mechanisms, dividends then tend to mitigate agency costs across all the different proxies used.

CHAPTER 1: INTRODUCTION AND SCOPE

1.1 BACKGROUND OF THE STUDY

Dividend policy has been an issue of much financial, economic and literature analysis for many years, and remains one of the most debated topics in the field of corporate finance to date. As dictated by corporate finance, a fundamental role of a manager is to make decisions that ultimately lead to the maximising of the shareholder wealth through the increase in firm value. Shareholders, however, argue that an increase in firm value without the actual distribution of benefits to them in the form of cash is unfavourable. As such, management needs to decide how often to distribute free cash flow to the shareholders and in what form (cash dividends or share repurchases) and make further decisions on the consistency of this pay-out over time. Dividend policy, therefore, is one of the many complex decisions that managers are faced with (Hashemijoo, Mahdavi-Ardekani and Younesi, 2012).

Since the publication of Miller and Modigliani (1961)'s dividend irrelevance theory, extensive research has been conducted in trying to understand how firms determine the way they distribute earnings to the shareholders and why they make such distributions. However, despite the decades of research, the basic determinants of dividend policy remain somewhat a topic of interest to date. Literature, however, provides a lengthy list of motivations as to why companies pay dividends. These include: signalling, attracting a certain clientele, bird-in-hand as well as mitigating agency costs. Farre-Mensa, Michaely, and Schmalz (2014) find evidence in favour of agency-based arguments. Bøhren, Josefsen and Steen (2012) also support the argument that dividend payments can reduce agency-related conflicts among the firm's stakeholders. The question that remains is whether their conclusions hold good in countries with different social-political-legal structures such as South Africa, which is an emerging market. Consistent with Fama and French (2001), Viviers, Firer and Muller (2013) report a significant decrease in the number of dividend paying firms in South Africa. Some of the arguments put forward for this decline in the propensity to pay dividends by firms, include the possibility that improved corporate governance has reduced the need for dividends as a mechanism to control the agency problems of free cash flow.

Jensen and Meckling (1976) put forward a study which argues that top management pursue personal goals which are not consistent with the profit maximisation goal of the firm. Agency costs have been particularly prevalent in the last twenty years, given the abundance of corporate scandals that have occurred internationally and locally. The link between agency costs and dividend policy is further influenced by the role of corporate governance. Organisations with poor corporate governance are believed to experience high agency costs of free cash flow. In such a case, dividends will then be used as a mechanism to alleviate the existing agency problems. Corporate governance exists as a means of providing checks and balances between shareholders and management and, in turn, alleviating agency problems.

It is argued that if a firm has good corporate governance practices, no dividend payout mechanism is needed because this strong governance will lead to a high quality of monitoring that reduces the agency costs. Levels of corporate governance, or its application thereof, have however been shown to differ across organisations. Corporate governance mechanisms can take many forms including, but not limited to, composition or independence of the board and its size. According to Bebchuk and Hamdani (2009), the impact of many key governance mechanisms depends considerably on a company's ownership structure. Literature further leans towards the belief that ownership concentration may have a considerable bearing on corporate governance by mitigating or aggravating agency problems – a dichotomy that needs resolution at least by clarification on circumstances for mitigation versus aggravation.

As has been mentioned, the prevalence of the global corporate scandals is evidence that corporate governance mechanisms sometimes can and do collapse. Some of the main scandals of the past decades in the US, from Enron in the early 2000s, through the financial crisis in 2008 to the Barclays interest rate fixing disgrace in July 2012, form some of the highlights of the consequences of unprincipled leadership and poor corporate governance. Companies where managers commit fraud are especially prone to agency cost problems. Some managers commit fraud to create the perception that they are doing a good job, enriching themselves by manipulating accounting practices such as recognising revenue before it is realised. These scandals have highlighted just how important corporate governance is and how, consequently, it led to, for example, the USA government enacting the Sarbanes-Oxley Act which imposes stricter governance standards for publicly listed companies in the US. Non-compliance with this act can lead to millions of dollars in fines.

South Africa has also not gone without its fair share of corporate governance scandals and fiascos, some of which are the cases of Macmed, Tigon, Regal Treasury, LeisureNet, Saambou, Frankel International and Frankel Chemicals and recently the collapse of the board of South African Broadcasting Corporation (SABC). During the review of this study, another major scandal to hit South Africa was that of the Steinhoff CEO and board of directors acting fraudulently (accused of accounting irregularities), with the company subsequently losing billions of rands in value. These scandals have stunned investors' confidence in capital markets and the effectiveness of prevailing corporate governance practices in encouraging transparency and responsibility (Gill and Mathur, 2011b).

Regardless of the organisational scandals witnessed from time to time, Abor and Fiador (2013) indicate that South Africa is considered to be one of the best in the emerging markets in terms of its good corporate governance. In addition to this, it is the first country amongst the emerging markets to announce a code of corporate governance in the form of the first King Report (Ntim and Oseit, 2011). This King Report, based on international standards such as the UK Combined Code, has evolved over time from King I in 1994, King II in 2002, to King III that came into effect in 2013, which focuses on issues such as leadership, sustainability and corporate citizenship.

The South African corporate governance landscape has clearly gone through an extensive evolution over the past 25 years towards international standards - despite its fair share of corporate scandals. This transformation gives a landscape for studying whether corporate governance acts as a mitigating factor in reducing agency costs. While considerable work has been conducted on the factors that drive agency costs in the developed markets, Afshan, Chhetri and Pradhan (2011) advise that care must be taken not to generalise the findings of ownership structure. This is supported by other governance related studies on agency costs conducted in developed countries to developing countries, due to their fundamentally differing corporate world. This, therefore, highlights the need for further research in the field with particular reference to economic landscape (such as developing countries, one of which is South Africa). From the aforementioned, the progression of governance towards international standards, therefore, forms a basis of investigating whether good corporate governance has similar mitigating effects on agency costs in the South African context.

1.2 PROBLEM STATEMENT

The relationship between dividend policy and agency costs has been a subject of debate in corporate finance literature for some time now. This association is based on the idea that monitoring the firm and its management is a helpful tool in the reduction of agency conflicts and in convincing the market that the managers are not in a position to abuse their power (Kouki & Guizani, 2009). This relationship has been extensively tested in developed markets. For instance, Al-Najjar and Hussainey (2009) examined this relationship on a sample of non-financial firms in the UK for the period between 1991 and 2002. Other related studies which were conducted in the US include Belden, Fister, and Knapp (2005) as well as Borokhovich, Brunarski, Harman and Kehr (2005). Both studies focused on the existence of outside independent boards of directors and agency costs. The findings of these studies, however, contradict each other. For instance, Al-Najjar and Hussainey (2009) find a negative relationship between dividends and the number of outside directors for firms in the UK while Belden, Fister, and Knapp (2005) find a positive relationship for firms in the US. Similar work has also been conducted in emerging markets (Nizer Al-Malkawi, 2007; Abdelsalam, El-Masry and Elsegini, 2008). There are, however, a limited number of empirical studies that have been undertaken in the context of the emerging markets of Africa, particularly in South Africa.

The work on dividend policy in South Africa has largely focused on the nature of listed companies' dividend policies (Firer, Gilbert and Maytham, 2008; Séneque and Gourley, 1983; Viviers, Firer and Muller, 2013) and the factors influencing dividend-related decisions (Vermeulen and Smit, 2011; Wolmarans, 2003). A number of local authors have also investigated the value effect of dividend payments (Bhana, 1998; Erasmus, 2013; Wolmarans, 2000). However, as far as could be established, only limited research has been conducted on the simultaneous relationship between dividend policy, corporate governance and agency costs for firms listed on the Johannesburg Stock Exchange (JSE).

In other words, when looking at the South African context, there is no clearly established relationship between the dividend pay-out policy and agency costs, especially in the light of the recent developments in the governance dynamics of South Africa.

Furthermore, it is not clear whether dividend policy is an effective tool in mitigating agency conflicts in South Africa. Additionally, corporate governance as a tool in mitigating agency conflicts has not been adequately investigated in the empirical literature. From this, it is not clear whether strong corporate governance substitutes the role of dividends in reducing agency conflicts. With these inconsistencies in literature and the general dearth of research, there is a need to further explore the undocumented relationships between dividend policy, agency costs and corporate governance in the South African context – and this is the thrust of this study.

1.3. RESEARCH OBJECTIVES

The main objective of this study is to examine the relationship between dividend policy, corporate governance and agency costs for firms listed on the JSE. This objective gives rise to sub-objectives as presented below.

1.3.1 Sub-objectives

The sub-objectives of this study are to determine:

- the relationship between agency costs and the payout ratio for firms listed on the JSE;
- whether dividend payout mitigates agency conflicts for firms listed on the JSE; and
- whether corporate governance mechanisms and ownership structure mitigate agency costs for firms listed on the JSE.

1.4 DELIMITATIONS

- Due to the scope of the study and time constraints, this study will only look at companies listed on the JSE.
- The review is on company performance for the period 2005-2016, with an exclusion of those that delisted within the period.

- The study is quantitative. As a result of this it lacks the human element provided by a qualitative study, particularly with regard to investors' perceptions on dividend changes and share repurchases.
- The study will consist of only recorded data – therefore it is a secondary research dealing only with existing information.

1.5 IMPORTANCE AND BENEFITS OF THE PROPOSED STUDY

This study highlights the type of relationship existing between dividends and agency conflict given the evolving governance structure in South Africa. The results of the study will assist investors whose sole mandate is investing in firms that pay dividends to make well informed decisions as it will establish how management's style affects the pay-out policy. Chasing a dividend-paying firm is not enough if an investor does not know what the drivers behind those payments are.

The results of this study will also influence the general country level governance policy. For instance, corporate scandals become a national issue and laws pertaining to control of corruption maybe need to be applied to such organisations. Understanding these agency relationships would help government in determining laws and regulations that govern pay-out policies in instances where there is suspicion/evidence of shareholder expropriation by the majority shareholders or management. An example of such an expropriation would be a case where management decides to pay out bonuses to themselves and never declare any dividends because it is not an obligation to do so. In such a case, corporate governance mechanisms may be put in place as a way of protecting shareholders.

The study may also play a pivotal role in influencing the Company's Act of South Africa which also deals with corruption and exploitation of minority shareholders. The results of the study will also help the shareholders realise just how much power they have in forcing directors into being good custodians and improve their monitoring of management in South Africa especially when it comes to cash distributions. As this happens, companies are also expected to appreciate the importance of good corporate governance if they are trying to build and maintain a good reputation. This study will furthermore contribute to the growing literature arguing that there is a relationship between dividends and corporate governance, while paying particular attention to an emerging market and to that effect helping academics and university students with more research papers to refer to. This will hopefully contribute towards solving the existing dividend puzzle, or at least adding one of the many missing pieces to the puzzle and do so in a context of an emerging market which has not been given much attention in the previous studies that focused mainly on developed economies.

1.6. STRUCTURE OF THE STUDY

This paper is structured in the form of five chapters. This first chapter gives an orientation to the study plan while Chapter 2 provides an outline of the literature review on the main theories of dividend pay-out policies. Chapter 3 describes the data, sample collection and the methodology adopted. Chapter 4 provides the empirical results and discusses the findings. Chapter 5 summarises and concludes; highlights the main findings of this study; discusses the limitations and suggests future areas of study.

CHAPTER 2: LITERATURE REVIEW

2.1. INTRODUCTION

This chapter discusses some of the literature related to three main theories on dividends and further gives an overview of the corporate governance in South Africa. The chapter is organised as follows: Section 2.2 presents literature on dividends as a mechanism used by managers to communicate the future prospects of the company. Section 2.3 discusses the clientele effect on dividends. Section 2.4 discusses agency theory and the empirical evidence of agency costs on dividends. In Section 2.5 literature showing the direct relationship between corporate governance mechanisms, ownership structure and agency costs is discussed. Section 2.5 also gives an overview of the South African corporate governance landscape. Section 2.6 concludes the chapter.

2.1.1 Exploring the Research Environment

Firms have been paying out dividends to shareholders for the past couple of centuries, but it is still not empirically clear what the motivation behind this decision is and the debate, therefore, still continues. The earliest controversy around the importance of dividends was sparked by the seminal paper of Miller and Modigliani (1961) which argues that in a perfect, frictionless market, where the firm's investment is fixed, shareholder value is independent of its dividend policy. The authors contend that in the absence of taxes and transaction costs, shareholders are indifferent to how the proceeds from the firm are distributed back to them, a proposition known as MM dividend irrelevance theory. It has been one of the fundamental building blocks in the theory of corporate finance. Specifically, it posits that when a firm considers different leverage (funding structure) and payout decisions, it is simply slicing a fixed pie of cash flows from investment into different pieces. The individual values of the pieces must inevitably sum to the value generated by the underlying investment policy.

Contrary to the Miller and Modigliani irrelevance of dividend theory, Lintner (1956) shows that firms seem to follow a well thought out and deliberate payout policy. Managers from 28 companies were interviewed to determine which factors were most instrumental in firms' pay-out policies. Lintner found that not only were dividends dependent upon the amount of cash needed to finance projects in the short-term, but that they also represented management's belief in the sustainability of company earnings over the long-term. Thus, managers tended to increase or initiate pay-out only when they believed that subsequent earnings would be high. In addition to Lintner's study, Brav, Graham, Harvey and Michaely (2005) provide further support that indeed managers do follow a trend when pursuing a certain dividend policy. The authors also show that companies make their pay-out decisions conservatively; which simply means that managers are extremely reluctant to cut dividends even when the cut is justifiable. They show that at least 90% of the managers who were surveyed strongly agreed that they would rather borrow before cutting down dividends. Another feature that stands out from this study is the lower adherence of management to target payout policy as implied in Lintner (1956). The study further shows that sustainability of the firm's long-term profitability influences the decisions made around the dividend pay-out policy.

The two contradicting papers of Miller and Modigliani (1961) and Lintner (1956) have since then enthused economists to search for explanations on why firms pay dividends and how they determine their dividend payout policies. In addition to these clearly opposing views, the costs incurred by both the firm and shareholders during dividend payout also add to the increasing complexity of dividends. This is because firms incur costs when they pay out dividends thus reducing the cash available for positive value projects. The reduction in cash flow means the firm will forego some investment opportunities thereby negatively impacting the value of the company. As Myers (1986) contends, the total value of the firm is the sum of its real assets and growth options and, therefore, the foregone growth opportunity leads to reduction in the overall firm value. On the other hand, shareholders incur costs on their dividends through taxation which is higher than capital gains tax. It is therefore not easy to understand why investors would prefer dividends over capital gains if their proceeds are decreased by tax. The large amounts of cash flow paid out as dividends are not mutually exclusive to financing and budgeting decisions that a corporation makes. The interaction existing between dividend pay-out policies, financing (capital structure) and budgeting decisions complicates the pay-out policy of companies even more. Other economic theories such as asset pricing and mergers and acquisitions also rely on a view of how and why dividends are paid. Dividends therefore form an integral part in decision making of the firm, hence the need to understand factors that influence their payment.

Over the years, authors have produced extensive and sometimes conflicting research in the pursuit to understand the rationale behind dividend payouts and their determinants.

The consequence of this research is the birth of a few theories that try to explain why firms pay dividends. This includes, amongst others, the tax theory of dividends, the bird-in-hand hypothesis, signaling theory of dividends, agency theory of dividends as well as clientele effect on dividends. This study will however focus on three of the main theories which are; the signaling, clientele and agency theory as discussed in the subsequent sections.

2.2. THE SIGNALLING THEORY OF DIVIDENDS

Traditionally, dividends have always been thought, by both managers and investors, to have some information content in them. The theory of signaling rests on the assumption that managers have more information about the future prospects of the company and that this information is not readily available to outsiders. Managers will, therefore, pay dividends when they want to communicate the future profitability of the company. This phenomenon is seen through the reaction of prices around dividend announcement dates (Dasilas and Leventis, 2011; Suwanna, 2012). These authors specifically focused on the share price movements and volumes traded post the dividend announcement. Empirical evidence showed significant upward movement of share prices post dividend announcements.

Watts (1973) is amongst the first researchers to examine the relationship between current dividend payments and future earnings of a company. In his study, the subsequent year's earnings are regressed on the current year's earnings for a sample of firms in the US. The author finds positive coefficients with very low t-statistics. This means that even though the results show a positive relationship between current unexpected dividends and future earnings, the relationship is a trivial one. Building on this notion of asymmetric information, Battacharya (1979) and, similarly, Miller and Rock (1985) were the first to show that dividends are not just actions that happen to have information content in them, but they are signals that are explicitly and intentionally sent to shareholders about the firm's future earnings. It is, therefore, expected that when information asymmetry decreases, the propensity of the firm to pay dividends will also decrease, all things equal. An increase in dividends is meant to signal greater expected future profitability, thus leading to increased investment into the firm. On the contrary, a decrease in dividends aims to signal that the company expects lower profitability and hence lower expected firm value in the future.

Contrary to what the signalling theory predicts, Michaely, Thaler and Womack (1995) conducted an analysis on how markets react to initiation and omission of cash dividends. They study shows that firms which had omitted dividends experience a rebound in earnings in the subsequent years. Additionally, Bernartzi, Michaely and Thaler (1997) tested the validity of dividends as a way of communicating information privileged to management. In conducting their study, firms were categorized into dividend increasing, dividend decreasing and dividend omitting/initiation firms. The authors found that for dividend decreasing firms, unexpected earnings in year zero dropped significantly and have a strong positive relationship with unexpected earnings in year one. The results also show that the changes in earnings for years one and two are not as dramatic as those in year zero. The dividend-increasing firms show no obvious pattern of unexpected earnings in years one and two. The dividend changes are found to exhibit a strong correlation with concurrent earnings. According to the signalling theory, firms that increase dividends must exhibit an increase in earnings in the subsequent years. This prediction is however not realised in Bernartzi, Michaely and Thaler's study. Firms that increase dividends show no significant difference in the earnings growth compared to firms that did not change their dividends.

In addition to previous studies which find no compelling evidence for the signaling theory of dividends is the theory proposed by Jensen, Lundstrum and Miller (2010). The authors argue that dividend reduction acts as a 'last resort' taken by managers in an attempt to build financial resources and not necessarily as signaling of lower future earnings. This is shown by a significant rebound in earnings in the subsequent years for firms that had reduced their dividend payout which is clearly contrary to what signaling theory of dividends predicts. The authors further observe a reduction in spending on research and development, which signals that firms commit fewer resources to financing growth options. Firms that decide to reduce dividends tend to experience a decrease in overall capital expenditure three years before the dividend reduction or omission and continue to decrease beyond year zero. The observed underinvestment in fixed assets is evidence that firms allow more growth options to expire. The rebound in earnings explained above is consistent with the notion that companies tend to retain earnings, as opposed to paying out dividends, in order to accommodate the costs associated with exercising the firm's growth options. The empirical evidence clearly leans away from the theory that dividends are necessarily very good predictors of future earnings. The question that remains is, why send an expensive signal if no one gets it?

In trying to further understand what is really being communicated by management through dividend payments, Nissim and Ziv (2001) bring in a new twist to the story of signalling. The authors argue that inconsistency in studies on information content of dividends has been a result of the use of incorrect models in estimating profitability. In order to correct this, the authors examine the association between dividend changes and unexpected earnings by using two approaches. Firstly, using a similar approach to previous studies such as that of Bernartzi, Michaely and Thaler (1997), the authors take a sample data with 811 dividend decreases, 13 221 dividend increases and 86 634 no change observations for the period 1963-1998. In line with prior studies, they find that dividend changes are not positively related to future earnings changes. They then modify the regression model to address issues related to the estimation of unexpected earnings, measurement error and omitted correlated variables and conclude that the modified model is in support of signaling theory of dividends.

Grullan, Michaely, Shlomo and Thaler (2005) respond by arguing that the results of Nissim and Ziv (2001) are rather surprising as the previous studies that used control variables in the regression find either, a negative relationship between dividends and earnings, no relationship, or a weak positive relationship between dividends and earnings. The authors conducted an analysis on the forecastability of dividend changes, explicitly accounting for the parameter uncertainty faced by investors who had only historical data on firms listed on the NYSE and the AMEX over the period 1963 to-1997. Firms are categorised into dividend increases, dividend decreases and no change dividend observations. The study concludes that dividend changes are uncorrelated with future earnings and, as such, do not add any explanatory value in models designed to forecast earnings changes. The authors state that whilst dividends may signal something, they do not signal abnormal increases in future earnings or abnormal increases in future profitability. They further argue that Nissim and Ziv (2001)'s assumption of linear mean reversion process of the earnings is flawed because earnings follow a random walk and therefore their functional form is highly non-linear. A study by Sadka (2007) finds no relationship between dividend announcement of the firm and its current or future earnings while studying a large sample of US companies. Additionally, Din (2008) finds a significant and positive relationship between the amount of the dividends announced and earnings of the firm in a current year. It supports the hypothesis that firms increase their amount of dividend due to good current earnings and not necessarily a signal to future earnings performance. Dasilas and Leventis (2011) also find supporting evidence on the signalling of dividends by firms in Greece. The ability of dividends to affect stock prices more significantly in declining markets is supported by Fuller and Goldstein (2011). They show that dividend paying firms outperform non-dividend paying firms during times of downturn.

There is a clear contradiction within literature of dividend signalling in the developed markets. Some have argued that managers pay dividends as a means of communicating free cash flow as opposed to future increased earnings. These dividends are therefore declared as special dividends. Balachandran, Mahamuni and Dempsey (2009) test the impact of this special dividend on the stock market reactions in the UK. They find that markets react positively to special dividends and firms with higher growth options exhibit increased cash flow in subsequent years. Firms which declare dividends but are currently experiencing low growth options show no evidence that they are signalling future cash flow growth. This is because they actually do not experience any growth in the future cash flow.

Other studies such as Bozos, Nikolopoulos and Ramgandhi (2011) have investigated the theory that dividends have information in them. The authors approach the study on the firms listed on the stock exchange by exploring earnings and dividend announcements during periods of both upturn and downturn. A positive reaction on prices is observed both during dividend and earnings announcements. The authors observe an interesting outcome when analysing the announcements against economic conditions. Information content of dividends is more pronounced during downturns while earnings show more information content when the economy is stable.

In South Africa, an extensive study on information content of dividends has been conducted but it is still also showing inconsistent results. Ooms, Archer and Smit (1987) examine the speed at which market prices react to dividend announcements. The authors found that investors who traded on this information did not realise any abnormal returns. This implies that dividends do not convey any information other than that contained in the earnings, a result contradicting the findings of Suwanna (2012) who finds significant increases in stock price post dividend announcement.

A study conducted by Auret and De Villiers (2000) shows that the explanatory power of earnings per share (EPS) is greater than that of the dividends per share (DPS) in the interpretation of stock price. This is evidence that dividends do not have a significant explanatory power on the value of the company but rather the earnings of the company. The result is consistent with Linter (1956) who shows that the long-term sustainability of the firm's earnings is a better explanatory variable on the dividend pay-out. Adding to the signalling literature in South Africa, Nel, Hamman and Smit (2001) (as cited in Maytham, Gilbert and Firer, 2008) investigate whether changes in dividends contain information about future and/or present changes in earnings. They study 278 JSE-listed companies and find no evidence that future increases in earnings are predicted by dividend changes, but rather find that these changes are the response to changes in the current and past earnings. They find that management is reluctant to increase or decrease dividends, since a decrease sends a negative signal and an increase will only occur if the managers are confident that the current level of earnings will be maintained in the future.

More evidence against the signalling of dividends in South Africa is observed. For example, Wolff and Auret (2009) examine this proposition that dividends convey information about the future prospects of the company, especially earnings. Their study uses a categorical analysis and finds that dividends increase with an increase in current earnings. There is, however, no evidence of consistent prediction of future earnings by dividends payment. On the other hand, Bhana (1998) finds support of dividends as a signalling mechanism employed intentionally by managers. Marx (2001) shows that the majority of financial directors of listed firms in South Africa concede that there is an existence of both signalling and clientele effect. South Africa, like developed markets such as the US and UK studies, still has contradicting results concerning signalling theory of dividends.

2.3. DIVIDEND CLIENTELE EFFECT

The clientele effect theory predicts that investors with specific requirements tend to choose firms in which to invest given the firm's payout policy. Investors' choice is said to be influenced by features such as the tax differentials, institutional regulations as well as behavioural preferences. In particular, Shefrin and Thaler (1988) argue that investors' personal life-cycle considerations determine the preference for dividends. Older investors favour dividend-paying shares because this can substitute a regular employment income. An education trust fund that relies on dividend payouts would most probably prefer to invest in the firm that pays steady and stable dividends, because it needs a steady flow of income to meet its payment obligations on student bursaries. The clientele effect also assumes that share prices move according to investors' needs. Hotchkiss and Lawrence (2007) examine individual institutional shareholders' preferences for dividend paying shares, based on the characteristics of shares held in their portfolio and provide evidence that firm returns are higher following dividend announcements for firms with institutional investors who favour dividends.

Some studies find supporting evidence for dividend clientele among institutional investors. Allen, Bernado and Welch (2000) present a model in which dividends attract institutional investors. They posit that institutions prefer dividends because of common institutional charter, Prudent Man Rule restrictions, and because of the comparative tax advantages that some institutions have for dividends. This implies that higher dividends will lead to larger institutional holdings. The existence of tax-based clientele for dividends was found by Seida (2001).

Other studies, however, find no support for the clientele hypothesis among institutional investors. Grinstein and Michaely (2005) investigate the relation between institutional holdings and payout policy in US public firms and do not find supporting evidence for the clientele theory. The authors, however, discover that even though institutions avoid investing in non-dividend paying firms, when they do invest in dividend paying firms, they prefer firms that pay low dividends over high ones. Barclay, Holderness, and Sheehan (2009) investigate whether corporations that have the lowest dividend tax bracket favour dividends. Contrary to prior findings, the authors provide evidence that corporate shareholders do not prompt firms to pay dividends, but rather are concerned with improving the firms' operating business.

Brav et al. (2005) conduct a comprehensive survey of 384 managers and interview another 23 firms to determine the factors that drive dividend and share repurchase decisions. Their questionnaire is designed based on existing theoretical and empirical work. Their results indicate that payout policy is not influenced by clientele effect and institutional investors are indifferent to dividend decisions. On the other hand, Graham and Kumar (2006) conducted a study on share-holdings and trading behaviour of more than 60,000 households and found evidence consistent with dividend clienteles. The authors find evidence for clientele amongst retail investors. There is a clear indication that older and low-income retail investors tend to hold a larger fraction of dividend paying shares than other investors. The authors argue that older investors' preference for dividends results from their desire for income, and that low-income investors have an advantageous tax status that makes dividends preferable.

In addition, Rantapuska (2008) examines the ex-dividend day trading behaviour of all investors in the Finnish share. They show that investors who prefer dividends tend to buy dividend-paying shares before the ex-day and to sell after the ex-day. Conversely, Michaely (1991) provides no evidence for the effects of trading by long-term retail investors around ex-dates following the 1986 Tax Reform Act in the US.

2.4 AGENCY THEORY OF DIVIDENDS

In the late 1970's, Jensen and Meckling (1976) applied the existing agency costs theory to the ownership structure of a firm, namely, the conflict of interest between managers and shareholders. Jensen and Meckling (1976, p.308) define agency relationship as a "contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent". The authors contend that an agent may not always act in the best interest of the principal in a relationship where both parties are looking to maximise their own wealth. This separation of ownership and control in a company will undoubtedly give rise to conflict of interest between managers and shareholders. In order to align the interests of both parties, shareholders will need to establish appropriate incentives for the agent and incur costs that are designed to limit uncharacteristic actions of the agent. These agency costs include monitoring costs, bonding costs as well as residual loss. Shareholders may try to oversee or restrict inappropriate managements' actions and in turn incur the cost of monitoring such actions. The other forms of agency costs, such as bonding costs, may be incurred by insiders as a way of assuring the shareholder that they will adhere to systems that safeguard the shareholders' interests. Residual loss, on the other hand, is defined as the cost that is incurred even in the presence of monitoring and bonding costs. In light of this, shareholders may offer management financial incentives such as paying bonuses or remuneration linked to share/company performance in an attempt to prevent managers from acting in their own interests. These pecuniary enticements are some of the examples of the agency costs incurred by the shareholders. The authors argue that another way shareholders can incur monitoring costs, to some extent, is by appointing outside directors (independent and non-executive) on the board to act as the custodians of the shareholders. The shareholders can, therefore, put pressure on the board of directors to effectively monitor management on decisions such as paying out free cash flow in the form of dividends or share repurchases.

Emanating from this, the idea is that dividend payout addresses agency problems between corporate insiders and outside shareholders or between major and minor shareholders (Al-Malkawi, 2007; Easterbrook, 1984; Jensen, 1986). According to this theory, unless profits are paid out to shareholders, managers may use the company's resources on projects that do not increase firm value. For example, they could invest in projects that yield personal benefits to the insiders whilst reducing overall retained earnings; they could dilute the holdings of outside investors by issuing shares to insiders (ownership dilution); or they could simply pay the insiders more benefits with the excess cash. However, the theorem states that as the amounts of dividends paid to shareholders increases, the management of the firm has fewer funds available for investment decisions, and thus a reduction in their decision-making power. The key point is that failure to disgorge cash leads to its diversion or waste, which is detrimental to outside shareholders' interests.

Theories, however, tend to differ on how outside shareholders actually get firms to disgorge cash. It is for this reason that dividend payout is considered as one of the effective mechanisms that can be employed by managers to mitigate agency conflicts of interest within the firm. Dividend payouts are said to reduce agency conflicts within the firm for two reasons.

Firstly, dividend payout reduces the amount of free cash flow (FCF) available to the company, which may be diverted by the insiders for personal use or committed to unprofitable projects that provide private benefits for the insiders (DeAngelo, DeAngelo & Stulz, 2006; Jensen, 1986). Shleifer and Vishny (1997) contend that the divergence of funds to managers can take many forms ranging from excessive perquisite consumption, short selling of company shares, to theft of corporate assets. As a result of this, outside shareholders have a preference for dividends over retained earnings. In addition to this, Cohen and Uliana (1990) provide several examples of costs or actions by management which can give rise to excessive or unnecessary costs and which stem from this conflict situation: excessive levels of management remuneration; shirking (neglect of duty); avoiding to invest corporate resources in potentially profitable ventures to the detriment of the shareholders; the pursuit of sales growth at the expense of profit or shareholder wealth ; empire building by managers; employee welfare objectives; and manipulation of dividend policy at the expense of shareholder wealth creation. Richardson (2006) finds that managers spend recklessly when the firm has positive FCF, so there is a positive relationship between higher FCF and overinvestment.

Secondly, as dividends are paid, they reduce the cash flow available for investments, thus forcing the firm to seek funding in the capital markets, either by issuing of new securities or through borrowing from the debt markets in order to refinance their investment/growth opportunities. Going into the capital markets is believed to expose firms to more scrutiny by the prospective shareholders and investment bankers, which reduces the degree to which managers engage in non-profitable investments (Easterbrook, 1984; Rozeff, 1982). Franklin, Bernado and Welch (2000) recognise the importance of monitoring noting that institutional investors prefer to own shares of firms making regular payments and this type of investor is prone to cheaper frequent monitoring than small shareholders.

In addition to market scrutiny playing a partial role in protecting shareholders from possible expropriation from management, La Porta, Lopez-de-Silanes, Shleifer and Vishny (2000) have shown that the quality of legal protection of investors can provide a substitute for monitoring by capital markets. Firms in countries that have high legal protection of minority shareholders such as the USA and UK may pay high dividends as laws and courts in such countries potentially inflict monitoring. This is termed the outcome model of dividends where minority shareholders pressure the management to disgorge excess cash, in order to avoid its misuse, by exercising their legal rights. Contrary to this finding, it is noted that firms in civil law countries, such as those in Western Europe with low protection, may pay high dividends to establish a reputation in exchange for a decent treatment of minority shareholders. A good reputation is more important for firms in low legal protection, as shareholders have nothing else to rely on in terms of convincing investors that they will not be expropriated. An organization can build this reputation through good management, that is, by adhering to processes, systems, customs, laws, and policies that lead to maximisation of firm value and non-expropriation of outside shareholders. What this entails is simply following the practices of good corporate governance. The Company's reputation is arguably one of its most valuable assets and must be treated with care. The entire branding of the company depends on its reputation. If this is destroyed, a company may take ages to recover from the losses and into creating value for its shareholders. Investor protection turns out to be crucial because, in many countries, expropriation of minority shareholders and creditors by the controlling shareholders is extensive. When outside investors finance firms, they face a risk and sometimes near certainty that the returns on their investments will never materialize because the controlling shareholders or managers expropriate them. It does not come as a surprise that even creditors would look beyond the company's fundamentals in evaluating the credit risk of a company. Funders mainly show appetite to extend credit to firms that are deemed to be reputable with good governance.

Corporate governance, therefore, exists as a means of providing checks and stability between shareholders and management and as a result, is intended to mitigate agency problems. Firms with better governance quality are therefore expected to experience fewer agency conflicts. In such firms, managers ought to be less likely to implement a suboptimal dividend policy as they avoid minority shareholder expropriation of the investors. As a result, the quality of corporate governance should have an impact on how firms determine their dividend policy. The different types of corporate governance mechanisms and their existence depend on the extent of agency costs as suggested by agency theory. Some of the characteristics of corporate governance include board composition and board independence (Bhagat and Bolton, 2008; Brown and Caylor, 2006; Mak and Li, 2001; Weir, Laing and McKnight, 2002), the duality of CEO and chairman of the board (Brickley, Coles and Jarrell, 1997; Dedman and Lin, 2002) and managerial remuneration and structure (Lee, 2009; Shleifer and Vishny, 1997).

Bøhren, Josefsen and Steen (2012) support the argument that dividend payments can reduce agency-related conflicts among the firm's stakeholders. The study focuses on the role played by dividends on the actual agency conflict and not the potential agency problems. They particularly focus on whether the fraction of earnings paid out as dividends depends on the potential seriousness of the agency problem as reflected in the distribution of control rights among the firm's owners and non-owners. The results confirm that the strong shareholder chooses a dividend policy which reduces the actual agency conflict.

Some academics argue that pre-committing to a dividend pay-out policy could be another way of mitigating agency costs of the company. For instance, John and Knyazeva (2006) examine the effect of external and internal corporate governance on the design of pay-out policy and use of pre-commitment, level and structure of cash distributions, firm dividend and repurchase behaviour. The results of their study show that firms with weak external and internal corporate governance are more likely to pay higher dividends. This relationship is more pronounced for firms with greater cash flow and lower growth opportunities. The authors state that dividends are an effective mechanism that can be used to alleviate the agency costs of free cash flow due to their pre-commitment nature and costly implications of not sticking to the policy. It has been shown that markets react negatively (share price falls) when the company announces dividend cuts.

Previous evidence, showing that managers, specifically entrenched managers, pay dividends as a way of avoiding sanctions from shareholders, is provided by Hu and Kumar (2004). The authors argue that shareholders are more tolerant of weak governance when managers have limited cash at their disposal. The executive entrenchment level is measured with a variety of characteristics relating to the CEO's power over the internal governance mechanisms, investment opportunities, the CEO's incentive compensation, and monitoring by large external shareholders. The analysis is done using both dividends and share repurchases, as the authors claim that the theoretical entrenchment does not distinguish between dividends and share repurchases. The results show that the probability and level of pay-out seem to be significantly and positively related to factors that increase executive entrenchment levels even after controlling firm size, leverage and the ratio of intangible to total assets. The study also shows that factors such as board independence and in-the-money executive stock options significantly affect the likelihood to pay out dividends but not the determination of the pay-out level.

Managerial entrenchment is found to be more common in companies with weak corporate governance and therefore such companies anticipate a more serious cash flow problem if they were to deviate from their pre-commitment policy. It is, therefore, more crucial to have dividends for firms with weak shareholder rights than for firms with strong shareholder rights. Ghosh and Sirmans (2006) come to similar conclusions. Harford, Mansi and Maxwell (2008) conjecture that due to the strict protection and enforcement of shareholder rights in the USA, agency costs associated with cash reserves make entrenched, poorly monitored managers vulnerable to disciplining by the takeover market. Poorly governed firms exhibited lower cash reserves in the USA. In analysing this through the use of corporate governance metrics, the authors find that changes in a firm's cash position are positively related to changes in dividend policies. Firms with an increase in cash holdings are more likely to increase dividends (by about 2.2% on average).

The role of the board of directors is arguably one of the important mechanisms of corporate governance as directors act as shareholders' custodians, whereby executive/management is answerable to the board of directors. Keenan (2004) posits that it is the board's duty to determine the firm's overall strategy and to ensure that adequate controls are in place in order to protect shareholders' value. Other responsibilities of the board include making financing, investment and dividend decisions, although they may usually choose to delegate these responsibilities to top management in practice. In order to be better informed, non-executive directors, who are not involved in the day-to-day business of the organisation, rely heavily on assurances from management, internal auditing and external auditing, as well as board committees such as the Audit Committee. They must, however, take reasonable steps to ensure the information is accurate and that they understand it prior to making any decisions.

Adjoud and Ben-Amar's (2010) investigation of the relationship between the quality of corporate governance and the dividend payout policy for firms listed on Toronto Share Exchange in Canada, finds a higher dividend payout amongst firms with quality corporate governance. These results are consistent with other literature such as studies by Abdelsalam, El-Masry and Elsegini (2008); Mans-Kemp and Viviers (2015); Batool and Javid (2014) which indicate a positive relationship between dividends payout and good governance. The governance in the above studies is measured by board composition, specifically board independence, as well as shareholder rights. The studies show that when shareholder rights are strong, shareholders can use their power to force managers to pay dividends instead of using the firm's resources for their own personal benefit. A result consistent with the outcome model of dividends. In a similar light, a study by Afzal and Sehrish (2011) shows an existence of a positive and strong relationship between independent non-executive directors and dividend payments of the firms listed on the Karachi Stock exchange in Pakistan.

A more comprehensive study on the relationship between corporate governance and dividends is conducted by Mitton (2004). It aims to determine whether companies with stronger corporate governance have higher dividend pay-outs or if the opposite is true. The study spans 19 countries including South Africa, with a sample size of 365 firms. Firm-specific corporate governance ratings developed by Credit Lyonnais Securities Asia (CLSA) are used. The results from the study indicate that firms with good quality corporate governance have higher dividend pay-outs, which is consistent with the outcome model of dividends. It can be concluded that the existence of good corporate governance acts on behalf of shareholders as a means of cheap monitoring that may force management to disgorge cash in the form of dividend payments, which could otherwise have been used for non-value adding activities in the company.

In addition, the author observes that firms with good corporate governance pay lower dividends when faced with higher growth opportunities. This is evidence that management is more interested in increasing the firm value and consequently lower agency costs are expected within such a firm. Firms that have good corporate governance tend to come from countries with a higher level of shareholder protection, confirmation that country level governance and corporate level governance complement each other rather than working as substitutes. The study further shows that outside shareholders may prefer dividends over retained earnings when they fear a possible expropriation by insiders and this preference for dividends may be even greater in emerging markets with weak shareholder protection. It goes to show that ordinary investors also believe that dividends can be used as a mechanism for reducing free cash flow in the company, in order to avoid expropriation by company insiders. The results are consistent with the outcome model of dividends where investors with stronger protection can force the firm to disgorge cash in the form of dividends, but only if they believe the company does not have any positive present value projects.

From Mitton's study, it can be argued that carrying out a study on a panel of countries has the potential of masking country-specific issues and a study is, therefore, needed that focuses solely on one country's specific issues and will clearly capture such effects, for example, by focusing on South Africa alone. A similar study that also focuses on the quality of corporate governance is conducted by Officer (2006). The author examines whether paying dividends can be regarded as a substitute for weak governance or as a complement, and the results show that firms with weak governance have a higher likelihood of paying dividends. All weak internal governance mechanisms are associated with higher agency costs hence a need to pay dividends to reduce such agency costs. For example, Officer finds firms with large boards; the CEO holding position of a chairman; and low ownership by insiders and institutional investors, are significantly more likely to pay regular cash dividends to shareholders. These results are consistent with the substitute model which predicts that firms use dividend policy to compensate for other characteristics that have the potential to create agency problems between managers and outside equity holders. Officer further explores the relationship between investment patterns and dividend payments of a company. The results show that firms tend to initiate or pay higher dividends if they have ample cash flow and lower growth opportunities as measured by Tobin's Q. This result is interpreted as evidence towards the hypothesis that agency costs of overinvestment, as has been argued by Jensen in his free cash flow hypothesis, can be reduced by paying higher dividends.

A recent study by Abor and Fiador (2013) carried out an agency related research which covered sub-Saharan Africa. The study attempts to determine the relationship between corporate governance and dividend pay-outs over a 10-year period, that is, 1997-2006. More specifically, the study examines the impact of dividend payout on corporate governance as well as the effect of corporate governance on dividend payments. Abor and Fiador use four variables as measures of corporate governance; board composition; board size; CEO duality and institutional ownership. Their findings indicate that independent directors and board size significantly influence the dividend payment of firms in Kenya and Ghana. This is an indication that the non-executive members on the board tend to safeguard the shareholders' interests by paying them higher dividends so as to lower managers' discretion on the available cash. The same study finds that in South Africa, institutional ownership tends to positively influence the payout policy. This is evidence to the argument that firms with higher percentage of institutional ownership show higher dividend payout in South Africa. It is from this result that an expectation of lower agency costs, when there is a presence of institutional ownership, can be formed. In similar light, a study by Afzal and Sehrish (2011) shows an existence of a positive and strong relationship between independent non-executive directors and dividend payments of the firms in India.

Another emerging market study that focuses on the impact of corporate governance on the pay-out policy of dividends is that of Subramaniam, Devi and Susela (2011). They study firms listed on the Malaysian Stock Exchange and find a negative relationship between board size and dividend pay-out. The analysis shows that board independence and dividend policy serve as substitutes in the principal-agency perspective. When the company has a larger sized board, it is not necessary to pay out dividends as a means of alleviating agency problems, the board itself can monitor management's action and force them to act in the best interests of the shareholders. The board clearly acts as custodians of shareholders and can influence strategic decisions that add value to the firm. Maintaining reputation is additionally observed in firms that experience a drop in earnings but still maintain dividend pay-out. This trend was witnessed in the USA where managers showed that they would rather borrow than cut dividends. During the 2008 financial crisis, some companies were apparently still paying dividends even though their prospects were deteriorating.

Al-Najjar and Hussainey (2009) are amongst the authors that use agency theory to test if dividends and outside directorship are substitutes or complements in reducing agency conflicts of interest within the firm. The study is conducted on 400 non-financial firms listed on the London Stock Exchange. Their results show a negative association between dividend pay-out and a number of outside directors on the board. In other words, companies with a larger board size exhibited a lower payment of dividends, consistent with substitution effect which states that firms with weak corporate governance need to pay higher dividends as a means of maintaining reputation. Prospective shareholders consider various factors when making investment decisions and managerial reputation is one of these decisions. This result is consistent with Subramaniam, Devi and Susela (2011). No one wants to put their income in a company with a track record of shareholder expropriation hence the importance of the companies to maintain reputation in order to stay attractive to the prospective investors.

Benjamin and Mat Zain (2015) test the relationship between dividends and corporate governance by specifically looking at board independence as a measure of corporate governance. The outcome of the study shows a substitution effect of dividends, whereby firms pay higher dividends when there is weak governance in order to maintain reputation. A significant negative relationship between board independence and dividends is observed. Bokpin (2011) comes to a similar conclusion. His study reports a significant positive influence of foreign ownership and board size on the dividend payment of firms listed on the Ghana Stock Exchange. Board independence and CEO duality are, however, not found to have any statistical impact on how firms pay out dividends.

It is clear from the above literature that, irrespective of the relationship between board independence and pay-out policies, the one thing that researchers agree on is the ability of corporate governance to influence dividends and as a result alleviate agency costs. Some academics interpret the positive relationship as support of the board acting in the best interest of the shareholders, by forcing management to disgorge cash which could otherwise be used at the discretion of managers for overinvestment and other non-value adding activities. The result is, therefore, supporting the free cash flow hypothesis of Jensen. On the other hand, where results show corporate governance as playing a substitution role to dividends it is interpreted as a form of monitoring by board members deeming payment of dividends unnecessary in forcing management to outside scrutiny.

In addition to board characteristics, which are believed to influence dividends in one form or another, agency theory posits that costs may also exist between different external shareholders of the company as they possess unequal control on the company which results in a need for dividend payments to alleviate such costs. It is consequently anticipated that shareholding will play a major role on how the management distributes retained earnings. Shareholding can be in the form of size or identity. For instance, shareholders with concentrated ownership can have bargaining power on the managers or board of directors to disgorge cash and dispersed ownership may pose a challenge in monitoring as each single shareholder finds it expensive to monitor the company's management individually. Such types of owners are, as a result, prone to expropriation by management given their lack of resources and control.

Given that the identity of the shareholders can influence dividend pay-out (Huanga & Paul, 2017), it does not come as a surprise that the shareholding size also has an impact on the dividends paid out. This is because the benefits that shareholders derive from monitoring are proportional to their equity stake. Shareholders with low proportion of ownership will clearly have little or no incentive to exert monitoring function. The cost of monitoring can be so high that it is unjustifiable to carry out, consequently rendering the benefits from such monitoring trivial (Chang, Kang & Li, 2016). It can, therefore, be generalised that the higher the number of shares that an investor holds, the stronger the incentive to monitor and protect their investment. Among large shareholders, the largest shareholder will therefore face the highest cost of monitoring. From this, it could be argued that the larger shareholder may force management to act in the best interest of the shareholder and, therefore, reduce agency costs of monitoring.

Several studies have examined the relationship between the largest shareholder and dividend policy but the results are not consistent with each other. A negative relationship between the largest shareholder and dividends is observed by Gugler and Yurtoglu (2003), Mancinelli and Ozkan (2006), Maury and Pajuste (2002) and Renneboog and Trojanowski (2007) in companies from Germany, Italy, Finland, and the UK, respectively. A positive association between the largest shareholder and dividend pay-out is observed by Truong and Heaney (2007) and Ramli (2010) across 37 countries and Malaysia respectively. Contrary to the notion that the largest shareholder might expropriate the companies' wealth, these two studies observe that companies with high levels of the largest shareholding have higher dividend pay-outs. The presence of the second largest shareholder also has a significant and positive effect on companies' dividend pay-outs, indicating that the presence of other large shareholders in companies encourage the largest shareholder to pay out higher dividends.

Mancinelli and Ozkan (2006) show that Italian firms are characterised by high concentration of ownership and agency conflicts stem from the different shareholders, that is, the controlling shareholders and minority shareholders as opposed to insiders and outsiders. It is for this reason that they test the possibility of expropriation on minority shareholders by larger controlling shareholders, control being measured by total voting rights. The results of the study show that dividends decrease with an increase in the control of ownership.

The relationship between ownership structures and dividend payouts is further explored by Shah, Ullah and Hasnain (2011). The authors attempt to determine the potential impact of ownership structure on dividend payout policies of corporations listed on the Karachi Stock Exchange in Pakistan for the period between 2002 and 2006. The empirical evidence shows a significant positive association between ownership structure and dividend policy. It is found that shareholders sitting on the board can exert their power to influence the pay-out policy thereby reducing the conflict of interest between the inside and outside shareholders. Similarly, Belden, Fister and Knapp (2005) using a sample of 524 US firms during the period 1998-2000 examined the same issue. They similarly discover that companies with more independent non-executive directors on boards pay higher dividends. This result is in support of the previously mentioned evidence that the presence of outside shareholder custodianship can force management into paying out cash which could be used for non-value adding projects. In Wiberg (2008), the relationship between institutional ownership and dividend policy, conducted on 189 companies in Sweden, shows that institutional ownership and dividend payments are positively related. The author argues that the study takes into account the control retained by shareholders through mechanisms such as vote differentiation. It is known that shareholders may hold ordinary or preference shares which constitute unequal voting rights. It is through such mechanisms that shareholders who have more voting rights are likely to influence decisions in their favour.

Another study investigating the impact of institutional ownership and the payout policy is that of Gill and Obradovich (2012). They explore this relationship on 296 companies listed on the New York Stock Exchange between 2009 and 2011. The results show a positive and significant relationship between institutional ownership and the decision to pay dividends. Literature clearly suggests some level of relationship between company shareholding and dividend policy. The identity or concentration has been shown to be an important factor in such a case.

Institutions may claim high levels of dividends in an attempt to force firms to opt for external funding such as in the capital markets thereby exposing them to external scrutiny and cheaper monitoring by the markets. Short, Zhang and Keasey (2002) conducted a study in the UK to determine the association between institutional ownership and dividend payout policy. The authors argue that because equity is mainly owned by institutions in the UK, this ownership may affect the payout policy and that dividends may, therefore, be used as a mechanism to reduce agency problems existing between shareholders and managers. Evidence shows that higher dividends are paid when there is a larger proportion/concentration of institutional ownership in a company, proving the hypothesis that institutional shareholders can directly/indirectly mitigate agency costs.

An inconsistent outcome is, however, observed from Mehrani, Moradi and Eskandar (2011) in a similar study for firms listed on the Tehran Stock Exchange between 2000 and 2007. The authors posit that there is a significant negative relationship between institutional ownership and dividend payout ratio, although a positive relationship is observed when institutional ownership is concentrated in a firm. This result is interpreted as evidence that when there is a higher percentage of institutional ownership in a company, lower dividends are paid as a sign of good corporate governance. There is, however, an insignificant relationship that is observed between managerial ownership and dividend payout. Irrespective of the contradictions in the studies, one consistent fact that remains is that ownership has an influence on the payout policy of a firm.

It is perceived from the above studies that large shareholding is, by and large, in a position to influence company policy. In a similar light, Harada and Nguyen (2011) carry out a study to determine the impact of ownership concentration on the firm's willingness to pay dividends in Japan. Empirical evidence shows that the existence of highly concentrated ownership in a company leads to lower dividend payments. They construe this as evidence of minority shareholder expropriation. This is in line with the free cash flow hypothesis; the controlling parties are tempted to use the free cash flow for their own personal gain. This is because the results also show reluctance from the firms to increase dividends even with an increase in the company's earnings.

In an attempt to further show how significant is the notion of small shareholders being expropriated by the larger shareholders, Bena and Hanousek (2006) conduct a study on Czech Republican firms. They observe a negative effect of ownership concentration on dividend policy in the emerging market. When a dominant majority owner exists in the firm, dividend ratios tend to be lower and less frequent. However, firms with a majority owner and at least one strong minority owner pay dividends more often and the target payout ratio is large. This is construed as evidence that dominant owners extract rents from firms and those strong minority shareholders can prevent this behaviour. Dividends, therefore, reduce agency costs in the case where there is an influential minority shareholder. The existence of the minority shareholder can monitor the larger controlling shareholders and force them to pay out higher dividends to reduce the resources available for expropriation.

Furthermore, Mehar (2005) examines the behaviour of 180 dividend changing firms listed on Karachi Stock Exchange in Pakistan. The author finds that there is a lower retention of earnings or higher dividend payouts when a large share of equity is owned by the board. In addition, the study determines that a large concentration of ownership in the company leads to higher dividends because the proceeds go into the pockets of the directors. The likelihood of dividend pay- out is found to be lower if a significant amount is paid to outside shareholders. In the case where there is a larger concentration of ownership by outsiders, the directors compensate themselves through the executive compensatory benefits. This is one of the studies where dividends are not paid to alleviate agency problems but rather paid by managers as a way of compensating them.

Truong and Heaney (2007) observe that the identity of the largest shareholder is related to the decision to pay dividends. Their study shows that firms tend to pay lower dividends when the largest shareholder is a financial institution or an insider. This implies that managers would pay more dividends knowing that the distributions are for their own benefit anyway, in the case of an insider. Consistent results are found in Obradovich and Gill's (2013) study. These studies are inconsistent with the theory that shareholders can force management to pay out dividends instead of building empires for themselves. This is another form of expropriation of outside minority shareholders.

The above results are quite fascinating as they demonstrate that the severity of conflict of interest between large controlling owners and small outside shareholders can be signalled by the dividend payout. Although larger shareholders are deemed beneficial due to their greater incentives and ability to monitor corporate managers, they can have their own agency problems. The results further show that during downturns, dividends are cut but not increased during periods of upturn.

2.5 AGENCY COSTS AND GOVERNANCE

The literature in Section 2.4 examines the agency theory in conjunction with dividends. Corporate governance mechanisms and ownership structures were discussed and how they could indirectly influence dividends in such a way that such payment of dividends could lead to alleviation of agency costs in a firm. In this section however, the agency model identifies a number of governance mechanisms which realign the interests of agents and principals and so reduces agency costs. Traditionally, financial economists have suggested that ownership structure tends to mitigate the conflicts of interest between shareholders and managers, as well as other governance mechanisms such as executive compensation structure, board directors' composition, and the threat of a hostile takeover (Shleifer & Vishny, 1997). Large shareholders may control the corporate board and select the company's top managers. Hence, the critical role of block-holders in corporate governance should not be underestimated. Chen and Yur-Austin (2007) find that outside blockholders are more vigilant about mitigating managerial extravagance while inside blockholders, especially managerial blockholders, are more effective in improving the efficiency of firm asset utilization. This empirical evidence supports the notion that corporate governance mechanisms can mitigate agency conflicts in a firm.

Florackis (2008) investigates the impact of several corporate governance mechanisms on two alternative proxies for agency costs, namely the asset turnover ratio and the ratio of selling, general and administrative expenses to total sales (SG&A). The results reveal that the capital structure characteristics of firms, namely bank debt and debt maturity, constitute important corporate governance devices for UK companies. Also, managerial ownership, managerial compensation and ownership concentration are strongly associated with agency costs. Florackis (2008) further explores the impact of specific internal governance mechanisms such as board composition on the agency costs. The results show that this impact is dependent on the firm's growth opportunities and varies accordingly. Larger board independence is perceived as a monitoring mechanism which can play an important role in limiting or controlling the agency problem. Another study in the literature which sheds some light on the role of independent directors in mitigating agency costs is Henry (2010) who suggest that directors are more likely to work for the shareholders' interests and, as such, conclude that agency costs will be lower with the existence of a higher number of independent directors on the board.

Chen, Chen and Xu (2012) posit that unusual activities of managers depend on the availability of free cash flow. Firms that have large free cash flows are expected to use it in negative present value projects and are reluctant to pay out the cash to its shareholders. This is the free cash flow hypothesis of Jensen (1986). Managers have a greater opportunity for over-investing in SG&A costs when free cash flow is higher. Disgorging the cash, therefore, reduces the cash flow for empire-building. The results of Chen et al. show that managers increase SG&A costs more when sales upsurge than they reduce when sales decline.

As the literature has shown, large shareholders can have a two-fold influence on firms. On the one hand, significant owners have a strong incentive to monitor management to ensure that a firm's value is maximized, while on the other hand, their behaviour is driven by the possibility of extracting rents and enjoying the private benefits of control. The agency costs in firms with concentrated ownership then shift from the traditional principal-agent conflict to the dominant shareholder's incentive to consume private benefits at the expense of other minority shareholders.

The larger shareholders may also be forced into realising just how important it is for them in preserving their reputation of not appropriating wealth from smaller shareholders, as their wealth will be unfavourably affected by such actions and may result in decreased firm value (Claessens & Fan, 2002). The mere fact that majority shareholders, in fear of sanctions, try to avoid expropriation leads to lower monitoring by minority shareholders hence lower agency costs. The authors review the literature on corporate governance issues in Asia and find that Asian firms have a limited protection of minority shareholders. This lack of protection leads to expropriation of minority shareholders by the controlling owners. Low corporate transparency further aggravates the agency problems in Asia. Consistent with this result is Grinstein and Michaely (2005) who assert that major shareholders should have a strong motivation to monitor, or have the capacity to synchronise several governance mechanisms to improve their efficiency in monitoring. The level of monitoring by the largest shareholder may sometimes be deemed insufficient or the firm may be experiencing agency conflicts that are already in existence between the majority shareholder and minority shareholder. Dividend payments are therefore believed to provide a partial remedy as a substitute monitoring device and as a result, lower agency costs that could have been incurred by minority shareholders. Companies that have greater levels of the largest shareholder will therefore have a higher pay-out ratio, all things being equal.

Ownership structure is clearly another important aspect of corporate governance system, as concentrated ownership is argued to lead to effective monitoring. Klein (2002) posits that if ownership in a company is dispersed, an increase of a positive relationship between measures of corporate governance and firm performance must be expected, all things being equal. Dwivedi and Jain's (2005) Indian study supports the notion that the presence of block equity holders positively affects corporate performance and can be explained by arguing on the lines of 'cost of capital' and 'effective monitoring'. The argument on 'cost of capital' reflects that when the ownership structure is concentrated, financial performance tends to decrease due to an increase in the firm's cost of capital.

Institutional shareholders play a key role in mitigating agency problem because they can monitor firm performance and action of managers and can influence managerial decision making. Furthermore, institutional shareholders have higher voting rights when it comes to policies such as anti-takeover amendments and, therefore, work in the best interests of shareholders. Institutional owners tend to be more informed because of higher expertise and resources than private shareholders and can, therefore, monitor managerial performance at a lower cost (Henry, 2008).

Ibrahim and Samad (2011) examine the relationship between corporate governance and agency costs of family and non-family ownership of public listed companies in Malaysia. The study applies the governance mechanisms such as board size, independent directorship and duality as tools in monitoring agency costs, based on asset utilization ratio and expense ratio as proxy for agency costs. There is strong evidence that larger board size has a significant effect as a device in mitigating agency costs. The influence of independent directors differs for family and non-family owned companies. Board independence is found to play a mitigating role in agency conflicts in firms that are non-family owned but not on family owned. The study also finds that family ownership experiences fewer agency conflicts when the CEO also holds the position of the board chairman, but higher conflicts exist when these positions are held by one person in a non-family owned firm. CEO duality is said to reduce the monitoring efficacy of the board over management and supports separating the position of CEO and chairman in order to prevent conflicts between shareholders and managers.

Contradicting studies on the efficacy of corporate governance in mitigating agency costs exist. McKnight and Weir (2009) show that agency costs are not influenced by institutional ownership in a firm. They measure agency costs in three ways: first, using the assets-to-sales ratio; second, by means of the interaction of free cash flow; and third, by means of the number of acquisitions undertaken by an individual firm. The authors show that shareholder wealth actually decreases post acquisitions especially from the acquirer shareholders' perspective. According to Singh and Davidson III (2003) outside block ownership does not appear to have a significant influence on agency cost.

2.6 CORPORATE GOVERNANCE IN SOUTH AFRICA

Studies show that various corporate governance mechanisms have been introduced over the years as a way of alleviating the agency problem and its associated costs (Haniffa and Hudaib, 2006; Shleifer and Vishny, 1997). Most of these mechanisms have been formalised in country-specific codes and legislation. These codes set out the principles that are used to govern the complex relationship between shareholders, the directors and managers. Although a number of African countries have published corporate governance codes during the past decade, according to Abor and Fiador (2013), South Africa is the pioneer in Africa of corporate governance in the early 1990's and it is considered to be one of the best in the emerging markets with its Companies Act (1973) that is inspired by British common law.

South Africa has adopted the King Code of good corporate governance which is based on international standards such as the UK Combined Code, OECD Code and the

Commonwealth Secretariat Code. It has since gained global respect for pioneering the corporate governance in Africa. According to Waweru (2014), South Africa is perhaps an exception, where concerns for corporate governance issues have kept pace with the developed world over time. The legal framework for the implementation of the Company's Act in South Africa is divided into three institutions; the Financial Services Board (FSB), the Department of Trade and Industry (DTI) and Intellectual Properties Registration Office. According to Report and Observance of Standards and Codes (2003), this separation, however, can lead to regulatory duplications on the one hand, and unwanted loopholes on the other, which could give rise to weak enforcement culture.

The first corporate governance (King Report I) was compiled by a committee chaired by Mervin King in 1994. Resonant with the Cadbury report, King I report provides guidelines on things such as the composition of the board and director emoluments. It adopted an Anglo-American (shareholding) style of unitary board of directors, consisting of executive and non-executive directors (NEDs). The directors are first and foremost answerable to shareholders with a voluntary ('comply or explain') compliance and disclosure regime. Moreover, South African firms listed on the JSE are mandated to separate the roles of chairman and CEO, set up audit and remuneration committees with a minimum eight directors which constitutes at least two non-executive directors as board members, Institute of Directors in Southern Africa (IoDSA, 1994).

Given the change in domestic regulatory environment and international developments in corporate governance, King 1 report was revised in 2002. The UK introduced the Combined Code in 1998 while the South African government has passed laws aimed at promoting the interests of historically disadvantaged South Africans as a result of the apartheid era. These laws attempt to rectify historical, social and economic imbalances. Some investors have argued that the existence of these laws, which may require companies to have a certain shareholding of historically disadvantaged people so as to secure government contracts, make it hard to operate in SA. The stakeholder laws on black economic empowerment are incorporated into the governance of South African corporations (Ntim, 2013).

The result of these developments gave birth to King Report II (henceforth King II). It adopted a triple bottom-line reporting where companies were expected to report on social, economic and environmental performance. King II put emphasis on compliance that maintains and strengthens the Anglo-American (shareholding) features while also incorporating substantial South African context-specific affirmative action and stakeholder demands (stakeholding). It also puts emphasis on the composition of board committees and the importance of shareholder activism.

As a result of the Company's act of 2008, King Report III (henceforth King III) came into effect on 1 March 2010, introducing the concept of 'integrated' reporting. Since 2011, all JSE-listed companies are obligated to publish integrated reports (South African Institute of Chartered Accountants, 2015). Unlike the conventional annual report, which mostly contains financial information, an integrated report incorporates both financial and non-financial information in one report. It focuses on issues such as leadership, sustainability and corporate citizenship. It is also applicable to all South African entities in both the public and private sector, irrespective of their method and arrangement of their incorporation. King III reflects a shift from a 'comply-or-explain' approach to an 'apply-or-explain' approach to corporate governance, which requires that all entities disclose their application of principles as prescribed in King III. In the event that certain principles are not applied, King III requires that a justification be provided for the non-application thereof, (Ntim, 2013). In 1995, the Johannesburg Stock Exchange made it compulsory for listed companies to disclose the extent of their compliance with the King report. Moreover, listed companies are also required to adhere to International Accounting Standards, where previously, firms only had to adhere to generally accepted practise. South Africa's Insider Trading Act which was passed in 1998 enabled the FSB to take more forceful action against illegal transactions, (Malherbe, 2001).

The King Reports provide a well-developed corporate governance framework for companies doing business in South Africa. While a few listed companies in emerging markets published comprehensive information on their environmental, social and corporate governance performance in the late 2000s, South Africa was noted as an exception by the United States Forum for Sustainable and Responsible Investment (US SIF, 2009). In the US SIF study, the JSE-listed companies revealed the most transparent non-financial reporting, with a distinct focus on corporate governance aspects. South Africa has well coded corporate governance codes in black and white; however, by virtue of it being an emerging market it is still highly vulnerable to challenges facing other developing economies, such as the prevalence of tightly held corporate control structures, weak legal and judiciary systems.

King IV has been recently released in South Africa in November 2017 and implemented in April 2018. It stipulates that the risk governance committee should be made up of a mixture of non-executives and executives (the majority being non-executives). The governance guidelines warn against audit and risk being under one committee. Its advice is that a company should only combine them if it's able to devote enough time to dealing with risk related issues. The Companies Act, combined with the detailed principles and recommendations in King IV, provides a comprehensive basis for ensuring fair, transparent and accountable corporate governance in South Africa. On the downside, the unitary board structure has been criticised for its propensity to compromise the independence of the non-executive directors which has the potential of diluting their oversight role.

2.7 CHAPTER SUMMARY

Several studies have been conducted in trying to understand the rationale behind dividend payments. Theories have been put forward and debated by academics and professionals, but it is clear that no consensus has been reached given the number of contradicting results on the different theories discussed in the previous sections. In a recent synthesis of academic research on corporate payout policy, Farre-Mena, Michaely and Schmalz (2014) conclude that amongst the traditional motives of why firms issue dividends (signalling, taxes and agency costs), there is more persuasive evidence towards agency considerations. It is, however, still found that the famous dividend puzzle remains unsolved. Empirical evidence is equivocal and the search for new explanation for dividend pay-out continues.

CHAPTER 3: RESEARCH METHODOLOGY

In this chapter, the methods and procedures which were used to accomplish the purpose of the research are presented.

3.1 DATA SAMPLING

The study focuses on dividend-paying firms listed on the JSE covering the period 2005 to 2016. This long period is chosen in order to provide extensive and more conclusive results. All data are obtained from IRESS and company integrated reports (published on the company website). Firms that delist during the period are excluded from the sample. Companies must have paid dividends for at least two consecutive years with no missing data points during the period of study. This is to ensure that there are sufficient data points for comprehensive statistical analysis. Companies forming part of the real estate investment trust (REITs) on the JSE are not included in the sample given that their dividend payment is governed differently by law. REITs are forced by law to pay out at least 70% of their earnings in the form of dividends. It is for this reason that they are eliminated as their dividend policies do not truly reflect the traditional determinants. In order to compare dividends at different time periods, a panel data model of regression is used. A total sample of 179 companies is collected. A brief discussion of panel data modelling, detailing its uses and benefits is given in section 3.2.

3.2 PANEL DATA

According to Hsiao (2003), a panel data set is one that follows a given sample of individuals over time, thus providing multiple observations on each individual in the sample. The main difference between panel regression model and a normal time-series or cross-section model is its ability to attach the double subscript to each variable. This means panel data allows for an opportunity of testing the time-series and cross-sectional aspects of the data. A panel data model can, in its general form, be written as: $Y_{i,t} = \alpha_{i,t} + \beta X_{i,t} + \mu_{i,t}$ with $Y_{i,t}$ representing the dependent variable and $X_{i,t}$ a vector containing the set of explanatory variables in the model, whereas the subscripts i and t represent the cross-sectional and time-series dimension respectively.

The trends observed in the dividend pay-out ratios may be influenced by industry-specific and other general factors. The use of panel data allows the researcher to blend the intra-individual and inter-individual dynamics. Due to a large sample size of panel data compared to cross-sectional, panel data allows for larger degrees of freedom thereby improving the efficiency of the estimates (Hsiao, 1996). It is regularly contended that the main reason certain effects may be found (or not found) in the model, is that there are certain variables that cannot be observed but are correlated with those variables included in the model. The use of panel data, therefore, helps in the control of such omitted variables. Using panel data also has an advantage of simplifying the computational and statistical inference. For instance, when time series data are non-stationary, an assumption of normally distributed maximum likelihood estimators no longer holds, but panel data allows the use of central limit theorem to show that estimators remain normally distributed. Panel data does, however, come with disadvantages as well. For example, collecting panel data can be very costly and time-consuming. Estimation model (discussed below) will be used in the analysis of the data in an attempt to arrive at conclusions addressing the study objectives.

3.3 ESTIMATION MODELS

In an attempt to comprehend the relationship between agency costs and dividend payout, a generalised method of moments (GMM) regression analysis is carried out, with dividend pay-out as a dependent variable. Additionally, the same regression analysis technique is used to examine the link between corporate governance, ownership structure and agency cost proxies. This technique removes omitted variable bias and allows for controlling unobserved heterogeneity across the sample firms. A dynamic regression modelling is appropriate in capturing the omitted variable bias if those unobserved variables are time invariant. In the case of this study, the sector and industry or variations within the firms can influence the pay-out policy. Sargan test is employed in testing for the overall validity of the instruments, that is, if there is any auto correlation of first and second order, which may distort results. The results show no presence of auto correlations.

In the regression models, dividends are firstly treated as a dependent variable to be explained by the agency costs and, in turn, as an explanatory variable when the bi-directional relationship is tested. Some of the characteristics of corporate governance include board composition and board independence (Bhagat and Bolton, 2008; Brown and Caylor, 2006; Mak and Li, 2001; Weir, Laing and McKnight, 2002), the duality of CEO and chairman of the board (Brickley, Coles and Jarrell, 1997; Dedman and Lin, 2002) and managerial remuneration and structure (Lee, 2009; Shleifer and Vishny, 1997).

Literature leans towards particular variables that are believed, to some extent, to form the basis of corporate governance mechanisms and different ownership structures. The choice of independent variables, therefore, stems from such literature. The study uses board independence, board size and director remuneration as measures of corporate governance and ownership structure variables used are institutional ownership, largest shareholder and ownership concentration. The study further employs these variables in an attempt to understand their mitigation ability on agency costs. The dependent variables that proxy for agency costs are those variables that are related to operations and profitability asset turnover, free cash flow and sales and management expense ratio. As has been shown by Fama and French (2001), some firm specific characteristics such as profitability, leverage, firm size, growth opportunities also play a significant role in determining whether a firm will be a dividend payer or nonpayer. These firm specific characteristics are therefore used as control variables for the robustness of the estimation model in determining the pay-out level, given the existing agency costs.

The equations depicting the relationship between corporate governance and agency costs on the JSE mimic the conceptual frameworks as in the study by Gul et. al. (2012).

The relationship between dividend and agency costs is captured by the following equation;

$$\boldsymbol{AC_{i,t} = \alpha_{i,t} + \beta_1 Div_{i,t} + \sum_{j=1}^{N} \beta_j Control_{i,t} + \varepsilon_{i,t}} \qquad \textbf{(1)}$$

Where:

- $\boldsymbol{AC_{i,t}}$ denotes the different agency cost proxies as defined in Section 3.4.1
- $\boldsymbol{Div_{i,t}}$ is the conventional ratio of cash dividends paid to earnings
- $\boldsymbol{Control_{i,t}}$ is the vector of control variables
- The subscripts *i* and *t* identify the individual company and year, respectively
- $\alpha_{i,t}$ is the intercept, and $\varepsilon_{i,t}$ is a random error term

Equation one is regressed three times because the agency cost variables are proxied by three variables.

The relationship between dividends and agency costs could be bi-directional. Dividends could actually be used to explain the severity of agency costs. In order to test this relationship, the following model will be used;

$$\boldsymbol{Div_{i,t} = \alpha_{i,t} + \beta AC_{i,t} + \sum_{j=1}^{N} \beta_j Control_{i,t} + \varepsilon_{i,t}} \qquad \textbf{(2)}$$

A negative or positive beta coefficient on the agency cost is expected to be observed depending on the agency cost measure used. Dividends are expected to be positively related to asset turnover and negatively related to the sales and expense ratio and free cash flow if dividends do, indeed, reduce the severity of agency costs.

As indicated in the sub-objectives, the study also aims to determine whether ownership structure can mitigate agency costs. The relationship is shown by equation three. The coefficient on the dividend variable is also expected to behave as in equation one dependent on the agency proxy used, lower if indeed the ownership variables do reduce costs. The relationship is depicted as;

$$\boldsymbol{AC_{i,t} = \alpha_{i,t} + \beta_1 Div_{i,t} + \beta_2 INO_{i,t} + \beta_3 LS_{i,t} + \beta_4 HC_{i,t} + \varepsilon_{i,t}} \qquad \textbf{(3)}$$

Where:

- $\boldsymbol{INO_{i,t}}$ is the percentage of institutional ownership
- $\boldsymbol{LS_{i,t}}$ is the percentage owned by the largest shareholder in the company
- $\boldsymbol{HC_{i,t}}$ is the high concentration of ownership

Another objective of the study is to determine whether corporate governance mechanisms mitigate agency costs on the JSE. In order to test this relationship, equation four is used as shown;

$$AC_{i,t} = \alpha_{i,t} + \beta_1 Div_{i,t} + \beta_2 BC_{i,t} + \beta_3 S_{i,t}^2 + \beta_4 CEO_{i,t} + \beta_5 MR_{i,t} + \varepsilon_{i,t} \quad (4)$$

Where:

- $BC_{i,t}$ is the number of independent non-executive directors
- $S_{i,t}^2$ is the number of board members
- $CEO_{i,t}$ is when the CEO holds a position of chairman
- $MR_{i,t}$ is the managerial remuneration

3.4 EXPLANATION OF VARIABLES AND HYPOTHESIS FORMULATION

3.4.1 Agency Costs Variables

This study uses three different agency costs measures that relate to various aspects of a firm's operations. The use of alternative measures provides a broad and strong depiction of the agency costs environment for JSE listed companies. The variables and the measurement are defined in the next subsection.

Asset Turnover Ratio; The first measure of agency costs is the asset turnover ratio (ATR), which is defined as annual total revenue divided by total assets. This ratio measures management's ability to employ assets efficiently. A high asset turnover ratio shows a large amount of sales and ultimately cash flow that is generated for a given level of assets. A low ratio would indicate that management is using assets in non-cash flow generating and probably value-destroying ventures, additional allowance, or using funds to purchase unproductive (non-revenue-generating) assets. While a higher asset turnover may be identified with efficient asset management practices and, hence, creation of shareholders' value, a lower sales-to-asset ratio reflects asset deployment for unproductive purposes. Therefore, firms with considerable agency conflict will have lower asset turnover ratios relative to those having less agency conflict (Ang, Cole and Lin, 2000; Singh and Davidson III, 2003). This measure does, however, come with some drawbacks. Firstly, sales generation may not be tantamount to shareholder wealth because the sales may be generated from unprofitable activities. Secondly, McKnight and Weir (2009) argue that even though the sales are high, the cash generated may be expropriated by management and not actually be distributed to shareholders.

Sales and Management Expense Ratio: The second agency costs proxy follows the measure as explained by Singh and Davidson III (2003). It is the sales and management expense ratio (SER), which is defined as the annual sum of the selling, general and administrative expenses divided by total revenue. This variable identifies relative expenditure on items including managerial salaries, rents, equipment leasing, office buildings, equipment and fittings, and advertising and marketing. It captures excessive or perquisite expenditure, over which management has discretionary authority. Higher levels of SER expenses are a close approximation of managerial pay and perquisite consumption in terms of higher salaries, large office complexes, and other organizational support facilities. These costs, to a large extent, reflect managerial discretionary expenses and may be a closer proxy for agency costs. Firms with high sales and management expense ratios are expected to experience high agency costs between managers and shareholders.

Free Cash Flow: The third agency costs proxy is free cash flow (FCF), which is calculated as operating income before depreciation minus corporate income tax paid, interest expenses and dividends paid (Lehn & Poulsen, 1989). Agency costs are high when high free cash flow is combined with poor growth opportunities (Jensen, 1986). Retaining free cash flow reduces the ability of the capital market to monitor the decisions of management and, hence, large free cash flow suggests greater managerial discretion and higher agency costs. The payment of dividends is claimed to be able to reduce those agency costs by reducing the amount of resources under managers' control and discretion, and therefore keep companies going to capital markets to raise funds, where monitoring of managers is offered at lower costs (Fama and French, 2001).

3.4.2 Ownership and Corporate Governance Variables

A number of corporate governance measures and ownership structures are used to gauge the severity of the firm's agency costs. The study employs two ownership variables, two governance variables, as well as an expense variable to proxy for governance mechanisms. Since these measures may substitute for each other in controlling the firm's agency problems, using multiple measures provides a more complete picture.

Institutional ownership ($INO_{i,t}$): Following Henry (2008), institutional ownership is determined as the total percentage shareholding of all institutional shareholders. Institutional investors have greater expertise and resources and can monitor management at lower costs relative to an average private shareholder and this will reduce the need for capital markets as external monitoring systems (Al-Najjar, 2009). Additionally, because institutional investors cannot make large sales of stock without causing the share price to plummet, they will choose to monitor the firm's decisions in order to avoid fire sales which results into loss making transaction.. McKnight and Weir (2009) nevertheless showed that high levels of institutional ownership do not mitigate agency costs.

Largest shareholder ($LS_{i,t}$): this variable captures the percentage shareholding of the largest holder in the company. Truong and Heaney (2007) argue that the largest shareholder is a unique group of shareholders, as their holding can be associated with benefits and costs, especially the underinvestment costs. Agency costs are expected to be lower with the larger percentage of the shareholder, as they provide monitoring of managers.

Outside directorship on the board ($BC_{i,t}$): This variable captures the independence of the board. It is measured as the log of the total number of directors on the board who do not work directly for the company. A corporation with a greater number of independent directors may experience lower agency costs because the outside directors could use their supervisory powers to confine management's discretion. A board of directors also keeps management in check in an effort to try and protect their reputation. A board of directors may play an imperative role in providing a monitoring and disciplinary role and thus contribute to the reduction of agency costs (Yarram and Dollery, 2015). It is, therefore, expected that a greater proportion of independent directors on the board will lead to lower agency costs.

Board size ($S^2_{i,t}$): This variable accounts for the number of board members in an organisation. The board of directors of a corporation is a vital facet of the corporation's internal governance which is in charge of offering strategic direction (Lefort and Urzúa, 2008). It is essentially the control device in support of monitoring the top management's behaviour. The authors further argue that a board plays a role in coordinating different stakeholders' objectives. Following on from the preceding argument, the larger board size is, therefore, expected to lower agency costs. Abor and Fiador (2013) argue that the relationship between board size and dividends is a non-linear function. Hence this variable needs to be squared to capture the effect of this non-linearity.

Managerial Remuneration ($MR_{i,t}$): Murphy (1999) and Core (2001) suggest that managerial remuneration is an effective way to motivate managers to take actions that will maximize shareholders' wealth. This variable is measured by taking natural log of the sum of the total annual benefits paid to all board members as explained in the study by Sajid, Muhammad, Nasir and Farman (2012). It is predicted in prior literature that the higher the remuneration of directors, the lower will be the agency costs. This is because it incentivises the board in monitoring or forcing managers to work in the best interest of the shareholders in order to continuously receive these benefits and to protect their jobs.

3.4.3 Control Variables

Dividend payout policy is said to be influenced by many different factors other than those considered as measures of corporate governance. These variables, if not controlled, may distort the model of dividends which the study is trying to test thus resulting in a less robust model. In addition to Fama and French (2001), Denis and Osobov's (2008) study also reports that profitability, firm size and growth opportunities, are variables influencing the firm's dividends payout. The larger and more profitable firms are more likely to pay dividends. Furthermore, Aivazian, Booth and Cleary (2003) find that for both the US and emerging market firms, profitability influences the dividend payout. Similarly, higher debt ratios lead to lower dividend payments, signifying that financial limitations have an influence on dividend policy. In conclusion, the literature discussed so far shows that the following are the major determinants of dividend policy: earnings (profitability), firm size, growth opportunities and debt ratios (leverage) and, therefore, need to be controlled for the robustness of the model. These variables and their measurement are explained below.

Profitability (C/A): measures the firm's performance for a particular period. Profitability is measured as the ratio of cash flow to total assets as has been done in Al-Najjar and Hussainey (2009). Fama and French (2001) show firm characteristics, such as profitability and firm size, as determinants of the dividend payout. They find that firms with current high profitability and low growth opportunities tend to pay dividends, as opposed to low profit/high growth firms that tend to retain any profits. There are other studies showing that profitable firms are more likely to pay dividends (Al-Kuwari, 2009; Nizar Al-Malkawi, 2007).

Leverage (D/E): is measured by total debt to total equity ratio. The higher the debt, the less likely it is for the firm to pay dividends as some of the cash flow has to go into servicing the debt.

Firm size (log assets): measured as a log of total assets. Larger firms tend to pay higher dividends as they are highly likely to have stable cash flows. Coulton and Ruddock (2011) find that dividend paying firms tend to be larger compared to those firms which do not pay any dividends. DeAngelo et. al. (2006) also show that mature firms, that is, those with retained earnings forming a large proportion of their equity, are more likely to pay higher dividends and young firms pay lower dividends if not zero. Young firms face relatively ample investment opportunities with inadequate financial resources leading to retention rate of profits to be dominating the distribution, whereas investment opportunities become scarce as the firm matures hence the high dividend payouts. It is further argued that as a firm's size increases, the shareholders' ability to monitor company performance closely decreases. In other words, as the firm's size increases, the agency conflict will also increase, hence the need to control firm size in the model.

Growth opportunities (M/B): measured by market-to-book value of the assets. Firms with higher growth opportunities tend to have a higher retention rate and are expected to have a lower dividend payout. Since external financing is costly, fast-growing companies require internally generated funds to finance their investment projects, thereby reducing dividends (Al-Kuwari, 2009).

CHAPTER 4: EMPIRICAL DATA ANALYSIS

This section discusses the results from the regression analysis. It starts by giving a descriptive statistic of the variables used in the regression models. The different relationships as per the models are then discussed.

4.1 SPECIFICATION TESTS

The study first started by testing auto correlations of first and second order using the Sargan test and presence of auto correlations was not observed. The two-step Arellano Bond dynamic panel data regression was therefore used to run the test on the objectives of the study. The outcomes of the specific tests follow in the sections that follow.

4.2 DESCRIPTIVE STATISCTICS

Table 1- Descriptive Statistics

Variables	Median	Mean	Std Dev	Min	Max
AT	1.082	1.324	1.152	-0.232	8.104
FCF	0.080	0.055	0.962	-0.896	0.954
SER	0.061	0.083	0.106	-0.269	2.936
INO	0.375	0.433	1.619	0.000	68.210
BC	7.000	7.240	3.181	1.000	20.000
BS	10.000	10.543	3.681	2.000	26.000
DEMRATIO	0.004	0.013	0.026	0.000	0.310
DIVRATIO	0.021	0.057	0.706	0.000	30.120
MB	0.010	0.075	0.312	-0.030	8.420
PROF	0.149	0.154	0.282	-9.979	1.372
DA	0.566	0.568	0.258	0.002	2.524
FS	15.217	15.128	2.290	6.342	21.394

Notes: This table reports the correlation coefficients for all the variables used in the paper. AT is asset turnover; FCF is the free cash flow; SER is the management sales and expense ratio; INO is the percentage of institutional ownership; BC is number of independent board of directors; BS is the board size; DEMRATIO is the directors' remuneration; DIVRATIO is the dividend ratio paid; PROF is the profitability; DA is the leverage and FS is the firm size

Table 1 shows descriptive statistics for all explanatory variables and agency cost proxy variables. The descriptive statistics include the median, mean, standard deviation, minimum and maximum values. The sample consists of 179 companies listed on the JSE for the period, 2005-2016. The data has been taken from company's annual reports as well as IRESS. The results show that the mean asset utilization ratio is 1.324, with a standard deviation of 1.152 the highest mean ratio of the agency costs proxy variables. Free cash flow has the lowest mean of 0.055 and a standard deviation of 0.962. As for the ownership structure on the JSE, average institutional ownership is close to 44% with a standard deviation of just above 1%. According to the data, there is a minimum of 0% ownership by institutions and a maximum of 68%. It shows that almost half of the companies on the JSE are owned by institutions. The average size of the board is 11 with a minimum of two and maximum of 26 directors. When looking at the median number of 10, it could be argued that a maximum of 26 is more of an exception than the rule. In fact, it has been observed manually that there is only one company with such a big board of directors, namely Bidvest. This could be explained by the conglomerate nature of the company. As far as the independence of the board is concerned, Table 1 shows a high prevalence of independent directors on the JSE, with a mean of 7% and standard deviation of close to 4%.

4.3 CORRELATION MATRIX

The below table is the correlation matrix of the variables used in the regression analysis.

Table 2 - Correlation Matrix

	AT	FCF	SER	INO	BC	BS	DERA	DIVR	MB	PROF	DA	FS
AT	1											
FCF	0.052	1										
SER	0.315	-0.014	1									
INO	0.006	0.001	-0.015	1								
BC	-0.241	-0.025	-0.171	-0.025	1							
BS	-0.144	-0.015	-0.147	-0.014	**0.716**	1						
DERATIO	0.249	0.017	0.497	-0.005	-0.356	-0.262	1					
DIVRATIO	-0.014	**-0.990**	0.032	-0.001	0.021	0.011	-0.008	1				
MB	0.029	-0.350	0.075	-0.002	-0.137	-0.089	0.236	0.344	1			
PROF	0.193	**0.883**	0.062	-0.001	-0.054	-0.046	0.052	**-0.809**	-0.311	1		
DA	0.133	-0.010	-0.066	-0.034	0.193	0.184	-0.166	-0.010	-0.007	-0.045	1	
FS	-0.320	0.079	-0.357	-0.016	**0.700**	0.553	-0.631	-0.093	-0.265	-0.002	0.291	1

Notes: This table reports the correlation coefficients for all the variables used in the paper. AT is asset turnover; FCF is the free cash flow; SER is the management sales and expense ratio; INO is the percentage of institutional ownership; BC is number of independent board of directors; BS is the board size; DEMRATIO is the directors' remuneration; DIVRATIO is the dividend ratio paid; PROF is the profitability; DA is the leverage and FS is the firm size

In order to determine the multicollinearity amongst the regression variables, Pearson's co-efficient of correlation is computed. The results are depicted in Table 2 above. Technique for detecting multicollinearity is through the use of a correlation matrix. The problem of multicollinearity exists if there is high correlation between explanatory variables. Researchers, however, do not agree on the exact point where correlation is considered high. Some use an exact figure of 70% as a minimum (Anderson 1999), while others believe high correlation is anything above 80% which is the specific point a correlation will be considered as a high correlation (Brayman & Cramer, 2001). The study follows Anderson's benchmark of 0.7 as an indicator of high correlation coefficient between two variables.

The results from Table 2 show some correlations worth noting. For instance, there exists a high positive correlation between board size and composition. When a company's board size increases, the number of independent directors also seems to increase. This could mean that companies are adding more non-executive directors with the number of executives remaining relatively constant. The King III report dictates that a board of a public company must constitute at least 50% of non-executive independent directors. This positive correlation between the board size and board composition could be a result of such a recommendation. This could be a sign of compliance when it comes to board composition as it has been shown that South Africa is the leader in the African Continent. This result is also supported by the descriptive statistics in Table 1 showing that, on average, a company with 10 board members would have at least seven independent non-executive directors.

Another relationship that comes as a surprise is that a negative coefficient exists between profitability and dividend ratio. One would expect a positive relationship to exist, that is, high profit firms exhibit higher pay-out ratios, as supported by most literature that states that profitability is one of the firms' determinants on paying dividends. Firm size is seen to be highly correlated with board composition, but this may not be of concern as firm size is used as a control variable. Overall, multicollinearity does not seem to be a problem in the sample and we can, therefore, trust the validity of the results.

4.4 THE RELATIONSHIP BETWEEN DIVIDENDS AND AGENCY COSTS

This model has agency costs as a dependent variable, being explained by dividend pay-out with variables that are commonly known to influence dividends treated as control variables. The aim of this equation is to determine whether firms that pay dividends have lower agency costs. For the dividends to reduce agency costs, a negative coefficient is expected in this model. This implies that firms with lower agency costs are expected to have high asset turnover. It means that management is employing assets of the company efficiently in increasing productivity, hence firm value, which is ultimately the objective of the business. As argued by Jensen and Meckling (1976), a loss due to inefficiencies in the company are an example of agency cost.

The results, as seen in Table 3 below show a positive, even though statistically insignificant relationship between dividends and agency costs, when asset turnover is used as an agency cost proxy. In order to reject the null hypothesis of no relationship between dividends and agency reduction, we would expect a significance level of 10% or less. As shown in Table 3, a probability of 0.5 is statistically highly insignificant hence the failure to reject the null hypothesis. Dividend payments in South African companies do not seem to have an impact on the agency costs, particularly when the measure used is asset turnover ratio. It could be argued that dividends are not necessarily used to reduce agency costs given the quality of governance that is close to international standards. As Waweru (2014) has shown, South Africa's corporate governance is arguably still the best in Africa. For firms with good corporate governance practices, no dividend payout mechanism is needed because this strong governance will lead to a high quality of monitoring that reduces the agency costs. It is therefore expected that firms with good corporate governance will have lower payout ratios while those with poor governance will show higher payout ratios (Kose & Anzhela, 2006).

Table 3 - depicts the relationship between different agency costs and dividend payout,

Dependent Variables	Independent Variables	Coefficient	P>z
Asset Turnover	Dividend Ratio	0.2405	0.5720
	Profitability	0.5375	0.0290
	Firm Size	-0.0754	0.0400
	Leverage	0.3043	0.0530
	Growth Opportunities	0.0036	0.9640
	Constant	1.1650	0.0650
Sales and Management Expense Ratio	Dividend Ratio	0.0932	0.0554
	Profitability	-0.4603	0.0370
	Firm Size	-0.0129	0.0187
	Leverage	0.0371	0.0200
	Growth Opportunities	0.0128	0.5530
	Constant	0.2421	0.0819
Free Cash Flow	Dividend Ratio	-1.1501	0.0000
	Profitability	-0.4603	0.0000
	Firm Size	-0.0129	0.0150
	Leverage	0.0371	0.0050
	Growth Opportunities	0.0128	0.3940
	Constant	0.2421	0.0000

The second variable used to proxy for agency cost is the sales and management expense ratio. As explained in Section 3, it identifies relative expenditure on items including managerial salaries; rents; equipment leasing; office buildings; equipment and fittings; advertising and marketing; and it also captures excessive or perquisite expenditure over which management have discretionary authority. A lower ratio is synonymous with lower agency costs. For dividends to reduce agency costs as measured above, a negative relationship is expected. This means when dividends increase, sales and management expense ratio is expected to decrease, otherwise a decrease in dividends should result in a higher ratio and thus a negative coefficient in this equation. As seen from Table 3, a positive and significant relationship is discovered between dividends and sales and management expense ratio. This result is inconsistent with the hypothesis that higher dividends would reduce agency costs in the firm. Managers seem to be paying higher dividends in parallel with higher costs; therefore, dividends do not serve as a deterrent to excessive expenditure by management. The outcome is consistent with Singh and Davidson III (2003). One may argue that this result symbolises management that pays higher dividends as a way of discouraging outside shareholders to monitor them.

Lastly, free cash flow is used as the variable used as a proxy for agency costs in the company. It is expected that companies with high free cash flows are less likely to use the capital markets to raise funds. This lower frequency of external capital increases managers' discretion on the use of internal funds, and they may end up engaging in non-value adding activities such as empire building. The company with a greater amount of free cash flow is, therefore, expected to experience higher agency costs. The relationship between dividends and free cash flow is therefore anticipated to be negative. This implies that the higher the dividends paid out to shareholders, the lower the free cash flow available to management; and this may imply a proxy for the potential damage caused by overinvestment (the severity of agency problems). As expected, a negative and statistically significant relationship is observed between dividend pay-out and the agency cost proxy as depicted in Table 3. This result is consistent with Chen, Chen and Xu (2011).

The above regressions are repeated but now take into consideration the impact of financial crises on the pay-out of dividends. It has been argued that during the 2008 financial crisis, firms opted to borrow instead of stopping the paying of dividends. This measure may be irrational if the business is not operating as a going-concern. The dummy variable crisis is included in order to determine if the results would still be the same. All the coefficients do not change significantly which brings us to the conclusion that the pre- and post-financial crisis did not have any impact on the pay-out policies. Due to the insignificant impact the variable had on the entire model, the results are not shown in the study. Financial crises did not in any way alter the way companies pay out dividends to their shareholders. This could be evidence implying that, once management has committed to paying dividends, it does so even during periods of downturns, which is consistent with Brav et al (2005) where managers show that they would rather borrow than cut dividends. Dividends are cut as a last resort, as confirmed by Jensen, Lundstrum and Miller (2010).

4.4 IMPACT OF AGENCY COSTS ON DIVIDENDS

This model is basically the inverse of Equation 1. It tries to explore the bi-directional relationship that may exist between dividends and agency costs. Agency costs may actually be influencing the payment, as opposed to paying dividends as a means of alleviating agency costs. The relationship is, however, expected to be consistent with results in Equation 1. Dividend is regressed on agency costs variables and similar results to Equation 1 are observed. There is no significant relationship between agency costs and dividend policy on the South African listed companies, (results not shown).

4.5 RELATIONSHIP BETWEEN AGENCY COSTS AND OWNERSHIP STRUCTURE

The relationship between ownership structure and agency costs is tested in Equation 3. Independent variables used are institutional ownership and the single largest percentage of shareholding. As in Equation 1, the first agency cost measure used is the asset turnover ratio. In order for ownership to be deemed impactful on agency costs, coefficients to both ownership structure variables are expected to be positive. This means that an increase in institutional ownership, for instance, can monitor management to ensure that they employ the company's assets efficiently and, as such, create value. The results of the model are shown in Table 4. Institutional ownership, as envisaged, is found to have a positive significant impact on asset turnover. This could be attributed to the power institutional owners have in enforcing good governance in the firm. Institutional shareholders can threaten to divest from the company if management do not act in the best interests of the shareholders. Management, in fear of losing current and prospective investors and in turn ruining the firm's value, may opt to utilise the firm's assets efficiently and effectively to increase firm value. The effect of institutional ownership as an agency cost mitigating mechanism is consistent with Henry, (2004); Chen and Yur-Austin (2007). A positive statistically significant relationship between asset turnover and dividends is observed. It shows that dividends alone have no impact on the profitability of a company but could be influenced by the presence of shareholders with some influence and control. A negative but non-significant relationship between largest shareholder and ownership concentration is observed.

Table 4 - depicts the relationship between agency costs and ownership structure

Dependent Variables	Independent Variables	Coefficient	P>z
Asset Turnover	Dividend Ratio	0.617	0.0800
	Institutional Ownership	0.0003	0.0000
	Largest Shareholder	-0.01475	0.3250
	High Ownership Concentration	-0.11	0.1800
	Constant	0.2421	0.0000
Sales and Management Expense Ratio	Dividend Ratio	-0.6971	0.0130
	Institutional Ownership	0.0000017	0.0000
	Largest Shareholder	-0.0129	0.0150
	High Ownership Concentration	0.0371	0.0050
	Constant	0.2421	0.0000
Free Cash Flow	Dividend Ratio	-0.7000	0.0010
	Institutional Ownership	-0.00028	0.7740
	Largest Shareholder	-0.0129	0.0150
	High Ownership Concentration	0.0371	0.0050
	Constant	0.2421	0.0000

Free cash flow hypothesis suggests that for agency costs to be lower in the firm, there must be less cash that can be used at the discretion of management. We, therefore, expect a negative relationship between the independent variables and the agency costs measure if this were to be true. Institutional ownership is found to be significantly related to lower cash flows; results consistent with Al-Najjar (2009). One feature to note, however, is a very low coefficient of institutional ownership which has a potential of making this result invalid.

When sales and management expense ratio is used as an agency costs measure, no significant relationship is observed between ownership structure and the dependent variable (except for dividends). The negative relationship between dividends and sales and expense ratio is consistent with the hypothesis that higher dividends will reduce management discretion on spending as cash is disgorged in the form of dividends. This result is consistent with Singh & Davidson III (2003).

4.6 RELATIONSHIP BETWEEN AGENCY COSTS AND CORPORATE GOVERNANCE

This model determines the impact of corporate mechanisms such as board size, board remuneration and board independence on the agency costs. As mentioned, corporate governance mechanisms are those mechanisms that protect shareholders' interests. For instance, the company with a larger number of independent directors is expected to have lower agency costs because independent directors have a significant influence on the performance of the firm. Independent directors do not only protect the interests of shareholders but also monitor decision making of company's management. In this model, most corporate governance measures seem to have no significant impact on the agency costs measures used, except for remuneration structure. The lack of evidence on independent boards of directors to mitigate agency costs is consistent with McKnight and Weir (2009) who found no evidence that the independent director representation affects agency costs in terms of asset turnover ratio in the UK. They also pointed out that although the UK Combined Code proposes that one-third of the board be independent directors, a higher proportion of independent directors do not bring clear benefits to shareholders in the form of lower agency costs. Given the fact that corporate governance mechanisms in South Africa were inspired by The UK Combined Code, it does not come as a surprise that the results mimic those of UK studies.

This is also consistent with Boivie, Lange, McDonald and Westphal (2011) who contend that a board's independence is less likely to reduce agency costs which may be dependent on the level of independence of the directors. Although Fama (1980) states that independent directors are vital for ensuring an effective governance system since they have more independence from management, this argument does not hold for directors on the Johannesburg Stock Exchange. Henry's (2010) study, conducted on the Australian Stock Exchange between 1992 and 2002, actually states that the degree of board independence increases the agency costs in terms of asset utilization ratio. The results are contradictory, however, to what was found by McKnight and

Mira (2003). The majority of authors listed above posit that firms with a higher number of independent board members will experience lower agency costs.

Table 5 - depicts the relationship between agency costs and Corporate Governance

Dependent Variables	Independent Variables	Coefficient	P>z
Asset Turnover	Dividend Ratio	0.8371	0.014
	Board Composition	-0.0036	0.339
	Director Remuneration	8.232	0.000
	Board Size	-0.0007	0.810
	Constant	0.2884	0.000
Sales and Management Expense Ratio	Dividend Ratio	0.5657	0.107
	Board Composition	0.0000	0.880
	Director Remuneration	1.5779	0.000
	Board Size	0.0000	0.696
	Constant	0.0406	0.000
Free Cash Flow	Dividend Ratio	-0.6039	0.005
	Board Composition	0.0000	0.979
	Director Remuneration	-0.2083	0.682
	Board Size	0.0005	0.647
	Constant	0.0895	0.000

As the regression is repeated, with sales and management expense ratio as an agency cost proxy, board remuneration is the only statistically significant variable. This result implies that remuneration of the board increases with expenses that are within the discretion of management. Managers may have the sole discretion on remuneration policies and, therefore, director compensation may not act as an agency costs mitigator. Board size and independence are statistically insignificant in reducing agency costs in this model.

Lastly, the model attempts to determine the influence of corporate governance mechanisms by approximating agency costs with free cash flows. As argued, a larger board with independent directors is supposed to be in a position to monitor and influence management on the utilisation of the available cash flow. If this is the case, a negative relationship is expected between governance and free cash flow, resulting in lower agency costs. As the results show from Table 5, not a single measure of governance has a significant influence on agency costs as measured by free cash flow. The results are consistent with (Singh & Davidson III, 2003) who do not find any significant impact of board independence on agency costs.

An interesting result is observed in the above regressions where governance is used together with dividends in mitigating agency costs. When dividends are used in conjunction with corporate governance mechanisms, dividends then tend to mitigate agency costs across all the different proxies used.

CHAPTER 5: STUDY CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This research study set out to investigate the relationship between dividend policy, corporate governance and agency costs for firms listed on the JSE. In this endeavor, a background and research plan was presented in Chapter 1, followed by detailed discussions of the study's theoretical underpinnings in Chapter 2 (literature review) and Chapter 3 (research design and methodology) that formed the basis for the empirical data analysed in Chapter 4. To complete the study, the overall conclusions and recommendations are the agenda for this final chapter.

5.2 SUMMARY AND CONCLUSIONS

Extensive research has been conducted in trying to understand how firms determine the way they distribute earnings to shareholders and the justification for such distributions. Irrespective of the amount of research conducted around dividend payment policies, conflicts on why firms pay dividends, coupled with reasons investors pay attention to dividends, still exist to date. Different theories have been discussed in trying to explain payment of dividends. Some authors have argued that dividends can be used to communicate the firm's future prospects, given the asymmetric information present between management and outside shareholders. This is according to a theory that was first developed by Watts (1973).

There is support for and against this signalling theory of dividends, both in the developed and emerging markets. Nissim and Ziv (2001); Dasilas and Leventis (2011); and Suwanna (2012) in the developed markets find evidence supporting the hypothesis that dividends have an information content in them. Contradicting studies to the notion of dividends being deliberately paid out by management as a way of communicating future growth prospects also exist, as recorded by Bozos, Nikolopoulos and Ramgandhi (2011) for developed markets, as well as Wolff and Auret (2009) in the case of South Africa. The dividends are rather found to be related to current earnings than future earnings. Firms increase or initiate dividends in year zero because they had increased earnings for the year and not necessarily because they are expecting to increase earnings in year one. Dividend payments are further argued to exist as a way of attracting a certain clientele of investors.

Under this theory, tax implications and an investor life cycle play a major role. There is, however, inconsistent empirical evidence with regards to this theory.

The focus of this paper was on agency theory of dividends, which emanates from the conflict of interest arising from separation of ownership and control in a corporation. Under this theory, it is believed that dividends can be used as a mechanism to reduce agency costs in the firm. This can be done in two ways: firstly, by reducing the free cash flow available for use at management's discretion, as it is argued that management may be tempted to invest in non-value adding projects and empire building (Jensen, 1986); and, secondly, by exposing firms to free monitoring by capital markets. Dividend payments will result in the reduction of cash that is available for positive value projects in a company. This reduction of cash flow forces management to seek funding in the external capital markets which will, in turn, subject the company to cheaper outside scrutiny (Nizar Al-Malkawi, 2007; Easterbrook, 1984). Managers have been found to spend recklessly when the firm has positive free cash flow and this may imply existence of a positive relationship between higher free cash flow and overinvestment (Richardson, 2006).

The link between agency costs and dividend policy is further influenced by the role of corporate governance. Corporate governance has received a renewed interest, particularly due to the high-profile collapses of a number of large firms. Levels of governance are shown to differ across organisations as well as countries. Some tend to be characterised by poor governance while others may pay close scrutiny resulting in greater quality of governance. Kose and Anzhela (2006) have shown that organisations with poor corporate governance practices are not able to decrease sub-optimal managerial investments and this situation often leads to high agency costs of free cash flow. Dividends can therefore be used to alleviate the existing agency problems. Nevertheless, if a firm has good corporate governance practices, no dividend pay-out mechanism is needed because this strong governance will lead to a high quality of monitoring that reduces the agency costs.

Corporate governance mechanisms can take many forms including, but not limited to, composition or independence of the board and its size and such mechanisms seem to be influenced considerably by the ownership structure of the company

(Bebchuk and Hamdani, 2009). The South African corporate governance landscape has clearly gone through an extensive evolution over the past 25 years towards international standards, despite its fair share of corporate scandals. It has gone from the 1994 King I through to the recent 2016 King IV. King I had adopted an Anglo-American (shareholding) style of unitary board of directors, consisting of executive and non-executive directors. King II was introduced as a result of international developments, and it puts more emphasis on compliance aimed at maintaining and strengthening the Anglo-American (shareholding) features while also incorporating substantial South African context-specific affirmative action and stakeholder demands (stake-holding) (Ntim, 2013

The lack of literature on the relationship between dividend policy and agency costs, together with the impact of governance mechanisms in the South African context has motivated this research study. Its objectives were to determine the relationship between dividend payout and agency costs on the Johannesburg Stock Exchange in an attempt to get to the core of the challenges and potential solutions. It also seeks to explore whether corporate governance mechanisms play a mitigating role in agency costs. IRESS data for 186 dividend paying companies were collected during the period 2005-2015 as empirical data for the study. Arellano Bond dynamic panel data estimation model was used to perform a two-step regression. This was chosen after testing for first and second auto correlations on the independent variables which resulted in no evidence of significant auto-correlation. For the robustness and extensiveness of the study, three measures of agency cost were used. These are asset turnover ratio, sales and management expense ratio as well as free cash flow. Ownership and corporate governance mechanisms variables used are institutional ownership, largest shareholder, ownership concentration, board independence, board size and director remuneration.

The first model in the study regressed dividends on agency costs so as to determine the impact the dividend payment had on agency costs. A vector of those variables that have an extensive support of the literature as determinants of dividend payment, was also included in the regression to control for robustness of the model. This included firm profitability, firm size, leverage and growth opportunities. Agency costs are first measured by asset turnover ratio which measures management's ability to employ assets efficiently. A high asset turnover ratio indicates a large amount of sales and ultimately cash flow that is generated for a given level of assets. A low ratio would indicate that management is using assets in non-cash flow generating activities and probably value-destroying ventures, additional allowance or using funds to purchase unproductive (non-revenue-generating) assets. This study does not compare absolute ratios but rather the direction of the relationship existing between dividends and each measure of the agency costs. A positive relationship implies that an increase in dividends leads to higher asset turnover hence the conclusion that a positive relationship signifies alleviation of agency costs.

Dividend payment is found to be insignificantly related to agency costs when such costs are measured by asset turnover ratio. Institutional ownership is found to be significantly related to lower agency costs when asset turnover ratio and free cash flow are used as measures of agency cost. No relationship is observed between ownership and sales and managerial expense ratio. In analysing the impact of corporate governance mechanisms on the efficacy of mitigating agency costs, only director remuneration is found to mitigate agency costs when asset turnover ratio is used. An unexpected result between director remuneration and sales together with management expense ratio is observed. This result implies that director remuneration actually increases management discretion on their spending. Some arguments hold that improved corporate governance has reduced the need for dividends as a mechanism to control the agency problems of free cash flow. This is consistent with substitution hypothesis as discussed in literature. Overall, the results of the study show different relationships depending on the proxy/ measure used for agency costs.

The significant impact of dividends on agency costs that is witnessed when corporate governance measures are added on to the dividend model is one that is noteworthy. It could mean a board of directors has a great influence in determining the dividend policy. The board of directors may not necessarily influence agency costs but rather, indirectly, through the use of dividends.

5.3 RECOMMENDATIONS

This study did not show any meaningful relationship between dividend policy and agency costs and this finding warrants further research on potential reasons beyond those suspected in literature. Grullan and Michaely (2002) suggest that there is evidence which indicates that share repurchases serve as substitutes for dividends. The study conducted by Wesson (2015) showed that the pace at which companies were willing to buy back their own shares had increased dramatically over the past few years. Investors seemed to have welcomed this, as the share value of the remaining shareholders increased. It would be interesting to have a study that focuses on share repurchases and its ability to alleviate agency costs.

LIST OF REFERENCES

Abdelsalam, O., El-Masry, A., & Elsegini, S. (2008). Board composition, ownership structure and dividend policies in an emerging market: Further evidence from CASE 50. Managerial Finance, 34(12), 953-964.

Abor, J., & Fiador, V. (2013). Does corporate governance explain dividend policy in Sub-Saharan Africa?. *International Journal of Law and Management*, *55*(3), 201-225.

Adjaoud, F., & Ben-Amar, W. (2010). Corporate governance and dividend policy: shareholders' protection or expropriation?. *Journal of business finance & accounting*, *37*(5-6), 648-667.

Afshan, N., Chhetri, P., & Pradhan, S. (2011). Board, ownership structure & pay and firm performance: A literature review. *IUP Journal of Corporate Governance*, *10*(2), 82-92.Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from US firms?. *Journal of Financial research*, *26*(3), 371-387.

Afzal, M., & Sehrish, S. (2011). Ownership structure, board composition and dividend policy in Pakistan. *African Journal of Business Management*, *7*(11), 811-817.

Allen, F., Bernardo, A. E., & Welch, I. (2000). A theory of dividends based on tax clienteles. *The Journal of Finance*, *55*(6), 2499-2536.

Al-Kuwari, D. (2009). Determinants of the Dividend Policy of Companies Listed on Emerging Stock Exchanges: The Case of the Gulf Cooperation Council (GCC) Countries. *Global Economy & Finance Journal*, *2*(2), 38-63.

Al-Najjar, B. (2009). Dividend behaviour and smoothing new evidence from Jordanian panel data. *Studies in Economics and Finance*, *26*(3), 182-197.

Al-Najjar, B., & Hussainey, K. (2009). The association between dividend pay-out and outside directorships. *Journal of Applied Accounting Research*, *10*(1), 4-19.

Ang, J. S., Cole, R. A., & Lin, J. W. (2000). Agency costs and ownership structure. *The Journal of Finance*, *55*(1), 81-106.

Auret, C. J., & De Villiers, J. U. (2000). A comparison of earnings per share and dividends per share as explanatory variables for share price.

Balachandran, B., Mahamuni, M., & Dempsey, M. J. (2009). Special dividend announcements: Signaling or free cash flow hypothesis 'evidence from UK firms. *Finance and Corporate Governance Conference 2010 Paper*.

Barclay, M., & Holderness, C. D. Sheehan,(2009), Dividends and Corporate Shareholders. *Review of Financial Studies*, *22*, 2423-2455.

Bathala, C. T., Moon, K. P., & Rao, R. P. (1994). Managerial ownership, debt policy, and the impact of institutional holdings: An agency perspective. *Financial Management*, 38-50.

Batool, Z., & Javid, A. Y. (2014). Dividend policy and role of corporate governance in manufacturing sector of Pakistan. *Pakistan Institute of Development Economics*, (2014), 109.

Bebchuk, L. A., & Hamdani, A. (2009). The elusive quest for global governance standards. *University of Pennsylvania law review*, *157*(5), 1263-1317.

Belden, S., Fister, T., & Knapp, B. O. B. (2005). Dividends and directors: do outsiders reduce agency costs?. *Business and Society Review*, *110*(2), 171-180.

Bena, J., & Hanousek, J. (2006). Rent extraction by large shareholders: Evidence using dividend policy in the Czech Republic.

Benartzi, S., Michaely, R., & Thaler, R. (1997). Do changes in dividends signal the future or the past?. *The Journal of Finance*, *52*(3), 1007-1034.

Benjamin, S. J., & Mat Zain, M. (2015). Corporate governance and dividends payout: are they substitutes or complementary?. *Journal of Asia Business Studies*, *9*(2), 177-194.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of corporate finance*, *14*(3), 257-273.

Bhana, N. (1998). The share price reaction on the Johannesburg Share Exchange for special (extra) dividend announcements. *Investment Analysts Journal*, *27*(47), 5-15.

Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *Bell journal of economics*, *10*(1), 259-270.

Bøhren, Ø., Josefsen, M. G., & Steen, P. E. (2012). Stakeholder conflicts and dividend policy. *Journal of Banking & Finance*, *36*(10), 2852-2864.

Bokpin, G. A. (2011). Ownership structure, corporate governance and dividend performance on the Ghana Stock Exchange. *Journal of Applied Accounting Research*, *12*(1), 61-73.

Boivie, S., Lange, D., McDonald, M. L., & Westphal, J. D. (2011). Me or we: The effects of CEO organizational identification on agency costs. *Academy of Management Journal*, *54*(3), 551-576.

Borokhovich, K. A., Brunarski, K. R., Harman, Y., & Kehr, J. B. (2005). Dividends, corporate monitors and agency costs. *Financial Review*, *40*(1), 37-65.

Bozos, K., Nikolopoulos, K., & Ramgandhi, G. (2011). Dividend signaling under economic adversity: Evidence from the London Stock Exchange. *International Review of Financial Analysis*, *20*(5), 364-374.

Brav, A., Graham, J. R., Harvey, C. R., & Michaely, R. (2005). Pay-out policy in the 21st century. *Journal of financial economics*, *77*(3), 483-527.

Brickley, J. A., Coles, J. L., & Jarrell, G. (1997). Leadership structure: Separating the CEO and chairman of the board. *Journal of corporate Finance*, *3*(3), 189-220.

Broni, G., & Velentzas, J. (2012). Corporate Governance, Control and Individualism as a Definition of Business Success. The Idea of a "Post-Heroic" Leadership. *Procedia Economics and Finance*, *1*, 61-70.

Brown, L. D., & Caylor, M. L. (2006). Corporate governance and firm valuation. *Journal of accounting and public policy*, *25*(4), 409-434.

Borokhovich, K. A., Brunarski, K. R., Harman, Y., & Kehr, J. B. (2005). Dividends, corporate monitors and agency costs. *Financial Review*, *40*(1), 37-65.

Chang, K., Kang, E., & Li, Y. (2016). Effect of institutional ownership on dividends: An agency-theory-based analysis. *Journal of business research*, *69*(7), 2551-2559.

Chen, Q., Chen, X., Schipper, K., Xu, Y., & Xue, J. (2012). The sensitivity of corporate cash holdings to corporate governance. *The Review of Financial Studies*, *25*(12), 3610-3644.

Chen, X. C., & Yur-Austin, J. (2007). Re-measuring agency costs: The effectiveness of blockholders. *The Quarterly Review of Economics and Finance*, *47*(5), 588-601.

Claessens, S., & Fan, J. P. (2002). Corporate governance in Asia: A survey. *International Review of finance*, *3*(2), 71-103.

Claessens, S., Djankov, S., Fan, J. P., & Lang, L. H. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The journal of finance*, *57*(6), 2741-2771.

Cohen, T., & Uliana, E. (1990). An evaluation of corporate ownership structures on employee, management and shareholder compensation for JSE companies. *De Ratione*, *4*(1), 7-14.

Conyon, M. J. (1998). Directors' pay and turnover: an application to a sample of large UK firms. *Oxford Bulletin of Economics and Statistics*, *60*(4), 485-507.

Core, J. E. (2001). A review of the empirical disclosure literature: discussion. *Journal of Accounting and Economics*, *31*(1), 441-456.

Coulton, J. J., & Ruddock, C. (2011). Corporate pay-out policy in Australia and a test of the life-cycle theory. *Accounting & Finance*, *51*(2), 381-407.

Crutchley, C. E., Jensen, M. R., Jahera, J. S., & Raymond, J. E. (1999). Agency problems and the simultaneity of financial decision making: The role of institutional ownership. *International review of financial analysis*, *8*(2), 177-197.

Dasilas, A., & Leventis, S. (2011). Stock market reaction to dividend announcements: Evidence from the Greek stock market. *International Review of Economics & Finance*, *20*(2), 302-311.

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial economics*, *81*(2), 227-254.

Dedman, E., & Lin, S. W. J. (2002). Shareholder wealth effects of CEO departures: Evidence from the UK. *Journal of Corporate Finance*, *8*(1), 81-104.

Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial economics*, *89*(1), 62-82.

Dwivedi, N., & Jain, A. K. (2005). Corporate governance and performance of Indian firms: The effect of board size and ownership. *Employee Responsibilities and Rights Journal*, *17*(3), 161-172.

Easterbrook, F. H. (1984). Two agency-cost explanations of dividends. *The American Economic Review*, *74*(4), 650-659.

Erasmus, P. (2013). The influence of dividend yield and dividend stability on share returns: Implications for dividend policy formulation. *Journal of Economic and Financial Sciences*, *6*(1), 13-31.

Fama, E.F., & French, K.R. (2001). Disappearing dividends: changing firm characteristics or lower propensity to pay?. *Journal of Financial economics*, *60*(1), 3-43.

Farre-Mensa, J., Michaely, R., & Schmalz, M. (2014). Payout policy. *Annual Review of Financial Economics*, *6*(1), 75-134.

Firer, C., Gilbert, E., & Maytham, A. (2008). Dividend policy in South Africa. *Investment Analysts Journal*, *37*(68), 5-19.

Florackis, C. (2008). Agency costs and corporate governance mechanisms: evidence for UK firms. *International Journal of Managerial Finance*, *4*(1), 37-59.

Franklin, A., Bernado, A. E., & Welch, I. (2000). A theory of dividends based on tax clientele. *Journal of Finance*, *6*, 2499-2536.

Fuller, K. P., & Goldstein, M. A. (2011). Do dividends matter more in declining markets?. *Journal of Corporate Finance*, *17*(3), 457-473.

Ghosh, C., & Sirmans, C. F. (2006). Do managerial motives impact dividend decisions in REITs?. *The Journal of Real Estate Finance and Economics*, *32*(3), 327-355.

Gill, A., & Mathur, N. (2011). Board size, CEO duality, and the value of Canadian manufacturing firms. *Journal of Applied Finance and Banking*, *1*(3), 1.

Gill, A., & Obradovich, J. (2012). The impact of corporate governance and financial leverage on the value of American firms. *International Research Journal of Finance and Economics ISSN*, 1450-2887.

Graham, J. R., & Kumar, A. (2006). Do dividend clienteles exist? Evidence on dividend preferences of retail investors. *The Journal of Finance*, *61*(3), 1305-1336.

Grinstein, Y., & Michaely, R. (2005). Institutional holdings and pay-out policy. *The Journal of Finance*, *60*(3), 1389-1426.

Grullon, G., & Michaely, R. (2002). Dividends, share repurchases, and the substitution hypothesis. *the Journal of Finance*, *57*(4), 1649-1684.

Grossman, S. J., & Hart, O. D. (1988). One share-one vote and the market for corporate control. *Journal of financial economics*, *20*, 175-202.

Grullon, G., Michaely, R., Benartzi, S., & Thaler, R. H. (2005). Dividend changes do not signal changes in future profitability. *The Journal of Business*, *78*(5), 1659-1682.

Gul, S., Sajid, M., Razzaq, N., & Afzal, F. (2012). Agency cost, corporate governance and ownership structure (the case of Pakistan). *International Journal of Business and Social Science*, *3*(9).

Gugler, K., & Yurtoglu, B. B. (2003). Corporate governance and dividend pay-out policy in Germany. *European economic review*, *47*(4), 731-758.

Haniffa, R., & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, *33*(7-8), 1034-1062.

Harada, K., & Nguyen, P. (2011). Ownership concentration and dividend policy in Japan. *Managerial Finance*, *37*(4), 362-379.

Harford, J., Mansi, S.A., Maxwell, W.F. (2008). Corporate governance and firm cash holdings in the U.S. *Journal of Financial Economics 87, 535–555.*

Hashemijoo, M., Mahdavi-Ardekani, A., & Younesi, N. (2012). The impact of dividend policy on share price volatility in the Malaysian stock market. *Journal of Business Studies Quarterly*, 4(1), 111-129.

Henry, D. (2008). Corporate governance structure and the valuation of Australian firms: is there value in ticking the boxes? *Journal of Business Finance & Accounting*, *35*(7-8), 912-942.

Henry, D. (2010). Agency costs, corporate governance and ownership structure: evidence from Australia. *La Trobe University, Melbourne*, 1-44.

Hotchkiss, E. S., & Lawrence, S. (2007). Empirical evidence on the existence of dividend clienteles. *Available at SSRN 1001429.*

Hsiao, C. (1996). Logit and probit models. *The Econometrics of Panel Data*, (33) 410-428.

Hsiao, C. (2003). Analysis of panel data, 2nd. *Cambridge: Cambridge University Press. Kose, MA, ES Prasad and ME Terrones (2003), Financial Integration and Macroeconomic Volatility, IMF Staff Papers*, *50*, 119-142.

Hu, A., & Kumar, P. (2004). Managerial entrenchment and pay-out policy. *Journal of Financial and Quantitative Analysis*, *39*(04), 759-790.

Huang, W., & Paul, D. L. (2017). Institutional holdings, investment opportunities and dividend policy. *The Quarterly Review of Economics and Finance*, *64*, 152-161.

Hutchinson, M., & Gul, F. A. (2006). The effects of executive share options and investment opportunities on firms' accounting performance: Some Australian evidence. *The British Accounting Review*, *38*(3), 277-297.

Ibrahim, H., & Samad, F. A. (2011). Corporate governance mechanisms and performance of public-listed family-ownership in Malaysia. *International Journal of Economics and Finance*, *3*(1), 105.

Institute of Directors in Southern Africa (IoDSA). (1994) King Report on Governance for South Africa. www.IoDSA.co.za

Jensen, M. C. (1986). Agency cost of free cash flow, corporate finance, and takeovers. *Corporate Finance and Takeovers. American Economic Review*, *76*(2), 323-329.

Jensen, G. R., Lundstrum, L. L., & Miller, R. E. (2010). What do dividend reductions signal?. *Journal of Corporate Finance*, *16*(5), 736-747.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

John, K. and A. Knyazeva (2006), 'Payout Policy, Agency Conflicts, and Corporate Governance', *Working Paper (available on the Social Science Research Network, Electronic Library at: www.ssrn.com).*

Keenan, J. (2004). Corporate governance in UK/USA boardrooms. *Corporate governance: an international review*, *12*(2), 172-176.

Kouki, M., & Guizani, M. (2009). Ownership structure and dividend policy evidence from the Tunisian stock market. *European Journal of Scientific Research*, *25*(1), 42-53.

Latif, B. I. L. A. L., Shahid, M. N., Haq, M. Z. U., Waqas, H. M., & Arshad, A. R. B. A. B. (2013). Impact of corporate governance on firm performance: Evidence from sugar mills of Pakistan. *European Journal of Business and Management*, *5*(1), 51-59.

Kouki, M., & Guizani, M. (2009). Ownership structure and dividend policy evidence from the Tunisian stock market. *European Journal of Scientific Research*, *25*(1), 42-53.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *The journal of finance*, *55*(1), 1-33.

Lee, J. (2009). Executive performance-based remuneration, performance change and board structures. *The International Journal of Accounting*, *44*(2), 138-162.

Lefort, F., & Urzúa, F. (2008). Board independence, firm performance and ownership concentration: Evidence from Chile. *Journal of Business Research*, *61*(6), 615-622.

Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, *46*(2), 97-113.

Mak, Y. T., & Li, Y. (2001). Determinants of corporate ownership and board structure: evidence from Singapore. *Journal of Corporate Finance*, *7*(3), 235-256.

Malherbe, S. (2001). Corporate governance in South Africa, 2001. Discussed at Policy Dialogue Meeting on Corporate Governance and emerging Economies, OECD.

Mallin, C. (2002). The relationship between corporate governance, transparency and financial disclosure. *Corporate Governance: An International Review*, *10*(4), 253-255.

Mancinelli, L., & Ozkan, A. (2006). Ownership structure and dividend policy: Evidence from Italian firms. *European Journal of Finance*, *12*(03), 265-282.

Mangena, M., & Chamisa, E. (2008). Corporate governance and incidences of listing suspension by the JSE Securities Exchange of South Africa: An empirical analysis. *The International Journal of Accounting*, *43*(1), 28-44.

Mans-Kemp, N., & Viviers, S. (2015). Investigating board diversity in South Africa. *Journal of Economic and Financial Sciences*, *8*(2), 392-414.

Mansi; William F. Maxwell, J. H. S. A. (2008). Corporate governance and firm cash holdings in the US. *Journal of Financial Economics*, (3).

Maury, C. B., & Pajuste, A. (2002). Controlling shareholders, agency problems, and dividend policy in Finland. *LTA*, *1*(2), 15-45.

Marx, J. (2001). Empirical findings on directors' views on dividend policy. *Management Mehar, A. (2005). Corporate governance and dividend policy. Pakistan Economic and Social Review, 93-106.Dynamics*, *10*(2), 50-66.

McKnight, P. J., & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. *The quarterly review of economics and finance*, *49*(2), 139-158.

Mehrani, S., Moradi, M., & Eskandar, H. (2011). Ownership structure and dividend policy: Evidence from Iran. *African Journal of Business Management*, *5*(17), 7516.

Michaely, R. (1991). Ex-dividend day stock price behaviour: the case of the 1986 Tax Reform Act. *The Journal of Finance*, *46*(3), 845-859.

Michaely, R., Thaler, R. H., & Womack, K. L. (1995). Price reactions to dividend initiations and omissions: Overreaction or drift?. *The journal of finance*, *50*(2), 573-608.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *the Journal of Business*, *34*(4), 411-433.

Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information. *The Journal of finance*, *40*(4), 1031-1051.

Mitton, T. (2004). Corporate governance and dividend policy in emerging markets. *Emerging Markets Review*, *5*(4), 409-426.

Murphy, K. J. (1999). Executive compensation. *Handbook of Labor Economics*, *3*, 2485-2563.

Nissim, D., & Ziv, A. (2001). Dividend changes and future profitability. *Journal of Finance*, *56*(6), 2111-2133.

Nizar Al-Malkawi, H. A. (2007). Determinants of corporate dividend policy in Jordan: an application of the Tobit model. *Journal of Economic and Administrative Sciences*, *23*(2), 44-70.

Ntim, C. G. (2013). Corporate Governance, Affirmative Action and Firm Value in Post-apartheid South Africa: A Simultaneous Equation Approach. *African Development Review*, *25*(2), 148-172.

Ntim, C. G. (2013). An Integrated Corporate Governance Framework and Financial Performance in South African-Listed Corporations. *South African Journal of Economics*, *81*(3), 373-392.

Ntim, C. G., & Oseit, K. A. (2011). The impact of corporate board meetings on corporate performance in South Africa. *African Review of Economics and Finance*, *2*(2), 83-103.

Obradovich, J., & Gill, A. (2013). The impact of corporate governance and financial leverage on the value of American firms.

Officer, M. (2006). Dividend policy, dividend initiations, and governance. *Unpublished working paper. University of Southern California*.

Ooms, L. L., Archer, A. A., & Smit, E. V. D. M. (1987). The information content of dividends on the Johannesburg Stock Exchange: an empirical analysis. *South African Journal of Business Management*, *18*(4), 187-197.

Ramli, N. M. (2010). Ownership structure and dividend policy: Evidence from Malaysian companies. *International Review of Business Research Papers*, *6*(1), 170-180.

Rantapuska, E. (2008). Ex-dividend day trading: Who, how, and why?: Evidence from the Finnish market. *Journal of Financial Economics*, *88*(2), 355-374.

Renneboog, L., & Trojanowski, G. (2007). Control structures and pay-out policy. *Managerial Finance*, *33*(1), 43-64.

Richardson, S. (2006). Over-investment of free cash flow. *Review of accounting studies*, *11*(2-3), 159-189.

Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend pay-out ratios. *Journal of financial Research*, *5*(3), 249-259.

Sadka, G. (2007). Understanding stock price volatility: The role of earnings. *Journal of Accounting research*, *45*(1), 199-228.

Sajid, G., Muhammad, S., Nasir, R., & Farman, A. (2012). Agency cost, corporate governance and ownership structure: the case of Pakistan. International Journal of Business and Social Science, 3(9), 267-277.

Seida, J. A. (2001). Evidence of tax-clientele-related trading following dividend increases. *Journal of the American Taxation Association*, *23*(1), 1-21.

Séneque, P. J. C., & Gourley, B. M. (1983). Dividend policy and practice in South Africa. *Investment Analysts Journal*, *12*(21), 35-41.

Shah, S. Z. A., Ullah, W., & Hasnain, B. (2011). Impact of Ownership Structure on Dividend Policy of Firm (Evidence from Pakistan) International Conference on E-business. *Management and Economics*, *3*, 22-26.

Shefrin, H. M., & Thaler, R. H. (1988). The behavioural life-cycle hypothesis. *Economic inquiry*, *26*(4), 609-643.

Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of political economy*, *94*(3, Part 1), 461-488.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, *52*(2), 737-783.

Short, H., Zhang, H., & Keasey, K. (2002). The link between dividend policy and institutional ownership. *Journal of Corporate Finance*, *8*(2), 105-122.

Singh, M., & Davidson III, W. N. (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking & Finance*, *27*(5), 793-816.

South African Institute of Chartered Accountants (2015). Integrated Thinking-An exploratory survey, www.saica.co.za.

Subramaniam, R., Devi, S. S., & Marimuthu, M. (2011). Investment opportunity set and dividend policy in Malaysia. *African Journal of Business Management*, *5*(24), 10128.

Suwanna, T. (2012). Impacts of dividend announcement on stock return. *Procedia-Social and Behavioral Sciences*, *40*, 721-725.

Truong, T., & Heaney, R. (2007). Largest shareholder and dividend policy around the world. *The Quarterly Review of Economics and Finance*, *47*(5), 667-687.

Vermeulen, M., & Smit, E. (2011). Dividend pay-out and future earnings growth: A South African study. *South African Journal of Business Management*, *42*(4), 33-46.

Viviers, S., Firer, C., & Muller, C. (2013). A review of the dividend payments of South African listed companies during the period 1977-2011. *Management Dynamics: Journal of the Southern African Institute for Management Scientists*, *22*(4), 2-19.

Warrad, L., Abed, S., Khriasat, O., & Al-Sheikh, I. (2012). The effect of ownership structure on dividend pay-out policy: Evidence from Jordanian context. *International Journal of Economics and Finance*, *4*(2), 187.

Watts, R. (1973). The information content of dividends. *The Journal of Business*, *46*(2), 191-211.

Waweru, N. (2014). Determinants of quality corporate governance in Sub-Saharan Africa: evidence from Kenya and South Africa. *Managerial Auditing Journal*, *29*(5), 455-485.

Weir, C., Laing, D., & McKnight, P. J. (2002). Internal and external governance mechanisms: their impact on the performance of large UK public companies. *Journal of Business Finance & Accounting*, *29*(5-6), 579-611.

Wesson, N. (2015). *An empirical model of choice between share purchase and dividends for companies in selected JSE listed sectors* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

West, A. (2009). The ethics of corporate governance: A (South) African perspective. *International Journal of Law and Management*, *51*(1), 10-16.

Wiberg, D. (2008). *Ownership, Dividends, R&D and Retained Earnings–are institutional owners short-term oriented* (No. 152). Royal Institute of Technology, CESIS-Centre of Excellence for Science and Innovation Studies.

Wolff, J., & Auret, C. J. (2009). Do dividend changes in South Africa signal earnings changes?. *Journal for Studies in Economics & Econometrics*, *33*(3). 19-38

Wolmarans, H. P. (2000). Does "dividend investing" have value for the South African investor?. *Meditari Accountancy Research*, *8*(1), 229-247.

Wolmarans, H. P. (2003). Does Lintner's dividend model explain South African dividend payments?. *Meditari Accountancy Research*, *11*(1), 243-254.

|World Bank (2003). South Africa - Report on the observance of standards and codes http://documents.worldbank.org/curated/en/868341468307150933/South-Africa-Report-on-the-observance-of-standards-and-codes-ROSC-accounting-and-audi

Yarram, S. R., & Dollery, B. (2015). Corporate governance and financial policies: Influence of board characteristics on the dividend policy of Australian firms. *Managerial Finance*, *41*(3), 267-285.