

DETERMINANTS OF DIVIDEND PAYOUT IN KENYA;
EVIDENCE FROM MANUFACTURING FIRMS LISTED IN THE
NAIROBI SECURITY EXCHANGE

BY

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BY

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DECLARATION

I declare that this Dissertation is my original work and has not been previously published or submitted for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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ABSTRACT

The study investigated determinants of dividend pay-out among manufacturing firms listed in Nairobi Security Exchange that covered duration of 10 years effective from 2007 to 2016. Secondary data which comprised of audited financial statements was obtained from the website of the Capital Market Authority. Purposive sampling technique was applied to select 7 firms out of the 10 listed manufacturing firms. Dividend Pay-out measured by dividend per share over earnings per share is the dependent variable while Profitability, Liquidity and Leverage were predictor variables being investigated while Firm size was applied as a Moderating variable. Random Effect Tobit Model is applied in regression due to its suitability to accommodate zero censored values constituted among dependent variable. In addition, Descriptive Statistics is used for analytical purposes on data sampled in aspect of mean, mode and variance. Findings of the research reveals that Liquidity whose p-value is 0.097 hence greater than 0.05 ($p > 0.05$) insignificantly influences dividend pay-out. However, Leverage and Profitability do have p-values of 0.002 and 0.003 respectively which is less than 0.05, implying they significantly determine how manufacturing firms pay dividend to investors. Moderating variable Firm size increases precision of significance of the model from 0.15 to 0.02 hence considered as significant determinants of dividend pay-out. Based on this outcome, management ought to not only exercise due diligence when borrowing to prevent an entity from liquidation but also invest in noble projects that are geared towards profit maximization as empirically proven by the study. Future research in this context should consider inclusion of more independent variables like Earnings per share, like business risk, earnings per share, taxation, ownership in so doing accuracy is enhanced on proportionality of influence per variable on dividend pay-out. However, component of entity in terms of sector and economic empowerment of a region is paramount since it has a bearing on the end results of the entity which obvious play a vital role on how dividend is issued as alluded by Amarjit et al., (2010). Finally, the outcome of this study will enable potential investors understand the parameters to consider while making decision to invest in Kenya's manufacturing firms not forgetting insight to management on impact of dividend pay-out to entity reputation as proclaimed in signalling theory.

Key words; Dividend, Profitability, Liquidity, Leverage and Firm size

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DEDICATION

Dedicate this work to my Uncle Evans Shinali and my Family for relentless assistance and encouragement. Mother Lydia for believing in me.

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ACRONYMS AND ABBREVIATIONS

CI- Confidence Level

Coef – Coefficient

DPO – Dividend Pay-out

LEV = Leverage

LIQ = Liquidity

LR – Likelihood Ratio

NSE – Nairobi Security Exchange

Obs – Observations

OLS – Ordinary Linear Squares

PROF = Profitability

Prob – Probability

SIZE = Firm Size

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

It's no doubt that the culture of firms distributing dividends is not new since it dates back to ancient times approximately four centuries ago Baskin (1988). Dividend which is earnings distributed to shareholders as a reward for investment in an entity Pandey (2004) has been a contagious subject under investigation. Numerous scholars in the field of finance and economics have in the last five decades geared all their efforts towards finding out the determinants that influence how dividend policy is determined. Significant contributions have been noted from Lintner (1956), Modigliani and Miller (1961), Musiage et al., (2013) not forgetting the recent finding by Ikunda et al., (2016). Apparently, entire concept remains a mirage since no amicable solution has been agreed upon by scholars instead more conflicting results keep erupting that leaves the academic fraternity more divided Black (1976).

Nissim and Ziv (2001) acknowledges that the management of each entity have been entitled with vital mandate to draft the dividend policy, an instrument that shades light and guides how an entity will distribute dividend not only in a given financial year but subsequent years. The company prospects and objectives are among key components that are enumerated in this essential document, which tend to differ between various firms; this explains partly why outrageous variances in dividend payment are a norm, despite the fact that performance in a given year could have been equivalent in terms of profitability. Nevertheless, the managers are expected to exercise due diligence and cautious in making the noble decision on whether an entity should issue dividend or not.

Alli et al., (1983) noted that, the firm should ensure that it has enough funds to facilitate dividend payment this argument explains why most do pay dividends after they have earned significant profits to carter for internal routine operations and surplus be distributed to

investors. The rationale applied to how this matrix is determined has left more questions than solutions. Nevertheless, at the end of the day any reasonable investor expects the entity to issue a dividend after a successful final year as evidenced by empirical studies which have indicated a strong and positive relationship does exist between profitability and firms' behaviour towards dividend pay-out Mohammed and Mohammed (2012).

Fama and Blacomin (1968) in addition to above, noted that management are duty bound to exercise due diligence since the firm ought to be financially stable to sustain dividend pay-out in subsequent years besides the current financial year that profits are earned. Otherwise, frequent changes in dividend distribution might send out mixed signals to investors regarding future "going concern" of the entity in terms of financial muscles hence impairing the reputation earned. At the end of the day, investors' image towards the company is tainted hence negatively impacting the entity as eluded by (Abdullahi, 2011; Linter, 1956).

Ahmed and Javad (2009) in their contributions recognized a linkage between firms' liquidity and behaviour on how they pay dividend. Stable firms in terms of liquidity have the cash flow required to swiftly meet their current obligations when they fall due and be left with outstanding balances whose optional utility can be to reward investors through dividend pay-out contrary to those malnutrition in liquidity.

Easterbrook (1984) despite acknowledging that liquidity influences dividend, he furthermore alleged that since most institutions have a culture of misappropriation of liquid funds at their disposal. As a result investors adopted preference to have dividend paid as a control mechanism to mitigate vices like fraud, lucrative allowances not forgetting investment in negative NPV projects sentiments that have been emphasized by Jensen (1986).

Al-Twajry (2007) found out that the probability of a firm to obtain credit facilities is critical element before dividend is declared for example in a worse scenario whereby cash dividend is issued and a firm is unable to meet its current obligations then alternative option could be to obtain short term loan to supplement the liquidity deficit. Thus, it is prudent for management to evaluate its ability to access quick financing as it weighs out on options to pay shareholders dividend. Previous studies have pointed out that large firms have easy access to credit facilities due to the fact that they have collateral besides minimal risk levels to default, which positively contributes to their consistency in dividend pay-out (Holder et al., 1998; Mehta (2012).

Maina (2000) points out that external finance is expensive due to interest charges and risks of ultimate loss in the event of default in servicing the mortgage. In this context he advocates that firms ought to utilize internal sources of funding which are cheaper besides cautioning the firm from high leverage that can result into liquidation. This concept forms the basis of transactional cost theory, thus entities that rely heavily on external funding are constrained financially as a result of costs linked to loans. This explains why most of them do have inadequate funds to pay dividends as empirically shown that firms that are tide up on loans do have an inverse relationship towards dividend pay-out (Crutchley & Hensen, 1989; Higgins, 1972; Mueller 1967).

Fama (1974) affirmed these allegations and further emphasized that management should take precautions against borrowing beyond certain limits since it might plunge the firm into receivership. The practice is still adhered to date in terms tedious procedures followed among them the board committee to approve meetings and signing before management can go forth and acquire any loan. Likewise, financial institutions scrutinize any individual or firm that applies for such facilities before approval is issued.

Kania and Bacon (2005) found out that composition of how a firm is structured in terms of ownership do play a role on how dividend decision is made. Unlike individually or family owned entities whereby decision to pay dividend vests in one person who might not consider minority in terms of shareholdings despite the fact that they could be many in quantity, interests interested parties, Government entities do factor the clientele preferences on how dividend ought to be issued. This has made the public to embrace confidence towards investing in Government institutions. Aggregately, literature indicates that individual or family owned firms do pay fewer dividends which is attributed to self-interests to maximize profits by ploughing back into investments that they stand to gain more. Democracy demonstrated by capital ownership through shares rather than majority rule (Al-Kuwari (2009).

Jensen and Meckling (1976) inferred the interests of shareholders through the Clientele theory. Preferences of investors differ and agency is duty bound to try and accommodate both their needs in order to avoid withdrawal of shareholders whose interests are neglected. In specific the aged rely on dividend as a source of income for livelihood hence a prudent managers need to analyse type of shareholders the company constitutes and make a moderate conclusion on how dividend should be paid Shefrin and Thaler (1988).

Baker and Powell (2001) inconsideration of all the above challenges attributed to dividend policy, concluded that it is a cumbersome, tedious and undesirable process although management are obliged to undertake it annually due to a couple of underlying elements like symbolising financial stability of an entity, public image to investors and other stakeholders. Management therefore have no option but to exercise due diligence in equalising both investors and company prospects are ironed during dividend policy preparation Salehi and Rostami (2009).

Modigliani and Miller (1961) as one of the contributors of theories that attempt to solve dividend phenomenon pioneered Dividend Irrelevancy theory argues that in a perfect market whereby there exists free flow of information between parties on the market, hence no transaction costs and taxation, dividend pay-out is meaningless thus adds no value to the entity. The theory further suggests that when a company issues dividends its value declines by proportion of funds issued which can inversely be restored by issuing new shares of similar quantity, it sums up by concluding that powers over dividends rest in the hands of shareholders who can either buy or sell their shares whenever they feel like Brigham and Houston (2011).

Litzenberger and Ramaswamy (1979) in agreement with findings of MM theory despite immense criticism by researcher on basis that the theory is unrealistic in a normal market situation due to the fact that it violates or neglects basic market fundamental for example the absence of taxes and transaction costs not forgetting professional skills offered by agency. Based on this observation reasonable junk of economist allude to Dividend relevancy theory which states that payment of dividend does affect the value of the firm positively.

Lintner (1956) the author of Signalling theory asserts that when a firm issues dividend it's a sign of financial stability, growth and better performance which draws more investments into the entity hence increment in the value of capital and share per price, findings which were also echoed and empirically proven by (Asquith and Mullins 1983; Bhattacharya (1979)

Gordon and Walter (1963) on the other hand later founded Bird in hand theory which claims that investors prefer dividend today rather than in future since they are assured of what they can possess as opposed to ploughing back expecting better future rewards yet the market environment is predominantly full of unpredictable volatile events that are bound to occur which definitely depreciates the dividend per share value. Nevertheless, some investors

would rather retain their dividends due to impact of taxation that is imposed to cash dividends as opposed to capital gains which forms the basis for tax preference theory Brennan (1970).

1.1.1 Performance of Manufacturing Firms in Kenya

Kenya's manufacturing sector is rated the best among other industries in terms of dividend payment and the most significant sector among listed firms in NSE in terms of market capitalization according to Business daily newspaper on 4th February 2017. The literature singled out East Africa Cables, Bamburi cement and Tyre firm Sameer to be among the best firms that paid dividends in 2016 not forgetting East Africa Breweries (Kenya), B.O.C Kenya, Unga Group and Carbacid investment. However, it is interesting to note that a few other reputable firms in this category apparently failed to declare dividend over the same period, Mumias Sugar Company and Eveready East African which is an issue of concern that this investigation will attempt to unveil.

Dividends can be distributed to investors through various modes of transfer like property dividend, whereby dividends are issued in form of products of an entity while bond dividend is applicable when the firm has insufficient liquidity thus dividends are pegged to bonds for a future maturity. In scenario when the firms would like to enhance its market capitalization then stock dividend is preferred despite disputes by investors in fear of devaluation of shares which could be attributed to volatility in market as evidenced by Salehi and Rostami (2009).

Pandey (2008) recognized that cash dividend is the most commonly method of dividend payment that is applicable among local manufacturing firms, this can be attributed to the fact that it is faster, convenient and widely acceptable by both shareholders and managers followed by bonus issue which involves free distribution of shares to existing shareholders in respect to their shareholdings.

In the East Africa region, manufacturing industry in Kenya which comprises of 10 companies that are listed in the NSE is the most outstanding in performance as evidenced by World Bank report titled “Anchoring High Growth, can Manufacturing firms contribute more?” released by Diarietou Gaye country director in March 2015, furthermore it was ranked 17th position in Africa as a continent which is recommendable and indisputably has a bright future.

On the contrary the same report indicated that the sector contributes only 11 % of the Gross Domestic Product which translates to creating 12 % employment opportunities of the current labour force of about 2.3 million which is about 280,000 which is below par notwithstanding that it can only export about 26 % of Kenya merchandise of which 40 % is sold within the East Africa Community which implies that the sector has lost the market share abroad which can be linked to a couple of factors including lack of creativity and innovation, insufficient resources, low quality products and low productivity as a result of obsolete machines besides high costs to maintain, lack of competition thus stagnation and struggling with structural inefficiency among other factors and unskilled labour. Similar sentiments were echoed in a different report released by Centre for the study of African Economies (CSAE) 2000 which reaffirmed the 11 % performance of the industry.

Nevertheless this sector is considered instrumental if the country is to achieve any meaningful sustainable economic development; attributing to the fact that it yields high value returns on low output in addition the products are durable thus the prices are able to appreciate over time, no losses inclined to spoilage or stalemate which earns it advantage against agricultural sector that has low returns over huge output, products are perishable thus decline in value in case market is not readily available and above all it's bound to environmental challenges like drought and floods which adversely affect its productivity and dependents as affirmed by (Tybout, 2000).

1.2 Statement of problem

Dividend payment being one of the major drivers for investing in stocks has been centre of interest among stakeholders mainly investors, management and academic fraternity in attempt to find-out the determinants of dividend pay-out. Apparently, besides the numerous studies that have been done on this subject no amicable solution has been agreed upon Black (1976) hence resulting to dividend policy being categorized as one of the top ten most tricky puzzle in the field of economics and finance Brealey and Myers (2005). The literature available points out that profitability, liquidity, earnings per share, leverage, taxation, ownership, firm size and business risk to be among the dominant independent variables that influence dividend pay-out as empirically evidenced by (Al-Kuwari, 2009; Essa et al.,2012; Kartal, 2015; Nishat, 2015); Nyamosi, 2016, Ikunda et al., 2016).

Khan and Ahmad (2017) on investigating pharmaceutical firms in Pakistan stock exchange affirmed that profitability, liquidity, growth opportunities and audit type significantly influence dividend pay-out sentiments that are echoed by above scholars. However, on analysing Lebanese banks and UAE companies it was empirically proven that profitability insignificantly impacts dividend pay-out as affirmed by (Anupam, 2012; Maladjian and Khoury, 2014).

Baker and Gandi (2007) clarified that various firms have different budget plans on how to expense the income earned in terms of profitability for example more often medium firms opt to reinvest their profits into viable project to enhance growth and capitalization. Hence, in this respect it is immaterial to generalise that increment in profitability is translated directly into dividends. This conspicuously confirms the alleged controversy on profitability as an independent variable.

Anil and Kapoor (2008) furthermore, noted that large firm have easy accessibility to credit facilities since their asset portfolio act as collateral to obtain loans. Due to this benefit they have potential to rapidly expand through investment in efficient modern technological machineries that have capacity to significantly increase productivity and quality. As a result they have upper hand to control market dynamics through reasonable pricing of their products as a result of economies of scale in addition to quality which embraces value for money. Nevertheless, different cohorts of scholars have urged among the recent studies revealed that firm size negatively influence dividend pay-out by recent study Farma and Khan (2017).

Ikunda et al., (2016) in his investigation shades light on qualitative variable that is ignored, Corporate Governance. The research successfully linked corporate governance to influence dividend pay-out although it lacked statistical evidence. This implies some fundamental components that impact dividend pay-out are not incorporated in regression analysis because of measurability aspect despite the fact that they significantly influence dividend. At the end of the day the decision on how much dividend ought to be paid is vested into the agency, hence the influence of managers is noble on proportion of dividend pay-out Omwenga and Nyamosi, (2016).

Musiega et al., (2013) analysed dividend determinants of local non-financial firms listed in NSE. Research found out that return on equity, current earnings and firms growth positively impacted dividend pay-out inclusive of moderating variables business risk and size whose impact was significance. This contribution outstanding, however, the study only captured firms that paid dividend as a result the comparison of what could have necessitated dividend payment was not clear. In addition, all non-financial firms were consolidated together yet some sectors like manufacturing firms do encounter different operational challenges that

impact manner in which they pay dividend compared to service sector as alluded by Amarjit et al., (2010).

Based on this shortcomings the current study has narrowed down its investigations to manufacturing firms due to their unique features like huge capital investment, depreciation on non-current assets and impact on obsolete. Furthermore, all manufacturing firms regardless of whether they paid dividend or not have been examined with objective to find out predictor variables that necessitated dividend pay-out. The harmonization of study to specific sector is intended to give a solution on controversial findings elaborated above among independent variables hence bring sanity in this dividend phenomenon puzzle.

1.3 General Objective

To determine factors that affect dividend pay-out among Manufacturing Companies listed in Nairobi Securities Exchange.

1.3.1 Specific Objective

- 1.** To establish the effect of profitability on dividend pay-out among the manufacturing companies listed on Nairobi Security Exchange
- 2.** To find out the effect of liquidity in relation to dividend pay-out among the manufacturing firms listed in Nairobi Security Exchange
- 3.** To examine the effect of a firms leverage ratio in relation to dividend pay-out among manufacturing firms listed in Nairobi Security Exchange
- 4.** To determine the mediating effect of firms size on dividend pay-out among manufacturing firms listed in Nairobi Security Exchange

1.3.2 Research Question

1. Do increments in profitability affect dividend pay-out among manufacturing firms listed in Nairobi security exchange?
2. Does liquidity level of a firm affect dividend pay-out among manufacturing firms listed in Nairobi security exchange?
3. Does leverage ratio of a firm affect dividend pay-out among manufacturing firms listed in Nairobi security exchange?
4. Do mediating effects of firm size affect dividend pay-out among manufacturing firms listed in Nairobi security exchange?

1.4 Scope of Study

The research will entail 7 of the 10 listed manufacturing firms in the NSE which comprises of B.O.C Kenya ltd, British American Tobacco Kenya ltd, Carbacid Investment ltd, East African Breweries ltd, Mumias Sugar Company ltd, Unga Group ltd, Eveready East Africa ltd. The study will sought to find out how these entities paid dividend for the period of 10 years (2007 - 2016) thus able to comprehensively evaluate the predictors that have played significant role in influencing dividend policy. During the study period covered some firms have issued dividends while others apparently failed thus necessitating conducive environment for investigations into this subject why dividend was paid or otherwise.

1.5 Significance of the study

The research will add value to the continued research on dividend determinants as we understand no consensus has been reached, furthermore majority of previous literature on this subject has been based in developed countries whose findings could be different to

developing states due to economic and political instabilities. Thus the study will shade clarity and emphasis to findings reflecting less developed countries subject to this topic.

Management of companies will be enriched with reliable parameters that should be applied in future to tackle the perennial trouble linked to dividend policy. In addition, the impact of dividend pay-out in relation to firm performance has been highlighted which is relevant to managers insight in making this critical decision.

Both local and international investors willing to invest in Manufacturing firms in Kenya will find vital information to base on in making this decision. Among the ingredients packaged in this category includes predictors that ought to indicate future growth of the entity hence probability to pay dividend besides assurance as a going concern. It is no doubt that investors will make prudent or informed decisions based on this information.

Government will be informed about the performance of manufacturing firms and how dividend pay-out positively or negatively influences the company, in this context they will be able to formulate relevant policies that will enhance growth in industries based on findings on the study.

Last but not least, the general public will gain knowledge on performance of manufacturing firms and the basic indicators to consider when searching for an entity to invest into.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The chapter has examines theories related to dividend policy and empirical studies that have been carried out in relation to the objectives to be investigated in addition to relationship between each independent variable and the dependent variable. It ends up with a brief summary of the entire topic and conceptual framework.

2.2 Theoretical Framework

2.2.1 Modigliani-Miller Dividend Irrelevance Theory

Franco Modigliani and Merton Miller founded the MM Dividend Irrelevancy theory in 1961, as the name suggests it advocates that dividends do not influence value of the company in a perfect market condition. The theory is based on three assumptions that ought to be present in order for the theory to be applicable. First; no single individual has control over the market share price or security under perfect market. According to MM, in a scenario whereby all players in the market have access to information which is readily available at free of cost thus based on this assumption the cost of transacting business will automatically be nil since barriers attributed to lack of information is evaded. In the long run sellers are linked directly to buyers hence tax will be eradicated which has been seen to be the main hindrances to equal playing ground to all participants in the market.

Secondly, the theory assumes that all the participants in the market have identical information, this presumption includes the professional skills acquired by both investors and managers to enable them make prudent decisions regarding the business in terms of prediction of current and future trend of shares in the market, based on this aspect of equal asymmetric of information, an entity can only increase its dividend when they expect an

increase in earnings per share thus as supported by signalling theory MM affirms that shareholders could be interested in signal effect of positive future returns but not the increase in dividends Brealey and Myers (2000).

Thirdly, the theory assumes that all the players are rational thus they have preference towards accumulation of more wealth. MM considers it immaterial on whether the shareholders will add wealth in form of stocks, capital gains or dividend payment. When a firm pays dividends it is obliged to issue new shares in order to raise the required funds, hence issuance of new stocks results to decline in price of the existing stocks in equal proportions as dividend paid hence MM conclusions that dividend payment does not impact value of the firm rather dividend is issued residually meaning dividend is issued as the least option when the company has exhausted all the Net Present Value (NPV) projects.

Brigham and Houston (2011) affirms that according to MM dividend Irrelevance theory the ultimate power over dividends vests in the hands of shareholders, in the event whereby a firm declares dividend pay-out against the will of investors then they can turn to alternative of buying extra shares into the company implying the dividend issued is converted into bonus issue and vice versa in case of failure to pay dividend against desire of owners.

Miller and Scholes (1978) argues out that despite varied tax system applied in the United States on dividend and capital gains they do not impact on value of the firm hence concurs with sentiments alluded in MM Dividend Irrelevancy theory. However, to the contrary some scholars have refuted these findings on grounds that management do adjust payment of dividend in respect to tax preferences of investors, thus no relationship between dividends and stocks returns Black and Scholes (1974).

The ultimate power of investors to control or manipulate dividend pay-out through choices to either buy or sale shares is an interesting aspect that the current study will attempt to prove

its relevancy and assumptions inclined to perfect market that forms the basis of this theory raises concerns on applicability nevertheless the outcome will enlighten learners if MM narrative is irrelevant to dividend.

2.2.2 Signalling Theory

Lintner (1956) authored Signalling theory which suggests that when a firm declares dividend it symbolizes financial soundness or stability, growth in terms of expansion and sound management which sends out a positive signal to the public. This ignites investors to become part of the firm through buying of shares whose value is presumed to be attractive thus expected to yield better returns, the demand for company shares increases while supply declines which results to increment of price per share or stocks. A study that sampled manufacturing firms listed in NSE provides empirical evidence which concluded that there is positive relationship between dividend policy and stock prices Nyamosi and omwenga (2016).

Bhattacharya (1979) contributions on this subject asserts that significant increment in price per share is witness across the board to firms that pay dividend which is attributed to increased investors demand against limited supply. Further investigation on the same subject using empirical formula successfully linked increase in dividend pay-out to a simultaneous increment in the investor's wealth despite the challenge of substantiating the findings they concluded that dividends contain information which is not accessible in other accounts data which opens up gap for future research Asquith and Mullins (1983).

(Aharony & Swary, 1980; Asquith & Mullins, 1986; Healy & Palepu, 1988; Kalay & Loewenstein, 1985) performed subsequent analysis on asymmetric information that exists between managers and investors. They enormously came to a conclusion that modern management do apply dividend pay-out as a marketing instrument to signal confidential

information about a company's performance to the public. This outcome conflicts with MM theory which is based on assumption that both shareholders and managers have equal access to information pertaining the business. The professionalism and skills possessed by the agency equips him with relevant knowledge to predict market trends and likelihood of performance of shares as opposed to shareholders Miller and Rock, (1985).

Further analysis does reveal that immense influence of dividend pay-out has negatively lured managers into unethical practices of cooking the financial statements to impress the public of how better the entity is performing. Consequently, they end up paying dividends strategically to draw more investors to purchase the shares. Britam Company Kenya is an outstanding example in the recent time that sacrificed to issue dividends besides loss earned in its financial performance statement of 2015.

It is on the basis of such allegations linked to the influence of signalling theory that led to isolated punch of scholars drive criticism on relevancy of this theory. According to their perceptive, some information documented is unreliable hence need to scrutinize contents in the public domain specifically unaudited financial statements before investors can rely on them to make investment decisions (Pettit, 1972; Black, 1976).

2.2.3 The "Bird in Hand" Theory

Gordon (1959) pioneer of the Bird in Hand theory based his argument on unpredictability of the market due to volatility. Gordon suggests that it is in the best interest of shareholders to first realize wealth then they can utilize it, based on this analogy most shareholders would prefer to be paid their dividends as they fall due (now) as opposed to be paid later or in future. Investors fear that if their dividends are retained in form of ploughing back into the

organization by management, then in the event of market fluctuations, it can lead to devaluation of the securities hence decline in share per value notwithstanding that in the event of receivership or liquidation they stand a higher risk of losing everything.

Bratton and William, (2005) echoed similar sentiments that investors do have a higher affinity towards cash dividends in order to avert future risks that could be beyond human control. Furthermore, they contextualized current value of shares in form of dividends to be valuable since its purchasing power is higher compared to future. Therefore, based on this logic it is prudent for investors to rather obtain the cash dividend and reinvest in fixed assets like land that are able appreciate over time to substitute any decline attributed to inflation.

Keown et al., (2007) while agreeing to predecessors acknowledged the principle that stock price is determined by markets forces and not by the managers, thus element of unpredictability is reality, besides its argued that most managers of firms are conservative in their financing policies hence dividends in future will be based or determined on the basis of a pay-out ratio. Shareholders choice of whether to retain shares or not is all about risk that is beyond agency control, hence better option would be to be paid dividend today.

The huge capital required by manufacturing firms is no doubt an obstacle towards dividend pay-out and managers encounter uphill task to make an opportunity cost between the two. In essence stakeholder ought to have a final thumb ruling on how dividends are distributed apparently all powers are vested in agency who drafts the dividend policy. Nevertheless, on the other hand investors have applied orthodox means like disposing of shareholdings to compel agency to give in their demands, this has made management to understand the type of investors they do have and consider their preferences on dividends.

2.2.4 Agency Cost Theory

Jensen and Meckling (1976) described agency theory as a cost that arises between the principals (Shareholders) and agents (managers) in a process whereby Shareholders delegate the obligations of managing business affairs to managers referred to as the agent and grants them powers to enforce rules and regulations geared towards achieving the goals and mission of the entity.

Several cases have been documented subject to vice of misappropriation of funds by agency in form of exorbitant perks, high remuneration beyond financial capacity of the firm not forgetting negative net present value projects that do not benefit the company in the long run. In attempt to safeguard their interests, investors demand for payment of excess liquidity within possession as dividends as a control measure to prevent syphoning of funds Farinha and Jorge, (2003).

Easterbrook (1984) in his study emphasized earlier allegations that payment of dividends reduces funds availability at agency disposal hence mitigates probability of misappropriation of resources. However, entire exercise is futile considering the fact that majority of investors are unprofessional and a few who might have the relevant knowledge lack time to commit in daily transactions of the business. This grants the agency a blanket cheque to diligently plan and execute their fraud. The only weapon at shareholders disposal is to ensure that part of them are positively involved in policy making to put stringent internal and external controls that could include external auditors who are independent and report to the board directly. Its only through such controls that mischief can be unravelled and necessary remedies applied rather than reacting to aftermath losses Allen et al., (2000).

Raheja (2005) shades light on the two main ways in which dividend payment can be applied to mitigate agency costs; First, it is critical to distinguish between ownership of an entity and control or management, according to him if the two are tied-up then there is a likelihood of managers to take advantage and invest in negative NPV which could be at their own benefit. Secondly, dividend pay-out is a signal that a firm is performing better hence chances of issuing new securities in the near future are high, as a result it is subject to scrutiny by the capital market authorities thus enhancing accountability and transparency in operations besides reducing cash exposure to misappropriation Jensen (1996).

2.2.5 Clientele Theory

Shefrin and Thaler (1988) states that Clientele theory is founded on basis that investors preference for dividend could be attributed to institutional features or behavioural inclination, they established from their study that older investors tend to prefer dividend paying stocks or firms as opposed to young investors which is attributed to the fact that older fox rely on this dividends as a source of income for their upkeep while youthful investors are still in employment besides being energy to actively get involved in meaningful source of income generating activities.

Allen et al.,(2000) points out that shareholders are broadly recognized as institutional and retail investors in accordance to their contributions in terms of shares. Investigations in this context presented a model which confirmed that institutional investors are less taxed thus they tend to have a high affinity towards dividend as opposed to retail investors similar results were reached were echoed in a different study that affirmed that are high on institutional investors who pays dividends Hotchkiss and Lawrence (2012).

Brav and Heaton (1997) acknowledge that this has led to ideology whereby substantial ratio of investors would rather hold up their dividends until maturity in order to take

advantage of accrued benefits. On the other hand managers utilize this scenario to monitor and evaluate the behavioural trend of shareholders hence guide them in future decisions concerning dividend pay-out Graham et al., (2005).

However, Grinstein and Michaely (2005) came out with controversial findings, in their analysis it was crystal clear that allegations about institutional investors to influence dividend pay-out was not supported empirical evidence. Instead, the study concluded that institutions prefer firms that pay low dividends so that the balances are diverted into other lines of business or investments.

Graham and Kumar (2006) found empirical evidence that supports existence of dividend clientele among retail investors, according to the findings retail investors possess a huge junk of dividend paying stock despite the fact that they are in small portions. The aspect of behavioural inclination is more among this group since they tend to invest only after firms have declared lucrative dividends (Lee, 1992; Barber & Odean, 2008).

Becker et al., (2007) in investigating impact of investors when an entity is situated within geographical location, found out that, due to pressure from local investors who constitute majority shareholding the management might have less option but to give in their demands to pay dividends.

In application of clientele theory the study will establish if preferences of shareholders do impact how a firm pays its dividends as alleged by this theory or if their the impact is insignificant thus management do not base this factor in considering portion of dividend to be declared.

2.3 Empirical Literature

2.3.1 Effect of Profitability on Dividend

According to Anil and Kapoor (2008) dividend pay-out involves out flow of funds, hence for the process to be successful a firm is required to locate resources in this respect which can only be done when the company makes net profit, as a result he asserts in his study that profitability is a key indicators of dividend pay-out. The finding is undisputable because any reasonable mind can buy the idea although numerous scholars have empirical evidence in this context and in solidarity they are in agreement that current and past profits of a company are fundamental factors which impact on dividend pay-out (Fama & French, 2000; Han et al., 1999; Jensen et al., 1992; Pruitt & Gitman, 1991).

(Amidu & Abor, 2006; Najjar, 2009) carried out investigations on subject which sampled firms in Jordan and Ghana revealed that the influence of profitability towards dividend is of a high magnitude that it cuts across all firms regardless whether they are larger or smaller in size nor older or younger in terms of existence and above all its impact is felt in both developed economies as well as up-coming economies. A further analysis that investigated GCC countries showed positive significant relationship between profitability and firms trend on dividend pay-out Alkuwar (2009).

Mohammed and Mohammed (2012) who studied factors that influence dividend policy on Industrial firms listed in Amman stock exchange and it was no strange that similar outcome were replicated that profitability which is represented by earnings per share (EPS) was a major factor in determination of dividend pay-out. In Kenya, Non-Financial firms listed on NSE were analysed and descriptive statistics and multiple regression was applied and the empirical findings affirmed that even in developing economies profitability equated as Return on Equity stood out as a major predictor that impacts dividend policy Ondiek, et al., (2013).

Myers and Bacon (2004) identified that a positive relationship does exist between firms that make profits to consistently pay dividend to investors, he further noted a significant increment in dividend pay-out which could be linked to respective growth in profitability of the sampled firms. This explains effectiveness of profitability hence it cannot be ignored by management, in fact a different research has inferred that agency is reluctant to reduce dividend pay-out due to negative impression it can insulate among the investors whose effect are bound to influence the institution inversely Arnott and Asness (2003).

Bose and Husain (2011) studied determinants of dividend which sampled five sectors both the manufacturing and financial namely Pharmaceutical, Finance, Electricity, Steel and Machinery, the findings emphasized the subsequent connectivity of notable simultaneous increment in the ratio dividend pay-out is issued as profitability of the firm improved while vice versa when contrary performance of an entity is recorded as evidenced by (Aivazian & Cleary, 2003; Al Kuwari, 2009; Kun Li & Chung-Hua 2012; Naceur et al. 2006).

Amidu (2007) who sought to find out correlation between performance and dividend policy in Ghana, concludes that positive and significant relationship exists between return on assets, return on equity and dividend pay-out. The results were affirmation of earlier study done which alluded that causal relationship do exist between dividend policy and performance Farsio et al., (2004).

Although the concept of taxation has remained controversial to be considered as a determinant of dividend pay-out due to the fact that it applies across all firms, it has been argued out that profit after tax has the strongest relationship with dividend per share the higher the net profits the reciprocating impact on dividend pay-out Appannan and Sim (2011).

Kartal (2015) in recent times, went further to investigate determinants of target dividend pay-out ratio (TDPR) which sampled manufacturing firms, in particular cement firms for the period between 2002 to 2012, panel autoregressive methodology was applied and empirical findings showed that in the long run profitability is key in determination of target dividend pay-out together with growth opportunities and corporation tax.

Despite immense evidence to link profitability to positively impact dividend payment, it is interesting to note that some scholars have come up to strongly dispute these findings. First, they have urged out its not obvious that profits earned are converted into dividends since firms utilize the income to expand the entity by investing in NPV projects, enhance entity capitalization and service debts.

Anupam (2012) investigated UAE companies between 2005 to 2009, the results showed that profitability measured by ROE has a negative relationship with dividend policy although critics have challenged the findings since they are not statistically backed. However, another investigation that focussed on Bangladesh showed that a negative significance relationship do exist between dividend pay-out and earnings per share Taher (2012).

Further debate by scholars who object to performance of a firm to translate into dividend do claim that managers are business oriented and opportunist hence would prioritize to reinvest net profit in hope of better future returns and less tax, which remains valid in real market situation as evidenced in a research done by (Chai-ying, 2012; Sajid et al., 2012).

In the context of manufacturing firms, which are considered to be unique due to huge investment required in form of capital in order to commence, depreciation charged on fixed assets which form a junk of its portfolio not forgetting aspect of obsolescence which has a big blow on this sector because replacement of machinery is a capital expenditure. This led to conclusion that not all the independent variables that influence service sector can

automatically impact dividend when it comes to manufacturing firms, hence the study will examine if this observations are true or false Amarjit et al., (2010)

2.3.2 Effect of Liquidity on Dividend

Firms' capability to issue bonds on the capital markets or obtain funds in form of loans over a short period of time is termed as liquidity. The financial literature strongly acknowledges liquidity of a firm to have significant bearing towards payment of dividend. The agency theory forms the background that infers that available liquidity ought to be put in use otherwise chances of being misappropriated by management is high, thus it has been argued out that one of the most appropriate ways of effective utilization of this funds is through dividend pay-out Jensen (1996).

In the context of layman point of view, prudent management is obliged to analyse excess funds available after apportioning cash to cater for current obligations before making the critical decision to issue dividends, otherwise this well-intended motion might lead the entity into financial deficit which is costly to redeem considering the options of mortgage which is costly Ahmed and Javad (2009).

Kanwal and Kapoor (2008) in his contribution, analysed Information and Technological sectors in India, independent variables included profitability, corporate tax, sales growth, and liquidity and growth opportunities. Findings inferred that liquidity of the firm significantly influenced how an entity paid its dividend; they remarked that stable entity in terms of liquidity has the financial muscles to meet current business obligations in addition to short term investment projects. Due to this advantage they often issue dividend without any constraints that could be linked to incapacitating future operations of the organization as a result of having paid dividend hence faced with finance deficits to meet it current obligations as a going concern entity.

Hafeez and Attiya (2008) in a different study but on the same content sought to find out the determinants of dividend policy among non-financial firms listed on Karachi stock exchange, they concluded that market liquidity of a firm has a positive impact on dividend payments among other independent variables sentiments which were echoed by John and Muthusamy (2010).

Musiega et al., (2013) carried out a local study whose objective was to establish determinants of dividend pay-out among non-financial firms that are listed at NSE, it was found out that liquidity is fundamental factor in dividend formulation policy. It is no doubt that majority of scholars are in consensus that liquidity of a firm is significant in determination of dividend payment among the numerous studies in support of this findings include (Fama & French, 2002; Naceur et al. 2005; Amidu & Abor, 2006; Naeem & Nasr, 2007; Avil & Kapoor, 2008; Ahmed & Javid, 2009; Okpara, 2010).

Okpara and Chigozie (2010) on investigating dividend pay-out determinants in Nigeria, found out that current ratio has a positive relationship with the way dividend will be declared, implying firms that have stable liquidity tend to pay dividends whose outcome in agreement with earlier study that had affirmed that cash flow, currents assets and current earnings positively influence dividend pay-out of a company Musa and Fodio (2009).

Khan and Ahmad (2017) carried out an empirical study with objective of finding out determinants of dividend pay-out among the manufacturing firms specifically Pharmaceutical companies that are listed at the Pakistan Stock Exchange (PSX), profitability, growth opportunities, business risk, liquidity, firm size, leverage, taxation and audit type were used as independent variables while dependent variable was dividend pay-out. Multiple linear regressions was used to detect any correlation among the variables, the outcome revealed that

liquidity is significant in dividend pay-out decision in addition to audit type, profitability and investment opportunities.

Anupam (2012) continued to affirm controversial outcomes, in this case he investigated UAE firms and noted that liquidity insignificantly influence dividend pay-out. While defending the outcome, it was clear that excess liquidity was the backbone for misappropriation of funds through investment in negative Net Present Value projects, selfish increment of allowances and perks by managers as alluded in the agency cost theory. Therefore liquidity raises impulse expenditure, fraud and accounting malpractices contrary to enhancing dividend pay-out.

Komrattanapanya and Suntrauk (2013) reaffirmed similar results while attributing the insignificance of liquidity is attributed to the fact that entities with high liquidity prefer to invest more in new projects hence less consideration is given towards dividend payment hence refuting the direct implication that excess liquidity is transferred into dividend pay-out (Banerjee et al., 2007; Naeem & Nasr, 2007).

In summery both arguments raised both pro and against liquidity are fundamental above all they have been supported by empirical evidence which cannot be ignored. The research will evaluate how liquidity will influence dividend pay-out in the manufacturing firms listed in NSE.

2.3.3 Effect of Leverage on Dividend

More often than not most entities do require credit facilities to finance acquisition of capital assets that require huge finance like machineries, land, and plant. Hence leverage which is measured as debt to equity symbolises the proportion of equity and debt that has been used to

acquire fixed assets. Therefore studies have indicated that highly leveraged firms affect the manner, in which an entity would pay dividend to its investors Pruitt and Gitman (1991).

(Mollah et al., (2001) whose findings allude to above conclusion, clarified that the high cost of loan repayment which is inclusive of interest rate do consume a reasonable junk of income that could be earned from its transaction hence the company is left with less funds to cater for other compulsory expenses recurring expenses like salary, utilities, creditors among others. At the end of the day the firm is not able to issue dividend despite the fact it might be willing but finances do not allow.

Muhammad and Saddia (2014) investigated dividend pay-out among manufacturing firms in Pakistan which analysed 44 entities between 2006 and 2011 using OLS technique for analysis, the outcome showed that there is a significant negative relationship between leverage and dividend pay-out. Similar outcome was echoed by Essa (2012).

Transactional cost theory intensively captures the perspectives explained above, the theory based on the fact that borrowed loan do accrue additional charges like interest and other undisclosed bank charges. The firm has an obligation to prioritise repayment of this mortgage which eventually impacts its financial strength to pay dividend as supported by (Agrawal and Jayaraman, 1994; Al-Malkawi, 2005; Gugler and Yurtoglu, 2003).

Nevertheless, the impact of leverage on dividend pay-out could either be positive or negative depending on various aspects like the how effective the firm utilises the credit facility to achieve the intended objective. If the credit facilities are wisely utilized then the returns could supersede the costs of repayment thus implying the firm is capable to regenerate extra income thus financial sound which could simultaneously led to dividend pay-out while repaying the mortgage.

However, John and Muthusamy (2010) empirically proved that leverage do influence dividend policy positively, to their analysis despite the fact that an entity could be in debt its possible to buoyant the situation and still pay dividend especially when the projects invested into are able to give quick returns. The controversial outcome although not strongly agreeable by most scholars in real business scenario cannot be neglected.

Gupta and Banga (2010) who analysed firms listed in BSE concurred with above findings, in conclusion they inferred that leverage and liquidity significantly influenced dividend payment among the industries, this could be attributed to the fact that some firms despite being highly geared could pay dividends as a signalling to retain investors that might withdraw their investments in fear of liquidation of the entity. In Kenya British America Tobacco is on record of paying dividend in 2015 while its financial position was showed negative

2.3.4 Effect of Firm size on Dividend

Lloyd et al., (1985) modified the model referred to as Rozeffs model which had been conceptualized by Rozeff, to make it “firm size” thus to be applied as an additional variable in regression precisely in dividend determination. It’s no doubt the idea was logic hence applied in subsequent studies by numerous researchers Anil and Kapoor (2008).

Al-Twajry (2007) positively argued out that large firms have high capital asset base which qualifies them to easy accessibility to credit facilities based on the fact that they act as collateral against loan. Financial institutions do evaluate the credibility of a borrower to repay the loan hence able to earn meaningful interest as a source of income besides reduction of bad debts which have led to downfall of bigger organizations. In this context larger organizations have an upper hand to credit facilities as emphasized by Holder et al., (1998).

As a result of easy access to loans from financial institutions, large firms have added advantage against their counterparts (smaller firms) in various ways despite operating in similar market conditions. First, quick expansion due to the fact that they can obtain funds in this respect at without constrains which if invested in noble projects will definitely yield higher returns which is able to repay the loan and play a role in the trend on how dividend policy will be drafted. It's on this basis that several studies have linked firm size to significantly contribute to dividend pay-out Holder et al., (1998).

Kun Li and ChungHua (2012) besides agreeing to above conclusions noted that in addition to ability to obtain funds from capital markets they have developed trust with financial organization which enable them to get credit finance at a lower cost. This implies, the aggregate cost of debt finance is lower compared to smaller entities yet they are more aggrieved. At the end of the day, large firms enjoy privileges which positively add to net profit earned in a financial year and hence ultimate reward to investors through enhanced dividend pay-out.

Maina (2000) on analysis relevance of firms size focussed on a different dimension, according to his investigations, large firms do have various business lines that enable them generate revenue without reliance on one project which could be subject to business risk resulting to decline in it financial stability. He urged out since large firms are able to generate internal income from various projects they might not require external sources of finances like loans which are subject to interest charges, thus they do utilize internal sources do expand which is cheaper and easily available. The costs that could have been incurred by the entity to cater for debt finance are distributed as dividend to investors. These findings made him conclude that a close correlation exists between firm size and dividend pay-out.

Anupam (2012) affirmed that firm size significantly influences dividend pay-out based on sample of UAE, an interesting outcome from the scholar after he apparently got controversial results concerning profitability and liquidity on the same subject. Nevertheless, literature tend to conqueror with this conclusions despite the fact that varied notations have descript to explain why firm size impacts dividend pay-out as revealed by studies done by (Al-Malkawi, 2007; Al Kuwari, 2009; Eddy & Seifert, 1988; Fama & French, 2000; Holder et al., 1998; Jensen et al., 1992; Manos, 2002; Mollah 2002; Perretti et al., 2013; Redding, 1997; Travlos et al., 2002).

Al Shubiri (2011) on analysis determinants of dividend pay-out, sampled companies listed on Amman stock exchange between 2005 and 2009, and the outcome re-emphasized previous results that there exists a strong significant positive relationship between firm size and dividend payment decision. Earlier, investigations that analysed firms listed in Jordan, replicated similar findings a clear indication that indeed firm size do significantly impact dividend pay-out positively as affirmed by Najjar (2009).

Manufacturing firms is Kenya are categorized in terms of size, this is why this independent variable has been considered in this study. Large manufacturing entities like Bristish American Tobacco and East Africa Breweries (Kenya) are a true reflection of this argument due to ability to pay dividends in spite of dubious and extreme taxes imposed on their products. Reasons attributed to large firms dividend payment in Kenya is sound or stable financial position, allegation that is empirically proven by other international researches done Lloyd et al., (1985).

Just like other variables discussed, firm size is not exceptional on controversial studies. A research that sought out to find out the dynamics and determinants of dividend policy on non-

financial firms listed in Karachi Stock Exchange in Pakistan, found out that there exist a negative relationship between dividend pay-out and firm Hafeez and Attiya (2008).

Perretti et al., (2013) while investigating similar subject alludes to the fact that its not crystal clear on how firm size do impact dividend payment thus left the gap for future research which this study will bring to light some of the issues that are unsubstantiated.

2.5 Summary

In order to demystify the dividend policy puzzle various scholars have come up with theories that attempt to explain this phenomenon. They have categorized this theories into two broad groups namely Irrelevancy dividend theory which alleges that divided payment does not affect the value of the firm as promulgated by Modigliani and Miller in 1961, while the Dividend relevant theory is in support that payment of dividend by a firm has a positive effect to a firms aggregate performance and capital value whose symptoms can be seen by changes in price per share appreciating significantly as a result of increased demand due to positive reputation directly linked to dividend pay-out. Theories in support of this analogy include Bird in hand theory by Gordon and Walter (1963), Tax preference theory by Brennan (1970), Agency theory by Jensen and Meckling (1976), Signalling theory by Miller and Rock (1985) and last but not least Clientele theory.

Literature available strongly support this argument and empirically proven that Liquidity, Profitability, Firm Size, Investment opportunities, business risk and Ownership of firms are the outstanding independent variables that significantly influence dividend pay-out (Ahmed & Javid, 2009; Bopkin, 2010; Hafeez & Attiya, 2008; Najjar, 2009; Kun Li & Chung Hua, 2012, Musiega, et al., 2013).

Nevertheless a reasonable portion of scholars have disputed these findings and performed statistical findings as evidence to their controversy that above predictors do impact dividend pay-out negatively hence insignificant. Indeed, this make dividend subject unique and interesting to area to research and could make been one of the reasons why it's considered as one of the ten most difficult puzzle in the field of finance and economics. Researches opposing relevancy of above independent variables include among others (Komrattanapanya and Suntrauk 2013; Muhammed and Saddia 2014;Farma and Khan 2017).

At the end of the day management of each company are entitled to formulate dividend policies that are in line with the entities objectives and prevailing financial position. This explains the intrigues surrounding fluctuations of dividend payment which complicates efforts to reach an amicable solution in dividend pay-out puzzle.

2.6 Research gap

By the fact that dividend pay-out remains unresolved Black (1976) it no doubt that emerging scholars while continue to research on this thorny issue that elicits not only the concern to academic fraternity but also entire business community that stand to benefit by applying the along waited remedy on how to disperse dividend phenomenon professionally. The available literature richly acknowledges immense contributions done by researchers on this subject but this study has narrowed its investigations specifically on dividend pay-out determinants on manufacturing sector.

Its unarguable true that manufacturing sector is unique to others due to the fact that it does require huge capital investment which is consumed in plant construction and purchase of fixed assets like machineries compared to service sectors that rely heavily on human resource, but more importantly the fixed assets do incur extra cost linked to depreciation which is charged as an expense on the profit and loss trading account. This has a direct

negative effect on aggregate net profit earned as opposed to service industry whose depreciation cost is minimal and in some cases it never materializes thus allocation reverted to income in proceeding financial year not ever changing technology hence rendering some machinery obsolete and in the context of manufacturing industry cost for upgrading or new purchases is an immense process requiring huge capital.

Amarjit et al., (2010) having considered this factors came to a conclusion in his investigation on predictors that influence dividend pay-out that determinants that impact manufacturing firms differ from those that affect other sectors. This element cannot be undermined since empirical studies have shown a direct linkage been profitability and dividend pay-out, and from accounting principles depreciation is an expense whose impact leads to decline in profitability (Anil and Kapoor, 2008; Myers and Bacon, 2004)

Amidu (2007) found at that in Ghana profitability in manufacturing firms has a strong positive relationship with dividend payment which is one sample among the numerous findings that have been cited in literature elaborated in this topic, however, in the same country controversial findings were documented when analysing same sector that affirms that although above variable impact dividend pay-out but in a negative manner Ndibania and Korankye (2014).

The element of controversy among influence of independent variables is crystal clear based on cases mentioned and what complicated the already worse scenario is that in both arguments their conclusions are backed with empirical evidence which makes it difficult to disqualify any of the findings unless it is proven that methodologies applied were not correct or failed to meet the required scientific threshold.

Musiega et al., (2013) studied dividend pay-out on Non-financial firms listed in NSE, manufactured firms were included although only firms that paid dividend in the stipulated

period were sampled which left the element to evaluate firms that failed to pay dividend while another recent study based its analysis on Corporate governance impact towards dividend pay-out among manufacturing firms whose context is more of qualitative rather than quantitative Ikunda et al., (2016).

Based on this facts the study at hand is unique and different in the sense that it narrows down to manufacturing firms and specifically those listed in the NSE as opposed to a wider scope of amalgamation of different sectors that faces varied challenges in operation and market set-up. In this way the researcher hope to come up with definite solution to determinants of dividend pay-out in local manufacturing sector whose outcome will be relevant in future comparison in search of solution to dividend pay-out.

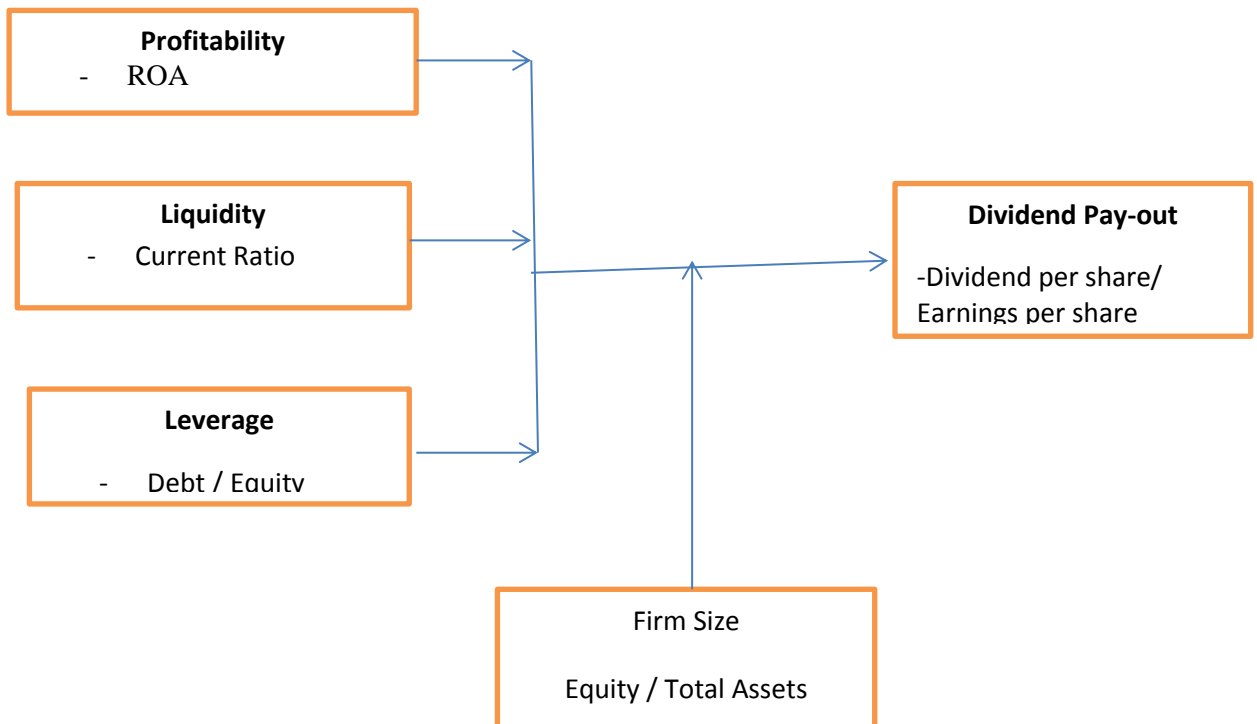
2.7 Conceptual Framework

FIGURE 2.7.1
Conceptual Framework

Independent Variable

Moderating Variable

Dependent Variable



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The chapter evaluates the research design applied, the target population and how data was collected. In addition, data analysis and how it's interpreted in order to come up with meaningful conclusions.

3.2 Research Design

The study has used the quantitative secondary data obtained from audited financial statements which narrowed it down to application of descriptive research design. Furthermore longitudinal panel data is used due to its suitability to amalgamate the data gathered over a cross section of time while simultaneously observing behaviour of various items. In this context, data was sampled from 7 firms over a period of 10 years which made up an aggregate of 70 units considered significant for analysis.

3.3 Target Population

The population of this study comprises of 10 manufacturing firms that are listed in the Nairobi Security Exchange NSE (2012). However, the research is focussed on 7 firms that made minimum threshold requirement of having being listed in the NSE for a period of at least 10 years consecutively effective 2007 to 2016. They include B.O.C Kenya, British American Tobacco, Carbacid Investment, East African Breweries, Eveready East Africa, Mumias Sugar and Unga Group. These firms under investigation constitute 70% of manufacturing firms listed in NSE which is a significant number to represent the entire population.

3.4 Data Collection

Secondary data was collected from the website of Nairobi Security Exchange and Capital Market Authority. In order to enhance credibility and reliability of the findings, the researcher gathered data over a period of 10 years. This mitigates biasness that could be attributed to economic volatility such as inflation, political instability whose impact can have a short term reactionary changes on output of findings in a scenario whereby period covered for study is 1 or 2 years. In this conjunction, only audited financial statements verified by capital market were accepted whose authenticity meets the qualification stipulated by (Steppingstones, 2004; Kothari, 2005).

3.5 Data Analysis and Presentation

In order to establish the appropriate regression model to be applied in this study, the researcher performed various diagnostic analysis tests in line with panel data model steps stipulated below. In addition, other essential tests like multicollinearity, unit root, heteroskedasticity will be performed.

The researcher carried out Exploratory data analysis through a process of applying visual plots on the dependent variable. This included application of growth plot and overlain plot whose end result is to facilitate determine the type of panel model to be used, for instance if the outcome indicates variation in the intercepts then it means fixed model is appropriate while random model is suitable in a scenario whereby the intercept is constant.

Alternatively, hausman test is carried out to guide make decision on similar case. If the regression shows that the p-value is greater than 0.05 ($p < 0.05$) then this implies Fixed Effect model is suitable to be applied in the regression while on the other hand if p-value is less than 0.05 ($p > 0.05$) means Random Effect model is appropriate for regression. However, the

study at hand applied the first modality to decide on the regression model suitable for the research.

High correlation of independent variables normally causes errors on the final findings obtained after regression. To mitigate occurrence of this problem, multicollinearity test was done whose objective is to check the presence of close relationship between independent variables. If the test indicates VIF greater than 0.8, then it symbolizes the presence of multicollinearity among those specific variables and the remedy is to eliminate one of the independent variable among the highly related. The outcome is tabulated for easy interpretation and understanding.

The Levin Lin Chu unit root test which is carried out to determine presence of unit root in the panel data and Wooldridge test which investigates presence of Serial correlation mostly in a study that involves analysis of a longer duration is approximately 20 to 30 years. Nevertheless, this procedure is irrelevant in the current study.

Another essential test is to establish how independent variables are distributed against the dependent variable, uneven distribution results to a situation termed as heteroskedasticity which is determined by use of Modified Wald test in case of fixed effect and it can be corrected by use of robust option. Presence of heteroskedasticity can cause significant errors or biased coefficients which apparently influence the findings Hair et al., (2006).

Findings of heteroskedasticity can be derived from Stata software although some researchers have dismissed the outcome as biased and inconsistent specifically under tobit regression. However, it has been demonstrated that tobit estimator is consistent under normality as opposed to OLS which only applies heteroskedasticity robust standard error to solve the issue of heteroskedasticity Amemiya (1984).

Finally, descriptive statistic analysis was done to determine how the data is distributed per respondent and predictor variables in terms of mean, minimum, maximum, standard deviation.

Derivation of Random effect Tobit regression model

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \epsilon_i + \epsilon_{it}$$

Combination of $\epsilon_i + \epsilon_{it}$ will result to w_{it} , therefore Y_{it} will be as follows

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + w_{it}$$

Tobit Model or Censored Regression Model

$$Y^* = \beta_0 + \beta_1 X_{it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + w_{it}$$

$$Y = \max(0, Y^*) \quad \text{or} \quad Y_t = \max(y_{\min}, X_t \beta + \epsilon_t)$$

$$Y = \max(Y_{\min}, \beta_0 + \beta_1 X_{it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + w_{it}) \quad \text{if } Y > 0$$

Afterwards the researcher performed two regression models to determine the impact of moderating variable. In the first regression model the independent variables were regressed without the moderating variable while in the second regression model the moderating variable is applied by multiplying each independent variable with firm size then regressed.

First regression model exclusive of moderating variable

$$Y = \max(Y_{\min}, \beta_0 + \beta_1 X_{it} + \beta_2 X_{2it} + \beta_3 X_{3it} + w_{it}) \quad \text{if } Y > 0$$

$$DPO = \max(Y_{\min}, \beta_0 + \beta_1 LIQ + \beta_2 LEV + \beta_3 PROF + w_{it})$$

Second regression model inclusive of moderating variable

$$DPO = \max(Y_{\min}, \beta_0 + \beta_1 LIQSZ + \beta_2 LEVSZ + \beta_3 PROFSZ + w_{it})$$

The findings in the first and second regression are evaluated and compared then conclusion is made whether the moderating variable has an impact on the aggregate outcome based on how each variable behaves in terms of influencing dividend pay-out.

Denotations in above Panel and Tobit regression models are as below

Y = Dependent variable (Observed value of dependent variables)

Y^* = Latent dependent variable (some variables are not observed)

Y_{\min} = Threshold values

$\beta_1, \beta_2, \beta_3$ and β_4 = Coefficients of independent variables

X_1, X_2, X_3 and X_4 = Independent variables

w_{it} = Error term

$i = 1, 2, 3, \dots, 7$ (firms)

$t = 1, 2, 3, \dots, 10$ (Time in years)

Measurability of Dependent and Independent variables

DPO = Dividend per share / Earnings per share

PROF = ROA (Return On Assets) = Net profit after Preference Dividend /
Number of Equity shares outstanding

LIQ = Current Ratio = Total Current Assets / Total Current Liabilities

LEV = Debt / Equity

SIZE = Equity / Total Assets

The outcome of the regression using tobit model is categorized in three broad segments as indicated below.

$Y_{it} \leq Y_{it}^0$ implies all observed items are left censored

$Y_{it} \geq Y_{it}^0$ indicates all the observed items are right censored

$Y_{it} = Y_{it}^0$ implies all the observed items are uncensored

CHAPTER 4

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

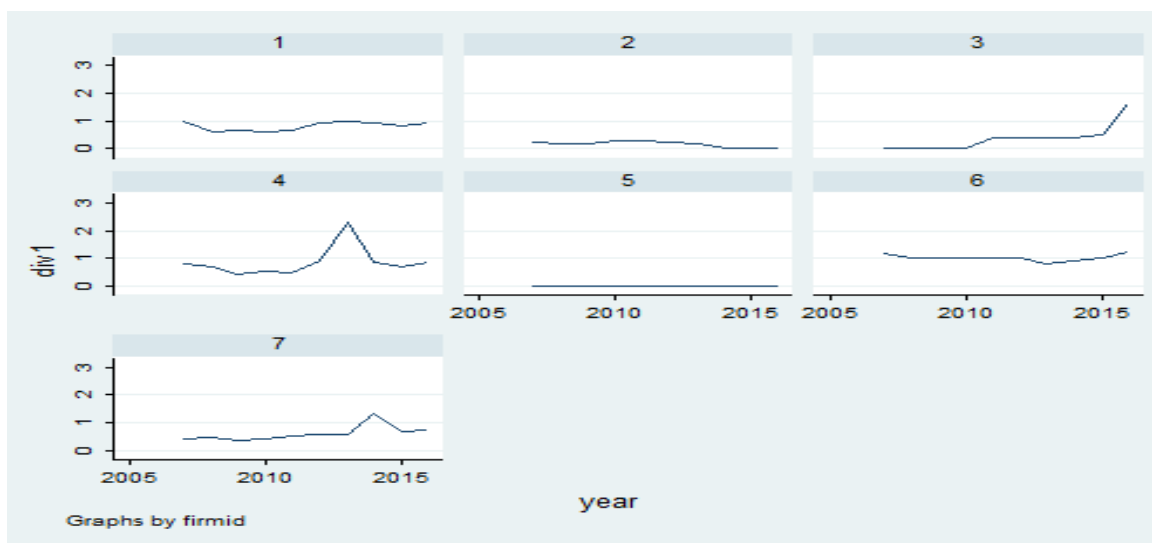
The chapter explains the analysis and presentation of the dataset that has been regressed, findings of the output using the Random effect tobit regression and definitely a brief explanation of the results.

4.2 Data Analysis and Presentation

The dataset was transformed into a panel series to enable its usability in Stata software during regression. The first test to be done was to find out how balanced the data was which revealed that it was strongly balanced. However, the zero values captured on respondent variable led to dependent variable to have “string values” to solve this problem the affected variable was “destring” hence generating a new name div1 from dividend.

Table 4.2.1

Growth Plot Graph Trend Plots for Dependent Variable



The graph indicates trend plot for each respective firm and is essential to help decide whether time related fixed effect will be applied or not.

Table 4.2.2

Descriptive statistics for Manufacturing firms listed in NSE

Variable		Mean	Std. dev.	Min	Max	Observations
Div1	overall	0.5437	0.4503	0	2.3152	N = 70
	between		0.3987	0	2.3152	n = 54
	within		0	0.5437	0.5437	T-bar 1.2963
Liquidity	overall	2.5117	2.7541	0.1765	14.2307	N = 70
	between		3.0730	0.1765	14.2307	n = 54
	within		0.2570	1.3928	3.3075	T-bar 1.2963
Leverage	overall	1.2323	1.4172	0.1455	7.5962	N = 70
	between		1.5557	0.1455	7.5962	n = 54
	within		0.3633	0.3730	3.0154	T-bar 1.2963
Firmsize	overall	0.5680	0.2031	0.1316	0.8730	N = 70
	between		0.2005	0.1316	0.8730	n = 54
	within		0.6276	0.3813	0.8152	T-bar 1.2963
Profitability	overall	2.6934	2.8681	-2.0612	9.6443	N = 70
	between		2.8909	-2.0612	9.6443	n = 54
	within		0.4672	1.1178	4.2389	T-bar 1.2963

Based on the findings of descriptive statistics analysis as per table 4.2 above, the dependent variable indicated by div1 has a mean of 54.34% with standard deviation of 45.93%, implying that on average the listed manufacturing firms at the NSE do spend 54.34% out of the net profit to pay dividends to investors. Liquidity which is the current assets over current liabilities had a minimum of 0.18 and maximum of 14.23 while a mean of 2.51 indicates that listed firms have high liquidity level which could impact on how they pay dividends.

Leverage measured by debt over the equity of the firm has 0.15 and 7.60 as minimum and maximum values respectively and mean of 1.23 meaning most manufacturing firms listed in NSE constitute debt capital over 120% which could adversely influence on how they issue dividends to investors. Profitability which is return on assets comprised a minimum of -2.06

and maximum of 9.64 values, mean of 2.69 which symbolizes net profits above 250% which can impact the trend on how firms draft their dividend policy both current and subsequent years. The moderating variable firm size had 0.13 and 0.87 minimum and maximum values respectively and a mean of 0.56, this indicates that averagely the 56% of the listed firm are large firms in terms of capitalization which is bound to reflect on how they do pay dividend.

4.3 Correlation Test

To ensure that variables were not closely related, which causes fluctuation of coefficients thus mixed interpretation of the outcome a correlation test was carried out. The findings indicated that on aggregate the relationship ranged between 0 to 0.5 this symbolizes that there is no presence of close relationship since it falls within recommended limits according to Cooper & Schindler (2003).

Table 4.3

Correlation Test

	Liquidity	Leverage	Firmsize	Profitability
Liquidity	1			
Leverage	-0.3811* 0.0011	1		
Firm size	0.5256* 0	-0.1820 0.1317	1	
Profitability	0.1227 0.3115	0.2641* 0.0272	-0.0751 0.5367	1

4.4 Random Effect Tobit Model Regression

Table 4.4.1 below show the findings of regression of independent variables when firm size is excluded using the Stata software.

Table 4.4.1**Random Effect Tobit Regression exclusive of Firm Size**

Random Effect Tobit Regression		Number of obs		70		
Group variable: firmid		Number of groups		7		
		Wald chi2(3)		5.22		
Random effect u-i		Gaussian		Prob > chi2		
Log likelihood		-37.1288		0.1561		
Div1	Coef.	Std. Err.	z	p> z	{95% Conf. Interval}	
Liquidity	-0.0304	0.0310	-0.98	0.327	-0.0912	0.0303
Leverage	0.0490	0.0394	1.24	0.214	-0.0283	0.1262
Prof	-0.0441	0.0423	-1.04	0.298	-0.1269	0.0388
cons	0.5491	0.2864	1.92	0.055	-0.0122	1.1105
Sigma-u	0.6659	0.2840	2.85	0.004	0.2072	1.1245

The outcome indicates that Prob > chi2 = 0.1561 which is greater than 0.05, meaning the model is unfit for regression hence it cannot be used to determine the impact of predictors liquidity, leverage and profitability on the dividend pay-out policy. In addition, none of the variables has an influence on dividend pay-out. The finding is contrary to previous studies and can be attributed to model applied being unsuitable.

Table 4.4.2**Random Effect Tobit Regression inclusive of Firm Size**

Random Effect Tobit Regression		Number of obs		70		
Group variable: firmid		Number of groups		7		
		Wald chi2(6)		19.95		
Random effect u-i		Gaussian		Prob > chi2		
Log likelihood		-28.287677		0.0028		
Div1	Coef.	Std. Err.	z	p> z	{95% Conf. Interval}	
Liquidity	-0.4187	0.2458	-1.70	0.089	-0.9005	0.0631
Leverage	-0.7830	0.2658	-2.95	0.003	-1.3040	-0.2620
Prof	0.1827	0.0738	2.48	0.013	0.0389	0.3274
Liquidity1	0.4842	0.2919	1.66	0.097	-0.0880	1.0564
Leverage1	1.3948	0.4447	3.14	0.002	0.5232	2.2663
Prof1	-0.3038	0.1031	-2.94	0.003	-0.5060	-0.1016
cons	0.6374	0.2208	2.89	0.004	0.2047	1.0701

The Prob > chi2 = 0.0028 which is less than 0.05, this implies the regression model is suitable to analyse the influence of independent variables namely liquidity, leverage and profitability on the dividend pay-out among manufacturing firms.

4.5 Findings of Regression Model

4.5.1 Findings of Random Effect Tobit model exclusion of Firm Size

Based on findings as illustrated in table 4.4.1 it is clear that when moderating variable firm size is excluded from the regression, the model is unfit for regression since its the p-value is 0.16 (Prob > chi2 = 0.1561) which is greater than 0.05 meaning we accept the null hypothesis; hence “the random effect tobit model is inappropriate”. This implies that the model cannot explain the fluctuations of independent variables used in this regression namely profitability, liquidity, and leverage towards the dependent variable dividend pay-out (dpo).

However, further interpretation per respective independent variable indicates that liquidity whose p-value is 0.327 thus greater than ($p > 0.05$) means the confidence level is less than 95%. This implies liquidity does not influence dividend pay-out among the manufacturing firms listed at the NSE in addition a negative relationship does exist between liquidity and dividend pay-out symbolized by coefficient of -0.03. Therefore it can be concluded that a 1% increase in liquidity will result to a decrease of dividend pay-out by 0.003%.

Leverage whose p-value is 0.214 which is also greater than 0.05, signifies that the confidence level of leverage towards dividend pay-out is less than 95%. This means leverage does not significantly influence dividend pay-out among the manufacturing firms listed in NSE. Nevertheless there is a positive relationship between leverage and dividend pay-out of

0.049. Thus, a 1% increment in leverage will lead to a decline of dividend pay-out by 0.049%.

Finally, a similar trend is replicated on profitability with a p-value of 0.298 which is greater than 0.05. This implies confidence level is below 95% hence profitability insignificantly impacts the manner in which manufacturing firms listed at NSE pay dividend. Besides, there is a notably an inverse relationship that exists between profitability and dividend pay-out of 0.044. Hence a 1% increase in profitability will result to a 0.049 decline in dividend pay-out.

4.5.2 Findings of Random Effect Tobit model inclusion Moderating Variable

The inclusion of firm size in the regression as a moderating variable has led to significant changes on the findings as opposed to when it's excluded. The p-value of the model is $\text{Prob} > \chi^2 = 0.0028$ this value is less than 0.05 hence we reject the null hypothesis. This implies the "the random effect tobit model is inappropriate" meaning the confidence level of the model is 95% thus suitable to explain the fluctuations of each predictor against the respondent. Therefore the study has applied the findings illustrated in table 4.4.2 above to explain how the dependent variables influenced dividend pay-out of manufacturing firms listed in NSE.

Liquidity whose p-value is 0.097 which is greater than 0.05 ($p > 0.05$) this implies that the confidence level is below 95% hence liquidity does not significantly impact dividend pay-out among manufacturing firms listed in NSE. However, a positive relationship of 0.4842 does exist between dividend pay-out and liquidity. This can be interpreted to mean a 1% increase in liquidity does result to decline in dividend pay-out by 0.4842%.

Secondly, leverage with a p-value of 0.002 which is less than 0.05 ($p < 0.05$) indicates we reject the null hypothesis, meaning leverage has a positive influence on how manufacturing

firms decide on how to pay dividend pay-out. In addition, there is a positive relationship between leverage and dividend pay-out as evidenced by a coefficient of 1.3948. This means there is a simultaneous increment in leverage and dividend pay-out. The outcome can be interpreted as 1% increase in leverage will lead to respective increment of 1.3948% of dividend pay-out.

Last but not least, profitability whose p-value is 0.003, definitely less than 0.05 ($p < 0.05$) means the confidence level is 95% and above. This implies that profitability does significantly influence dividend pay-out among manufacturing firms listed in NSE. However, the study notes existence of a negative relationship between the two as indicated by coefficient 0.3. Therefore, 1% increment in profitability will result to inverse increment of profitability of 0.3%.

Comparison of regression outcome illustrated on tables 4.4.1 and 4.4.2, it is clear that inclusion of firm size as a moderating variable had a significant impact on regression findings. First, the regression model p-value changed from 0.1561 to 0.0028 implying the inclusion of firm size into the model made it fit or appropriate to explain the fluctuations caused on independent variables upon dividend pay-out. The suitability of the model to be applied for regression enhances reliability of the outcome.

Another conspicuous impact is on how independent variables influenced dividend pay-out, the outcome without moderating variable indicated that liquidity, leverage and profitability had p-values of 0.327, 0.214 and 0.298 which is greater than 0.05. This implied none of the predictors significantly influenced dividend pay-out. The outcome is unique from previous studies hence if that was the final results then more questions could have been raised than answers.

However, inclusion of moderating variable firm size led to different outcome whereby liquidity, leverage and profitability had p-values of 0.097, 0.002 and 0.003 respectively. This implies leverage and profitability significantly influenced dividend pay-out which is reasonable and in agreement with most previous researches.

CHAPTER FIVE

SUMMERY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The chapter highlights the summery, conclusion and recommendation of the research based on findings outlined in the previous chapter. Furthermore challenges experienced during the investigation and insight on future studies on this subject are elaborated.

5.2 Summary

The study investigated determinants of dividend pay-out among manufacturing firms listed in NSE over duration of 10 years from 2007 to 2016, which is considered significant to captured comprehensive data free from errors that could be attributed to economic volatilities and political instabilities whose short term impact can have adverse influence on outcome studies. Out of a population of 10 manufacturing firms that are currently listed at NSE, the study selected 7 firms which made the threshold of having been listed over the stipulated period regardless of whether they paid dividend or not, this proportion is equivalent to 70% of listed firms hence reasonable to represent the entire manufacturing population.

Descriptive statistical analysis was applied to analyse the quantitative secondary data in terms of mean, maximum, minimum and standard deviation. While random effect tobit regression was found suitable due to its features to amalgamate longitudinal panel data and zero censored values. However, to ensure that independent variables were not closely related correlation test was carried out.

The outcome indicates that profitability and leverage do significantly influence dividend pay-out among manufacturing firms listed in NSE while liquidity does not. The moderating

variable firm size increased the precision of regression model from 0.156 which is considered to be unfit to 0.0028 which is below 0.5 hence appropriate for regression.

In conclusion, future studies ought to consider more independent variables that have not been analysed in this current study like ownership, taxation, Earnings per share among others. In addition, there is need to include qualitative variables that significantly influence dividend pay-out like Corporate Governance.

5.3 Conclusion

5.3.1 Profitability and Dividend Pay-out

The study found out that profitability which is measured by return on asset, has a p-value of 0.003 meaning that it does significantly influence the dividend pay-out of manufacturing firms listed at the NSE. The outcome is in agreement with numerous preceding studies including scholars Musiega et al., (2013) who affirmed that profitability indeed influences dividend pay-out among non-financial institutions in Kenya. Since dividend pay-out process involves cash outflow it then goes without saying that an entity requires funds to facilitate this process which can be secured when its making meaningful profits as compared to indebted firms that are constrained financially. This culminated to whichever perspective examined profitability is key for dividend pay-out as inferred by Kartal (2015).

Nevertheless, a negative relationship that was indicated by a coefficient of 0.3% is attributed to the fact not all firms transform profits earned into dividend pay-out. Research has shown that most small and medium size firms do utilize the profits to invest into viable projects that ignites future growth hence expansion of the entity besides increase of asset portfolio. This could have contributed to the controversial findings on analysing UAE companies whereby profitability impacted dividend pay-out insignificantly Anupam (2012).

5.3.2 Liquidity and Dividend Pay-out

The study shows that liquidity whose p-value and coefficient is 0.097 and coefficient 0.4842 respectively, symbolizes that although there exists a positive relationship between dividend pay-out and liquidity, ultimately liquidity insignificantly impacts dividend pay-out among the manufacturing firms listed at the NSE. Couple of reasons can be attributed to this finding. First, liquidity is subject to frequent fluctuations as a result management might find it tricky to consider variable that cannot be predicted. The finding emphasizes previous studies that have indicated that liquidity insignificantly influences dividend pay-out as alluded by Komrattanapanya and Suntrauk (2013).

5.3.3 Leverage and Dividend Pay-out

A positive and significant relationship does exist between leverage and dividend pay-out among manufacturing firms listed at the NSE. This is evidenced by the p-value 0.002 which is less than 0.05 meaning the confidence level is 95%. The coefficient is 1.3948 implying there is a likelihood of simultaneous increment of both leverage and dividend pay-out. Manufacturing firms do require huge capital investment to invest in fixed assets preferably modern technological machinery to increase efficiency and productivity. Consequently, sales increment is unavoidable which is evidenced by increased earnings that can be utilized to pay dividend, finding that is echoed by John and Muthusamy (2010).

5.3.4 Firm size and Dividend Pay-out

The inclusion of firm size as a moderating variable increased a precision of regression model from 0.1561 to 0.0028; this made the regression model suitable to explain influence of variables on dividend. Furthermore, inclusion of firm size led to profitability and leverage to significantly influence dividend pay-out. This means firm size has a significant impact on

how firms determine dividend pay-out, findings that echo previous conclusions by (Huston 2015; Musiega et al., 2013).

The findings are attributed to the fact that larger firms have easy access to credit facilities due to the fact that they have collateral. As a result they are able to invest in modern technological production equipment which enhances faster and quality products while minimising wastage. This translates into higher profits leading to dividend pay-out.

5.4 Recommendation

The study recommends potential investor willing to invest in manufacturing firms listed at NSE to consider the performance of entity in terms of profitability and leverage since they have a bearing of probability of the firm to pay dividend and future growth.

Management are advised to consider preferences of investors towards dividend pay-out in dividend policy drafting because if their needs for are not catered for could lead to capital flight by disposing their shareholdings whose impact is adverse to the entity.

Furthermore, agency is to pay dividend when the entity is able since it signals positive reputation of the firm hence drawing more investors to buy shares which increases capitalization besides appreciation of price per share.

Despite the fact that the study has empirically proven that leverage is significant in dividend pay-out, managers are advised to be cautious not to borrow beyond acceptable levels that will constrain the firm financially into debt repayment besides risk of liquidation and receivership.

Finally but not least, management are advised to enforce strong internal control measures that can enhance confidence and security among investors contrary to option of dividend pay-out based on allegation of misappropriation as alluded in agency cost theory.

5.5 Limitations

The accounting policies and principles applied by manufacturing firms do vary between different organizations for example method of depreciation, disposal of fixed assets, accounting for bad debts not forgetting even the valuation costs for assets. Nevertheless, the collection of secondary data from audited financial statements does not consider the accounting policies applied rather than the actual end figures. These assumptions can cause significant errors that could impact the final results obtained from regression.

The study used tobit model due to its features to accommodate zero censored values among the response (y). However, the model doesn't distinguish between the probability of a positive value and actual values but as long as they are positive then they are subjected to similar underlying parameters Crage, (1971). Besides interpretation of Pseudo R-squared on using tobit model has raised more queries hence been side-lined due to its inaccuracy as affirmed by McDonald and Nguyen, (2015) who concludes that nonnormality or heteroscedasticity results to inconsistency among tobit estimators compared to OLS whereby which negatively impact the findings.

Since the ultimate vital powers to draft dividend policy are vested into management, it is tricky to determine qualitative variables that are not measured yet applied in making this decision. Example decision to plough back entire profits into projects impacts dividend pay-out yet profitability is a major determinant variable of dividend as per this study and others.

Besides secondary data being authentic it lack interaction with users whose input could add significant value on conclusions made, for example interviewing financial managers on qualitative factors considered that are not captured in financial statements.

5.6 Suggestions for future research

Researcher recommends future investigations on this subject to involve other independent variables like Ownership, Taxation, Earnings per share whose impact on dividend pay-out could be significant to influence above findings. More importantly, it is essential for scholars to appreciate the qualitative variables that have been neglected like impact of corporate governance, management skills on dividend pay-out which do play a vital role in the manner in which dividend is determined.

The independent variables influencing developed and developing economies differ hence need to have a comparison future study to find out these allegations in addition to the fact that manufacturing firms faces unique challenges like huge capital investment, depreciation and cost for replacement in case they are rendered obsolete compared to service sector thus need to analysis each sector differently before a comprehensive finding can be concluded Amarjit et al., (2010).

Data compiled and used in Tobit Model for Regression

firm	firmid	year	dividend	liquidity	leverage	firm size	prof
EABL	1	2007	0.9836	2.2067	0.4918	0.1760	8.0699
EABL	1	2008	0.6316	1.7843	0.5063	0.2050	6.9738
EABL	1	2009	0.6691	1.6909	0.5389	0.1448	7.2758
EABL	1	2010	0.6229	1.4856	0.6040	0.1316	7.9467
EABL	1	2011	0.6501	0.8933	0.8489	0.1533	7.7452
EABL	1	2012	0.9409	0.8031	5.5244	0.5409	9.6443
EABL	1	2013	0.9637	0.6988	7.5962	0.6234	7.0278
EABL	1	2014	0.9242	0.7213	5.9077	0.6498	6.5800
EABL	1	2015	0.8429	1.0225	3.8796	0.6639	8.9477
EABL	1	2016	0.9456	0.7707	4.6819	0.6703	8.6112
UNGA	2	2007	0.2318	1.5657	0.6030	0.6192	0.4032
UNGA	2	2008	0.1898	1.9161	0.6064	0.6159	1.4514
UNGA	2	2009	0.2055	2.2713	0.7124	0.5840	0.5766
UNGA	2	2010	0.2896	2.5438	0.5052	0.5293	0.7419
UNGA	2	2011	0.2669	2.5245	0.5244	0.6170	1.3971
UNGA	2	2012	0.2101	2.3583	0.6129	0.6560	1.3541
UNGA	2	2013	0.2072	1.8378	0.8895	0.6644	1.0289
UNGA	2	2014	0	2.2713	0.7124	0.6651	1.4998
UNGA	2	2015	0	2.3685	0.6236	0.6225	1.6794
UNGA	2	2016	0	2.2986	0.6149	0.6238	1.9401
MUMIAS	3	2007	0	2.2956	1.6651	0.2848	1.8724
MUMIAS	3	2008	0	1.3482	1.7547	0.2903	0.5193
MUMIAS	3	2009	0	1.4585	0.7407	0.4516	0.5261
MUMIAS	3	2010	0	1.9871	0.7407	0.4905	0.5139
MUMIAS	3	2011	0.3817	2.1986	0.6010	0.5694	0.6318
MUMIAS	3	2012	0.4132	1.2536	0.7561	0.6246	0.5765
MUMIAS	3	2013	0.3884	0.8382	1.0386	0.5600	-0.7307
MUMIAS	3	2014	0.3810	0.4093	1.2142	0.5745	-1.1128
MUMIAS	3	2015	0.5063	0.1879	2.4445	0.6389	-2.0612
MUMIAS	3	2016	1.6484	0.1765	2.5118	0.6997	-1.9828
BOC	4	2007	0.8037	2.5878	0.3016	0.7626	4.0948
BOC	4	2008	0.6833	2.5878	0.2956	0.7385	3.0235
BOC	4	2009	0.4422	2.6406	0.2964	0.7257	2.3731
BOC	4	2010	0.5010	2.1509	0.3544	0.7263	2.2017
BOC	4	2011	0.4995	1.9400	0.3675	0.7021	1.9406
BOC	4	2012	0.8820	2.0793	0.3700	0.7313	2.3566
BOC	4	2013	2.3152	2.2270	0.2700	0.7384	2.3747
BOC	4	2014	0.8629	2.1390	0.3200	0.7714	2.8474
BOC	4	2015	0.6628	2.0635	0.3540	0.7068	1.6407
BOC	4	2016	0.8248	2.2831	0.3112	0.7530	1.3559

EVEREADY	5	2007	0	1.5598	1.6842	0.4494	0.8548
EVEREADY	5	2008	0	1.6612	1.2851	0.5117	0.1326
EVEREADY	5	2009	0	1.5057	1.5277	0.2349	0.1978
EVEREADY	5	2010	0	1.4105	1.9644	0.4204	0.0702
EVEREADY	5	2011	0	1.1143	2.6395	0.3037	-0.8248
EVEREADY	5	2012	0	1.2591	2.2926	0.2748	0.3282
EVEREADY	5	2013	0	1.5404	1.3788	0.3373	0.2863
EVEREADY	5	2014	0	1.3339	3.2573	0.3956	-1.1810
EVEREADY	5	2015	0	0.8695	0.9543	0.4376	-1.0079
EVEREADY	5	2016	0	0.4538	1.2253	0.3726	-0.6981
BAT	6	2007	1.1691	1.1266	0.9752	0.4802	2.0496
BAT	6	2008	0.9947	1.0506	1.1063	0.4921	2.4169
BAT	6	2009	0.9988	1.1892	2.1334	0.4452	2.6739
BAT	6	2010	0.9935	1.0572	1.3997	0.4458	2.2874
BAT	6	2011	0.9936	1.3069	1.1445	0.4677	4.4844
BAT	6	2012	0.9845	1.1780	1.1382	0.4663	4.7543
BAT	6	2013	0.7985	1.2693	1.2434	0.4167	5.4700
BAT	6	2014	0.8954	1.2491	1.2461	0.3191	6.0954
BAT	6	2015	1.0000	1.4512	1.1101	0.4748	7.1389
BAT	6	2016	1.2266	1.4132	1.0826	0.8269	5.9113
CARBACID	7	2007	0.4156	12.938	0.1818	0.8684	4.0046
CARBACID	7	2008	0.4516	14.2307	0.1806	0.8344	4.2719
CARBACID	7	2009	0.3627	10.6253	0.1788	0.8528	6.4806
CARBACID	7	2010	0.4289	5.7860	0.1688	0.8730	2.5781
CARBACID	7	2011	0.5236	8.8431	0.1858	0.8211	2.2025
CARBACID	7	2012	0.5624	4.2579	0.2178	0.8433	3.1515
CARBACID	7	2013	0.5525	10.0893	0.1455	0.8556	3.7356
CARBACID	7	2014	1.3263	6.2962	0.1727	0.8483	2.3436
CARBACID	7	2015	0.6793	4.5106	0.1985	0.8470	2.2776
CARBACID	7	2016	0.7299	4.3574	0.1516	0.8462	2.1983

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