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Financial Factors Affecting Dividend Pay-Out in Kenya, Evidence from Listed Manufacturing Firms in Kenya

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Abstract:
Dividend pay-out signals the performance of a firm this preposition is supported by the dividend signaling theory. A theory that suggests, when a company announcement of an increase in dividend pay-outs it indicates a positive performance. Working on this signalling theory preposition it could therefore be expected that firms with high dividend pay outs have high stock prices, another signal of a high performing firm. However, this is not the case in the Kenyan manufacturing sector. Manufacturing firms in Kenya are paying high dividends relative to their stock price. Following this disproving fact, this study looks at the financial factors affecting dividend pay outs in the Kenyan manufacturing sector. The dependent variable is Dividend Pay-out measured by dividend per share over earnings per share. The financial factors considered in this paper are Profitability, Liquidity and Leverage, while firm size was used asthe moderating. Secondary data for a sampled 7 out of 10 manufacturing firms listed in Nairobi Security Exchange over a period of 10 years (2007 to 2016) was used for the analysis using a Tobit Random Effect Model. The study findings indicated that Profitability and Leverage significantly influence a firm's dividend pay-out while Liquidity has an insignificant effect. Moderating variable Firm size was considered as a significant determinant of dividend pay-out.

Keywords: *Dividend pay-out, profitability, liquidity, leverage, firm size*

1. Introduction

The culture of firms distributing dividends is not new since it dates back to ancient times approximately four centuries ago (Baskin 1988). However, it is interesting to note that despite cumulative initiatives geared towards solving dividend phenomenon described as earnings distributed to shareholders (Pandey 2004) entire concept remains a mirage since no amicable solution has been agreed upon by scholars in the field of economics and finance instead more conflicting results keep erupting that leaves the academic fraternity more divided Black (1976). In attempt to unravel the myth, scholars have come up with various theories that shade light on this subject, which are broadly classified in the context of whether dividend pay-out adds value to an entity or not.

While dividend is considered as a return on investors' shareholding in an organization, it's also viewed as a liability from accounting perspective due to cash outflow involved. Based on this assumption a firm incurs capital decline in executing dividend pay-out that could have been reinvested or ploughed back into the business. Aggregate asset portfolio decreases inversely as dividend paid increases. In order to maintain equilibrium of a firm's equity portfolio the management of an entity are obliged to issue allotment of new shares in order to recover the amount expensed to shareholders as dividends. In application of this narrative, (Modigliani & Miller, 1961) argued out that, it is then immaterial for a firm to pay dividend since the resources utilized is reclaimed back using other modalities, at the end of the day the status quo remains constant. Ultimately, this led to genesis of Dividend Irrelevancy theory whereby MM affirmed that in a perfect market payment of dividend adds no value to the firm.

However, critics refuted the sentiments in MM theory and strongly pointed out that besides conspicuous failure to recognise basic market norms like transaction costs and taxation, it deliberately assumed professional input offered by agency. In consideration of above variables, Lintner inferred that when a firm pays out dividend it's a sign of growth, quality management and financial stability of the firm which culminates to affirmation of the basic principle of "going concern". The positive reputation draws potential investors to buy the company shares as a result the demand of these shares appreciates beyond supply hence significant increment in price per share. Finally, the end product is apparent increment in equity holding meaning the value of the company has appreciated. Indeed, it's no doubt that the logic reflects real market situation, the argument affirms the Dividend Relevancy theory as articulated in Signalling theory by (Lintner 1956).

Reasonable junk of scholars is not only in agreement of relevancy of dividend pay-out but rather applied the concept to urge out related theories. In an open market shares are subjected to volatilities such as political instability, inflation, competition amongst firms which adversely impact the value of the shares either positively or negatively. As a result of unpredictable future shares, majority of investors have a high affinity to dividends as they fall due as opposed to risk of ploughing back. The situation has a bearing on how agency decides the portion of dividend pay-out as inferred in Bird in hand theory by Gordon (1959). Similarly, the type of shareholders comprising majority shares in an entity play a

vital role on influencing trends of dividend payment. The aged investors rely mostly on dividends as a source of income for livelihood compared to youthful generation whose energy and skills earn them a pay. Hence, an organization might be obliged to pay dividend in order to retain or fulfil interests of the old rather than risk to lose their shareholdings. Agency ought to diligently evaluate preferences of its investors as eluded in clientele theory by (Shefrin and Thaler, 1988) in order to make prudent decision not only to satisfy the company interests but also the shareholders.

Nevertheless, the literature is crystal clear that the ultimate decision on whether a firm pays dividend or not and if it pays by what margin is absolutely vested in the agency. This supreme power raises more questions than answers on who has the mandate over a company, currently shareholders are no better than quasi or dormant partners. It's on this basis that conflict of interest is unavoidable between these two parties, specifically in areas on how funds or resources are utilized. Several cases are in the limelight whereby the agency has been accused of misappropriation of resources through lucrative remuneration, allowances and investment in negative NPV projects to shareholders opinion is wastage of income that would rather be used to pay dividend. In this context, the Agency cost theory by (Jensen 1986) advocates the option of dividend pay-out as mitigation to impulse expenditure by the agency.

The plan on how dividend pay-out is executed is outlined in a document referred to as dividend policy, which entails how the net profits earned by the firm after taxes will be distributed to shareholders in accordance to their shareholdings and portion of it retained for investment purposes (Kempner 1980). Before the decision is made on dividend, the agency diligently analyses various components. First, is the ability of the firm to pay dividend, since enough resources ought to be available to facilitate the process and more importantly, the entity should have the financial muscles not only to issue dividend in the current year but able to sustain the trend in the subsequent years. This is attributed to the fact that frequent changes on dividend pay-out might send out mixed signals to the public or investors that could impact asset portfolio (Fama and Babiak, 1968). In addition, the current and long-term projects of the firm are considered since it's out of the funds earned (net profits) that portion of it is to be utilized to implement these projects.

However, proportion to be allocated for investment is relative since different entities do have varied investment policies that depends on firm size for example small firms are invest more compared to large size entities that could prefer only to value addition through innovation and creativity on their core products and services. The regulation regime on how tax is imposed on dividends is paramount on the quantity to be disbursed not forgetting shareholders preferences depending on age brackets as discussed earlier. In exceptional cases managers have applied dividends as a marketing strategy in order to maintain the share market price, this is evidently clear for example when stable firms like Britam Kenya declared dividend in 2015 besides recording a loss in its financial statements. Intrigues involved especially on variables that can't be measured do play a role to complicate dividend matrix. Hence at the end of the day regardless of how one views the dividend policy process, it all sums up to a tedious but critical financial decision that corporate managers must make (Baker & Powell, 2009). Finally, firms can decide to distribute the dividend pay-out in form of stock, script, bond, property but the most preferred mode by shareholders is cash dividend since its faster, convenient and reliable (Pandey 2008). Controversy on how independent variables influence dividend pay-out remains a thorny issue and the study is limited to manufacturing firms listed in NSEto find if similar outcome will be replicated.

1.1. The Performance of Manufacturing Firms in Kenya

Economic growth of a country is engineered by manufacturing sector as one of the key drivers, due to the fact that the output is valuable hence positive gains in bilateral trade, meaningful employment and more importantly it's independent from environmental conditions unlike agriculture which is heavily relied upon by developing countries. Kenya has taken significant milestones in the manufacturing industry, thus rated the best in East Africa region and 17th in Africa as a continent according to World Bank report "Anchoring High Growth, can Manufacturing firms contribute more?" released by then country director Diarietou Gaye in March 2015. The Nairobi Security Exchange comprises of ten sectors, manufacturing being one of them, likewise constituted of also ten firms (NSE Booklet 2012).

However, despite the positive gains made in manufacturing sector, it only contributes to 14 per cent to the country's Gross Domestic Product as compared to 26 per cent from Agriculture as per Kenya Economic Outlook 2017 by Deloitte. This is attributed to various factors including export of unprocessed tea and coffee which earn the country less foreign exchange. In addition, less investment in the industry whereby the machines in factories like Webuye Pan Paper are obsolete hence low qualities besides high costs of maintenance. Nevertheless, the Government has put in place some strategies like allocating resource towards textile, pyrethrum, milk processing and leather industries to enhance growth and efficiency. Furthermore, passing of procurement Act requiring at least 40% of procurement materials to be local which is implemented could significantly improve the current status quo. In spite of this, the issue of quality remains a grey hair that local products fail to meet hence the only alternative is to import, latest being during construction of Standard Railway Gauge as the China company rejected local materials citing low quality.

Mixed reactions have dominated dividend pay-out of manufacturing firms locally, while some entities like East Africa Cables, Bamburi cement, East Africa Breweries Limited have consistently declared lucrative dividends annually, others like Mumias Sugar Company and Eveready East African apparently failed to issue dividend over the similar period (Business daily newspaper, 4th February 2017). Although this raises legitimate concerns about the discrepancy to investors and interested parties at large, it will enhance clarity in the current research since both firms are investigated regardless of whether they paid dividends or not. Contrary to previous study that sampled only entities that issued dividends while analysing dividend determinants in Non-Financial firms listed in NSE Musiega et al., (2013).

Cumulative efforts geared towards dividends as evidenced in the literature indicates that profitability, liquidity, firm size, ownership, earnings per share, taxation, leverage and business risk are among the outstanding predictors that influence dividend pay-out (Al-Kuwari, 2009; Essa et al.,2012; Kartal, 2015; Khan & Ahmed, 2017; Nyamosi, 2016, Ikunda

et al., 2016). Interestingly, further analysis on these variables apparently shows controversial influence of the same variables towards dividend. In this context, a recent study by Khan and Ahmad (2017) that analysed pharmaceutical firms in Pakistan stock exchange concluded that profitability, liquidity, growth opportunities and audit type significantly influence dividend pay-out. Contrary, another study affirmed that profitability and liquidity insignificantly impact dividend among Lebanese banks, according to this finding Maladjian and Khoury (2014) urged that the profits earned are diverted into new investment projects hence do not impact dividends.

Similar outcomes were replicated as Anil and Kapoor (2008) urged that large firms have easy accessibility to credit facilities since they have collateral. The resources aid in investment into modern technological machinery and innovation and creativity which boost financial performance that yields to dividend pay-out. On a different opinion, Farma and Khan (2017) inferred that firm size insignificantly impacts dividend pay-out. This scenario prevails cuts across the board that has left the academic class more puzzled and perplexed. Research on this topic remains relevant to date and to ensure that the combated spirit is upheld, the dividend policy investigation is considered to be among the top most challenge in the field of economics and finance among the Brealey and Myers (2005).

Scholars ought to adopt new techniques on how to analyse qualitative variables that influence dividend as a way forward in order to overcome dividend monster. Some of these ignored aspects could be the core cause of outrageous variances. First, developed economies do have clear policies and regulatory mechanisms that govern dividend policy, this harmony influence that may be induced by bird in hand theory and clientele theory whose impact is inevitable in developing countries besides unstable economy (Glen et al, 1995). Secondly, different entities do apply varied accounting policies whose impact could significantly influence data captured for analysis, although the issue is subject to debate the fact remains relevant considering the impact the accounting standards applied affects the profits and decisions made based on this outcome as evidenced in Pakistan's pharmaceutical research that affirmed that audit type significantly influence dividend pay-out Khan and Ahmad (2017).

Thirdly, since no clear parameters are specified on basis agency decides dividend policy; it complicates measurability of qualitative components visa via quantitative values evidenced earlier in a cited scenario while some firms pay dividends when the firm earns profits agency may decide to plough back into their investment that increases the firms value but dividend is not declared. Finally, the nature and composition of an entity in terms of capital investment and operationalization is paramount on how dividend payment will be done. It's unarguable that manufacturing firms do require huge initial capital investment that facilitates procurement of machineries and installation process. Furthermore, the costs inquired to maintain the assets is relatively costly not forgetting the depreciation and electricity costs that are incurred thus deducted from net profits earned. This is contrary on service sector that requires more of technological skills, creativity and innovation, implying the net profits are high hence probability to pay dividends is higher.

1.2. General Objective

The study sought to determine the effect of financial factors on dividend pay-out of manufacturing firms listed in the Nairobi Security Exchange.

2. Theoretical Review

Dividend determinants is guided by several theories, however of important to current study, reviewed Modigliani – Miller Dividend Irrelevancy Theory, Signalling Theory, The "Bird in Hand" and the Clientele Theory amongst others.

A perfect market is mainly characterised by the free flow of information amongst the key players in a market, this results to minimal or nil transaction costs. Furthermore, this information is presumed to be identical which neglects the professionalism aspect of the agency in terms of prediction of market share and behavioural trends, thus shareholders can only be interested in signalling effect of positive future returns but not mere increase in dividends Brealey and Myers (2000).Based on these assumptions, Modigliani and Miller (1961) argued out that the issuance of dividend is a futile event since the funds utilized to issue dividends results to decline of shareholders equity which is repurchased through allotment of new shares of similar quantum. Hence, according to him dividend pay-out is immaterial and adds no value to the firm, thus the genesis of Dividend Irrelevancy theory. Therefore, the ultimate power over dividends is vested in investors who can freely decide either to buy or sale their shares in-line with demand and supply of the shares Brigham and Houston (2011).

Critics of MM theory, cited unrealistic assumptions entailed in this narrative for example free transaction cost contradicts corporation tax which is mandatory in any market set-up. Empirical study by Masulis and Trueman's (1988) indeed affirms the allegations that tax levied on dividends could adversely affect investor's preference towards dividend pay-out while further investigations indicates that a positive relationship does exist between tax and dividend pay-out ratios Amidu and Abor (2006). Alternative school of thought pioneered by Lintner (1956)observed that payment of dividend by a firmsignal'sgrowth and security of shares. This draws more investors to purchase the shares of the company resulting to increase in price per share due to persistent demand against low supply. Literature strongly supports these sentiments that there exists a positive relationship between dividend pay-out and respective increment in stock prices (Bhattacharya, 1979; Nyamosi and Omwenga, 2016). This affirms that payment of dividend by firms has a bearing with significant increment in share per price that ultimately adds value to the firm hence Dividend Relevancy theory.

Interestingly, current management have acknowledged impact of dividend payment to the extent that they apply it as a marketing strategy to trap or lure potential investors, the motive is clear in instances when reputable firms like Britam Kenya opt to pay dividends in 2015 financial year besides earning a loss. Unfortunately, on extreme cases some local entities have fraudulently post factious financial statement in order to impress the public about performance of the

firm which in reality doesn't represent true and fair value of the entity. In this perspective, isolated scholars have questioned the genuine intentions of signalling theory (Pettit, 1972; Black, 1976).

However, while the objective of investors is earning maximum returns, majority fear risk entailed considering the fact that shares are vulnerable based on the market and political environment prevailing hence high affinity to cash dividends Bratton and William, (2005). In this context of unpredictable future returns on shares,reasonable junk of shareholders especially the risk averse do prefer to be paid their dividends as they fall due as opposed to ploughing back as proclaimed in Bird in hand theory by Gordon (1959). Although the case is debatable either side, the element of inflation on future currency is unarguable as inferred by Keown et al., (2007).

In order to enhance efficient, effectiveness and accountability geared to achieve the corporate objective, the shareholders saw the need to contract qualified and skilled professionals whose mandate is to manage the entity on their behalf. Agency was empowered with necessary mandate to enable executing of this duties and responsibilities at a fee agreed upon by investors. Among the vital decisions executed by agency includes drafting of dividend policy which gives the way forward on dividend is declared signifying the critical role played by managers as eluded in Agency cost theory by Jensen and Meckling (1976). The supreme powers on agency is a question of concern to many investors today, couple of case studies show misuse of the powers through misappropriation of funds that is evidenced through fraudulent expenditures, exorbitant perks, high remuneration, conflict of interest between self-interests and entity projects not forgetting manipulated financial statements. It remains a grey hair that has led to external audits besides stringent internal control measures as advocated by Allen et al., (2000), whether the powers of agency might be streamlined in near future remains a mystery. Consequently, investors opt to be paid extra miscellaneous funds within the entity in addition to net profits earned in form of dividend as a strategy to mitigate misappropriation of resources Farinha and Jorge, (2003).

Like any society, an entity is constituted by diverse shareholders in terms of age, wealth and either institutional or retail based on their contributions in terms of shares. Conventional wisdom reveals that the aged or senior residents rely more on dividends as a source of income, hence their preference towards dividends is relatively higher compared to youthful investors who are energetic and have alternative income generating ventures. Prudent demands that managers ought to comprehensively evaluate the needs of investors subject to the manner in which dividend is distributed. Unlike in politics where majority always carries the day, agency ought to consider the minority especially the preferences aged whose earlier investment has contributed significantly to the current status of the entity. Negligence to adherence on client's preference might adversely plunge the firm into operationalization crisis in terms of liquidity and shareholdings in case the aggrieved clients withdraw their shares as per Clientele theory Shefrin and Thaler (1988). Despite the fact that retail investors have invested in smaller units the study by Graham and Kumar (2006) affirmed empirically that they aggregately hold the majority shares in most reputable firms. Apparently, their plight seems to be ignored on dividend matters due to their thirst to demand dividends endless (Barber & Odean, 2008; Lee, 1992).Therefore, need for due diligence by agency is paramount in order to maintain buoyant between company's objective in terms of investment and dividend pay-out Grinstein and Michaely (2005)

2.1. Empirical Literature

The coreobjective of any business is to maximize its profitability, which is considered as the main source of income. The resources earned from operation are invested into viable growth opportunities, innovation and creativity not forgetting to rewards shareholders for their capital among others as per goals of the company. Literature strongly indicates a strong relationship between dividend pay-out and performance of an entity precisely its profitability Mohammed and Mohammed (2012). This applies across board from to small vendors who rewards themselves after a successful business cycle mostly on monthly. The basic logic behind it is motivation aspect and the funds to initiate the process are available in form of net profit. However, the agency has various factors to consider like expansion of the entity through investment in long term projects which are cheaper if financed internally as opposed to external that bears interest, debt settlement in case a firm is indebted and ensuring liquidity is sufficient for smooth running of business. It's on this basis that studies show some firms opt to priorities these goals as an opportunity cost of dividend pay-out Anupam (2012). Besides achieving set goals, an effective management is measured on how it settles its obligations when they fall due; this does not only earn the firm good reputation but also ability to enjoy services in advance on credit facilities. To enhance this process sufficient liquidity ought to be allocated depending on the type of business the firm transacts. A firm suffering from liquidity malnutrition is unlikely to pay investors dividends since it signals deficiency of funds which is articulated well in a research by John and Muthusamy (2010) who inferred a strong relationship between liquidity and dividend pay-out, sentiments echoed by Kanwal and Kapoor (2008). Similarly, agency costs theory advocates payment of excess liquidity to shareholders in form of dividends as a remedy to mitigate misappropriation of funds by managers Javad (2009). More often than not most companies do acquire debt finance to compliment internal reserves as they venture into long term projects. Indeed, scholars have urged that prudent managers do partly require external funding to form part of capital portfolio as an episode of actualising its objectives. The assumption is always that funds invested in viable projects will gainreturns that outweigh cost of capital borrowed, which is not always the case. The accumulated cost of debt is relatively higher to extend that it consumes almost entire revenue earned as profits, these constrains the firm from dividend pay-out due to unavailable resources Essa (2012). Depending on how a firm utilizes its debt facility has a reflection impacts its financial statement either positively or vice versa. In scenario of viable investment that are able to boost the productivity hence increase the returns, the entity is able to service the loan concurrently with issuance of dividends thus leverage influencing dividend positively John and Muthusamy (2010), nevertheless, in extreme cases whereby wrong investment decisions are made thus it turns out to be a negative NPV then the cost of servicing the debt is

an expense from gross profit hence less funds available to facilitate payment of dividend, implying the company is unlikely to pay any dividend in the near future until the mortgage is settled Muhammad and Saddia (2014).

Financial institutions prefer to offer credit facilities to large corporations due to the fact that they have collateral security in case of default in repayment as opposed to smaller entities Al- Twaijry (2007). The advantage enables larger firms to invest in viable projects including modern technological machineries that boost production. Eventually, they are able to earnest more returns besides rapid expansion which stabilizes their asset portfolio and ability reward investors. The allegation is supported by literature that show firm size as one of the key determinants of dividend pay-out among both financial and non-financial firms Al Kuwari (2009). Additionally, large firms do generate enough internal revenue that has enhanced diversified investment into different business lines, therefore in the event one business is disadvantaged by prevailing market conditionality's then the other subsidiaries are able to substitute in terms of revenue to normalize operations. This explains why consistency in dividend pay-out is notable among large firms. However, some large size firms both local and multinationals are on record of failure to reward their investors with dividends, based on this outcome a research done in this context affirmed that firm size negatively impacts dividend pay-out Perretti et al., (2013).

3. Research Methodology

A quantitative research design was adopted in this study. The population comprised of 10 manufacturing firms that were listed at NSE as at the end of 2016. However, only 7 firms met the threshold of having been listed in the NSE entire period of analysis of 2007 to 2016.

3.1. Data Analysis and Discussion

Random Effect Tobit Model was the appropriate for regression of the data due to the fact that it can accommodate zero censored values and the available data includes such values especially the dependent variable in instances where a firm failed to pay dividend in a given financial year.

Tobit Model or Censored Regression Model (Latent Dependent variable)

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

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

Tobit Model combination of Dependent and Latent dependent variable

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

Where

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 (Liquidity, Profitability and Leverage)

w_{it} Error term

icross sections = 7 Manufacturing firms

t time period = 10years

Equating the dependent and independent variables in the model

Regression model without Firm size

$DPO = \beta_0 + \beta_1 LIQ + \beta_2 LEV + \beta_3 PROF + w_{it}$ Equation1

Regression model inclusive of firm size (SZ)

$DPO = \beta_0 + \beta_1 LIQSZ + \beta_2 LEVSZ + \beta_3 PROFSZ + w_{it}$ Equation 2

4. Data Analysis and Discussion

4.1. Descriptive Statistic

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total	Av. Per Co.
	Company	DPO											
1	**BAT**	17	17	17	30.5	30.5	32.5	37	42.5	49.5	49.5	323	32.3
2	**BOC Kenya**	11.3	6.8	6.8	9.4	6.8	5.05	5.2	5.2	5.2	5.2	67	6.7
3	**Carbacid**	10	10	10	5	5	6	6	0.7	0.7	0.7	54.1	5.41
4	**EABL**	7.34	8.05	8.75	8.75	8.75	8.75	5.5	5.5	7.15	12	81	8.1
5	**Eveready**	0	0	0	0	0	0	0	0	0	0	0	0
6	**Mumias**	1.5	0.4	0.4	0.4	0.5	0.5	0	0	0	0	3.7	0.37
7	**Unga**	0	0	0	0.375	0.75	0.75	0.75	0.75	1	1	5.4	0.54
	Total	47.14	42.25	42.95	54.425	52.3	53.55	54.45	54.65	63.55	68.4	534.2	**53.42**
	Av. Per Year	6.73	6.04	6.12	7.78	7.47	7.65	7.78	7.81	9.08	**9.77**		

Table 1: Analysis of How Manufacturing Firms in Kenya Paid Dividends over the Study Period

As shown on Table 1 the average dividend pay-out of manufacturing firms listed at the NSE was 53.42. This implies 53.42% of manufacturing firms that were studied paid dividends to investors. In addition, 4 out of the 7 firms analysed issued dividend over the entire period, which represents a significant figure of 57%, meaning majority of firms in this sector do pay dividends. However, only 1 entity that is the Eveready company failed to issue dividend over the stipulated study period. About 29% of the firms experienced a mixture of the two observations whereby in some years they paid dividend or failed to do so. A pattern of constant increase in dividend pay-out is witnessed among the regular dividend paying firms.Meaning the dividend policy cover does not only indicate how the company will pay dividends in the current year but intention to pay dividends of similar proportionate in the current year but subsequent years.

4.2. Correlation Test

To determine the presence multicollinearity among the independent variables a correlation test was performed. The findings as shown on Table 2 indicate that the relationship between the predictor variables is approximately was insignificant, hence the absence of multicollinearity.

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

Table 2: Correlation Matrix
***** *Significant at 0.5 Two Tailed*

4.3. Random Effect Tobit Regression without a Moderator

The regression model done without firm size indicate Prob > chi2 = 0.1561 meaning the model is unfit for regression and predictors liquidity, leverage and profitability have p-values of 0.327, 0.217 and 0.298 respectively implying they insignificantly impact dividend pay-out among the manufacturing firms listed in NSE.

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

Table 3: Random Effect Tobit Regression Exclusion of Firm Size

4.3.1. Equation (II) Random Effect Tobit Regression with a Moderator

Size was used as moderating variable betweenFinancial Factors and dividend pay-out, size was considered a significant moderator as firms could pay dividend not because of the stated factors but due to its large size. As shown on Table 4 the model with firm size as a moderating variable has prob > chi2 = 0.0028, implying the model is suitable for application in addition two of the independent variables leverage and profitability do significantly influence dividend pay-out.

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

Table 4: Random Effect Tobit Regression Inclusive of Firm Size

Table 4 indicates that profitability has a p-value of 0.003% which is less than 0.05%, meaning profitability significantly influences dividend pay-out among manufacturing firms listed at NSE. The findings are in agreement with previous research done by(Musiega et al., 2013) which analysed Non-financial firms listed at NSE.Leverage whose p-value is 0.002 and coefficient of 1.3948, means that there exists a strong positive and significant relationship between dividend pay-out and capital structure of the manufacturing firms listed at NSE. Similar findings were replicated in previous study

by John and Muthusamy (2010).This can be attributed to prudent investment in positive NPV projects whose returns outweighs the demerits eluded in the transaction costs theory.

Unlike above independent variables, liquidity whose p-value was 0.089 which is greater than 0.05 implied that it insignificantly impacts dividend pay-out among manufacturing firms listed at NSE. Although a positive coefficient of 0.4842 indicates that there is a higher likelihood of firms whose liquidity is stable to pay dividend since entity is able to meet its current obligations after dividend pay-out contrary to those experiencing liquidity deficit. The unpredictability of liquidity attribute to why agency fail to factor it when drafting dividend policy. Similar findings have been echoed by Khan and Ahmad (2017).

Firm size which has been used as a moderating variable influenced the regression model precision from Prob > chi2 = 0.1561 to prob > chi2 = 0.0028 when applied. This means inclusion of the firm size as a moderating variable let to the regression model being suitable for use since the p-value is now below 0.05, within acceptable limits. Based on this outcome it can be concluded that firm size significantly impacts how dividend pay-out of manufacturing firms is determined. The result affirms earlier research by Huston (2015) who inferred that a positive and significant relationship exists between firm size and dividend pay-out.

5. Recommendation

Potential investors interested in investing in manufacturing firms listed in NSE ought to consider the trend of the firm in terms of profitability and firm size. They contribute significant on how the entity will pay future dividends not forgetting its existence as a going concern.

Management should utilize the debt finance in viable projects since if invested wisely is able to enhance growth and improved returns, however, misuse of this funds paralyses the operations of the firm in the sense that entire proceeds are diverted into loan settlement hence expansion is stagnated not forgetting dividend pay-out.

6. Limitations

The accounting policies applied can inflate an error on data collected whose impact could adversely influence the findings, current study failed to analyse the type of accounting standards applied and if in any case an entity had changed its accounting standards due to time constrain.

Management considerations on the dividend issuance remain a thorny issue due to the fact that decisions made by agency vary depending on company priorities or objectives, this influence although being significant is qualitative hence not factored as a predictor. Future studies ought to improvise means of capturing impacted linked to managers.

Random effect tobit model although selected due to its suitability to embrace zero values, its accuracy is compromised especially in terms of interpretation of pseudo R-squared that has raised more queries not forgetting the aspect of non-normality or heteroskedasticity that has inconsistency results as affirmed by McDonald and Nguyen, (2015).

7. **References**

i. Al-Kuwari D. (200), Determinants of Dividend Pay-out Ratio of Companies Listed on Emerging Stock Exchange: The case of Gulf Cooperation Council (GCC) Countries. Global Economy & Finance Journal Vol. 2 No. 2. Pg 38-63.
ii. Allen et al.,(2000). Financial Contagion Journal of Political economy. Vol. 108 pages 1-33
iii. Anupam. M. (2012) An Empirical Analysis of Determinants of Dividend Policy - Evidence from the UAE Companies. Global Review of Accounting and Finance Vol. 3.No. 1. 18 – 31
iv. Anil, K., & S. Kapoor. (2008). Determinants of dividend payout ratios: A study of Indian information technology sector. International Research Journal of Finance and Economics 15 (May): 63–71.
v. Anil K, Kapoor S. Determinants of dividend payout ratios - a study of Indian information technology sector. Int Res J Finance Econ 2008; 15: 1-9.
vi. Baker, K. & Gandhi, D. 2007, The Perception of Dividends by Canadian Managers: New Survey evidence', International Journal of Managerial Finance, Vol. 13 No. 1, pp. 70–91A
vii. Baker HK, Powell GE, Determinants of corporate dividend policy: a survey of NYSE firms. Finance Pract Educ 2000; 9: 29-40.
viii. Baskin, Jonathan Barron. 1988. The development of corporate financial markets in Britain and the United States, 1600–1914: Overcoming asymmetric information. Business History Review 62:2, 199–237.
ix. Bhattacharya (1979) Imperfect Information, Dividend Policy, and "The Bird in Hand" Fallacy Bell Journal of Economics, 1979, vol. 10, issue 259-270
x. Bratton and William, (2005). The Academic Tournament over Executive Compensation Book California Law ReviewVol. No.5 pages 26
xi. Brealey, R., & Myers, S. 2005, Principles of Corporate Finance. London: McGraw-Hill, pp. 155– 167.Black F. The dividend puzzle. J Portfolio Manage 1976; 2: 5-8.
xii. Business Daily Newspaper (Kenya) – 4th February 2017.
xiii. Essa, M.S., et al, (2012), A worthy factors affecting dividends policy decisions, An empirical study on industrial corporations listed in Amman stock exchange, "Interdisciplinary journal of contemporary research in business", Vol. 4, No 5
xiv. Fama, E. F. & French, K. R. (2002) "Testing Trade-Off and Pecking Order Predictions about Dividends and Debt" The Review of Financial Studies, Vol. 15: pp. 1-33.
xv. Farinha J. (2003). Corporate Governance: A survey of the Literature Univeridade do Economia Discussion paper No. 2003-06

xvi. Gordon J. Myron J. & Eli Shapiro, (1956), Capital Equipment Analysis: The Required Rate of Profit, Management Science 3, 102-110.

xvii. Gordon, M. (1961), "The Investment, Financing, and Valuation of the Corporation", Review of Economics and Statistics.

xviii. Gordon, M. J. (1959). Dividends, earnings, and stock prices. The Review of Economics and Statistics, 41 (2), 99-105.

xix. Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3 (4), 305- 360.

xx. John, S.F. & Muthusamy, K. (2010). "Leverage, Growth and Profitability as Determinants of Dividend Payout Ratio-Evidence from Indian Paper Industry". Asian Journal of Business Management Studies. 1(1):26-30.

xxi. Lintner J. (1956): "Distribution of Income of Corporations among Dividend, Retained Earnings and taxes". American Economic Review. Vol 46: 97-113.

xxii. Khan A. and Ahmad N. (2017) Determinants of Dividend Payout; An Empirical Study of Pharmaceutical Companies of Pakistan Stock Exchange, Journal of Financial Studies & Research, pg. 16

xxiii. Miller, M. and Modigliani, F. (1961), "Dividend Policy, Growth, and the Valuation of Shares", The Journal of Business, 34(4), pp. 411 -433.

xxiv. Modigliani F. (1982). Debt, dividend policy, inflation and market valuation. Journal FinanceVol. 37: 255-73.

xxv. Modigliani and Miller (1961): "Dividend Policy, Growth and the Valuation of shares". Journal of Business. PP411

xxvi. Mohammed S.& Mohammed M (2012) A Worthy Factors Affecting Dividends Policy

xxvii. Decisions an Empirical Study on Industrial Corporations Listed in Amman Stock Exchange Interdisciplinary Journal of Contemporary Research in Business Vol 4, No 5

xxviii. Muhammad A & Saddia Y. (2014) Impact of Leverage on Dividend Payment Behaviour of Pakistan Manufacturing Firms, International Journal of Innovation & Applied Studies.

xxix. Musiega, M., Alala, OB., Douglas, M., Christopher, MO and Robert, E. (2013) 'Determinants of Dividend Payout Policy Amount Non-Financial Firms on Nairobi Securities Exchange, Kenya,' International Journal of Scientific &Technology Research, 2(10), 253-266.

xxx. Nyamosi, E & Omwenga J. (2016). Effect of Dividend Policy on Stock Prices for Manufacturing and Allied Industry Firms listed at the Nairobi Security Exchange International Academic Journal of Economics and Finance/ Vol, Issue, pp. 25-47 ISSN 2518-2366.

xxxi. Pandey M. (2004) Financial management. vikas publishing house PVT limited.

xxxii. Pettit R. (1972).Dividend announcement, security performance and capital market efficiency. The Journal of Finance Vol 27. Pages 993-1007

xxxiii. Perretti, G. F., Allen, M. T., & Weeks, H. S. (2013). Determinants of dividend policies for ADR firms, Shelton weeks, managerial finance, Vol. 39, No. 12, Pp. 1155-1168 DOI: 10.1108/mf-04-2013-0075

xxxiv. Shefrin, H., & Thaler, R. (1988). The Behavioral Life-Cycle Hypothesis. Economic Inquiry, 26, 609-643.

xxxv. World Bank report, 2015 "Anchoring High Growth, can Manufacturing firms contribute more?" Bibliography Amidu M, Abor J. Determinants of dividend payout ratios in Ghana. J Risk Finance 2006; 7: 136-45

xxxvi. Al-Twaijry, AA 2007, Dividend policy and payout ratio: Evidence from the Kuala Lumpur Stock Exchange", The Journal of Risk Finance, Vol. 8 No. 4, pp. 349- 363.

xxxvii. Alii, K.L., Khan, A.Q. & Ramirez, G.G. (1993) "Determinants of corporate dividend policy: A factorial analysis", Financial Review, vol. 28: 523-47.

xxxviii. Amarjit G, Naham B, Rajendra T. (2010) Determinants of Dividend Payout Ratios: Evidence from United States, Vol. 6

xxxix. Easterbrook, F. H. (1984). Two Agency-Cost Explanations of Dividends. The American Economic Review, 74 (4), 650-659.

xl. Gill A, Biger N, Pai C, Bhutani S. The determinants of capital structure in the service industry: evidence from United States. Open Bus J 2009; 2: 48-53.

xli. Sajid et al (2012) The Relationship between Dividend Policy and Shareholder's Wealth (Evidence from Pakistan) Journal of Economics and Finance Review Vol. 2(2) pp. 55 – 59,

xlii. Tybout J. (2000).Manufacturing Firms in Developing Countries: How well do they Do, and Why? Journal of Economic Literature Vol. 38, No. 1, 2000 pg. 11-44

xliii. Zhou, P. and Ruland, W. (2006). Dividend payout and future earnings growth. Financial Analysts Journal, 62(3), 58 – 69.