



Determinant Of Dividend Policy Of Firms Listed On The Ghana Stock Exchange Market

Mavis Akolor^{1*}, Dr. Tripti Gujral²

¹Parul University Parul Institute of Commerce 201600408002@paruluniversity.ac.in Phd. Accounting and Finance ORCID:0000-0002-2293-4512

²Snr. Lecturer Parul University Parul Institute of Commerce tripti.gujral@paruluniversity.ac.in Department of Accounting and Finance

Citation: Mavis Akolor (2024, Determinant Of Dividend Policy Of Firms Listed On The Ghana Stock Exchange Market *Educational Administration: Theory And Practice*, 30(4), 1120-1127

Doi: 10.53555/kuey.v30i4.1619

ARTICLE INFO

ABSTRACT

The main purpose of the studies was to determine factors that influence dividend payments to firms listed on the Ghana Stock Market. A total of twenty-two firms were sampled from the Ghana Stock Market from the year 2011-2020 and included trading, manufacturing, and construction firms. Panel data was attained from the firm's financial statement and the Sargan test of longitudinal estimation based on the Generalized Method of Moments was employed for the research. The regression analysis indicated that there is a direct effect of profitability on dividend policy, debt and investment also indicated a direct influence on dividend policy. The results were significant and 1%,5% and 1% and robust. Our findings also indicated that there is an indirect effect of firm size on dividend policy and the result were robust.

Keywords: Profitability, Leverage, Investment, Firm size and Dividend policy

1.1 INTRODUCTION

One major challenge facing developing countries, especially Africa is financial constraints and Ghana is no exception. The issue became worse in 2007 when the spillover effect of the American economic crunch affected many nations Since Africa and Ghana for that matter have to rely on these countries for borrowing, aid and grants for funding projects and development structures

Businesses have to borrow to finance their business and sustain due to the effect of the crisis that hit Africa and the world. Meanwhile, investors will invest to get a return on investment. Many firms have to resort to borrowing to stay in operation or risk the chance of being in business. In Ghana quoted companies are governed by the Companies Code Act 179 1993. The code determines the code of conduct for companies operating and Ghana; in it, the code indicates that firms may pay dividends to shareholders for their investments. In financial management, there are a lot of factors that affect the payment of dividends including investment decisions, financial decision profitability, liquidity and firm size. Some researchers have indicated for a company to pay dividends, the firm should make a profit before it can afford to pay dividends to shareholders. While others believe that dividend is paid from excess capital held in cash. Dividend according to (Kieso et al., 1997) is the consideration given to investors for their investment. The dividend is normally through cash payment or stock payment. According to (Ibrahim, 2015), a dividend policy is a policy taken by management to either pay dividends to shareholders or not and at what rate per share held.

The payment of dividends comes with several advantages, while the none payment also comes with disadvantages depicted below;

The payment of dividends is an indication that the firm is performing very well in the market.

It is also an indication that potential investors can trust the management of the firms for the proper handling of their money.

The payment of dividends reduces agency costs between the principal and the agent

It also informs stakeholders about the efficiency of management.

It has a signalling effect on new investors.

There are some disadvantages that also comes with the payment of dividend depicted below; the payment of dividend indicates that managers are not able to use the excess profit to invest in other profitable project. Dividend payment is a short-term measure that reduces shareholder's wealth in the long run. According to (Kieso et al., 1997) some shareholders prefer the payment of cash dividends to other forms of dividends

adopting the bird in hand theory. Meaning cash at hand is better than capital gains which the future is unknown. The payment of dividends is a board decision a board can decide to have a zero dividend policy thus plough back profit until it deems it fit to pay dividends in the future. The firm can also decide to have regular dividend payments, either in cash or kind to shareholders. The decisions to pay dividends are determined by factors that influence dividend payment in the firm. Concerns are sometimes raised by shareholders as to why dividends are not paid despite the firms declaring profit. Again, the expectations of the other stakeholders are high especially debt holders who are interested in the payment of their debt plus interest at the end of the period. These interest sometimes creates agency cost between managers and other stakeholders.

2.1 LITERATURE REVIEW

Researchers over the years have conducted studies in similar areas to determine some factors that influence the dividend policies of firms. While some indicate that profitability influences dividend payout, others have argued the reverse. In India (Banga, 2010), indicated that profitability affects the payment of dividends to shareholders significantly and positively in the India BSE index; he indicated that as long as firms make a profit, the notion of dividend payment is high among shareholders forgetting other commitments available to the firm. As per his conclusions, firms will have to pay attention to the liquidity and growth factors of the firm before dividend payment is made.

Meanwhile, (Mehta, 2012) who tested the determinant of dividend policy from UAE firms alluded that the profitability of a firm, the leverage otherwise debt ratio are factors determining dividend payment of firms in UAE, more so, for most firms until a profit is made there is no indication of dividend payment to shareholders of the company. According to (Ajanthan, 2013), the firm in the hospitality industry in Sri Lanka had their dividend payment influenced by the profitability and leverage of the firms positively. This was a major consideration for managers of the company when the dividend issues were a concern. He also added that, firm size and sales also influenced dividend payment. In Nairobi, research conducted by (Musiega et al., 2013) on the factors influencing dividend policy for firms in the Nairobi Stock Market alluded that profitability and firm size among other factors were among the factors affecting the dividend policy of firms. Another Indian researcher (Chadha & AK Anil, 2015) conducted a search on the topic of factors influencing dividend decisions in India; they performed a regression analysis and the results of their work indicated the influence of previous years' dividend payments on the present year's dividend payment. He concluded profitability influences dividend payment by 15% of firms under his study. Accordingly, (Rehman, 2016) confirmed in his work that for both financial and non-financial firms quoted in the market, the liquidity of the firms was a major determinant of dividend payment, while the profitability of the firm's size was not a major factor influencing dividend payment. Rehman mentioned that the profitability was not enough determinant, the cash available to the firm is a very important consideration and where firms were willing to pay higher dividends to shareholders despite investment opportunities available. While (Olayiwola, 2021) in Kenya quoted firms that studied the influence of dividends and the earnings of firms and indicated the firms in Kenya had a singular philosophy based on trends of the firm; where the previous year's dividend influenced the current year's dividend payment. His conclusions were investment opportunities of the firm and the profitability of the firm significantly had a direct relationship with the dividend policy of firms in Kenya. While (Sugastuti RH et al., 2018) whose research found a positive effect on profitability with dividend policy, their results showed a significant impact on dividend policy. To a large number of investors, profit means money has come into the firm and must be paid dividends but does profitability reflect cash available? That is why despite profitability some other researchers like Ibrahim (2015) concluded that investment opportunity and profitability had an insignificant effect on profitability. Again (Pattiruhu & Paais, 2020) authors in India concluded that profitability is a major determinant of dividend policy. Based on the bird in hand theory, most firms prefer to pay a dividend to shareholders to shareholders instead of ploughing back into the business. Once a firm declares profit shareholders and other stakeholders are itching to get a share of their profit. In testing their hypothesis debt of the firm and profitability showed an indirect relationship with dividend payment to shareholders. To buttress his view (Ahmed, 2015) also researched a similar study to determine how profitability influenced dividend payment and concluded profitability even though profitability determines the earning of the firm is not enough measure of dividend policy of Islamic firms. Likewise Palamalai & Brahmaiah (2018) also found out in India that profitability, leverage, liquidity and inflation did in fact influence the India market negatively. From our introduction, we indicated a mixed interpretation of data and variables and their impact on the dependent variables. The literature presented above indicates an inconsistency in the research available while some firms pay dividend upon making profits others believe that a declaration of profit does not mean enough cash is available to pay dividend to shareholders. Similarly, (Asif et al., 2011) a renowned researcher indicated debt had an indirect relationship with dividend policy, since firm has a lot of debt to settle with high interest rate, payment of dividend becomes difficult for firms in the krachi market. While (Eriotis, 2015) also contrary found debt has debt has a direct effect on dividend payment fro firms in Greek market.

There is extant available literature that is not conclusive due to the diverse ideas shared by researchers. This work seeks to add to the literature available especially in Ghana where little has been done in this area.

3.1 DATA AND DATA SOURCES

The study sampled a total of 22 firms quoted on the GSE for the year 2011 to 2020. The financial statements of these firms from annual reports in Ghana to help gather data for the study. The use of periodicals, journals firms websites newspapers are also used to collect the data for use. The study focuses on quoted firms that are not financial institutions since financial firms have different regulations governing them and their method of calculating some variables is quite different from the trading firms and for easy comparison and analysis. The data sourced is based on the objectives of the research and the research questions raised.

3.1.1 Variables

We looked at variables that influence dividend policy per available research to include profitability, leverage, investment and firm size.

a) Profitability

Profitability is the earnings from the company's trading activities, normally determined after all operational costs and expenses are taken out of total revenue. Many researchers have attempted to measure profitability using total assets, total equity or total revenue. According to (Pattiruhu & Paais, 2020) the measurement for profitability can easily be ascertained using the return to equity as profit before interest and tax to the total assets of the firm. The implication is to know how much 1cedi of shareholder's equity is used to generate a 1 cedis of profit for the firm. Investors and other stakeholders assume that firms pay a dividend because it makes a profit and a firm that does not make a profit cannot make a dividend payment.

b) Liquidity

A firm liquidity is the cash and cash equivalent available to the firm. It shows how fast a firm can turn its assets into cash to settle the debt as and when it falls due. The ratio of cash available to current liabilities measures the liquidity of the firm. This means how many times the liabilities of the firm can be settled using the cash available to the firm. Researchers have indicated that larger firms have enough cash to settle dividend policies and smaller have little at hand. (Raj Kumar and Pawan Kumar Jha, 2012) Indian authors indicated that a liquidity ratio is the ratio of cashless inventory to current liabilities.

c) Investment

When companies have investment opportunities, growth opportunities, either in sales or assets. As they operate most firms normally prefer to invest in positive opportunities and increase growth in sales and expansion rather than pay dividends to shareholders. A company that has investment opportunities will prefer to invest to increase shareholders' wealth in the run. According to (Amidu, 2007), investment is measured as the market-to-book ratio of the firm used to generate profit using the netbook value of assets to share price.

d) Leverage

A lot of firms acquire debt to finance business, and expand and grow their businesses. The acquisition of debt reduces the control of the firm and the responsibility to pay debt comes before the settlement of shareholders dividend. The debt repayment and interest payment puts a burden on the firm and the obligation to settle outsiders is higher. Researchers have argued that firms that have high interest rate finds to difficult to pay dividend to shareholders than firms that do not. While companies with little geared ratio will pay dividends to shareholders. As indicated by Amidu the ratio of debt to equity is used as a measurement of debt.

e) Firms size

Another factor influencing dividend decisions is firm size of the firm thus the total assets of the firm. Many authors have indicated that the total assets of the indicating how large firm are determined by how well the dividend policy is paid. The total assets of the firm assist the firm in production which eventually increases sales. In the case of a firm with large total assets, the firm is likely to pay more dividends than lower firms. A Ghanaian author (Amidu, 2007) method of measuring total assets is adopted for this work as the natural log of total assets.

3.2 Methodology

Our methodology is based on the empirical studies of (Ibrahim & Awudu Sare, 2018), these authors indicated that by using the two steps of GMM, the problem of endogeneity is reduced drastically to make the variables, based on that we establish with a panel data to determine the relationship with our explanatory and explained variables and firms. We then set up a model where dividend policy is a function of all independent variables and the error term.

$$DIP_{it} = f(PRT_{it}, INV_{it}, LEV_{it}, FMX_{it})$$

Where DIP is the dividend policy of firm i at time t, PRT is the Investment of Firm at t, LEV is leverage and FMX is the firm size at i time t.

One challenge with this method is the presence of endogeneity in the model which produces unfair and biased results from the model. Using the Blundell and bond estimation the equation will be expanded to include the initial values of dividend payout in the model

$$DIP_{it} = \alpha_0 DIP_{it-1} + \alpha_1 PRT_{it} + \alpha_2 INV_{it} + \alpha_3 LEV_{it} + \alpha_4 FMX_{it} + \epsilon_i + \phi_t + \sigma_{it}$$

Where DIP_{it-1} is the lag dividend policy, ϵ_i the firm effect not observed and ϕ_t is the time μ is the error term

As indicated the introduction of the DIP_{it-1} could correlate with the error term hence the use of GMM to fix the endogeneity problem in the model specification, moment conditions are drawn to explain the effect of the correlation.

$$F(\nabla DIP_{it-x} \sigma_{it}) = 0$$

$$F(\nabla VET_{it-x} \sigma_{it}) = 0 \quad \text{for } X \geq 2; t=3, \dots, T$$

for X is greater or equal; t equal 3

The ∇VET_{it-x} shows the lag of independent variables without DIP_{it-1}

The x depicts the lag structure including the levels where x is greater or equal to 2 are used as valid instruments. The variable lag is seen as a bad tool in the equation correlation with the error term. The two-step approach is a better tool for dealing with the error from measurement by adopting orthogonal restrictions as follows;

$$F(\nabla DIP_{it-x} \sigma_{it}) = 0 \quad \text{for } x=1$$

$$F(\nabla VET_{it-x} \sigma_{it}) = 0 \quad \text{for } y=1$$

These restrictions we believe will remove the collinearity in our work and improve the validity of our instrument.

Table 1 Descriptive statistics

VARIABLES	MEAN	STD	CC	MIN	MAX
DIP	.1113436	.5144264		-5.6643	2.2158
PRT	.0742027	1.418076		-11.1795	12.8951
LEV	2.070025	10.71232		-64.6981	119.1717
INV	3.819652	11.4078		-80.1391	81.9037
FMZ	8.031858	1.103163		5.9315	10.562

Where std standard deviation, cc correlation coefficient, max for maximum, and min for minimum Column 2 of the descriptive statistic table shows the mean of the model to be 11.13% showing that the average payment of dividends by firms on the stock market is 11.13% this means that the firms hardly pay dividends to shareholders. This normally happens when the firm has investments that might generate more earnings either through capital gains or dividend payments to shareholders. These are great signals that the going concern of the firms are guaranteed and the business has good prospects financially, and hence prefer to invest more than paying a dividend in the short-run Profitability shows the return from the equity of the shareholders of the firm. How the firms use the shares to make a profit, the mean is 7.4% this means that for the firms listed on the stock market for every share held 7.4% of earnings is generated for the firms. The standard deviation stands at 1.4180 meaning that there are some firms that do not generate generate 7.4 of earnings using their equity. Leverage proxy by debt ratio measures the total debt available to the firm, indicating how much equity can be used to settle the debt. Explain how much equity can be used to settle the debt of the firms in the case of liquidation. The mean of the debt ratio stood at 2.0700025. the total debt of firms listed on the market average debt amounted to twice the equity of the firm. Some firms are likely to find difficulties in settling debt and making payments of dividends to shareholders. The standard deviation is 10.712 indicating some firms have as high as 10.71 debt to equity ratio in the firms. Investment measured by market capitalization ratio is 3.819652 meaning that net book value of the firms generates and increases the market price per share by 3.819652 times. The firm size shows the average assets of the firms to be 8.031858, while the standard deviation is 1.103163 indicating some firms have low asset levels at the firm. The minimum and maximum levels indicate the high or low values or levels of our variables discussed.

Table 2: Correlation matrix

	DIP	PRF	LEV	INV	FMZ
DIP	1.0000				
PRF	0.0385	1.000			
LEV	0.0062	-0.6413	1.0000		
INV	0.1032	-0.3880	0.3835	1.0000	

FMZ	0.1047	-0.0561	0.0521	0.0608	1.0000
-----	--------	---------	--------	--------	--------

The table above shows the correlation matrix of explanatory variables showing the relationship between the variables under study. The first column shows that the dividend payout ratio relates positively with all the variables in the terms of direction of the variables. In the request, the magnitude of effect for all the variables is less than 0.5. these results are robust since our variables do not correlate with each other. Again the correlation matrix between all the variables with profitability is negative indicating that profitability has a significant role to play when it comes to the payment of dividend and other variables such as debt, investment and firm size significantly affects the rate of profitability of firms. Debt has the lowest coefficient to dividend payout ratio indicating a 0.0062.

We then proceeded to perform a regression analysis from our models and the table below is the results obtained.

Table: 3 Regression analysis

	1	2	3	4
Constant	.13829268*** {.0116153}	.1380285*** {.0121274}	.1168204*** {.0153686}	1.177043*** {.2239933}
Lag DPR	-.478208*** {.0040555}	-.4742032*** {.005676}	-.4707069 {.0118976}	-4896513 {.0070212}
PRT	.0291275*** {.0058966}	.0364992*** {.0072621}	.0391461*** {.0094537}	.0159445 {.0178885}
LEV		.0018067** {.000559}	-.0005204 {.00125978}	-.0012001 {.0012684}
INV			.0055789*** {.0015957}	.0037883 {.0028584}
FMZ				-.1317983*** {.024886}
Diagnosis				
Wald chi-Square	14366.12	9426.02	39475.29	15827.62
P value	0.0000	0.0000	0.0000	0.0000
Sargan test	15.66775	14.94495	11.99138	13.63536
AR 1	-9864	-.99197	-1.0153	-.99006
P VALUE	0.3239	.3212	.3100	0.3221
AR 2	.63498	.65075	.65586	.58778
P VALUE	0.5254	0.5152	.5519	.5567

4.1 FINDINGS

From the table above column one indicates the impact of profitability on dividend policy as the only independent variable. The lag dividend payout ratio is negative in all the models indicating a convergence in the future in terms of all firms paying dividends to shareholders. As indicated by the econometrics the negative direction of effect in all the models suggests that in the long run, all firms will pay dividends to shareholders. The significance of the lag dividend payout is to determine whether the previous year's dividend influences the payment of the current year's dividend. The result is negative indicating that the lag dividend does not influence the present year's dividend payment. Unfortunately, our research is inconsistent with (Aivazian et al., 2003) who established that the previous year's dividend influences the present dividend payment. This research is also consistent with the works of (Palamalai & Brahmaiah, 2018). Whose research in India found a negative effect of the lag dividend policy for firms in India. Meanwhile (Pandey, 2007) determined a positive effect of the previous year's dividend on the current year's dividend. These findings indicate that for some firms payment of dividends sends a good signal to investors, again managers are believed to be efficient when there is consistent payment of dividend and again signals that the firm is prosperous and is likely to increase shareholders wealth in the future.

While some researchers believe that the lag dividend influences current dividend payment others including this research indicate a negative effect of the past dividend on the present dividend payment in Ghana.

We introduced profitability as the only independent variable from column one of Table 3 and the results show a direct relationship between profitability and dividend policy where a 1% increase in profitability affects dividend payment by 2.9%, the results are significant at all conventional levels. According to (Palamalai & Brahmaiah, 2018), in India firms on the Indian market regression analysis depicted a direct relationship which is consistent with our findings.

This indicates that profitability causes dividend payments. Once a profit is made shareholders are expecting returns on their investment as a return on their investment without accessing the general finances of the firm. Nearly every company listed on the stock market believed that the declaration of profit means dividend

payment. In Ghana, near research conducted by (Amidu, 2007) found profitability measured by return on assets to have a direct influence on the dividend payment plans of firms quoted. The likes of (Sugiastuti RH et al. 2018),(Ajanthan, 2013), (Banga, 2010) and (Olayiwola, 2021) also indicated that profitability is a major influence of dividing payment plans the higher dividend payout enhancing effect of profitability is consistent with the study expectations where the authors indicated that large profit-making companies with sound earnings frequently distribute dividend as compared to smaller profitable companies. Based on these findings, profitability is considered a measure of performance a tool to assess the manager's ability to manage resources entrusted to them. It is considered one of the important explanatory variables that influences dividend policy. That is to say, a firm that does not make a profit cannot pay dividends. Baker & Smith (2006) concluded that the pattern of dividend payment is contingent on future anticipated profit and or earnings and future projects that may generate positive net present values to the firms. However, some researchers have contrary views on the effect of profitability on dividend payment. Palamalai & Brahmaiah (2018) dispute this finding saying that profitability and inflation have a negative influence on the dividend payment of quoted firms in the Indian market. They concluded that the profitability measured by return on assets and earnings per share was statistically insignificant in the model estimation. Singhanian & Gupta (2012) results are also inconsistent with our findings indicating a negative relationship with dividend policy. We introduced another key variable that influences dividend payment to answer our research question the influence of debt of dividend payment policy of firms listed on the market. When debt is introduced in the model, we noticed a direct relationship with dividend payment. Where a 1% increase in debt increases dividend payment by 0.018067% and significant results at 5%. this result is good depicting that firms with high debt enjoy tax savings which reduces taxes paid and increases profitability.

This is good as the organizations have a debt load which is used to invest in more positive projects for more profit or earnings which in the long run is used to pay dividends to shareholders. The tax savings from having huge debt will also help to increase their earnings. As firms go in for more debt they normally use it for investment for growth and expansion in the business and sometimes for acquisition of assets to improve their economic benefits. The introduction of debt also increases the profitability effect on dividend policy from 2.9% to 3.6% meaning that indeed the investment increases earnings resulting in high dividend payment. The results of the model are significant at all levels and robust in our models. The findings of this work are inconsistent with those (Banga, 2010) who found an indirect association between profitability and dividend policy and concluded that as long as firms have debt it will be difficult to announce and or propose dividend payments due to the high financial cost incurred during debt acquisitions. The likes of Onofrei et al., (2015) also suggest that firms with high debt ratios are unlikely to pay dividends to shareholders due to the high cost of borrowing. Palamalai Srinivasan, and Brahmaiah B, (2018) also concluded that an indirect relationship exists between debt and dividend payment of firms in Ghana and dividend payment due to financial cost, and interest rates hence firms will have to settle those debts first before considering dividend payments to shareholders. Again, (Asif et al., 2011) and (Yousaf, 2014) who adopted the theory of John Lintner concluded that debt has many disadvantages including the increasing cost of borrow which deters managers from paying dividends to the shareholders; hence an indirect influence on dividend payment. In Africa, (El Khoury et al., 2014) of Nigeria found a similar indirect effect between the debt and dividend policy of firms quoted in Nigeria. The findings of this research are consistent with the findings of (Pattiruhu & Paais, 2020), the authors also indicated that when firms borrow cash, it means the firms have identified an opportunity which will increase their earnings and would pay dividends more often than firms that do not. Again the tax savings from debt acquisition also increases their profitability hence such firms are able to pay dividend to shareholders.

In Column 3 the findings show the effect of dividend policy when profitability is controlled by investment. We notice that when investment is included in the model investment has a positive impact on dividend policy where a 1% increase in investment increases dividend payout by 0.55789% which is significant at all conventional levels. Again, when investment is controlled, the effect of profitability on the dividend increases slightly to 3.9146% against the effect when considering profitability as the only dependent variable. This means that during investment there is an inflow of funds from the market capitalization which marginally increases earnings available to firms for distribution as dividends. As suggested by most researchers in our literature review investment opportunities brings about inflows in the long run which increases the firm's ability to keep cash for payments of dividend to shareholders. The firms can use their assets to increase production and thereby increase turnover. The findings of our research are inconsistent with the works of (Palamalai & Brahmaiah, 2018) who indicated that investment opportunities were insignificant when it came to the payment of dividends to shareholders. This may mean the the method of measuring investment varies which could have an influence on the out.

We lastly included firm size as a variable in our estimation and noticed that firm size reduces dividend payments to shareholders for firms listed on the Ghana stock market. Where a 1% increase in firm size reduces dividend payment by 0.1317peswas. Firm size indicates the total assets of the firm. Now when firms' fixed assets expand there is an out of funds from the business, hence the firm is not liquid enough to pay dividends. The effect of buying assets to increase production for example is felt in the long run than short. Again a firm might produce more to increase goods in stock and when receivables are high, it becomes

difficult for the firm to have enough cash to pay dividends to shareholders. These findings are in agreement with the works of (Palamalai & Brahmaiah, 2018) (El Khoury et al., 2014) and (Pattiruhu & Paais, 2020) but do not agree with the works of (Yousaf, 2014).

Based on our findings, the Wald test statistics are high in values with low p values, this indicates our models are significant our independent variables together or separately do not correlate with the error term and the removal of one variable will affect the model estimation hence we do not accept the null hypothesis of the study. Our findings are valid and based on the Sargan test.

5.1 IMPLICATIONS

The findings from the empirical strategy analysis and the general objective highlighted some policy implications for the firms under study and prospective investors in an attempt to determine the relationship between debt and dividend policy, profitability and dividend policy, investment and firm size with dividend policy. The positive effect of profitability on dividend policy shows that as long as firms make a profit, they are likely to pay dividends to shareholders. The declarations of profit at board meetings means to most investors that they can receive dividend but the real that is that profit is not the availability of extra cash to pay a dividend. For example, high credit sales are included in turnover but it does not necessarily mean that cash has been received from the sales but it is considered in the determination of profit. A firm might fail to pay dividends even if it has declared profit. Hence the firm should analyse its cash flow from operating activities before paying dividends to shareholders.

Considering the lower mean of dividend payout to shareholders, firms on the market hardly pay a dividend to shareholders regardless of the debt level or not. The debt acquired could be used to invest in a positive project which generated profit for making payment of dividends to shareholders. It is important to know that acquiring too much debt will affect the liquidity of the firm in the future, the cash flow will be affected and this will affect the going concern of the firms listed on the stock exchange market. In a period of economic recession debt cannot be delayed in servicing those debts. Firms and investors should consider the debt level of firms before investing and firms should consider giving out monies to shareholders as dividend payments. As noted the introduction of leverage as has happened here indicates a disagreement with the pecking order theory because a lot of the firms do not wish for so much control in the firms, hence prefer debt to equity. The good thing about this is that managers have a responsibility to both shareholders and debenture holders this reduces information asymmetric. The changes in leverage to a positive after the introduction of profitability could mean that those debts have been invested in projects that earn some positive returns and have the firm decide to pay dividends from those profits. The effect of investment on dividend payout was positive and significant at all levels. Indicating during the issuing of shares there is an inflow of cash into the firms and payment of the dividend is possible but firms should consider that the total assets level of the matters in such decision hence firms should look at the level of total assets as share prices increase expectation managers should not rush in paying a dividend in the short run to satisfy some few customers.

6.1 CONCLUSIONS AND RECOMMENDATIONS

The results of our research conclude that profitability influences a firm's dividend payment. These results are significant and robust at all conventional levels. The debt level of firms also influences dividend payment positively since most firms invest in positive projects for higher returns. Investment measured as market-to-book ratio did indicate a significant influence on dividends. In the future other research can be conducted in this area using different methods such as time series data collection for a particular firm. Again, the research methods could vary to help find out a better way to deal with external factors that influence dividend payment also financial institutions can be included to test to determine their impact on dividend policy.

7.1 CONFLICT OF INTEREST

We declare that the authors of this research have not been funded by any organisation or other individual. This research is funded personally by the authors and for academic purposes only.

REFERENCES

1. Ahmed, I. E. (2015). Dynamics and Determinants of Dividend Policy in Pakistan (Evidence from Karachi Stock Exchange Non-Financial Listed Firms). *World Review of Business Research*, 5(2), 73–85.
2. Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from U.S. firms? *Journal of Financial Research*, 26(3), 371–387. h
3. Ajanthan, A. (2013). Corporate governance and dividend policy: A study of listed hotels and restaurant companies in Sri Lanka. *Indianjournals.Com International Journal of Management*.

4. Amidu, M. (2007). How does dividend policy affect the performance of the firm on the Ghana Stock Exchange? *Investment Management and Financial Innovations*, 4(2), 103–112.
5. Asif, A., Rasool, W., & Kamal, Y. (2011). *Impact of financial leverage on dividend policy: Empirical evidence from Karachi Stock Exchange-listed companies*. 5(4), 1312–1324. <https://doi.org/10.5897/AJBM10.838>
6. Baker, H. K., & Smith, D. M. (2006). In search of a residual dividend policy. *Review of Financial Economics*, 15(1), 1–18. <https://doi.org/10.1016/j.rfe.2004.10.002>
7. Banga, C. and A. G. (2010). The Determinants of Corporate Dividend Policy. *SAGE Publications*, 37(2).
8. Chadha, S., & AK Anil, S. (2015). Capital structure and firm performance: Empirical evidence from India. *Journals.Sagepub.Com*, 19(4), 295–302.
9. El Khoury, R. M., Maladjian, C., & El Khoury, R. (2014). Determinants of non-resident deposits View project Determinants of the Dividend Policy: An Empirical Study on the Lebanese Listed Banks. *International Journal of Economics and Finance*, 6(4). <https://doi.org/10.5539/ijef.v6n4p240>
10. Eriotis, N. (2015). The Effect of Corporate Leverage on Dividend Policy: Evidence from Greek Panel Data. *Researchgate.Net*, August, 1–12.
11. Ibrahim, M. (2015). THE EFFECT OF CORPORATE TAX ON DIVIDEND POLICY OF LISTED CONSUMER GOODS COMPANIES IN NIGERIA. In *Researchgate.net*. <https://www.researchgate.net/publication/320357773>
12. Ibrahim, M., & Awudu Sare, Y. (2018). *Determinants of financial development in Africa: How robust is the interactive effect of trade openness and human capital?*
13. Kieso, D. E., Kpmg, C. P. A., Weygandt, J. J., Andersen, C. P. A. A., Wiley, J., York, N., Brisbane, C., & Singapore, T. (1997). *INTERMEDIATE ACCOUNTING*.
14. Mehta, A. (2012). An Empirical Analysis of Determinants of Dividend Policy—Evidence from the UAE Companies Mehta. *Global Review of Accounting and Finance*, 3(1), 18–31.
15. Musiega, M. G., Alala, O. B., Douglas, M., Christopher, M. O., & Robert, E. (2013). Determinants Of Dividend Payout Policy Among Non-Financial Firms On Nairobi Securities Exchange, Kenya. *INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH*, 2(10). www.ijstr.org
16. Olayiwola, O. O. A. and J. A. (2021). Dividend policy-performance nexus: PMG-ARDL approach. *Future Business Journal*, 7, 23.
17. Onofrei, M., Brindusa, M., Durdureanu, C., Gabriel, S., Brindusa Tudose, M., Durdureanu, C., & Gabriel Anton, S. (2015). Determinant factors of firm leverage: An empirical analysis at Iasi county level. *Procedia Economics and Finance*, 20(15), 460–466.
18. Palamalai, S., & Brahmaiah, P. (2018). DETERMINANTS OF CORPORATE DIVIDEND POLICY IN INDIA: A DYNAMIC PANEL DATA ANALYSIS. *Academy of Accounting and Financial Studies Journal*, 22(2).
19. Pandey, I., R. Bhat. (2007). Dividend behaviour of Indian companies under monetary policy restrictions. *Emerald.Com/Managerial Finance*. https://www.emerald.com/insight/content/doi/10.1108/03074350710715782/full/html?casa_token=eBgw2T7BI3UAAAAA:dLAz_E6_Vy93y1veSztKhW2KLucWm2pEcz4fE2bBDkNDHoQfCNYChy5dSZXhxozhxD6aTf_1M9FbpmPE2M5lASXAFP58HNaRiT6Ho_zUiBXqeVCZUYXW
20. Pattiruhu, J. R., & Paais, M. (2020). Effect of Liquidity, Profitability, Leverage, and Firm Size on Dividend Policy. *Journal of Asian Finance*, 7(10), 35–042
21. Raj Kumar and Pawan Kumar Jha. (2012). DETERMINANTS OF CORPORATE DIVIDEND POLICY IN INDIA - A STUDY OF LISTED IT COMPANIES AT BSE. *SAGE Publications*, 148, 148–162.
22. Rehman, O. U. (2016). Impact of Capital Structure and Dividend Policy on Firm Value. *Journal of Poverty, Investment and Development*, 21.
23. Singhanian, M., & Gupta, A. (2012). Determinants of Corporate Dividend Policy: A Tobit Model Approach. *Vision: The Journal of Business Perspective*, 16(3), 153–162.
24. Sugiastuti RH, Dzulkirom M, & Rahayu SM. (2018). EFFECT OF PROFITABILITY, LEVERAGE TOWARD DIVIDEND POLICY AND FIRM VALUE. *RJOAS*, 8(80).
25. Yousaf, M. A. and S. (2014). Impact of Leverage on Dividend Payment Behavior of Pakistani Manufacturing Firms. *International Journal of Innovation and Applied Studies*, 6 No. 2.