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# The Impact of Profitability, Investment, Inflation and Government Effectiveness on Dividend Policy: Evidence from Ghana

**Mavis Akolor**
*Parul University*
*Parul Institute of Commerce*
*Email: 201600408002@paruluniversity.ac.in*

**Dr. Tripti Gujral**
*Sr. lecturer*
*Department of Accounting and Finance*
*Parul Institute of Commerce*
*Parul University*
*Email: tripti.gujral@paruluniversity.ac.in*

**Abstract**

This research has been conducted to determine the impact of the impact of profitability, investment, inflation and government effectiveness on the dividend policy of firms in Ghana. The study comprise of 22 non-financial firms listed on the GSE from 2011-2022. The results revealed a positive, significant and robust relationship between profitability and dividend policy while investment also has a positive relationship with dividend policy but was insignificant. Other variables that influenced dividend policy were inflation and government effectiveness. Our results were supported by the literature available and a further study needs to be conducted by including the financial institutions in the data.

**Keywords:** Dividend policy, Profitability, Investment, Inflation, Government Effectiveness.

## 1. Introduction

Stakeholders who invest their funds in a company will prefer to earn a return or profit on investments. These returns could be by way of capital gains and dividends payments of dividends are mostly made by firms to shareholders out of the profit of excess capital. According to (Kieso et al., 1997) "dividends are categorized into four types namely cash, property liquidation, and stock dividend". Some investors prefer the 'bird in hand' theory than to be paid capital gain in the future this is because cash dividends are perceived to give an investor more assurance and satisfaction than stock benefits. The policy taken by management to pay an amount in the form of consideration to shareholders is called the dividend policy. Accordingly, the board of directors of a firm decides at their annual general meeting to pay dividends either in part or whole to investors as a return on their investment. A dividend policy serves as a yardstick for shareholders to hold management accountable for the trust they have placed in them. The payment of dividends comes with a lot of benefits to the company and managers of the firm. It denotes a signal to prospective investors about the performance of the firm, it denotes managers are efficient, reduces agency cost and reduces information asymmetric. The payment of dividends may also lead to firms losing out on investment in other positive NPV projects that could bring higher earnings to the companies and increase shareholder's wealth in the future. This, in the long run, may affect the future earnings of the companies and eventually reduce shareholders' wealth. A lot of research has been conducted on how profitability affects the payment of dividends to shareholders. As firms grow and expand, they are expected to improve performance through an increase in profitability such that shareholders can be paid dividends and improve their wealth and capital gains.

Managers have taken the responsibility to be held accountable to creditors and shareholders for the trust impose on them.

The payment of dividends depends on the cash available to firms after taking into consideration, investment, debt financing activities and any other cash available. As indicated dividends are paid out of excess capital to shareholders from excess cash available. (Ibrahim, 2015) indicated "that firms will have to attract potential investors for them to show interest in their business and at the same time prove to the current holders that they can continue to trust them with their resources by increasing their dividends and wealth". Now, making a mere profit is not enough to inform shareholders that the firm is performing, firms have obligations towards debt servings and other commitments. The 'sweetmeat slap theory' indicated shareholders as rational as they prefer cash dividends to capital gains since the latter has so many tax implications and there is no guarantee as to when the taxes changes may be high. As many researchers have indicated the payment of dividends to shareholders is a strong indication of the performance of managers and the firm. Managers want to show they are performing and while increasing shareholders' wealth, whiles the payment also sends a signal to prospective investors, debt-holders. Are firms able to determine cash available before paying dividends, or are managers just paying dividends to impress shareholders and seeking for their trust? Many researchers indicate as much as a company makes profit then dividend should be paid and seen as a major driver dividend payment to shareholders.

## 2. Literature Review

There are extant literature available on this study in most part of the world however, in Ghana not much has been done in this area. Banga (2010) demonstrate if a firm has to pay dividend to shareholders then it needed to increase it earnings of the company. He again concluded that profitability influenced dividend policy positively and significantly for firms in India's BSE index. He also added that liquidity, and growth in sales also influence dividend. According to Mehta (2012) who tested the determinant of dividend policy from UAE firms dividend policy, profitability influences 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 hospitality industry in Sri Lanka had their dividend payment being influenced by profitability of the firms positively. This is was a major consideration for managers of the company when the dividend issues are concern He also added that, firm size and sales also influenced dividend payment. Musiega et al. (2013) also conducted a similar study on the determinant of dividend policy in the Nairobi exchange market where he allude that profitability and a firms size among other factors were among the factors affecting the dividend policy of firms. According to Chadha & AK Anil, (2015) who conducted a search on the topic of factors influencing dividend decisions in India; they performed a regression analysis and found that the past year's dividend has a positive influence on current dividend payment. Rehman (2016) conducted a study on factors influencing corporate dividend payment decisions of both financial and non-financial firms; he found out that liquidity, profitability and firm size are factors that influence dividend policy positively but the profitability was not enough determinant, the cash available to the firm is very important consideration and where firms were willing to pay higher dividend to shareholders despite investment opportunities available. Olayiwola (2021) in Kenya firms studied the influence of dividends and the earnings of firm and indicated in his conclusions that for most companies in Kenya the past year's dividend ,investment opportunities and profitability had a positive influence on dividend policy. The works of S et al.(2021) concluded that despite firms having liquidity issues profitability influenced dividend payment and had a positive relationship between profitability and dividend policy with significant and robust results. While, Sugiastuti RH et al. (2018) found a positive effect of profitability with dividend policy ,their results were significant impact on dividend policy. To a large of number of investors profit means money has come into the firm and must be paid dividend but does profitability really reflect cash available. That 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 conducted a study on the effect of profitability and leverage on dividend policy, testing some hypotheses and running a multiple regression, they concluded that there is an insignificant relationship between profitability and dividend policy. Ahmed (2015) also researched a similar study to determine how profitability influenced dividend payment and found that profitability had an insignificant negative relationship with the dividend policy of Islamic firms. Likewise Palamalai & Brahmaiah (2018) also found out in India that profitability 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.

## 3. Data and Data Source

The study adopts data from secondary sources like the financial statements of all 22 sampled for the study period. The financial statement was obtained from the ARG annual report Ghana website and the Ghana stock market website, the world bank sites and ghana statistical services websites. We also included financial statements of firms from periodicals, firm websites, and newspapers to make make a more accurate data collection process. With the 22 trading, manufacturing and constructions and mining firms, the main variables selected for the work include dividend payout ratio proxy for dividend policy, liquidity, investment, inflation and government effectiveness, ratios were calculated based on available research and data available at the time of the study. The data have been collected based on the necessity of the research objectives and questions. The compilation of firms listed o the stock market includes firms that were currently quoted on the stock market at the time of the study from the period 2011-2020. As indicated due to different regulations and different determinations of some variables the financial firms have been excluded from the analysis of the data and the focus is centred on non-financial firms listed in Ghana Stock Market.

**Table 1: Firms and Industries**

| Sn | Sectors/Industries | Number of Industries | Percentage |
|---|---|---|---|
| 1 | Basic materials | 3 | 13% |
| 2 | Consumer goods | 9 | 41% |
| 3 | Consumer service | 2 | 9% |
| 4 | Health care | 2 | 9% |
| 5 | Industrials | 1 | 5% |
| 6 | Oil and gas | 3 | 13% |
| 7 | Technology | 1 | 5% |
| 8 | Telecommunications | 1 | 5% |
| | | 22 | 100% |

***Source:*** Research's Analysis

### Determinants of Dividend Policy

We then looked at the determinations of our variables in order to explain their measurement and its effect on the dependent variables. The following are some determinants of dividend policy:

### (a) Profitability

A firm without earnings cannot pay dividends, the profitability of a firm is a major indication that the firm can pay dividends to shareholders. This has been made clear by a lot of works from the studies, where it has been established that the dividend payments pattern is contingent on the future anticipated profits and

earnings from positive net present value projects. According to, Pattiruhu & Paais (2020) measured profitability by return on equity ratio indicates how much and of equity can be used to generate a unit amount of profit for the firms Amidu & Abor (2006) adopted profitability as the ratio of profitability before interest and tax to total assets of the firms. We have applied the Kaur (2018) method to measure profitability as profit before interest and tax to shareholder's equity.

**(b) Liquidity**

The liquidity of the firm is how fast or quickly a firm can turn its assets into cash to settle its debt when it falls due. The studies available suggest that the more cash that is available the more firms will promisingly distribute earnings to shareholders. The larger makes enough cash to pay dividends and smaller firms barely have enough to pay dividends. Kaur (2018) indicated liquidity is the ratio of current assets to current liabilities. Hence we adopted the current ratio as a measure of liquidity thus assets to current liabilities.

**(c) Investment**

Investment opportunities as a factor are considered a vital determining variable of dividend policy. Companies having greater growth and expansion opportunities will require more funds for financing new investment proposals for expanding their business. As such, which source of financing, either internal or external, would be used first, that is the main concern and Amidu indicated investment can be measured using the market-to-book ratio. Showing how a firm's market price and total asset is used to generate profitability for the firm and how many assets can be used to pay shares of the firm

**(d) Inflation**

In Ghana, the macroeconomic variables on dividend policies are the centre for discussions by many authors and research investment brokers and underwires and finally policymakers. Inflation measures how much the prices of goods and services rise, generally, the influence of inflation has rarely been discussed by many researchers and in Ghana little has been, we noticed the inflation rates in Ghana are skyrocketing daily and believe that there is an influence on the performance of firms since the purchasing power of the firms will be affected by the inflation. The rates of inflation are collected from the ghana statistical services and the study expects a negative relationship between inflation and dividend payments of firms listed on the Ghana Stock Market.

**(e) Government effectiveness**

Kaufmann (2008) describes government effectiveness as what government doing what it is supposed to do, whether people in these entities work hard and bureaucracy of the public organization and its citizen helps achieve the organization objectives and whether it achieves its missions and goals. Again, government effectiveness encompasses factors that do not hinder the works of public servant, there are no intimation of , how processes and procedures help the administration of the various firms in Ghana, example when it comes to business registration, filing of taxes ,renewal of licenses what is the bureaucracy? How easy it is to get things done. The removal of political pressure from civil servant. That is if the public servant is able to work judiciously without the influence from government of a particular party and the credibility of the government's commitment to policies and, the competence of civil servants (Kaufmann, 2008). According to him, a -2.5 to +2.5 explaining that -2.5 is lowest level of effectiveness and +2.5 means the highest level of effectiveness.

**Table 2: Summary of Variables Measurement and Variables Measurement**

| Variable | Type of variable | Measurement |
|---|---|---|

| | | |
|---|---|---|
| Liquidity | Independent | Liquidity is measured by the acid test ratio |
| Profitability | Independent | Profitability is profit before interest and tax by the equity |
| Dividend policy is ( dividend payout ratio ) | Dependent | It is defined and measured as the total dividend paid to profit before interest and tax. |
| Inflation | Independent variable | Consumer price index from PURC |
| Government effectiveness | Independent variable | World Bank government indicators |

**Table 3 Descriptive Statistics**

| | MEAN | STD | MIN | MAX | KURTOSIS |
|---|---|---|---|---|---|
| DIP | .1113436 | .5144264 | -5.6643 | 2.2158 | 0.0000 |
| PRT | .0742027 | 1.418076 | -11.1795 | 12.8951 | 0.0000 |
| INV | 3.819652 | 11.4078 | -80.1391 | 81.9037 | 0.0000 |
| INF | 11.62824 | 3.667087 | 7.1264 | 17.4546 | 0.0000 |
| GEF | -.15536 | 0735937 | -.2813 | -0.486 | 0.0000 |

STD is standard deviation, MIN is minimum, MAX is maximum, DIP dividend payout, PRT is profitability, INV is investment, INF is Inflation and GEF is government effectiveness

The statistical table above indicates that from column 1 the mean is 11.13% indicating that firms hardly pay off dividends to shareholders for the sampled firms for the period under consideration. The 11.13% average payout ratio indicates that the studied firms for the period under consideration retained a larger proportion of their net profit for reinvestment or for financing decisions that will in future boost the profitability of the firms to pay huge dividends. This could be a good sign for future business growth and quality opportunities for expansion. The standard deviation of 51.44% indicates that some firms pay as high as 51.44% of their net profit as dividends whilst others pay as low as the mean of dividends to their shareholders. From the foregoing, the data for the dividend payout ratio is considered to be approximately symmetrical with Skewness and Kurtosis values of 0.00 respectively. The profitability ratio measured as return on assets denotes the ability of the studied firms to maximize their assets to generate profit. In other words, it measures how much profit the firms returned for every Ghc1 of asset invested. The average profitability ratio of 7.240% implies that for every Ghc1 investment made by the firms for the studied period, the firms generate a profit of 7 pesewas as profit with some firms generating as high as Ghc1.48 profit for every Ghc1 whilst others made a loss of Ghc1.34. The Skewness and Kurtosis data confirm the data for the profitability variables is nearly symmetrical. Investment opportunities measured by market capitalization to the book value of the company are important for ascertaining whether investors are paying too much dividend to shareholders from every single amount in shares value at the market. The average investment opportunities value of 3.819652 means investors are paying about 3.8% of the value of the actual shares to assets of the company for the sample selected. This implies that the studied companies are overvalued. The standard deviation value of 11.04% shows a widely dispersed value of the stock which is too much overvalued. Regarding the control variables, the average inflation rate of 10.6% with a standard deviation of 4.75% means the inflation rate for the period under consideration is beyond the Bank of Ghana inflation target band of 6% to 10%. The average government effectiveness index of -0.144 confirms the ineffectiveness of the government of Ghana which is similar to most African governments in the failure to provide their citizenry with quality public services. The profitability ratio was observed to be the most volatile variable. Regarding the skewness and Kurtosis values, all the variables are approximately normal.

**Table 4 Correlation Matrix**

| | DIP | PRT | INV | INF | GEF |
|---|---|---|---|---|---|
| DIP | 1.000 | | | | |
| PRT | 0.0385 | 1.0000 | | | |
| INV | 0.1032 | -0.3880 | 1.0000 | | |
| INF | -0.0015 | -0.0664 | -0.0273 | 1.0000 | |
| GEF | 0.1365 | 0.0358 | 0.0325 | -0.5122 | 1.0000 |

The tables (4) focuses on the correlation matrix discussion among the explanatory variables by showing the correlation coefficient of the variables under study. Results from Table 4 suggest that the strength of the association dividend payout ratio variable exhibit, a weak relationship with all exogenous variables as the correlation coefficient is less than 0.5 for all the independent variables under consideration. On the direction of the association, the dividend policy has a positive relationship with all the exogenous variables except inflation which showed a negative correlation as expected. A higher inflation rate triggers a high cost of operations which deeply affects gross profit and net profit. Regarding the key variables, the positive correlation is consistent with the expected negative relationship and investment opportunities having a negative relationship is quite unexpected for the firms under consideration. The remaining key variable's direction of association is consistent with the study expectations. On the strength of association amongst the exogenous variables, the result revealed weak association amongst the exogenous variables with a correlation coefficient less than 0.4 thereby removing the possibility of multi-collinearity and affirming the independence of each variable included in the study for the period being considered.

## 4. Empirical Strategy

The empirical strategy of Ibrahim & Sare (2018a) is employed for this work. According to this strategy the researcher determines the impact of dividend policy among the explanatory variables, profitability, firm, liquidity, inflation and government effectiveness. The strategy employed relationship between profitability and dividend policy proxy by dividend payout while the profitability by firms affects the firm dividend payment. Our attention to our main variables of interest debt, dividend payout, profitability, and liquidity are then considered to establish a model. A model is set up to explain the dependent and independent variables. The relationship is established with a model whereby dividend payout is explained by debt, investment, firm size, and liquidity. Explicitly specify dividend is a function of profitability, liquidity, and investment in the manner below;

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

Where $DIP_{it}$ is dividend policy proxy by dividend payout for firm i at time t; $(PRT_{it}, INV_{it}, CONT_{it})$ where, profitability and investment of firm i at time t. $CONT_{it}$ is a vector of the other control variable such as inflation and government effectiveness.

Well, stating equation (1) is to be expected to produce unfair and biased results due to the endogeneity nature of the model estimation. For instance, while higher investment and profitability enhance dividend payment, the desire of firms to pay dividends due to government effectiveness and inflation desire to send a good signal to influence share price may also be a good conduit to increase and consistently pay a dividend to shareholders. Now, the endogeneity problem could be dealt with using Blundell and Bond estimation adopted by Ibrahim and Sare strategy as indicated above, the equation is expanded to specify dividend payout using the initial values of dividend payout, profitability and our control variable to form:

$DIP_{it}$=$\alpha_0 DIP_{it-1}$+$\alpha_1 PRT_{it}$ +$\alpha_2 INV_{it}$+$\alpha_3 CONT_{it}$+ &$_i$ + $\emptyset_t$ +$\mu_{it}$

The definition for the variables remains the same while $DIP_{it-i}$ is the lag dividend payout; & i is the firm effect, which is not observed, Ǿ is the time, ω is the error term effect. As said earlier, the simultaneous existence of $DIP_{it-i}$ and the unobserved shows a probable occurrence of endogeneity $DIP_{it-i}$ relates to the idiosyncratic term. GMM which includes fixed effect is the initial reasonable stage in dealing with the endogeneity problem. The model mandates the application and utilization of extra conditions which have a fixed and stationery attributes for the variable under consideration, this will be on the premise which suggests that it's the idiosyncratic term may not relate to our independent variables and the weak exogenous nature of our explanatory variables, below are moments conditions drawn:

P ($\Delta DIP_{it-y}\omega_{it}$)=0 for y ≥ 2; t=3,….T

P ($\Delta VEC_{it-y}\omega_{it}$)=0 for y is greater or equal; t equal 3

The $VEC_{it-y}$ indicates the lag of independent variables without $DIP_{it-1}$

Where Y depicts the lag structure indicating the levels where y is greater or equal to 2 are used as valid instruments, the lag variables as be seen a bad tool in the equation correlating with the error term which defeats the assumptions of our model. The lag value is then included in the first equation to depict it influence in dividend payment. The two-step system approach of the generalized method moment improves the estimation compared to other types of generalized method moments, the step GMM adopts orthogonal restrictions as follows;

P ($\Delta DIP_{it-y}\omega_{it}$)=0 for y=1

P ($\Delta VEC_{it-y}\omega_{it}$)=0 for y=1

These restrictions we believe will remove any multi-collinearity in our work and improve the validity of our instruments.

**Hypothesis**

The hypothesis is drawn and tested to determine the impact of our variables stated below;

**Null hypothesis**: there is no relationship between profitability and dividend payout of listed firms in the Ghana stock market

**Alternate hypothesis:** there is a relationship between profitability and dividend payout ratio of firms listed on the Ghana Stock Market.

**Table 5: Impact of Profitability on Dividend Policy**

| | **1** | **2** | **3** | **4** |
|---|---|---|---|---|
| Constant | .1382926*** [.0116153] | .1280302*** [.0091144] | .0908464** [.0324195] | .2138365*** [.0254656] |
| L.DPR | -.478208*** [.0040555] | -.4828981 [.0088974] | -.4844527*** [.006088] | -.5101223*** [.0109675] |
| PRT | .0291275*** [.0058966] | .0196653 [.0164779] | .0278266 [.0155956] | .0379529*** [.0105591] |

| | | | | |
|---|---|---|---|---|
| INV | | .0040019 [.0028139] | 0042342 [.0022163] | .00606** [.0021589] |
| INF | | | .0004345 [.0031617] | .0236152*** [.0042295] |
| GEF | | | | 2.162866*** [.2593121] |
| **DIAGNOSTICS** | | | | |
| Wald chi square | 14366.12 | 5490.79 | 30370.20 | 2818.20 |
| P value | 0.0000 | 0.0000 | 0.0000 | 0.000 |
| Sargan test | 15.66775 | 14.08989 | 10.63792 | 14.93831 |
| AR(1) | -.9864 | -.99115 | -.99564 | -1.0073 |
| p-value | 0.3239 | 0.3216 | 0.3194 | 0.3138 |
| AR(2) | .63498 | .61642 | .6214 | .63402 |
| p-value | 0.5254 | 0.5376 | 0.5343 | 0.5261 |

Note: Values in [] denotes standard error; {} denotes P values

## 5. Findings

From the model, we considered a previous year's dividend payout policy on the basis that the current dividend payout is dependent on the previous year's dividend payment. From the table above, the column coefficient of the previous dividend payout policy is negative from columns 1-5 signifying the convergence in dividend policy for the organisation under consideration. By implication, the dividend policy of the firms under consideration shall converge in the long run thereby making it possible for all organisation with low dividend ratios to reach the level of those firms with higher dividend payment. This could be attributed to the growth opportunities for the organisation which is retaining more of their profit for investment which could lead to higher growth and more profit in the future in order payout more dividends thereby catching up in the long run to their counterparts. The finding of the lag dividend influence on the current is consistent with (Palamalai & Brahmaiah 2018) who found that the lag dividend had no significant influence on the dividend policy of firms while Patra et al. (2012) also indicated that the past year's dividend had a negative influence on current years dividend. The findings also relate to Pandey & Bhat (2007) who found that profits and past year's dividend are related to dividend policy and the past year's dividend payment influences the current year's dividend payment, the estimation indicates that some firms are willing to maintain dividend payment to increase shareholders wealth while others depending on the economic situation of the firms decides on whether the payment of dividend is probable.

We then introduce our key variables such as profitability, and investment inflation in each of the models to assess the stability and the robustness of their influence on the dependent variable in relation to the objective of the study. Column 1 of Table 5 reports the impact of profitability on the explained variables, the results show that there is a positive relationship between profitability and dividend policy of firms listed in GSE, where a person 1% increase in profitability increases dividend payment by 2.912% which is significant and robust at all conventional levels. This indicates that profitability cause 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, a near research conducted by Amidu (2007) found profitability measured by return on assets to have an affect the dividend payment plans of firms in Ghana. The likes of (Sugiastuti RH et al. 2018),(Ajanthan, 2013)**,** (Banga, 2010) and (Olayiwola, 2021) also found a positive relationship between profitability and dividend payout ratio thus 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 managers ability to manage resources entrusted in them. It is considered as one of an important explanatory variable that influences dividend policy. That is to say a firms who does not make profit cannot pay dividend. 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 policy of firms in India. They concluded that the profitability measured by return on assets and earnings per share was statistically insignificant in the model estimation. Singhania & Gupta (2012) results are also inconsistent with our findings indicating a negative relationship with dividend policy. We again probe into the impact of investment on dividend policy where investment is measured as the value total shares to the total assets of the company. In Column 2 the findings shows the effect of dividend policy when profitability is controlled by investment. We notice that when profitability is controlled by investment there is a positive relationship between investment and dividend payment policy where a 1% increase in investment increases dividend payout by 0.4% which is insignificant at all conventional levels. Again, when investment is controlled, the effect of profitability on the dividend is reduced by 1.966% against the effect when considering profitability as the only dependent variable. This means that during investment there is an outflow of funds from the firms which reduces earnings available to firms for distribution as dividends. As suggested by most researchers in our literature review investment opportunities reduces the firm's ability to keep cash for payments of dividend to shareholders. The focus will be on future earnings that those investments could break hence the reduction in dividend payment. The findings of our research are consistent with the works Palamalai & Brahmaiah (2018) where they indicated that investment opportunities were insignificant when it came to the payment of dividends to shareholders. We further controlled for inflation and realized that inflation had a positive relationship with dividend payments. Where a 1% increase in inflation increases dividend payment but the results are insignificant at all conventional levels considering the high p values. The external factors that affect the general operations of the firms are not a major consideration of the firm when it comes to dividend payments. When inflation values are high the firm is likely to face difficulties with its purchasing power, prices of goods and services are high and might consider that the value of the dividend to be paid to the shareholder will lose its value and even shareholders at the period will reject the theory of bird in hand and prefer capital gains to dividend payment. Unfortunately, this finding is not the case as firms do not take into consideration the inflation rate during the payment of dividends. Moreso, inflation in the country has an insignificant influence on the firm's profitability.

We also examined the effect of government effectiveness on dividend payment as explained earlier Kaufmann (2008) thus in a politically enthused economy governments come to set rules that favour some firms that they believe are friend to their opponents. By frustrating and bringing up rules that makes it difficult for them to operate. From the table above we noticed that government effectiveness has a positive significant relationship with the dividend policy of firms in Ghana. Where a 1% increase in government effectiveness increases dividend payment by 2.167. This means firms take into consideration when making payments to shareholders government participation, this may not be surprising since most managers, management and CEO of firms listed on the stock market are somehow politically inclined and oriented and their decision to pay dividends. For example, the managing director of Ghana Oil is assumed to have political affiliation with the government of the day and hence might just pay dividends to shareholders by ‘orders from above’. despite that, the country Ghana has so much influence on firms, when a new government a certain firm is attacked by some regulations and reforms. More so, there are many regulations set up by the government to protect the interest of the shareholders and other investors to aid trade and investment in Ghana. Based on our findings, the Wald test statistics are high in values with low p values, this indicates our models are significant and our independent's 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 back based on the Sargan test.

### 5.1. Policy Implication

The above research which main objective was to determine the impact of profitability on the dividend policy of firms listed on the Ghana stock exchange, and whether profit influenced dividend payments either negatively or positively. The results indicate that profitability indeed influences dividends positively and significantly. This means firms literally pay and or declare dividend payment upon the realization of profit. The payment of dividend just be making profit is not a complete assessment of the company earning. Profits may be declared however cash may not be available to shareholders for distribution. This could be a bad decision to take considering that the mere profit does not make the liquid enough to pay dividends. More so firms do not have investment opportunities available to invest earnings for better gains in the future. A lot of questions could be asked if firms have considered their debt and liquidity level before paying dividends or if they have performed a cash flow analysis before paying profits to dividend shareholders. Managers may just want to send a good signal and to also give themselves the bonuses for making profits. A simple making of profit from the income statement should not be a consideration for dividend declaration and payment. Upon the declaration of profit a firm needs to consider its cash flow and liquidity status, investment opportunities before paying dividend to shareholders.

### 5.2. Recommendations and Conclusions

The results of our research conclude that profitability influences a firm's dividend payment. The results are significant and robust at all conventional levels. Investment measured as market-to-book ratio did not indicate a significant influence on dividend again inflation did not also have no significant influence on dividend payment for firms listed in Ghana hence a thorough analysis needs to be conducted since we had some constraint with our data. 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 influences dividend payment also financial institutions can be included to test to determine the impact of profitability on dividend policy.

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