

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/287243642>

Determinants of dividend policy of banks in Ghana

Article in *International Research Journal of Finance and Economics* · January 2011

CITATIONS

32

READS

3,238

2 authors:



Edward Marfo-Yiadom
University of Cape Coast

11 PUBLICATIONS 146 CITATIONS

SEE PROFILE



Samuel Agyei
University of Cape Coast

11 PUBLICATIONS 188 CITATIONS

SEE PROFILE

Determinants of Dividend Policy of Banks in Ghana

Edward Marfo-Yiadom

*Senior Lecturer, Department of Accounting and Finance, School of Business
University of Cape Coast, Cape Coast – Ghana*
E-mail: emyiadom@yahoo.com
Tel: +233 244 51 51 62

Samuel Kwaku Agyei

*Lecturer, Department of Accounting and Finance, School of Business
University of Cape Coast, Cape Coast – Ghana*
E-mail: twoices2003@yahoo.co.uk
Tel: +233 277 65 51 61

Abstract

This paper seeks to find the determinants of dividend policy of banks in Ghana. Panel data covering the five-year period 1999 – 2003 were analyzed within the framework of fixed and random effects technique. The results show that profitability, debt, changes in dividend and collateral capacity are the statistically significant factors which positively influence dividend policy of banks in Ghana. On the other hand, we found that growth and age influenced bank dividend policy negatively and significantly. Although, surprisingly, cash had a negative relationship with dividend policy, the results were not significant. Consequently, the major determinants of dividend policy of banks are profitability, leverage, changes in dividend, collateral capacity, growth and age. In all, the study found support for the profitability theory and agency cost theory and partial support for life cycle theory even though no support was found for the free cash flow theory.

Keywords: Determinants, Dividend policy, Bank, Ghana.

1.0. Introduction

Dividend policy is one of the major decisions in corporate finance. Dividend is an appropriation or distribution of profit to shareholders. Research on dividend policy was sparked by Miller and Modigliani's (1961) work which concluded that under perfect capital markets dividends are not relevant. Later studies which relaxed the assumption of perfect market and recognized the presence of market imperfections, such as taxes, agency cost, asymmetric information and agency cost revealed that dividend policy is relevant to the firm's value.

On annual bases when profits are made, a company has to determine what proportion of the profit that is available should be paid out to shareholders in the form of dividends, and what proportion should be retained for reinvestment. Key factors which have been identified to have an effect on dividend policy include profitability, leverage, ownership structure, firm size, risk, age, firm growth and dividend changes (Eriostis and Vasiliou, 2003; Amidu and Abor, 2006; Al-Malkawi, 2007; Kowaleski, Stetsyuk and Talavera, 2007;). Apart from the fact all these results are based on data from non-financial institutions, very few of them are based on data from developing economies. John,

Knyazeva and Knyazeva, (2007) reveal that geographic location influences the information environment of the firm and hence, its corporate dividend. Writing on dividend policy Al-Malkawi (2007) observes that the examination of dividend policy in emerging market has, until recently being much limited. Yet the sort of firm and market characteristics that may influence dividend policy may be present in developing markets in an exaggerated function than in developed markets. In Ghana, in particular, not much research has been done in this area. The recent study by Amidu and Abor (2006) examined dividend payment ratios of listed firms in Ghana. This study explores the determinants of dividend policy of one of the fast growing sectors in the Ghanaian economy; the banking sector. This would not only add to existing literature but also serve as a guide to directors of banks when fixing dividends.

The rest of the paper is organized as follows: section two deals with a review of empirical studies and examines how dividend policy affects firm performance; section three discusses the methodology of the study; section four is on discussion of empirical results and; section five summarizes and concludes the entire study.

2.0. Review of Research Literature

2.1. Theoretical Considerations

A number of theories have been developed on dividend policy. Some of these are bird-in-hand, signalling theory, tax preference theory, agency theory and Clientele effect. The bird-in-hand theory asserts that because of uncertainty of future cash flow, investors will often tend to prefer dividend to retained earnings. As a result, higher payment of ratio will reduce the required rate of returns and have increased the value of the firm (Gordon (1963) and Linter (1962)). The signalling theory points out that share prices do not react to dividend payout rate in itself but to the information that investors believed changes in dividend levels have for the future prospects of the firm. Lasher (2000) submits that a decrease in dividend, for example, is taken as terrible news. It generally comes after sustained reduction in earnings, and tells the market that management does not expect the company to have the cash it had in the past. Brigham, Gapenski and Ehrhardt (1999) have noted that like most other aspects of dividend policy, implacable studies on signalling have had mixed result. There is clearly some information content in dividend announcement. However, it is difficult to tell whether the stock price changes that follow increases or decrease in dividends reflects only signalling effect or both signalling and dividend preference. Support for the signalling effect include Pettit (1977), Nissan and Ziv (2001) and Bali (2003).

The tax preference theory asserts that low dividend ratios lower the required rate of return and increase the market valuation of firms stock. Studies by Litzenberger and Ramaswamy (1979) and Barclay (1987) have research findings in support of the tax preference theory. Because of tax advantages, investors may prefer to have companies who retain most of their earnings. If so, then low-payment companies than otherwise similar higher-payment companies would be preferred.

The Clientele effect is another theory related to dividend policy. The theory recognises that different groups /clienteles prefer different dividend payment policies. For example, while one may want the firm to pay out a higher percentage of its earnings another may prefer otherwise. If dividend income is taxed at a higher rate than capital gains, investors in high tax bracket may prefer non-dividend or low-dividend paying stocks, and vice-versa. Prior studies that present evidence on clientele effect include Pettit (1977) and Dhaliwal, Erricsson and Trezevant (1999).

Another theory is the agency explanations. The relation between shareholders and managers of a company is an agency relation. The shareholders are the principals and the managers are the agents. The managers are charged with acting in the best interest of the owners. However, there are possibilities for conflicts between the interests of the two. The key thrust of the agency theory is that managers may take actions in accordance with their own interest which may not always be beneficial to shareholders. Empirical studies in support of agency explanation on dividend include Lloyd, Jaherer

and Page (1985) and Jensen, Solberg and Zern (1992). The payment of dividend therefore is seen as a means of reducing the amount of excess money available to managers which may not be used in the best interest of shareholders.

The life cycle theory is also cited as one of the explanations for dividend payment. The theory explains that as firms pass through the various stages in their lives, they tend to alter the dividend policy depending on the financial needs of each stage. Implied in this theory is the fact that firms that are in their growth stages are less likely to pay more dividend as compared to firms that are at their maturity stages. Old firms therefore, because they do not have a lot of growth opportunities to fund are expected to pay more dividend. Murhadi (2010) reveals that companies which enter in growth phase tend not to pay a lot of dividend, compared to companies at matured stage.

2.2. Determinants of Dividend Policy

Profitability

The size of a firm's profit has been a long standing determinant of dividend policy. Directors normally recommend the payment of dividend when the firm has made sufficient profit to warrant such payments. Profitability is among the main characteristics that strongly and directly influences dividend policy, Al-Kuwari (2009). Pruitt and Gitman (1991) conclude that current and past years' profits, the year-to-year and prior years' dividend are important factors that influence dividend policy. Consequently, it is expected that profitable firms are likely to pay dividend as compared to non profitable firms (Eriostis and Vasiliou, 2003; and Ahmed and Javid, 2009).

Liquidity/ Cash Flow

The liquidity position of a company is also an important determinant of dividends payments. Section 71 of the Company Act 1963, (Act 179) stipulates that a company cannot pay a dividend to its shareholders until and unless it is able after such payments to pay its debt when they fall due, without any embezzlement. Section 30(1) of Banking Act 2004, (Act 673) adds that a bank shall not declare or pay dividend on its shares unless it has: a) Completely written off all its capitalized expenditure; b) made the required provisions for non-performing loans and other erosions in asset values; c) supplied the minimum capital adequacy ratio requirements; and d) completely written off all its accumulated operating losses from its normal operations. A company that may be growing and is quite profitable may not be able to pay a specified cash dividend because of lack of cash on hand. Ali, Khan and Ramirez, (1993) observed that dividend payment depend on cash flow, current earnings do not really reflect a firm's ability to pay dividend. Firms with large portion of idle cash are more likely to return a portion to investors than those which do not. It is also expected that when firms reduce the amount of idle cash available to management, they reduce the ability of management to use this idle cash in their own interest rather than in the best interest of management. Limiting the availability of cash to management also pushes management to go for debt financing, which reduces agency cost. What is not clear, though, is as to whether the same effect would be shown on banks which have a wide array of short-term investment vehicles to place idle funds.

Leverage

Firms that finance their activities mostly with debt put pressure on their liquidity. Debt principal and interest payments reduce the ability of firms to have residual income to guarantee dividend payment. Consequently, it is expected that debt would impact negatively on the amount of dividend paid for a period. Kowalski *et al* (2007) argue that more indebted firms prefer to pay lower dividends. Also, Al-Kuwari (2009) confirms that dividend policy is negatively related to leverage ratio. Nonetheless, the use of debt has been associated with lower agency cost and enhanced firm profitability, both of which have the tendency of improving dividend payment.

Business Risk

The volatility of earnings reduces the accuracy of earnings predictability. Thus directors become reluctant to declare and pay dividend, when the certainty of future return is not assured. Therefore, business risk is hypothesized to have a negative relationship with the dividend policy (Amidu and Abor 2006 and Kowaleski *et al* 2007).

Growth

Firms that experience recent growth in revenues tend to pay lower dividends (Chen and Dhiensiri, 2009). If the firm is growing rapidly, there will be a high demand of capital. The pecking order theory states that firms should finance new projects first with least information-sensitive sources i.e. retained earnings. Consequently, firms with high growth opportunities are likely to retain a greater portion of their earnings to finance their expansion projects as against returning these dividends to shareholders. This would especially be true if the rate of returns the firm earn on its assets was in excess of what the individual shareholders could expect to receive by asking dividend and investing these cedis elsewhere. This view is support by Higgins (1981), who noticed that there is a direct link between growth and financing need: rapidly growing firms have external financing needs because working capital needs normally exceed the incremental cash flow. Higgins (1972) show that payout ratio is negatively related to a firm's need for funds to finance growth opportunity.

Collateral Capacity

Generally, firms which have a greater portion of their assets in the form of tangible assets enhance their ability to raise debt finance and at cheaper cost, thereby reducing the pressure on internally generated funds (Bradley, Jarell and Kim, (1984)). Thus collateral capacity is expected to have a positive effect on a firm's dividend policy.

Age of a Firm

Firms that have existed for quite some time are better placed to create good reputation for themselves. Reputation when managed properly can be used as a basis for attracting cheaper credit to finance expansion projects. In fact, Diamond (1989) suggests that financial institutions use firm reputation to assess the credit worthiness of firms. This implies that age and dividend policy would be negatively related. This notwithstanding, firms that are aging tend not to have more growth opportunities to fund because they may either be at their maturity or decline stages of their life cycle. Such firms therefore are likely to pay more dividend. In order to test for this seeming inconsistency, we include age squared to check for the possible nonlinearity of age.

Changes in Dividend Payout

The variability of dividend paid for previous years can have an effect on the dividend to be paid for the recent year. Companies that vary their payments signal that at least some level of dividend would be paid. Farrelly, Baker and Edelman (1986) concluded that the major determinants of dividends payment are anticipated level of future earnings and the pattern of past dividends. This is corroborated by Vasliou and Eriostis (2003) who postulate that firms set dividend policy not only by the net distributed earnings, but also by change from previous year's dividend.

Firm Ownership

The agency cost hypothesis postulates that agency cost can be reduced depending on the type of ownership and structure adopted by the firm. For instance, insider ownership can motivate management to work in the best interest of shareholders (Jensen and Meckling, 1976 and Rozeff, 1982). Also the structure of ownership (family-owned, state-owned, institution-owned and foreign of local ownership) can have an effect on the dividend declared. This study tests for the effect of foreign or local ownership of banks on dividend policy. This is because of the sharp distinction of banks in

Ghana into foreign or local and the difficulty in ascertaining the other variables. Banks are considered to be foreign when more than fifty percent of its ownership is held by foreign investors.

3.0. Methodology

The basic data used for this study was taken from the Banking Supervision Department of Bank of Ghana. The method of sampling was to include the financial statements (1999-2003) of all major banks. In all, sixteen banks qualified for inclusion in the study. The study included both banks that paid dividend and those that did not pay dividend, in order to guard against selection bias (Kim and Mandala, 1992 and Deshmukh, 2003).

3.1. The Model

The panel character of the data allows for the use of panel methodology. Panel data involves the pooling of observations on a cross-section of units over several time periods and provides results that are simply not detectable in pure cross-section studies. Panel data can also control for individual heterogeneity due to hidden factors, which, if neglected in time-series or cross-section estimations leads to biased results (Baltagi, 1995). The basic model is written as follows:

$$Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} \quad (1)$$

Where the subscript i denotes the cross-sectional dimension and t represents the time-series dimension. Y_{it} , represents the dependent variable in the model, which is bank's dividend payout ratios. X_{it} contains the set of explanatory variables in the estimation model. α is the constant and β represents the coefficients.

The following model was used for the study:

$$DPO_{i,t} = \alpha_0 + \beta ROA_{i,t} + \delta RSK_{i,t} + \theta GRO_{i,t} + \gamma AGE_{i,t} + \theta AGE2_{i,t} + \Phi CTA_{i,t} + \delta DVO + \ell FAT + \hat{A}TDA_{i,t} + \mu OWN \varepsilon_{i,t} \quad (2)$$

where the variables are defined in Table 1 together with the expected signs for the independent variables.

Table 1: Definition of variables (proxies) and Expected signs

THEORIES	VARIABLE	DEFINITION	EXPECTED SIGN
	<i>DPO</i>	Dividend Policy (Dependent Variable) = the ratio of cash dividend paid to Net Income for Bank i in time t	
<i>Profitability</i>	<i>ROA</i>	Profitability = Return on Assets (Net Income to Total Asset Ratio) for Bank i in time t	Positive
<i>Transaction Cost & Residual Dividend Life Cycle</i>	<i>RSK</i>	Bank Risk = the standard deviation of ROA for Bank i in time t from the average ROA of bank i over the period.	Negative
<i>Life Cycle</i>	<i>GRO</i>	Growth = Growth in Bank Interest income, year on year.	Negative
	<i>AGE</i>	Bank Age = the log of bank age for Bank i in time t	Positive
	<i>AGE2</i>	Non linearity of Age= the square of log of age	Negative/Positive
<i>Free Cash flow</i>	<i>CTA</i>	Ratio of Cash and cash equivalent to Net Total Assets for Bank i in time t	Positive
<i>Signalling</i>	<i>DVO</i>	Volatility of dividend payment = change in Bank dividend, year on year.	Positive
<i>Agency</i>	<i>FAT(Collateral)</i>	Ratio of Net Fixed Assets to Net Total assets for Bank i in time t	Positive
<i>Agency</i>	<i>TDA</i>	Leverage = the ratio of Total Debt to Total Net Assets for Bank i in time t	Negative
<i>Agency</i>	<i>OWN</i>	Ownership structure of the bank: Dummy Variable; 1 if bank is Ghanaian otherwise 0	Positive/Negative
	<i>E</i>	The error term	

The results of the fixed effects and random effects model are shown in Table 4. In order to decide on whether the fixed effects model or the random effects model, the Hausman (1978) specification test was employed. Based on the results shown in Table 4, the random effects model was considered more appropriate for estimating the regression model.

4.0. Discussion of Empirical Results

4.1. Descriptive Statistics

Table 2 gives the descriptive statistics of the variables used in the study. Banks in Ghana, under the period of study, paid out dividend of 24.65%. The return on assets was as low as 2.90%, with some banks recording a minimum of -1.71% and the maximum being 15.38%. The deviation of ROA shows that most banks did not deviate much from the mean return. The average risk of banks was 1.82% whereas the mean growth rate for the period was 65.02%. Average log of age was 1.08 while that of the square of age was 1.52. Cash to total assets ratio recorded an average of 0.30 while changes in dividend payout ratio had an average of -0.07. On the other hand, fixed assets accounted for 3.64% of total assets while ownership had an average of 0.542.

Table 2: Descriptive Statistics

Variable	Mean	Std. Dev.	Minimum	Maximum
DPO	0.24653	0.22887	0	0.73266
ROA	0.02896	0.04584	-0.17125	0.15385
RSK	0.01820	0.02589	0.00021	0.12821
GRO	0.65018	1.10860	-0.31517	8.15322
AGE	1.08171	0.59488	0	2.02938
CTA	0.30349	0.10833	0.06897	0.59981
DVO	-0.07273	0.28943	-1	0.55352
FAT(collateral)	0.03643	0.02424	0.00772	0.16159
TDA	0.87666	0.08097	0.56840	1.12622
AGE2	1.51954	1.33254	0	4.11840
OWN	0.54167	0.50176	0	1

4.2. Correlation Analysis

In order to determine whether the coefficient estimates may change erratically in response to small changes in the model or the data, the correlation coefficients of the explanatory variables have been shown in Table 3. The results depict that the presence of multicollinearity among the regressors is minimal.

Table 3: Correlation Matrix of the Explanatory Variables

	ROA	RSK	GRO	AGE	AGE2	CTA	DVO	FAT	TDA	OWN
ROA	1.000									
RSK	-0.492	1.000								
GRO	-0.049	0.182	1.000							
AGE	0.445	-0.119	-0.241	1.000						
AGE2	0.445	-0.110	-0.219	0.9721	1.000					
CTA	-0.211	0.017	0.063	-0.552	-0.573	1.000				
DVO	0.127	-0.025	-0.083	0.102	-0.137	-0.206	1.000			
FAT	-0.519	0.358	-0.132	-0.169	0.139	0.157	0.037	1.000		
TDA	-0.199	0.002	0.063	-0.054	-0.036	0.145	0.021	-0.255	1.000	
OWN	-0.057	0.010	-0.139	0.1025	-0.003	-0.148	-0.079	-0.244	0.061	1.000

4.3. Discussion of Regression Results

The results of the regression are shown in table 3 together with the results of the Hausman specification test. The regression results show that all the variables are significant in explaining the dividend payout policy of banks in Ghana except bank risk (RSK), cash (CTA) and ownership (OWN).

Profitability positively affects the dividend paid by banks. Banks which are profitable are more likely to pay dividend as compared to banks that are not profitable. Also, the level of dividend paid by banks is largely influenced by their level of profitability. Risk has a negative effect on dividend payout policy of banks, even though the result is not significant. As banks become uncertain about their earnings for a period, they are also reluctant to pay dividend to owners. This therefore reduces the propensity of banks to pay dividend. These results do not only confirm our expectations but are also in line with earlier empirical evidence (Amidu and Abor, 2006).

The level of debt held by a bank positively influences the dividend payout policy of the bank. This, although contrary to our expectation, is quite understandable. Probably, because debt increases the profitability of firms and also debt reduces the agency cost, higher debt is much more likely to indirectly allow banks to pay more dividends from the enhanced earnings. However, this is contrary to some earlier studies which posit that firms that are highly leveraged tend to pay lower dividend because they retain most of their earnings to pay off future debt obligations. Also growth is negatively related to dividend payment. High growth banks require more funds to finance their growth and therefore do retain a greater proportion of their income to finance such expansions (Higgins, 1981).

While the relationship between age and dividend payout is negative, that of age square is positive. This indicates that banks which have been in existence for a long time do not pay as much dividend as compared to newer banks, contrary to our expectations. It suggests that some long-established banks in Ghana are still vigorously pursuing growth strategies. But the significantly positive relationship between age squared and dividend payout shows that at a certain point the relationship between age and dividend payout could reverse. Put together, these results show that banks that are aging can pay dividend when they move from one stage to the other in their life cycle, based on the strategies adopted. Unexpectedly, cash has a negative but insignificant relationship with dividend payout. Probably, the numerous short-term investment vehicles available to banks, place more demand on bank cash flow than dividend.

Also, changes in the level of dividend payment positively affect dividend payout. It therefore means that current year's dividend is influenced by the dividend that was paid last year and that a bank that paid dividend last year is more likely to pay dividend this year. This lends support to the signaling theory. On ownership, the results indicate that Ghanaian-owned banks are much less likely to pay dividend than foreign banks, even though this results is not statistically significant. Some of the foreign banks are subsidiaries of large international banks and therefore do not have as much difficulty in raising funds as compared to local banks. Again, the payment of dividend by foreign banks may serve as positive signals about their performance in local environment and also reduce agency conflict between local management and corporate head office.

Expectedly, the relationship between bank collateral capacity and dividend payout policy is not only positive but significant. Banks with fixed assets are able to pay more dividends because they find it easier raising funds than those that do not. Consequently, big banks can be generous on dividend payment.

Table 4: Regression results for the model (dependent variable: DPO)

Explanatory Var.	Random Effects Model			Fixed Effects Model		
	Coef.	z-Stat.	Prob.	Coef.	t-Stat.	Prob.
ROA	1.7739	1.69	0.092	3.2571	2.35	0.025
RSK	-2.4048	-1.44	0.149	-4.999	-2.18	0.037
GRO	-.08175	-1.81	0.070	-.1178	-1.85	0.074
AGE	-.5474	-3.26	0.001	-.6293	-3.62	0.001
AGE2	.2096	3.04	0.002	.2319	3.34	0.002

Table 4: Regression results for the model (dependent variable: DPO) - continued

CTA	-.2519	-.99	0.323	-.3521	-1.31	0.200
FATA	3.2206	3.41	0.001	3.7792	3.38	0.002
DVO	.2618	5.13	0.000	.2541	4.83	0.000
TDA	1.3068	4.47	0.000	1.2726	4.31	0.000
OWN	-.0274	-0.65	0.519	0.0044	0.10	0.924
CONSTANT	-.5019	-1.76	0.079	-.4459	-1.55	0.130
	Wald chi2 (10)	143.96		F-Stat	14.86	
	Prob> chi2	0.0000		Prob> F	0.0000	
	R ²	0.8089		R2	0.7949	
	Haus. Test chi2	3.80				

5.0. Conclusion

This study was conducted to investigate the determinants of dividend policy of financial firms particularly banks in Ghana. Panel dataset was constructed from the financial statements of banks in Ghana from 1999 to 2003. The random effect model was used for testing the dividend policy.

The results show statistically significant and positive association between dividend policy and profitability, debt, changes in Dividend, and collateral capacity. On the other hand, we find that risk, growth and age influence bank dividend policy negatively and significantly. Although, surprisingly, cash had a negative relationship with dividend policy, the results were not significant. Consequently, the major determinants of dividend policy of banks are profitability, leverage, changes in dividend, collateral capacity, growth and age. In all, the results are largely consistent with theory and offer support for the for the profitability and agency cost theories. Also, partial support was found for the life cycle theory even though no support was found for the free cash flow theory.

Future studies can look at the determinants of dividend policy of other financial institutions such as insurance companies.

References

- [1] Ahmed, H. and Javid, A. Y. (2009), "Determinants of Dividend Policy in Pakistan," *International Research Journal of Finance and Economics*, Issue 29, pp. 110- 125.
- [2] Al-Kuwari, D. (2009), "Determinants of the Dividend Policy in Emerging Stock Exchanges: The Case of GCC Countries", *Global Economy & Finance Journal*, Vol. 2 No. 2 September 2009. pp. 38-63.
- [3] Alli, K. L., Khan, A. Q. and Ramirez, G. G. (1993), "Determinants of Corporate Dividend Policy: A factorial Analysis", *The Financial Review* Vol. 28, pp. 523-547.
- [4] Al-Malkawi, N. H. (2007), "Determinants of Corporate Dividend Policy in Jordan: An application of the Tobit Model", *Journal of Economic & Administrative Sciences* Vol. 23, No. 2, pp. 44-70.
- [5] Amidu, M. and Abor, J. (2006), "Determinants of the Dividend payout ratio in Ghana", *The Journal of Risk Finance* Vol. 7, No. 2, pp. 136-145.
- [6] Bali, R. (2003), "An Empirical Analysis of Stock Returns Around Dividend Changes", *Applied Economics* Vol. 35, pp. 51-61.
- [7] Baltagi, B.H. 1995. *Econometric Analysis of Panel Data*. Chichester: Wiley.
- [8] Banking Act, 2004 Act (673), Ghana.
- [9] Barclay, M. J., (1987), "Dividends, Taxes, and Common Stock Prices: The Ex-Dividend Day Behaviour of Common Stock Prices Before the Income Tax", *Journal of Financial Economics* Vol. 19, pp. 31-44.
- [10] Bradley, M., Jarell, G. and Kim, E. H. (1984), "On the existence of an optimal capital structure: theory and evidence", *Journal of Finance*, Vol. 39, pp. 857-78.
- [11] Brigham, E. F., Gapenski, L. C. & Ehrhardt, M. C. (1999). *Financial Management, Theory & Practice* (9th ed). Orlando, FL: Harcourt, Inc., pp. 332-349.
- [12] Chen, J. and Dhiensiri, N. (2009), "Determinants of Dividend Policy: The Evidence from New Zealand," *International Research Journal of Finance and Economics*, Issue 34 pp. 18-28.
- [13] Companies Act 1963 (Act 179), Ghana.
- [14] Deshmukh, S. (2003), "Dividend Initiations and Asymmetric Information: A Hazard Model ", *Financial Review* Vol. 38, pp. 351-368.
- [15] Dhaliwal, D. S., Erickson, M. and Trezevant, R. (1999), "A Test of the Theory of Tax Clienteles for Dividend Policies", *National Tax Journal* Vol. 52, pp. 179-194.
- [16] Eriotis N. (2005), "The effect of Distributed Earnings and Size of the firm to its Dividend Policy: Some Greek Data," *International Business and Research Journal*, vol. 4, no. 1 pp. 67-74.
- [17] Eriotis, N. and D.Vasilou (2003), "Dividend Policy: An empirical Analysis of the Greek Market," *International Business and Economics Research Journal*, vol. 3, no.3, pp. 49-57.
- [18] Farrelly, G. E, Baker, K. H and Edelman, R. B (1986). "Corporate Dividends: Views of the Policy Makers," *Akron Business and Economic Review*, Vol. 17 (4), pp. 62-74.
- [19] Gordon M. J., (1963), "Optimal Investment and Financing Policy", *Journal of Finance*, May, pp. 264-272.
- [20] Higgins, R.C. (1972), "The corporate dividend-saving decision", *Journal of Financial and Quantitative Analysis*, Vol. 7 No.2, pp.1527-41.
- [21] Higgins, R.C. (1981), "Sustainable growth under inflation", *Financial Management*, Vol. 10 pp.36-40.
- [22] Jensen, G. R., Solberg, D. P. and Zorn, T. S. (1992), "Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies", *Journal of Financial and Quantitative Analysis* Vol. 27, pp. 263-274.
- [23] Jensen, M. C. and Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure," *Journal of Financial Economics* 3, pp. 305-360.
- [24] John, K., Knyazeva, A., and Knyazeva, D. (2007), "Geography and Dividend Policy," Working Paper, New York University.

- [25] Kim, B. S. and Maddala, G. S. (1992), "Estimation and Specification Analysis of Models of Dividend Behaviour Based on Censored Panel Data", *Empirical Economics* Vol. 17, pp. 111-124.
- [26] Kowaleski, O., Stetsyuk I. and Talavera, O. (2007), "Corporate Governance and Dividend Policy in Poland," *Wharton Financial Institutions Centre Working Paper* No. 07-09.
- [27] Lasher, W. (2000), *Practical Financial Management*, 2nd ed. Thomson South-Western.
- [28] Lintner J., (1962), "Dividends, Earnings, Leverage, Stock Prices, and the Supply of Capital to Corporations", *Review of Economics and Statistics*, August, pp. 243-269.
- [29] Litzenberger, R. H., and Ramaswamy, K. (1979), "The effect of Personal Taxes and Dividends on Capital Asset Prices", *Journal of Financial Economics* Vol. 7, pp. 163-195.
- [30] Lloyd, W. P., Jahera, J. S. and Page, D. E. (1985), "Agency Costs and Dividend Payout Ratios", *Quarterly Journal of Business and Economics* Vol. 24, pp. 19-29.
- [31] Miller, M. H., and Modigliani, F. (1961), "Dividend Policy, Growth, and the Valuation of Shares", *Journal of Business* Vol. 34, pp. 411-433.
- [32] Murhadi, Werner Ria, (2010), "Study on Dividend Policy: Antecedent and its Impact on Share Price ". Available at SSRN: <http://ssrn.com/abstract=1686109>
- [33] Nissim, D. and Ziv, A. (2001), "Dividend Changes and Future Profitability", *Journal of Finance* 56, pp. 2111-2133.
- [34] Petit, R. R. (1977), "Taxes, Transactions costs and the Clientele Effect of Dividends", *Journal of Financial Economics* Vol. 5, pp. 419-436.
- [35] Pruitt, S.W., Gitman, L.W. (1991), "The interactions between the investment, financing, and dividend decisions of major US firms", *Financial Review*, Vol. 26 No.33, pp.409-30.
- [36] Rozeff, M. S., (1982), Growth, Beta and Agency Costs as Determinants of Dividend payout Ratios," *The Journal of Financial Research* 5, pp. 249 – 259.
- [37] StataCorp. (2009). Stata Statistical Software: Release 11.0, (Stata Corporation, College Station, Texas).