

An Empirical Investigation of Corporate Dividend Payout Policy in an Emerging Market: Evidence from Palestine Securities Exchange

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Abstract

This manuscript aims at investigating factors that affect corporate dividend policy of the listed companies on Palestine Securities Exchange. For this purpose, the study considers the impact of six explanatory determinants namely, firm's size, profitability, risk, leverage, liquidity and growth opportunities by using balanced panel dataset of Palestinian listed firms between the years 2009 and 2013. The sample which was investigated is composed of 24 listed and traded companies as of December 2013. Descriptive analysis, multicollinearity analysis and multiple regression analysis were used to test the model of the study. Empirical findings show that that growth, risk, and profitability explanatory variables have positive and statistically significant association with dividends payout ratio. Furthermore, the results indicate that the firm size and leverage ratio factors were found to have statistically no significant relationship with dividends payout ratio. Liquidity appeared to have a negative association with dividends payout but not statistically significant.

Keywords: Dividend Payout Policy, Palestine Securities Exchange

1. Introduction

Corporate dividend policy has long been one of the most intriguing issues in the financial literature. The corporate dividend policy decision is significant for the company because making this decision will impact on the value and future performance of the firm. Dividends play a crucial role in the capital structure of the firm and important for investment decisions. Moreover, dividend policy is regarded as an indicator for growth prospective and stability of the firm (Miller and Rock, 1985). However, the determinants which impact upon dividends policy seem unresolved across the different economic environments. Different dividend policies can be applied across countries due to regulations, different tax policies and different institutions and capital markets (Zameer et al. 2013).

Over the years, scholars posed questions such as " why do companies pay dividends?" and "why do investors pay attention to dividends?" and put forward a number of theories, hypotheses and models in attempts to resolve the issues of dividend policy and behavior and describe factors that affect dividend payout decisions. Several studies on dividends policy have been conducted in developed financial markets (Alam & Hossain, 2012; Hussainey et al. 2011; Karim, 2010; Baker & Powel, 2000; Copper et al. 2008; Jensen, 1986); however, providing additional evidence from the emerging markets is important because the dividend policy and behavior in these markets are often different in its characteristics, nature and efficiency (Al-Kuwari, 2009).

The primary goal of the current study is to investigate whether various determinants impact on the dividend payout policy for Palestinian shareholding companies. For this purpose, the study explored the association between dividends payout ratio and firm's size, profitability, risk, leverage, liquidity and growth opportunities. The paper will provide new evidence from the emerging market on the factors affecting the amount of dividends paid by the corporations. This paper is considered as the first study (to the researcher's knowledge) to investigate to what extent several factors of corporate dividends payout policy can explain the dividend decision of the companies listed on Palestine Securities Exchange.

The remainder of this manuscript is organized as follows. Section two presents the literature review on corporate dividend policy, section three describes the hypotheses of the study related to the determinants of corporate dividend policy, empirical model and measurement of variables are described in section four, section five presents research design, section six addresses data and sample procedures, discussion of empirical findings are presented in section seven and conclusions that have been drawn from the findings of the research and future research are presented in section eight.

2. Literature Review

Corporate dividend policy is regarded as one of the most controversial subjects in the financial literature. Several theories and models were developed by academicians and researchers in order to investigate the reaction of the share market values to the announcement of dividends and the determinants of dividend policy. Many studies conducted in different economic environments concluded that the announcement of dividends convey relevant information to the financial markets (John and Lang, 1991; Bom, 1988; Abeyratna et al. 1996 and Suwabe,

2006). Another group of studies pointed out that company's' dividends policy is affected by many factors or determinants such as company's' size, company's' financial leverage, free cash flows, growth and other factors (Rozeff, 1982; Holder et.al, 1998; Anil and Kapoor, 2008 and Maladjian and El Khoury, 2014).

However, the earliest empirical research on dividend can be traced back to the seminal work of Lintner (1956) who found that corporate profitability and previous year's dividends were the dominant determinants of corporate dividend decisions. Graham and Dodd (1962) stated that many individuals such as retired people who live on a fixed income, desire current dividends. Gordon (1959) developed "the bird in hand theory" and stated that stockholders prefer current dividends to possible future earnings since investors dislike uncertainty related to future dividends. Thus, investors would be willing to pay higher prices for company's' shares that pay immediate dividends (Khan & Jain, 2008). If companies do not pay dividends, the level of uncertainty will increase and this accordingly will lead to lower stock prices and minimize the shareholders wealth. Several studies supported Gordon theory and concluded that investors prefer current dividend in order to maximize their wealth by maximizing the stock prices of the firms (Fisher, 1961; Gordon, 1963; Walter, 1963 and Brigham and Gordon, 1968).

Miller and Modigliani (1961) were the first to introduce the value relevance of dividends and argued that dividends could convey information about the firm's future earnings. They stated that corporate dividend policy decision has no influence on either the company's stock prices or its cost of capital putting forward the irrelevance theory or MM model which is more commonly known. They argued that the value of the company is determined by the earnings generated by its assets and its business risk. The study of Charest (1978) and Aharony and Swary (1980) reported similar results of MM and concluded that corporate dividend policy convey information to the financial market. Moreover, Brittain (1966) found that cash flows information is more powerful than earnings in explaining dividends payout. In his "free cash flows" theory, Jensen (1986) concluded that free cash flows convey information to the financial markets. Jensen argued that if the company has free cash flow, it is better to pay dividends to the stockholders so as to maximize their wealth. Furthermore, the study of Lang and Litzenberger (1989) supported Jensen's theory and pointed out that free cash flows have information content. The tax preference theory was also introduced by many researchers (Elton and Gruber, 1970; Blume, et al., 1974; Lease and Schlarbaum 1978; and DeAnglo & Masull, 1980). This theory stated that investors prefer capital gain over current dividends for tax related reasons. Black (1976) pointed out that companies paid dividend to reward the stockholders who takes particular level of risk when investing in the firm. Black also added that in high tax brackets investors are most likely to hold low dividend stocks while in low tax brackets investors tend to own stocks with high dividends yield. Furthermore, Miller and Scholes (1982) argued that shareholders choose to make long term decisions about their investments for the purpose of minimizing taxes. Some studies pointed out that the dividends can be used to reduce the agency problem arising between management and stockholders as the payment of dividends contribute in reducing the funds available to the entity managers (Jensen and Meckling, 1976; Easterbrook, 1984; Crutchley and Hansen, 1989 and Jensen et al. 1992). However, Titman and Wassels (1988) found evidence that companies with low levels of conflict of interests between shareholders and bondholders are most likely to pay more dividends. In the same context, Alli et al. (1993) pointed out that agency problem arising between shareholders and bondholders affects the corporate dividends policy.

Several other empirical studies in the developed and emerging countries investigated the factors that affect the corporate dividend policy. Jensen et al. (1992) examined the relationship between insider ownership (insider holdings) debt and corporate dividends policy and pointed out that insider holdings is one of the most significant factors that affect dividend policy. Adu-Boanyah et al. (2013) investigated the determinants of dividend policy of the manufacturing firms listed on the Ghana Stock Exchange. The results revealed that profitability and size of the firms are the most influential determinants of corporate dividend policy. Gill et al. (2010) investigated the determinants of dividend policy in the service and manufacturing U.S publicly held corporations. The study concluded that firms' decisions about dividend is a function to profitability, sales growth, financial leverage and tax. Mehta (2012) also examined the determinants of corporate dividends policy for companies listed on the Abu Dhabi Stock. The results of the study indicated that profitability and size of the firm are the most significant factors that affect corporate dividends policy. The current study provides insights into corporate dividends policy in the emerging market, by addressing new evidence from Palestine.

3. Development of Hypotheses

In order to identify some of the factors that affect corporate dividend policy of the listed companies on Palestine Securities Exchange, the following hypotheses were generated based on the objectives of the study:

Hypothesis number 1 (H₁): There is a positive association between the size of the firm and dividend payout.

Hypothesis number 2 (H₂): There is a positive association between the profitability and dividend payout.

Hypothesis number 3 (H₃): There is a positive association between the P/E ratio (which measures the risk) and dividend payout.

Hypothesis number 4 (H4): There is a positive association between the leverage and dividend payout.
 Hypothesis number 5 (H5): There is a positive association between the liquidity and dividend payout.
 Hypothesis number 6 (H6): There is a positive association between the growth opportunities and dividend payout.

4. Empirical Model and Measurement of Variables

The main goal of the study is to explore the association between dividends payout ratio and firm's size, profitability, risk, leverage, liquidity and growth opportunities. For the purpose of investigating the six hypotheses developed in this study, the following empirical model was undertaken:

$$DPO = \beta_0 + \beta_1 \text{ SIZE} + \beta_2 \text{ PROF} + \beta_3 \text{ R} + \beta_4 \text{ LEV} + \beta_5 \text{ LIQ} + \beta_6 \text{ GROW} + e_i$$

Where DPO is the dividend payout ratio and represents the dependent variable of the study. DPO is defined as cash dividend divided by net income (Al-Kuwaril, 2009). As explanatory variable, the SIZE of the company is measured by the natural logarithm of the book value of the Total Assets of the company (Mehta, 2012). PROF represents the profitability of the firm which is measured by the Earning per Share (EPS). The EPS is calculated by dividing Net Profit by Number of Equity shares outstanding (Mehta, 2012). R is the risk of the company which is measured by Price of Share to Earnings per share ratio (Maladjian & El Khoury, 2014). LEV measures the leverage of the firm which is calculated using the Debt to Equity ratio (Gill et al. 2010). LIQ represents the liquidity of the company and measured by the Current ratio (Current Assets/Current Liabilities) (Ahmed & Javid, 2009). GROW is the growth opportunities of the company and measured by dividing the difference between the current and previous revenue to the previous revenue (Gill et al. 2010). Definition of the study variables and symbols are summarized in Table -1.

Table -1: Dependent and Explanatory Variables Definitions and Symbols

Proxy Variables	Definition	Symbol
Dividend Payout Ratio	Cash Dividend / Net Income	DPO
Firm Size	Natural Log of the Book Value of total assets	SIZE
Profitability	Net Profit /Number of Equity shares outstanding	EPS
Leverage	Total Liabilities / Equity	LEV
Risk	Price of Share to Earning Per Share Ratio	P/E
Liquidity	Current Assets / Current Liabilities	LIQ
Growth	Current Revenue - Previous Revenue / Previous Revenue	GROW

5. Research Design

The study investigates the factors that impact upon the corporate dividend policy in context of the companies listed on Palestine Securities Exchange. The current study is quantitative in nature since it investigated the consequence of theories employed in different economic environments. The study also stimulates future research in this area that provides evidence to verify the results and provide new directions and modifications necessary to put forth new theory (Bryman, 1988). The secondary data of this study were collected from the websites of the Palestinian listed companies where the annual reports and other details of the financial data of the companies are available. The study employs panel data and needs to gather data in relation to the determinants of dividends policy for the same listed companies for five years.

6. Data and Sample Procedures

Primarily, the 49 publicly held companies listed on Palestine Securities Exchange constitute the population of the study. The sample which was investigated is composed of 24 listed and traded companies as of December 2013. Investment, insurance and banking institutions are then excluded from the sample because they are specialized in nature, use special accounting systems and are subject to different regulations. Thus, the sample of the study includes companies operate in the service and manufacturing sectors. Table – 2 illustrates all corporations listed on the Palestine Securities Exchange broken down into sectors. The data were collected annually for dividends payout and all other explanatory variables for 5 years beginning from 2009 to 2013.

Table -2: Corporations Listed on the Palestine Securities Exchange according to Sector

Sector	Number of Corporations
Banking	9
Investment	9
Insurance	7
Service	12
Manufacturing	12
Total	49

7. Discussion of Empirical Results

This section presents a discussion of descriptive statistics for variables used in the study, multicollinearity analysis and the findings of Hypothesis testing.

7.1. Descriptive Statistics

Table 3 demonstrates descriptive statistics for the dependent and independent variables of the study. The statistics displayed in the Table reveal the mean, standard deviation, minimum and maximum values of the variables. As can be seen from the table, the average dividend payout ratio for the companies is 0.315 whereas the firm size (measured by Natural Log of the Book Value of total assets) is 17.65. The average profitability is 68.66, average leverage 0.37, average for the risk variable (measured by the Price of Share to Earnings per Share Ratio) is 16.78, average liquidity (measured by current ratio) is 2.92 and the average growth rate for the sample companies is 1.81.

Table – 3: Descriptive Statistics for Variables Used in the Study

Variable	Number of Observations	Mean	Standard Deviation	Minimum	Maximum
Dividend Payout	120	0.3156	0.8944	-3.21-	7.85
Firm Size	120	17.6527	2.51583	12.65	26.00
Profitability	120	0.6866	1.27106	-1.30-	5.23
Leverage	120	0.3797	.50407	.00	4.00
Risk	120	16.7864	30.41036	-111.36-	138.00
Liquidity	120	2.9245	3.80962	.20	30.07
Growth	120	1.8149	3.38483	-.85-	12.25

7.2. Multicollinearity Analysis

Mmulticollinearity analysis was run so as to detect whether or not the independent variables are dependent on each other. The multicollinearity of multiple regression refers to a situation in which the independent variables are themselves highly correlated (Gujarati and Porter, 2009). Multicollinearity among independent variables could result in implausible values, in the regression model coefficients and therefore standard errors of the coefficients may be biased (Al-Kuwari, 2009). Mmulticollinearity was diagnosed by means of Variance Inflation Factor (VIF) test and Correlation Matrix. As can be seen from table 4 and 5 the largest VIF for the explanatory variables is 1.372 which indicates that multicollinearity is not a problem for regression model of the study. The multicollinearity is considered harmful when the VIF exceeds threshold of 10 (Aqel, 2014).

Table – 4: Variance Inflation Factor (VIF) for the Independent Variables

Model	Dependent Variables	VIF	Tolerance
1	Growth	1.00	1.00
2	Growth	1.066	0.938
	Risk	1.066	0.938
3	Growth	1.197	0.835
	Risk	1.090	0.918
	Profitability	1.183	0.845

Table – 5: Variance Inflation Factor (VIF) for the Independent Variables (Excluded Variables)

Model	Dependent Variables	VIF	Tolerance
1	Firm Size	1.364	0.733
	Leverage	1.022	0.978
	Liquidity	1.00	1.00
	Profitability	1.157	0.864
	Risk	1.066	0.938
2	Firm Size	1.372	0.729
	Leverage	1.029	0.971
	Liquidity	1.003	0.936
	Profitability	1.183	0.835
3	Firm Size	1.490	0.671
	Leverage	1.030	0.825
	Liquidity	1.028	0.824

Table 6 illustrates the correlations matrix of the explanatory variables. As can be seen from the noticed from the table, the highest correlation between independent variables is 0.517 between growth and firm size. The correlations among the explanatory variables are not considered harmful until they exceed 0.80 or 0.90 (Aqel, 2014). This conclusion in turn suggests that there was no multicollinearity problem among the explanatory variables.

Table – 6: Correlation Coefficients among the Independent Variables

	Firm Size	Profitability	Leverage	Risk	Liquidity	Growth
Firm Size	1					
Profitability	0.420	1				
Leverage	-0.077	-0.77	1			
Risk	0.189	0.225	-0.116	1		
Liquidity	-.090	-0.144	-.0262	.043	1	
Growth	0.517	0.368	-.148	0.248	-.017	1

7.3. Regression Results

Multiple regression analysis has been run in order to examine the Hypotheses of the study and explanatory power for independent variables used in the study. The findings of Stepwise linear regression are illustrated in Table 6, and Table 7. The multiple regression model is significant at the 5 percent level ($p < 0.05$). As depicted in Table 6, growth, risk, and profitability explanatory variables are significantly associated with dividends payout. Firm size, leverage and liquidity do not have significant influence on the dividend behavior of the Palestinian listed firms and therefore stepwise regression analysis excluded these variables from the model as shown in Table 6 and Table 7.

As indicated in Table 8, significance value for the firm size is more than 0.05 and thus the first Hypothesis is rejected. This indicates that there is a significantly no association between the size of the firm and the corporate dividend policy in the entire sample. This findings is not consistent with the results reported by (Fama and French, 2001; Al-Kuwari, 2009 and Maladjian and El Khoury) who found evidence that large firms have more capability to pay dividends and pay higher dividends than smaller size firms.

Table 7 shows that the coefficient of variation (β) which explains the direction of variability is positive for the profitability Hypothesis and significance value less than 0.05 (0.00). This indicates that there is a significantly positive or direct relationship between the profitability of the firm and the dividend paid by the public shareholding companies in Palestine. This result supports the second Hypothesis of the study which stated that profitability and dividend payout ratio should have a positive association. This result is consistent with previous studies that found profitability to be a primary indicator of the corporate dividend payout ratio and reported a positive association between profitability and dividend payout ratio (Han et al., 1999; Fama and French, 2001; Al-Kuwari, 2009 and Yegon et al. 2014). However, Gill et al. (2010) found a negative association between profitability and dividend payout ratio in the entire sample for American service and manufacturing firms. In addition, Badu (2013) found that there is statistically insignificant association between profitability and dividend payout ratio for listed financial institution in Ghana.

The risk factor (measured by P/E) appeared to have a positive and statistically significant association with dividends payout ratio and thus is considered an important determinant of the corporate dividends policy for Palestinian shareholding firms. These findings supported Hypothesis 3, which predicted that the P/E and dividend payout ratio should have a positive relationship. Several prior studies employed the P/E ratio as a measure to of the risk of the firm since it indicate the perceived risk of a specific firm's future earnings (Fama and French 1998; Friend and Puckett, 1964). The results of the current study is in line with the findings of Mehta (2012) which indicated that the higher P/E ratio of a given firm, the lower its risk, and the higher is its dividends payout ratio.

The leverage ratio was found to have no significant relationship with dividends payout ratio. Thus, Hypothesis 4 is not supported. This results is consistent with the findings of Gill et al., (2013) and Mehta (2012) which provided evidence that the dividends payout ratio is not a function of the leverage (measured by debt to equity ratio). However, other prior studies found statistically significant and negative association between leverage ratio and dividends payout ratio Collins et al. (1996) and Al-Malkawi (2007). Furthermore, Rozeff (1982) argued that high financial leverage companies tend to have low dividends payout ratio so as to reduce transaction costs associated with the external financing.

Liquidity appeared to have a negative association with dividends payout but not statistically significant and thus the Hypothesis 5 is not supported. This is consistent with the findings of Marfo-Yiadom and Agyei (2011) and Kania and Bacon (2005). However, this is inconsistent with the results reported by several studies conducted in different economic environment which pointed out that liquidity is a significant determinant of corporate dividends policy Badu (2013); Amidu M, Abor (2006); Anil and Kapoor (2008). Other studies found also that liquidity position of the firm has no impact on the corporate dividends policy Al-Kuwari (2009) and Al-Shubiri (2011).

The Growth factor was found to have positive association with dividend payout ratio and statistically significant. This results is inconsistent with several prior studies which found significantly negative association between growth and dividend payout Gill et al. (2010); Amidu and Abor (2006); Collins et al. (1996). However, Badu (2013) pointed out that in the countries with high legal protection fast-growth companies tend to pay lower dividends as the shareholders were legally protected while in countries with low legal protection for shareholders companies continue to pay high dividends in order to maintain strong name, even when they had better growth opportunities. This provides support to the results of the current study.

Table – 6: ANOVA Results ^d

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	21.875	1	21.875	35.205	.000 ^a
	Residual	73.320	118	.621		
	Total	95.195	119			
2	Regression	30.355	2	15.178	27.387	.000 ^b
	Residual	64.840	117	.554		
	Total	95.195	119			
3	Regression	33.222	3	11.074	20.728	.000 ^c
	Residual	61.973	116	.534		
	Total	95.195	119			
<p>a. Predictors: (Constant), Growth b. Predictors: (Constant), Growth, Risk c. Predictors: (Constant), Growth, Risk, Profitability d. Dependent Variable: payout</p>						

Table – 7: Coefficients for each Explanatory Variable with the Dependant Variable ^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Standard Error	Beta		
1	(Constant)	.086	.082		1.049	.296
	Growth	.127	.021	.479	5.933	.000
2	(Constant)	-.030	.083		-.359	.720
	Growth	.106	.021	.403	5.114	.000
	Risk	.009	.002	.308	3.912	.000
3	(Constant)	-.077-	.084		-.926	.357
	Growth	.090	.022	.340	4.148	.000
	Risk	.008	.002	.281	3.597	.000
	Profitability	.133	.057	.189	2.317	.022
<p>a. Dependent Variable: payout</p>						

Table – 8: Excluded Variables^d

Model		Beta	t	Sig	Partial Correlation
1	Size	.015 ^a	172	.864	.016
	Profitability	.232 ^a	2.745	.007	.246
	Risk	.308 ^a	3.912	.000	.340
	Liquidity	-.060 ^a	-.741-	.460	-.068
	Leverage	.071 ^a	.862	.390	.079
2	Size	.028 ^b	.352	.725	.033
	Profitability	.189 ^b	2.317	.022	.210
	Liquidity	-.075 ^b	-.978	.330	-.090
	Leverage	.096 ^b	1.243	.216	.115
3	Size	.028 ^c	.354	.724	.033
	Liquidity	-.049 ^c	-.638	.524	-.059
	Leverage	.098 ^c	1.294	.198	.120

a. Predictors in the Model : (Constant), Growth
b. Predictors in the Model : (Constant), Growth, Risk
c. Predictors in the Model: (Constant), Growth, Risk, Profitability
d. Dependent Variable: payout

8. Conclusion

The focal point of this study was to explore the determinants of dividend payout policy for listed companies on Palestine Securities Exchange. For this purpose, the study examined association between dividends payout ratio and firm's size, profitability, risk, leverage, liquidity and growth opportunities the study employed panel data and data in relation to the determinants of dividends policy was collected for all firms in the area of manufacturing and service sectors for a period of 5 years from 2009 to 2013. Multiple regression analysis using Stepwise method was run in order to achieve the objective of the study. Moreover, multicollinearity among the explanatory variables was diagnosed using the correlation matrix and Variable Inflation Factors (VIF) and the results indicated that there was no multicollinearity problem among the explanatory variables.

The findings revealed that growth, risk, and profitability explanatory variables have positive and statistically significant association with dividends payout ratio. Firm size, leverage and liquidity do not have significant influence on the dividend behavior and therefore stepwise regression analysis excluded these variables from the model. The firm size and leverage ratio factors were found to have statistically no significant relationship with dividends payout ratio. Liquidity appeared to have a negative association with dividends payout but not statistically significant.

The major limitation of the study is that it takes into consideration only a period of 5 years and some of the factors such as insider ownership, institutional ownership, capital spending and tax have not been investigated. Besides, financial institutions and insurance firms have been excluded from the study. This research is also regarded as the starting point for identifying dividends behavior and major determinants of dividends payout in Palestinian listed firms. One way to extend this study is to explore the influence of other significant determinants of dividends payout for listed companies on Palestine Securities Exchange such as EPS, growth, tax and insider ownership. Furthermore, future research should investigate significant control variables that affect corporate dividends policy such as industry sector in addition to examining the reaction of the market stocks on dividends.

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