

Determinants of Corporate Dividends Policy: An Empirical Evidence from Palestine

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Abstract: This Empirical research aims to investigate the impact of factors that determine the dividends policy in non-financial companies in Palestine. For this purpose, the data was collected from the annual reports of sample companies that had continuous financial reporting throughout the period between 2018 and 2022. The dividends payout ratio was used as a dependent variable to measure the dividends policy, while the following eleven independent variables were used as hypothesized determinants: Financial Leverage, Firm Size, Revenue Growth, Industry Type, ownership concentration, Profitability, free cash flows, Business Risk, Firm Age, Return on Assets, and Previous Year Dividends. The population consisted of 49 companies, and two samples were tested to achieve the research purpose. Sample one included 32 companies that met the sampling criteria, but revealed no significant variable to dividends policy, since 13 companies had never paid dividends within the mentioned period and represented outliers that confused results. Alternatively, sample two included only 19 companies that paid dividends once at least between 2018 and 2022. The Multiple Linear Regression test at 95% confidence was used and resulted in five significant variables. The profitability, free cash flows, and business risk seemed to have a positive relationship with dividends payout, while return on assets and revenue growth had a negative association with dividends payout... Overall, the adjusted $R^2 = 0.713$. This measure is acceptable and reveals the resulting model interprets 71.3% of dividends policy determinants.

Purpose: the purpose of this study is to investigate the impact of factors that determine the dividends policy in non-financial companies in Palestine.

Design/methodology/approach: : this study has used quantitative secondary data that has been derived from the audited financial statements of the selected sample companies. Basically, we have two types of research approaches to interpret the relationships between theory and research process. Deductive, and Inductive. In the deductive approach research often relates the research to an existing theory to create hypotheses to be tested against empirical data. Then, the researcher either confirms or rejects the stated hypothesis based on the findings. In contrast, inductive approaches base the research on empirical data that is used in order to create a theory. In this case, the researcher has based the research on the related theories. Thus, a deductive approach is used to test the quality of theories against research hypothesis. the multiple regression with standard method is used in current research, since it seems from the literature that it is reliable and valid test. In addition, the multicollinearity test is conducted to measure the association between the independent variables.

Findings: this study resulted in five significant variables. The profitability, free cash flows, and business risk seemed to have a positive relationship with dividends payout, while Return on assets and revenue growth had a negative association with dividends payout... Overall, the adjusted $R^2 = 0.713$. This measure is acceptable, and reveals the resulted model interpret 71.3% of dividends policy determinants.

Research limitations/implications: This research is limited to the audited financial statement of publicly listed companies in Palestine. A sample of 32 public non-financial companies that have a continuous reporting are tested using current research model. However, the findings of this research are not applicable to the financial institutions like Banks, insurance, and other similar ones due to their special characteristics.

Moreover, this research is limited to secondary numeric data derived from the financial reports of selected sample companies. In other words, the research measures internally created factors that might determine the dividends policy, while the external factors such as investor preferences, governmental regulations, and other external environment factors are beyond the scope of this research, excluding the business risk that was possible to be included.

Practical implications: By the end of this research, the researcher established that research purpose is fulfilled through establishing a model that determines about 71.3% of variables that determine the dividends policy among Palestinian non-financial firms, and so, this is an addition to solving the dividends puzzle and so, this research has extended the previous research results over new time horizon. Accordingly, both current and potential investors can rely on these results to assess companies in terms of their behavior. For example, investors who follow the bird in hand theory look for receiving dividends rather than share price appreciation. Also corporates' CEOs and CFOs can utilize these results to understand the manner in which they actually pay dividends, and how things are going in the whole market. Understanding the internal financial factors along with surveying the investors' behavior will definitely enable managers to build a more workable and appropriate dividends policy. While government can also benefit from these results, and decide whether to leave companies free of regulation, and impose regulations related to dividends in favor of shareholders' interest.

Originality/value: this study has contributed to the theoretical knowledge and related literature; it added new variable that were researched for the first time in Palestine.

Keywords: Dividend Policy, Payout Ratio, Palestine Stock Exchange

Introduction

Dividends policy is one of the most researched topics tackled through the financial management literature. This topic has taken a distinctive importance in theoretical and practical fields due to its critical implications on operating, financial, and strategic positions of companies. According to Ross, Wasterfield, & Jordan (2012), some managers view the dividends policy modification as a shock absorber in cases of financial crises, others perceive this policy as a signaling factor to attract more investors and increase the value of the firm. Moreover, other managers and authors tackle dividends policy as a tool to manage the agency problem that arise through conflict of interests between management and shareholders, as at the end of each accounting period, public companies' boards and executives should be engaged in a critical decision. This decision is either to retain the profits or distribute full or partial earnings in the form of cash or stock dividends (Ross, Wasterfield, & Jordan, 2012).

This topic is researched massively all over the world to solve the puzzle of dividends policy by measuring the impact of some theoretical and empirical determinants of dividends payout. Some researchers revealed that profits is the primary determinant of dividends such as Al-Malkawi (2007). While others found that other variables may affect the policy such as company size Baker and Powell (2000), industry type in turkey Kuzucu (2015), business risk in USA Gill, Biger and Tibrewala (2010). Other variables were used as common among international research. For example, Al-Kuwari (2009) used the ownership concentration, firm size, financial leverage, growth rates, business risk, and profitability, and tried to compare the results between the countries that belong to Gulf Cooperation Council (GCC). The main significant variables were the ownership concentration, profitability, and firm size. In Palestine, Aqel (2016) investigated some determinants of dividends policy in Palestinian case. The most important findings were the establishment of positive impact of growth, financial risk, and profitability on dividends payout. In contrast, this impact was negative when investigating the liquidity as an independent variable. Aqel's paper has tackled the published data between 2009 and 2013. Another Palestinian research was conducted by Hassoun, Tran and Quach (2016). In contrast to the previous study which claimed that size is not a significant factor, they concluded that size, profitability are positively related to dividends payout. While the financial leverage and asset's structure are negatively related.

This paper concentrated on the dividends policy in Palestinian Non-financial companies, by measuring the impact of some researched empirical variables from the annual reports of the selected companies listed on Palestinian Exchange. Current research has used available literature to examine the impact of eleven variables on the dividend's payout in Palestinian non-financial companies. These variables include financial leverage, company size, revenue growth, business risk, profitability, free cash flow, ROA, firm maturity, industry type, ownership concentration, and previous year dividends. The data used from the released financial reports of sample companies between 2018 and 202

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.

Literature Review

The Dividend Policy is the manner of which company deal with earnings, either by distribution or retention. Empirically, it has several measures. one measure is the dividends payout ratio (DPO) which measures the amount of earnings that were distributed to shareholders. It's calculated by dividing the dividends per share by the earnings per share according to Damodaran (2010). Another measurement of dividends is dividends yield that considers the share price as an external factor in such calculation. It's calculated by dividing the dividends per share by the share price. In the current study, the researcher sees that dividend pay-out ratio is a more informative measurement of the firms' dividend since it is limited to internal factors, which will be more reliable. DPO was used by most of the previous studies such as Rozeff (1982) and Hellstrom & Inagambaev (2012). The following section entails the most common variables that have an impact of dividends policy as tackled in previous research, and they will be essential in analyzing this impact in the Palestinian case. These variables include Financial Leverage, revenue growth, firm size, business risk, free cash flow, profitability, firm maturity, industry type, ownership concentration, return on assets, and previous year (DPO).

Financial Leverage

The capital structure decision is one of the crucial ones made by financial management. Financial leverage is the extent to which the firm utilizes debt as financing vehicle for its operations and investment opportunities. According to Litzemberger & Karus (1973), the optimal capital structure is one that balances the benefits and pitfalls of debt. In other words, tax savings, reduction of agency cost, versus the costs associated with such a debt. Moreover, the degree of financial leverage (DFL) is a measure of efficiency and financial risk. One point is that DFL enables the firm owners to control a greater amount of assets to generate much of earnings and growth, while the financial risk increases in case of higher obligations. The most common formulas to measure the leverage (gearing level) are debt/equity ratio, or % change in EPS/ % change in EBIT. Afza & Mizra (2011) have established a negative relationship between leverage and dividends payout ratio. This is because of the high transaction costs and interests that increase profitability and reduce the firm's ability to distribute dividends. Asif et al. (2010) have also concluded the negative association between the leverage and payment of dividends. Alonso & Sanz (2005) also concluded that the capital structure in Spanish companies entails a negative relationship between leverage and firm value in cases of growth opportunities. These associations turn out to be positive when generating less profits, since the firm will retain dividends to increase the firm's value. In contrast, Al-Kuwari (2009) investigated the determinants of dividend policies for firms listed on (GCC) country stock exchanges during 1999 to 2003. Researcher concludes that there are a number of factors which have impact on the dividend policy. One of the findings is that firms with the optimum capital structure can pay high dividends as compared to other companies. Moreover, Asad & Yousaf (2014) Concluded that financial leverage has a significant negative impact on dividends payment in Pakistani manufacturing firms. Gupta & Banga (2010) Investigated 150 Indian companies between 2001 and 2007. By selecting six variables as follows: leverage, profitability, liquidity, growth, and ownership. structure. Results showed that only the leverage level and liquidity can determine the dividends decision

Revenue Growth

Even though the title impresses the growth in sales, it also includes the boosting in company resources. This is achieved through many profitable projects and investments. On the other hand, seeking growth often creates liquidity problems for companies Susela (2011). This variable is measured as $(\text{current year revenues} - \text{previous year revenues}) / \text{previous year revenues}$ according to Kivali (2013) in his recent research. The revenue growth reflects high investing opportunities and used as a quantitative variable to measure such opportunities. Chang & Rahee (2003) found that companies that have growth opportunities tend to retain its profits rather than distributing dividends, while much of dividends are paid in the absence of profitable investments to curb the problem of underinvestment, or investment in infeasible projects. Moreover, Rozeff (1982) established a negative relationship between growth opportunities and payment of dividends. The rationale beyond this finding is that firms which experience attractive investments opportunities tend to reduce dividends to avoid external financing, and to reduce the agency costs. Mohd, M., Perry, L., & Rimbey, J. (1995) also concluded that slow growing companies tend to pay higher dividends to prevent managers from over investing cash, and to shrink the agency problem. These findings were also applicable in the Lebanese banking sector, as Maladjian & El Khoury (2014) concluded. In addition, Pandey (2001) established a relationship between growth, debt financing, and dividends. He followed the trade-off theory to establish that the growing company engages in better economies of scale, then it can issue debt securities and maintain growth in retained earnings. This fact results in more liquidity to pay dividends and reducing the agency cost of shareholders.

Firm Size

Lloyd, Jaher, & Page (1985) were the first who considered the firm size as a determinant variable of dividends policy. They stated that larger firms tend to distribute more dividends to reduce the agency costs. Their findings supported this hypothesis based on that ownership dispersion leads to more bargaining power of investors. In addition, Sawicki (2005) illustrated that dividend distribution helps in monitoring information in large corporations. Consequently, paying dividends arises the need for external financing, which results in more transparency and monitoring by creditors and stakeholders. Kivali (2013) established a positive relationship between the firm size and payout ratio. His study sample had tackled 40 nonfinancial corporations and found that size is significantly related to the distributed dividends. On the other hand, the Palestinian context has revealed different results. For example, Aqel (2016) found that size is statically insignificant to the dividends policy, while Hassoun et al. (2016) found that a positive relationship exists between the two variables.

Corporate Business Risk

that high-risk firms will experience more cash flow volatility. Thus, the need for external financing requirement of such firms will increase, and so, manager will strive to reduce the dividend payout to avoid costly external financing Chen & Steiner (1999). On contrast, Mollah, Keasy, & Short (2002) Attempted to construct a relationship between business risk and dividends policy. The risk could be measured by the ability to create profitability per share, or EPS. The primary hypothesis stated that higher risks will shrink corporate profits. Nevertheless, this study has rejected this argument based on findings, since many companies have paid dividend during market recessions, or when market beta is high, and vice versa. (Mollah et al. 2002). Moreover, Wansly & Saxena (1996) established a negative relationship between

dividends payout and existing financial risk of the firm. The financial risk in this case is presented by the DFL. In other words, the highly leveraged firms are keen to pay off their debts as a priority, which in turns leave less earnings for shareholders. Bradely, M., Capozza, D., & Seguin, P (1998) found that systematic risk force companies to reduce the payment of dividends. By contrast, Al- Kuwari (2009) found the business risk is not a significant variable in determination of the dividends policy when she applied this study for Arab Gulf states. Svenson & Thoren (2015) also support this finding by implying the negative impact of business risk on dividends, but no significance in the free cash flow.

Free Cash Flow

Jensen (1986) defined free cash flow as the cash remains after the required funds for profitable investments. When this cash increases, the agency problem arises due to the conflict between management and shareholders who strive for increasing their share values, while managers look for personal achievements and reputation. This issue was researched by Jensen and others like La Porta (2000) and Jensen (1986) who both stated that to overcome the agency problems, and to avoid the misuse of cash, more dividends must be paid. Other studies have used the operating cash flows for the purpose of measuring the effect on dividends policy such as Gupta & Banga (2010) who found a negative relationship. However, OCF is considered less accurate than FCF in the financial literature since it does not measure the firm's excess cash for either investment or dividends.

Profitability

According to Fama & French (2001), firm profitability is an explanatory determinant of dividends' payout. However, there is a significant difference between developed and developing countries in such a relationship. La Porta (2000) compared between countries from the legal restrictions point of view and stated that in countries who experience poor quality for shareholders' legal protection, firms tend to pay less dividends regardless of profitability levels, while investors will accept whatever distributed. In Jordan, Al-Malkawi (2007) Identified profitability as the primary determinant of dividends policy. Osbove & Denis (2007) Tackled dividends policy from an international view, they investigated cases from six European counties and found that all share the same results. They concluded that large, profitable, and high earning companies will pay higher dividends, which agrees with Jensen (1986) Agency theory. Researchers claimed that these results create doubts about the Signalling theory as they contradict the common knowledge that less profitable firms use dividends as a means of signalling to shareholders.

Firm Maturity

Grullon, Michaely, & Swaminathan (2002) established that mature companies pay out more and have greater payout ratios than growing ones. Firms that reach the maturity stage initiate declare dividends rather than retention. This result is based on the lifecycle theory. In this study, the maturity of the firm is computed by the age of the firm as a positive determinant.

Industry Type

Michel (1979) Established that firm's industry affects its dividend policy. Moreover, Baker, Farrelly & Edelman (1985) examined the industry effect on dividend policy of firms. Three

main industry groups: utility, manufacturing, and wholesale/retail. In contrast, Rozeff (1982) results rejected that industry type explain its dividend payout ratio. In this research, Palestinian firms are classified into two groups: Manufacturing and Non-manufacturing

Ownership Concentration

According to Shleifer & Vishny (1986), the Ownership structure has an impact on dividend policy. This is reasoned by large controlling shareholders, such as a family, have large voting right. Accordingly, they may adopt a dividend policy in which the firm distributes no or low dividends. In contrast, Hassoun et al.(2016) found that the concentration of ownership is insignificant. In this study, this variable is quantified through the cumulative sum of owned shares that exceeds 5%.

Return on Assets- ROA

Hedensted & Raaballe (2006) conducted their research on the Danish market. They established a positive relationship between Dividends payout and Return on Assets. Moreover, Al-Kuwari (2009) Found that DPO is positively related to the ROA. According to the surfed literature, no study revealed that ROA was insignificant to the DPO.

Previous Year Dividends

According to Ross (1995), most companies believe in the consistent pattern of dividends payment. This is directly linked to the signaling theory that considers dividends as a positive signal to attract investors who seek for immediate return. As empirical evidence, Kuzucu (2015) has established a positive relationship between current year dividends, and the year t-1.

Research Hypothesis

To determine the factors that affect the dividends policy in Palestine, following hypothesis were developed based on the research objectives, and the selected variables.

H01: There is no significant relationship between DPO and Financial Leverage.

H02: There is no statistically significant relationship between DPO and Revenue Growth.

H03: There is no significant relationship between DPO and Firm Size.

H04: There is no significant relationship between DPO and Business Risk.

H05: There is no significant relationship between DPO and Free Cash Flow.

H06: There is no significant relationship between DPO and Profitability.

H07: There is no significant relationship between DPO and Firm Age.

H08: There is no significant relationship between DPO and Industry Type.

H09: There is no significant relationship between DPO and Ownership Concentration.

H010: There is no significant relationship between DPO and Return on Assets

H011: There is no significant relationship between DPO and Previous year Dividends.

Empirical Research Model and Variables Measurements

To investigate the relationship between DPO and the selected eleven variables, the following model is used in this paper:

$$DPO = \beta_0 + \beta_1 (DFL) + \beta_2 (GROW) + \beta_3 (Size) + \beta_4 (Risk) + \beta_5 (FCF) + \beta_6 (EPS) + \beta_7 (Age) + \beta_8 (Indust) + \beta_9 (Own) + \beta_{10} (ROA) + \beta_{11} (Prev.DPO) + e_i$$

The following table illustrates how these variables are measured based on commonly used formulas, and the abbreviation of each variable within the above model.

Table 1: Measures of Research Variables

Variable	Measurement	Symbol
Dividends Distribution	Cash Dividend / Net Income	DPO
Financial Leverage	Total Debt/ Total Equity	DFL
Revenue Growth	{Revenues (t) - Revenues (t-1) }/ Revenues (t-1)	Grow
Firm Size	Natural log of Total Assets Book Value	Size
Business Risk	Price of Share /Earning Per Share Ratio	Risk
Free Cash Flows	The Ratio of {OCF - Capital Expenditures}/Total Assets	FCF
Profitability	Net Income/ # of Outstanding Shares	EPS
Firm Maturity	Current Year - Year of Establishment	Age
Industry Type	Dummy of 1 = Manufacturing, 0= non-manufacturing	Indust.
Ownership Concentration	Cumulative Sum of owned shares over 5%	Own
Return on Assets	Net Income/ Total Assets	ROA
Previous DPO	Financial Statements figure in year t-1	Prev.DPO

Research Design

This research has used quantitative secondary data that has been derived from the audited financial statements of the selected sample companies (explained in the next section.). Basically, we have two types of research approaches to interpret the relationships between theory and research process. Deductive, and Inductive according to Bryman & Bell (2007). In the deductive approach research often relates the research to an existing theory to create the hypotheses to be tested against empirical data. Then, the researcher either confirms or rejects the stated hypothesis based on the findings. In contrast, inductive approaches base the research on empirical data that is used to create a theory. In this paper, the researcher has based the research on the related theories. Thus, deductive approach is used to test the quality of theories against research hypothesis, and to open the door for future research.

Data Collection and Sampling Criteria

This quantitative research studied the listed companies in Palestine Stock Exchange (PEX). The population consists of 49 listed companies including financial institutions (Banks, Insurance & Securities companies). The sample is limited to the non-financial companies, and excluded companies that did not issue their financial reports continuously between 2018 and 2022. Moreover, the research sample excluded the companies that had never paid dividends in the mentioned period. As a result, the sample size is 19 companies. The secondary data has been collected and calculated from the audited financial statements of sample companies as of Dec.31 of the years 2013, 2014, 2015, and 2016. The reliability of data is assumed to be based on the independent auditor report upon these statements. Table (2) explains how sample is reached.

Table 2: Sampling Criteria

Description	Number of Companies	Notes
Total Listed Companies	49	PEX Drop Down List
Less: Financial Banks	6	Their Financial structure has special characters
Less: Insurance Companies and other financial institutions	8	Their Financial structure has special characters
Less: Companies with no continuous reporting or newly listed	3	Data Distortion
Less: Companies Did not Pay dividends	13	Many Outliers
Result: Sample Companies	19	

Test Statistics

To analyze the relationship between the selected variables and DPO, the collected data will be summarized, coded and entered to be analyzed using SPSS V.23. The multiple linear regression test will be used to examine the correlation between the DPO, and eleven independent variables. This test seemed to be reliable and valid test for this case based on surfing the literature, and used by several researchers such as (Aqel, 2016; Al-Malkawi, 2007; Al-Kuwari, 2009; Hassounet al. 2016), and others. In addition, the multicollinearity test is conducted to measure the association between the independent variables. This methodology was followed by many previous researchers in such topic.

Data Processing

An important notation should be mentioned with regard to the procession of Size, and Profitability. These two measures have special characters in their computations for the current study. Size is the natural log of total assets, and Profitability is the EPS. The mentioned two figures are numbers rather than ratios, so that, the researcher faced a problem that some companies report their financial statements in Jordanian Dinar (JOD), while others report in USD. To resolve such a problem, the researcher unified those two numbers in JOD by multiplying the USD figures by 0.709, which is a constant rate between the two currencies. (WWW.Xe.Com). All variables are derived from the financial statements of the selected sample companies and classified as scale data in SPSS v.23. The only qualitative data is the business type which was classified into two groups: manufacturing, and non-manufacturing. Where dummy variables were developed into (1) for manufacturing, and (0) for non-manufacturing companies. The variables are coded and entered SPSS v.23 and were analyzed through multiple regression at 95% confidence level (accepted error = $\alpha = 0.05$).

Discussion of Empirical Results
Descriptive Statistics

The table below provides an overall picture on the components of study variables. The table depicts the mean, standard deviation, maximum and minimum values for each category of variables after data processing based on the full sample.

	N	Minimum	Maximum	Mean	Std. Deviation
DPO	59	-9.2476	11.6618	.712171	1.9813847
Prev.DPO	59	.0000	11.6618	.742698	1.4711924
LEV	59	.0469	1.7877	.451239	.3788700
GROW	59	-.7033	1.7004	.118382	.3072148
SIZE	59	15.0111	20.7443	17.425414	1.5731881
RISK	59	-135.0000	28.3654	9.518365	19.9523333
FCF	59	-.1491	.3401	.049501	.1015655
Prof	59	-.0071	2.1483	.320753	.4134135
Age	59	5.0000	71.0000	27.966102	14.4472478
ROA	59	-.0065	.2611	.077444	.0634694
OWN	59	.0000	46.6700	1.330861	6.0094747
Type	59	.00	1.00	.7797	.41803
Valid N (listwise)	59				

From the table, we can show a high standard deviation especially in the variables of Risk, and company Age. While slight deviation in the DPO of 1.98 as in average, companies distribute 71.21% of their earnings in the form of dividends. Otherwise, we can see a convergent nature of standard deviations. These standard deviations are discussed in the regression results upon assessing the standard error of the whole model.

Multicollinearity Tests

Multicollinearity situation arises when some independent variables are dependent on each other or highly correlated according to Walker & Maddan (2009). Accordingly, a correlation above 0.7 as an absolute value indicates the presence of multicollinearity problem between two independents. This could be illustrated in the correlation matrix obtained through SPSS output as and based on Pearson Correlation as shown in the correlation matrix.

	DPO	Prev.DPO	LEV	GROW	SIZE	RISK	FCF	Prof	Age	ROA	OWN	Type
Pearson DPO	1.000	.057	-.076	-.173	-.075	.602	.042	.133	-.094	-.058	-.010	.205
Correlation Prev.DPO	.057	1.000	-.170	.071	-.063	-.041	-.179	.569	-.151	-.118	-.014	.132
LEV	-.076	-.170	1.000	-.001	.359	.111	-.156	-.297	-.341	-.280	.036	-.366
GROW	-.173	.071	-.001	1.000	.050	.053	.367	-.018	-.033	.052	-.014	-.155
SIZE	-.075	-.063	.359	.050	1.000	-.046	-.066	-.030	-.292	-.182	.237	-.484
RISK	.602	-.041	.111	.053	-.046	1.000	-.061	-.064	.154	.016	.042	.224
FCF	.042	-.179	-.156	.367	-.066	-.061	1.000	-.252	-.390	.085	-.107	-.127
Prof	.133	.569	-.297	-.018	-.030	-.064	-.252	1.000	.229		-.077	.073
Age	-.094	-.151	-.341	-.033	-.292	.154	-.390	.229	1.000	.618	-.070	.247
ROA	-.058	-.118	-.280	.052	-.182	.016	.085	.618	.315	.315	-.102	.102
OWN	-.010	-.014	.036	-.014	.237	.042	-.107	-.077	-.070	1.000	1.000	.070
Type	.205	.132	-.366	-.155	-.484	.224	-.127	.073	.247	-.102	.070	1.000

From the correlation matrix, we conclude that no independent variables are correlated at higher than sig=0.7. Nevertheless, a slightly high correlation does exist between Profit and Previous DPO on one side with sig= 0.589, and Profit with ROA on the other side with sig= 0.618. Thus, even if these correlations are below 0.7, the researcher conducted another test to assess the possibility of multicollinearity that would harm the regression results. This issue is solved through another measurement obtained by SPSS and called Variance Inflation Factor (VIF) or Tolerance. According to Walker & Maddan (2009), Tolerance= 1/ VIF, as Tolerance measures how much of the variation in an independent variable is not depending on another. They have also stated that if VIF >4, or Tolerance < 0.25, then a multicollinearity does exist. After initial processing in SPSS, the following results are obtained:

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
Prev.DPO	.214	4.679
LEV	.544	1.839
GROW	.741	1.349
SIZE	.562	1.780
RISK	.851	1.175
FCF	.429	2.332
Prof	.128	7.819
Age	.443	2.258
ROA	.200	4.994
OWN	.873	1.145
Type	.588	1.701

a. Dependent Variable: DPO

We can simply conclude that our doubt of results obtained through the correlation matrix has come true. Since each of Prev. DPO, Profitability, and ROA has a VIF greater than 4, or a Tolerance less than 0.25. Therefore, the researcher had to exclude one of them at least from the regression analysis to overcome the problem of multicollinearity. This is illustrated in the next section of the approved regression model.

Regression Analysis

Based on the previous section, the researcher tried to exclude some of correlated independent variables to overcome the problem of multicollinearity. Three different scenarios (Models) were developed. First was by excluding Prev. DPO variable, second by excluding ROA variable, and the third scenario was developed by excluding the Profit variable. As a result, the multicollinearity problem was solved in all scenarios as follows:

Model 1: Excluding Prev. DPO, other things being constant.

This model obtained no collinearity according to the following table. While the second table shows the coefficient of determination that is used as the model selection criteria.

Model 1	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
LEV	.606	1.651
GROW	.950	1.052
SIZE	.592	1.690
RISK	.815	1.227
FCF	.680	1.471
Prof	.575	1.739
Age	.572	1.747
ROA	.565	1.769
OWN	.887	1.128
Type	.610	1.640

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873 ^a	.762	.713	1.0623064

- a. Predictors: (Constant), Type, FCF, Prof, OWN, GROW, RISK, Age, LEV, SIZE, ROA
- b. Dependent Variable: DPO

Model 2: Excluding ROA, other things being constant.

This model also obtained no collinearity according to the following table. While the second table shows the coefficient of determination that is used as the model selection criteria.

Model 2	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
LEV	.547	1.827
GROW	.702	1.425
SIZE	.656	1.524
RISK	.780	1.282
FCF	.478	2.094
Prof	.461	2.167
Age	.423	2.364
Prev.DPO	.443	2.255
OWN	.724	1.381
Type	.583	1.714

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.741 ^a	.549	.455	1.4629418

- a. Predictors: (Constant), Type, OWN, Prev.DPO, FCF, RISK, GROW LEV, SIZE, Prof, Age
- b. Dependent Variable: DPO

Model 3: Excluding Profit, other things being constant.

This model also obtained no collinearity according to the following table. While the second table shows the coefficient of determination that is used as the model selection criteria.

Model 3	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
LEV	.555	1.803
GROW	.715	1.399
SIZE	.657	1.523
RISK	.773	1.294
FCF	.467	2.140
ROA	.713	1.402
Age	.439	2.276
Prev.DPO	.721	1.387
OWN	.719	1.392
Type	.597	1.674

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	.711 ^a	.505	.402	1.5320263

a.

- a. Predictors: (Constant), Type, OWN, Prev.DPO, FCF, ROA, RISK, GROW, SIZE, LEV, Age
- b. Dependent Variable: DPO

Selection of the Explanatory Model

As a result of the analysis above, we are now able to decide which model can more interpret the relationship between the selected variables, and the DPO to make decision concerning the research hypothesis. By looking at the table titled “Model Summary” in each model section, we simply note that the most determinant model is Model 1. Which was based on the exclusion of previous year DPO variable. This selection can be interpreted by the highest R2 of 0.762

Regression Results

The research results are obtained through the multiple regression that was based on Model 1. The following table depicts the relationships between dependent and the independent variables based on P-value. Again, we should recall that regression was conducted in all of the above situations based on 95% level of confidence. Accordingly, any independent variable that has a Sig value below 0.05 is considered significant, and vice versa.

From the table below, and based on P-value criteria, we conclude the following:

- **Significant Variables:** Growth, Risk, Free Cash Flow, Profit, and Return on Assets.
- **Insignificant Variables:** Financial Leverage, Size, Firm Age, Industry Type, and Ownership Concentration.
- **Excluded Variables through Multicollinearity tests:** Previous Year Dividends

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	-1.335	2.317		-5.76	.567					
LEV	-.077	.473	-.015	-.164	.871	-.076	-.024	-.012	.606	1.651
GROW	-1.162	.466	-.180	-2.494	.016	-.173	-.339	-.176	.950	1.052
SIZE	.060	.115	.048	.522	.604	-.075	.075	.037	.592	1.690
RISK	.059	.008	.594	7.616	.000	.602	.740	.536	.815	1.227
FCF	6.061	.961	.539	6.308	.000	.567	.673	.444	.680	1.471
Prof	1.648	.445	.344	3.704	.001	.133	.471	.261	.575	1.739
Age	-7.877E-05	.013	-.001	-.006	.995	-.094	-.001	.000	.572	1.747
ROA	-7.928	2.923	-.254	-2.712	.009	-.058	-.365	-.191	.565	1.769
OWN	-.001	.025	-.003	-.038	.970	-.010	-.006	-.003	.887	1.128
Type	.233	.427	.049	.545	.588	.205	.078	.038	.610	1.640

a. Dependent Variable: DPO

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.873 ^a	.762	.713	1.0623064

a. Predictors: (Constant), Type, FCF, Prof, OWN, GROW, RISK, Age, LEV, SIZE, ROA

b. Dependent Variable: DPO

Moreover, this table provides an indication of the strength of relationship between all variables, and the DPO. $R = 0.873$, which is called Correlation Coefficient, indicate a strong relationship of the model since it is greater than 0.75 according to (Bryman & Bell, 2007). While $R^2 = 0.762$ is called the Coefficient of Determination. The adjusted R^2 indicates that 71.3% of the variation in DPO is determined by the 5 significant variables (Growth, Risk, FCF, Profit, and ROA). This value supports the explanatory model based on the F-test sig value in ANOVA table. The standard error of 1.06 is depicted in the above table is used in the final revealed model as an error instead of ϵI in the hypothesized model. It means that predicted values have an average distance of 1.06 % from the regression line.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	173.534	10	17.353	15.377	.000 ^b
	Residual	54.168	48	1.128		
	Total	227.701	58			

a. Dependent Variable: DPO

b. Predictors: (Constant), Type, FCF, Prof, OWN, GROW, RISK, Age, LEV, SIZE, ROA

Finally, the ANOVA table provides an idea about the linear fit of the regression model. When $ANOVA \text{ sig} < \alpha$, then linear model is appropriate for such analysis. This conclusion is based on F-test value = 15.377 which results in sig value $< \alpha$. (see the below illustration):

At the beginning of this research, a hypothesized model was developed to include eleven variables that other researchers found significant to DPO as follows.

$$\text{DPO} = \beta_0 + \beta_1 (\text{DFL}) + \beta_2 (\text{GROW}) + \beta_3 (\text{Size}) + \beta_4 (\text{Risk}) + \beta_5 (\text{FCF}) + \beta_6 (\text{EPS}) + \beta_7 (\text{Age}) + \beta_8 (\text{Indust}) + \beta_9 (\text{Own}) + \beta_{10} (\text{ROA}) + \beta_{11} (\text{Prev.DPO}) + e_i$$

After analyzing the data through Model 1, following results are obtained based on coefficients table and model summary table

$$\text{DPO} = -1.335 - 1.162 \text{ Grow} + 0.59 \text{ Risk} + 6.061 \text{ FCF} + 1.648 \text{ Prof} - 7.928 \text{ ROA} + e (1.062)$$

From this model, we note a positive impact of Risk, FCF and Profit, while Growth and ROA have a negative impact.

Hypothesis Testing

This section discusses the empirical findings in terms of accepting or rejecting the research hypothesis, in addition to comparison with other researchers' conclusions regarding the included variables in this study.

Degree of Financial Leverage (Accept H01)

From the coefficients table, DFL seemed to have no statically significant relationship to the DPO based on P-value = 0.871 > 0.05. This results in failing to reject the H0, but also consistent with several research's results revealed by (Aqel, 2016; Gill et al.2010) while conflicting with (Hassoun et al.2016) results who found it to have a negative significant relationship in Palestinian market, along with other research all over the world.

Moreover, some theories state the reversing effect of DPO on leverage rather than being determined by it. This is stated in Signaling Theory by Ross (1995), and Bird in Hand Theory by Gordon & Linter (1962). They established that company which pay dividends will need more debt. Finally, one interpretation of this result is that Palestinian financial system is not highly engaged in long term debt as a financing vehicle.

Revenue Growth (Reject H02)

From the Coefficient table, we note that growth Sig 0.016 < 0.05. This indicates the significant relationship, and by looking at the constant value of -1.162, we conclude a negative relationship between revenue growth and DPO after rejecting the H0.

This conclusion is consistent with most of researched literature such as (Al-Malkawi, 2007; Aqel, 2016; Alonso & Sanz, 2005; Pandey, 2001), and others, In contrast, in the Palestinian context, Hassoun et al. (2016) found growth to be insignificant, but they used a different measurement of growth represented by the natural log of company market value.

Firm Size (Accept H03)

From the Coefficient table, we note that size Sig 0.604 > 0.05. This indicates that no significant relationship between size and DPO after failing to reject H0. Through surfing the literature, we conclude that current study results are consistent with Aqel (2016) while conflicting with Hassoun et al. (2016). Additionally, it worth to mention that no theory beyond this relationship, but some empirical studies that depends on the nature of financial system in each country according to Lloyd et al. (1985).

Business Risk (Reject H04)

From the Coefficient table, we note that Risk Sig approaches to $0.000 < 0.05$. This indicates the significant relationship, and by looking at the constant variable of 0.59, we conclude a positive relationship between risk and DPO after rejecting H0. This result is consistent with Mollah et al. (2002) who established that many companies had paid dividends during market recessions. Moreover, Aqel (2016) have established the same positive relationship to the Palestinian market. In Contrast, Hassoun et al. (2016) found that no statistically significant relationship can exist along with others like (Al-Kuwari, 2009; Al-Malkawi, 2007).

Free Cash Flows: (Reject H05)

From the Coefficient table, we note that FCF Sig $0.000 < 0.05$. We conclude a significant relationship exists between the FCF and DPO based on successful rejection for H0. By looking at the constant variable of 6.061, we note that DPO is positively related to free cash flows. This result is conflicting with (Hassoun et al, 2016; Al-Kuwari, 2009). While consistent with others like (Jensen & Meckling, 1976; La Porta, 2000).

Profitability (Reject H06)

From the Coefficient table, we note that profitability Sig $0.001 < 0.05$. This indicates the significant relationship between profitability and DPO based on rejecting H0. By looking at the constant variable of 1.648, we conclude a positive impact of profitability on dividends' payment. This is consistent with most of previous research like (Hassoun et al, 2016; Al-Kuwari, 2009; Aqel, 2016); Al-Malkawi, 2007) who found that profitability is the primary determinant of DPO.

Firm Maturity (Accept H07)

From the Coefficient table, we note that Age Sig $0.995 > 0.05$. This indicates that no significant relationship exists between the age of the company and payments of dividends after failing to reject H0. This result is conflicting with Grullon et al. (2002) who found that mature companies pay more dividends than immature ones. Moreover, this indicates that the lifecycle theory does not apply for our case.

Industry Type (Accept H08)

From the Coefficient table, we note that Type Sig $0.588 > 0.05$. This indicates the absence of significant relationship between the industry type and DPO based on failing to reject H0. This hypothesis was developed without a theoretical background, but based on previous researches that established a significant difference between economic sectors in their dividends behavior like (Baker et al. 1985; Michel, 1979). While our findings are consistent with Rozeff (1982).

Ownership Concentration (Accept H09)

From the Coefficient table, we note that Own Sig $0.970 > 0.05$. This indicates that no significant relationship between the degree of ownership concentration and dividends policy in the company, after failing to reject H0. This is consistent with Hassoun et al. (2016) in the Palestinian context, while conflicting with Shleifer & Vishny (1986) who established a positive relationship.

Return on Assets (Reject H010)

From the Coefficient table, we note that ROA Sig $0.009 < 0.05$. This indicates the significant relationship based on successful rejection of H0. By looking at the constant variable of -7.928, we conclude a negative relationship between the return on investment and DPO. Previous research that investigates the ROA have established a positive relationship such as (Al-Kuwari, 2009; Hedensted & Raaballe, 2006), while no study revealed an insignificant relationship of returns. In my opinion, this result is surprising based on signaling theory which provides a positive signal for investors when the company generates higher returns, while create another agency problem through the conflict between high return on the company, with no return on the investors' shares.

Previous Year Dividends (Accept H011)

This variable was excluded from the model one that was selected to this study. This is to solve the problem of multicollinearity as mentioned in section 4.3.3. Even though, in the initial analysis, Previous DPO found to have no significant impact on current year dividends after failing to reject H0. This is another deviation from the signaling theory that reveals an inconsistent behavior of dividends.

Discussion and Conclusion

This quantitative research aimed at establishing and empirical evidence for the dividends policy applied in Palestinian Non-financial firms. The dividends policy was measured through the Dividends Payout Ratio (DPO) and hypothesized to be a function of eleven independent variables, Revenue Growth, Financial Leverage, Previous year DPO, Firm Size, Business Risk, Free Cash Flows, Firm Age, Industry Type, Profit, Ownership concentration, and ROA. The empirical multiple regression revealed five significant variables, Profit, ROA, Growth, FCF, and Business Risk. While previous DPO was excluded at the final model to solve the multicollinearity problem, the remaining variables had insignificant relationship to the DPO. Overall, results have been consistent with several local, regional, and international research as explained in each variable testing. One important note the reader should be aware of. The EPS and ROA are considered profitability measures that are expected to have the same impact.

However, this study revealed a positive impact of EPS but a negative impact of RAO. The interpretation of these two results is that ROA is not only a profitability measure, but also measure the company performance according to (Ross, Wasterfield, & Jordan, 2012). This fact is based on the Dupont equation that considers ROA a result of two ratios, the profit margin (Net Income / Sales) multiplied by assets turnover (Sales/ Assets). The profit margin is the part of ROA that measures profitability, while assets turnover measures the company performance. This interpretation explains the difference between the two variables used in this research and justifies the contradictory impact of each of them.

Further Research and Recommendations

At the end of this research, the researcher recommends conducting further investigation of more determinants of the dividends policy puzzle. This could be by addition of newly hypothesized variables that might be concluded through companies' management views, or by

considering more CG variables (corporate Governance Variables). Moreover, we should recall that current research has interpreted variables impact in dividends- paying companies (Sample 2- Model 1). Therefore, it is highly recommended to conduct a new study to investigate the reason beyond not paying dividends in some companies over many years. Finally, we suggest applying this research model for a longer time period, which might reveal different results.

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