

A Review of the Panel Data to Determine the Influence of Dividend Policy on Firm Performance

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Abstract: Examining the connection between dividend policy and performance of firm is the main goal of this research. 40 manufacturing enterprises from 2012 to 2021 are included in the sample. The financial statements of the chosen manufacturing companies were employed to construct the panel data. The dependent variable was return on assets (ROA), while the independent variables were price earnings ratio (PER), dividend payout ratio (DPOR) and earnings per share (EPS). Descriptive analysis, correlation, and multiple regressions were employed as data analysis methods. The findings demonstrates that there is a positive association among firm performance and dividend policy. Return on assets is favorably impacted by the dividend payout ratio, price-earnings ratio and profits per share. Our study's limitation is that we only look at 40 manufacturing companies; other researchers utilize a larger sample size, and other sector companies anticipate manufacturing.

Keywords: Performance, Dividend policy, Returns on the asset, Dividend payout ratio, Price earnings ratio.

Introduction

The aim of this study is to examine how dividend policies affect the performance of Pakistani manufacturing companies. In the corporate world, dividend policy becomes the most crucial topic. Dividend policies in Pakistani companies are causing a lot of problems in the capital market. The dividend policy has been examined by several economists in recent decades. Black (19 1976) said that "the dividend image appears to be a puzzle with pieces that don't fit together the more closely we examine it.". However, the firm's profitability is also impacted by the dividend policy.

The announcement of dividend payments to shareholders is known as dividend policy. The transfer of profits to owners is referred to as a dividend. Because of their risk, a shareholder also benefits from the payout. The amount of profit that shareholders get based on their investment is determined by management. One minor element that characterizes the success of the company is its dividend policy. One of the four most crucial areas in finance is the choice to distribute dividends.

Prudence and globalization, which are well-organized and lead to rapid success, give expertise in a corporation that is closely monitored in Pakistan. Today's businesses need to be more innovative. In essence, creating a dividend policy is crucial for businesses looking to boost their performance. The framework maximizes the firm's success via dividend. The dividend might be used to reduce the amount

of agency costs. It is possible to classify the dividend. (1) advice (2) excess. Administrators have faith that dividend policies have a big influence and directly effect share value. The most beneficial policy reduced price abuse and offered recommendations for reducing shareholder wealth.

According to Modigliani and Miller, the dominance of dividends lowers the firm's quality and results in (blow of stream) sermonized functioning. The bring-home effectiveness was compared with the component of a firm's range of vision that was improper for its policy. In order to get accessible sources, such as dividends or other profits in a great market, the shareholders are tenacious. The agency hypothesis proposed by Mackling and Jonson (1976). If there is no accompanying constitution of applicable issue and goal disparity, the conductor may not be sufficient to increase shareholder abundance. Jenson argues that by allowing managers to hold inadequate free-of-cost capital gains, a complete allocation of profit indemnified dividends may enhance the firm's evaluation. If the dividend is renowned for being advantageous for business devotion and long-term conditions evaluation of businesses, dividend policy suggests association appointment.

The primary goal of this study is to determine how dividend policies may influence the performance of manufacturing companies that are listed on the Pakistan Stock Exchange.

We measure the effect of dividend policy on company performance using a variety of factors. ROA is a dependent variable, whereas DPOR, EPS, and PER are independent variables. ROA is a measure of a company's performance. There are five sections to this study paper: The introduction comes first, followed by the literature review, methods, then results and analysis in the fourth and fifth sections.

2. Literature Review:

2.1 Theories Used

A multitude of ideas has been used to elucidate the function of commercial organisations within society. These ideas delineate the responsibilities of shareholders, creditors, workers, suppliers, government, consumers, society, and the environment. The following sections delineate these theories.

2.1.1 Shareholder/Agency theory

The shareholder or agency theory, first articulated by Jensen and Meckling (1976), examines corporate management by positing that Principals, who are the owners, and their agents, who are the executives, interests often conflict. The shareholder or agency paradigm emphasizes risk allocation and agency dilemmas amongst management and shareholders, together with the associated three costs of agency which is bonding, monitoring, and residual—incurred by shareholders, as posited by Fama and Jensen (1983). Within the framework of agency theory, the moral hazards arise from information asymmetry, when the agent (management), representing the principle (shareholders), has superior knowledge of its acts and/or intentions than the principal, attributable to inadequate oversight of the agent.

2.1.2 Stakeholder theory

Stakeholder theory categories stakeholders into internal and external stakeholders. Stakeholders maintain a reciprocal connection with a business, since their contributions enhance the value of firm generation, while the firm's success influences their well-being. According to Freeman's (1984) stakeholder theory and Jensen's (2001) "Profit maximization" theory identify the enhancement of company performance as well as long-term worth of the business as the standard for reconciling the benefits of entire stakeholders. Stakeholder theory is pertinent to all management activities, since the combination and synergy of all of the distinct components of the company processes and model are crucial for attaining comprehensive sustainable performance targets (Freeman, 2010; Donaldson & Preston, 1995).

2.2 Dividend Policy and firm performance

Dividend policy performance is being among the most contentious topics in corporate finance and

continues to have a significant position in both established and emerging countries (Hafeez & Attiya, 2009). Assume that the following characteristics have notable impacts on the amount of dividends paid, incomes from prior years and current years, income irregularities from year to year, earnings growth, and bonuses from prior years.

Febri Strait (2014) utilized data from 95 companies between 2002 and 2008 to examine the influence of dividend payments on business performance. He used a variety of regression techniques. This study found that profitability is positively correlated with both dividend consistency and magnitude. However, the researcher has no evidence that a rise in dividends is a sign of increased profitability. Mohammed Amid (2007) utilized information taken from the last eight years' worth of financial statements of the company registered on the GSC. He examined the regression equation using the ordinary least squares model. He discovers a good correlation between dividend policy, ROA, and sales growth. However, there is an inverse correlation between leverage, ROA, and dividend payout ratio.

Mulanazar (2016) looked into whether dividend policies have an impact on the success of the company. He gathered information from public companies' financial statements between 2010 and 2015. He used the OLS method. The results indicate a negative correlation between growth, dividends, and ROA. Leverage and the dividend payout ratio have a detrimental influence on ROA. Velnampy (2014) used data from manufacturing enterprises between 2008 and 2012 to claim that there is an association among dividend policy and company profitability. ROE and ROA were used as independent variables. The dividend policy factor is determined by EPS and dividend payment. He comes to the conclusion that earnings per share and dividend payments have no effect on the profitability of the company.

Carless Yegon (2014) examines nine manufacturing companies listed in Kenya to determine the connection between dividend policy and company profitability. According to research, dividend policies improve the success of businesses. Dividend policy has a favorable impact on investments as well. According to research, the company has to have a robust dividend policy in order to generate investment and profit. The goal of this analysis was to examine the connection among a company's profitability and its dividend policy (Farrukh et al., 2017).

Because this approach was directly related to profitability, many businesses adopted it. ROA is used to gauge how well a company is doing, and its influence depends on a number of hypotheses, such as customer theory, signaling theory, and bird in hand theory. Regression analysis and correlation are used by (Priya et al., 2013) to assess the impact of dividend policy on business performance. The results demonstrate that the dividend policy is determined by price earnings, earnings per share, and return on investment. 51 companies are increasing their wealth by paying dividends over a ten-year period. Businesses may lower agency costs by offering dividends, which attracts workers. Through regression analysis, Jimoh JAFARU proposed a relationship between the firm's profitability and dividend policy (2012). A significant dividend distribution strategy may raise a company's level of performance and economy of scale.

2.3 Research Hypothesis:

H1: The dividend policy and the performance of the company are positively correlated.

H2: EPS and dividend policy have a favorable relationship.

H3: Return on assets is correlated with both business profitability and dividend policy.

3. Research Methodology:

The effect of dividend policy on business performance was investigated in this study. We select 40 manufacturing companies that are listed on the Pakistan Stock Exchange (PSE) as an example. Information gathered from the annual reports of the firm. This study's ten-year timeframe spans the years 2014 and 2023. Pakistani manufacturing companies (PSE) are our target demographic. Our

researcher evaluated the data using a variety of techniques, including regression, correlation, and descriptive analysis.

3.1 Variables of Analysis:

The following dividend payout ratios are employed.

Earnings per share equivalent to net income divided by the total number of capital shares. Price to earnings ratio equals market price per share divided by earnings per share. Dividend payout ratio equals total dividends divided by total net earnings multiplied by 100 percent.

3.1.1 Firm Performance Ratios:

In this specific investigation, the dependent variable is the measure of financial performance. The financial success in this research is assessed using return on assets (ROA). The return on assets is determined by evaluating a firm's net income to its total assets. According to the references (Jamal et al., 2022; Yu et al., 2018; Ortas et al., 2015; Xie et al., 2018; Pintea et al., 2014), the Return on Assets (ROA) serves as a figure of organisations' financial success.

3.1.2 Control Variable

Firm Growth: There is a correlation between changes in firm assets and the growth of a company (Develle, 2021; Xie et al., 2018).

Leverage: According to Sahut and Pasquini-Descomps (2018) and Mohammad and Wasiuzzaman (2021), it is an indication of the leverage ratio—the ratio of a company's debts to its assets.

Firm Age: The number of years that a firm has been listed on a stock exchange is expressed by this term, according to Thomas (2012).

3.2 Research Model

The model used for the research is shown below. Multiple regression analysis was done to look at how dividend policy ratios affected firm performance. Performance of the Firm = f (ROA) It is crucial to remember that the price to earnings ratio (P/E), dividend payout ratio (DP), and earnings per share (ES) all affect how well a company performs. The effect of dividend policy ratios on firms is measured by the following two models.

Performance is as follows.

$$ROA = \alpha_1 + \beta^1 ES + \beta^2 PE + \beta^3 DP + \beta^4 FG + \beta^5 LEV + \beta^6 FA + \varepsilon \dots \dots \dots (1)$$

The equation 1, which represents the connection between the independent variable and the dependent variable, is the representation of this connection. The ROA measures the financial performance of firm, the ES measures the earning per share, PE measures the price to earnings ratio, the DP measures the dividend payout ratios, FG measure the firm growth, the FA measures the age of the company, and LEV measures the firm leverage. The slope, which is represented by the symbol β , is the beta coefficient, while the error term is represented by the symbol ε ,t.

4. Analysis and Interpretation:

4.1 Descriptive Analysis;

The researcher utilized std, mean, maximum, and minimum. Dev examines how the dividend policy affects the operation of the company.

Table 21: Descriptive Analysis

Variables	ROA	DP	ES	PE	FG	LEV	FA
Mean	6.0134	42.287	14.77	12.34	5.013	41.783	15.53
Maximum	26.720	119.02	53.43	113.43	25.200	19.0200	43.4300
Minimum	0.020	0.00	1.710	1.530	0.120	0.003	1.61
Std.Dev	7.848	31.73	12.95	14.61	6.84	21.17	11.56

The table represents the descriptive statistics of manufacturing firms of Pakistan.

4.2 Correlation Analysis:

Correlation matrix appears the connection concerning independent as well as dependent variable. Values might range anywhere from +1 to -1.

Table 2: Correlation Matrix

Variables	ROA	DP	ES	PE	FG	LEV	FA
ROA	1						
DP	0.6561	1					
ES	0.3924	0.2516	1				
PE	0.2962	0.1382	-0.0665	1			
FG	0.6756	0.2652	0.1342	-0.0655	1		
LEV	0.3682	0.2364	0.2652	0.1342	-0.065	1	
FA	0.2842	0.1334	-0.0695	0.252	0.132	-0.061	1

Note: This table presents findings of correlation matrix.

The association involving performance of firm and dividend policy in Pakistan is determined via correlation findings. The data show a considerable correlation between ROA and price-earnings ratio, earnings per share, also dividend payout ratio.

4.3 Regression Analysis

The influence of dividend policy on firm financial performance is analyse with the help of multiple regression models. The results of this model are given in the table that is presented below.

Table 3, Analysis of Regression

Variables	Coef	S.E	t-stat	P
DP	0.111***	0.027	4.125	0.000
EP	0.076 ***	0.053	4.460	0.011
PE	0.069 ***	0.048	3.428	0.014
FG	0.121***	0.017	5.136	0.000
LEV	0.074 ***	0.023	4.440	0.015
FA	0.062	0.078	1.438	0.122

Note: This table presents findings of proposed hypotheses using dynamic regression model. *, **, *** show 10%, 5% and 1% significance levels respectively.

When using a regression model for analysis, the result shows that DP, EP, PE, FG and LEV are positively and significantly associated with ROA. It also indicates that dividend policy increase the financial performance of firm operating in Pakistan. While the firm age show in significant relation towards financial performance. The findings indicate that firm growth positively impacts the financial performance of Pakistanian firms. Li et al. (2018) also Mohammad and Wasiuzzaman (2021) confirmed that firm size has an inverse link with value of firms. The age of firm is also enhancing the financial performance. The firm's leverage is also enhancing financial performance. The results indicate that

firms with more leverage will achieve better profitability, whereas smaller organisations are expected to exhibit greater productivity. Jamal et al. (2023), Crisóstomo et al. (2011), also Ingram and Frazier (1980) assert that leverage favourably and considerably enhances financial performance.

5. Conclusion:

The first and foremost goal of this research is to examine how dividend policies influence the performance of companies listed on the Pakistan Stock Exchange (PSE). We have chosen 40 Pakistani manufacturing companies for the study. From 2012 to 2021, information was taken from the yearly reports. We used regression, descriptive, and correlation analysis to assess the data. Table 3 demonstrates that return on asset, dividend payment, price-earnings ratio, and earnings per share are all positively correlated. Table 3's result indicates that return on asset is positively impacted by the dividend payout ratio. In the end, we advise businesses to keep their dividend policies consistent in order to boost return on assets.

5.1 Future Direction:

This paper's primary emphasis is only on Pakistan's 40 manufacturing companies. In order to get more precise results, future study may expand the sample size and include more sectors. Increase the time span for future study since the results of this work were conducted on limited data for a short period of time. Therefore, more study may be carried out by including other businesses, gathering more data, and extending the time frame.

5.2 Limitations:

First of all, our study's sample size is insufficient. We only work with 40 manufacturing companies. Second, we exclusively use data spanning ten years, from 2012 to 2021. For improved results, future researchers may utilize data from more years. We solely utilize the manufacturing sector; other researchers do their studies in other sectors. We only utilize ROA, DPOR, EPS, and PER, but future researchers may use more variables to get more accurate and significant results. Lastly, although using the regression approach, they use a variety of techniques.

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