IMPACT OF DIVIDEND POLICY ON THE FINANCIAL PERFORMANCE OF ECONOMIC INSTITUTIONS LISTED ON THE AMMAN FINANCIAL MARKET

Sulieman D. Al-Oshaibat *

* Department of Business Economics, College of Business, Tafila Technical University, Tafila, Jordan
Contact details: Department of Business Economics, College of Business, Tafila Technical University, P.O. Box 179, Tafila 66110, Jordan

OPEN ACCESS

How to cite this paper: Al-Oshaibat, S. D. (2025). Impact of dividend policy on the financial performance of economic institutions listed on the Amman financial market. *Risk Governance & Control: Financial Markets & Institutions, 15*(3), 84–93.
https://doi.org/10.22495/rgcv15i3p6

ISSN Online: 2077-4303
ISSN Print: 2077-429X

Received: 10.10.2024
Revised: 07.01.2025; 24.03.2025; 27.06.2025
Accepted: 18.07.2025

JEL Classification: C33, G15, G32, G35
DOI: 10.22495/rgcv15i3p6

Abstract

The current study aims to test the impact of dividend policy on the financial performance of the economic institutions that trade on the Amman financial market. The analysis utilized a sample of 37 economic institutions over the period of 2018–2021 and was based on panel data and a fixed effects model. The results demonstrated that cash dividends and dividends per share (DPS) had a negative, and statistically significant, effect on the return on total assets (ROA) of the economic institutions listed on the Amman financial market; conversely, retained earnings had a positive, and statistically significant, effect on the ROA of the economic institutions listed on the Amman financial market. Furthermore, the analysis also indicated that the economic institution's financial leverage diminished the institution's ROA. The most important recommendation generated from these hypotheses is that economic institutions should follow a retained earnings policy, which allows for greater value to be created for the institution and subsequently creates increased opportunities for future investments, hence leading to an improved financial performance. In conclusion, the study offers the first early-stage investigative and structured analysis of dividend policy impact on the financial performance of the economic institutions listed on the Amman financial market.

Keywords: Dividend Distribution Policy, Financial Performance, Panel Data, Amman Financial Market

Author's individual contribution: The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

Declaration of conflicting interests: The Author declares that there is no conflict of interest.

1. INTRODUCTION

The dividend distribution policy has recently emerged as an important discussion in the financial industry. Companies are increasingly focused on determining how to distribute their profits among shareholders, particularly concerning stock dividends. Examples are retained earnings policies and the proportion of dividends distributed per share. Many economists and financial experts argue that the dividend policy plays a crucial role in attracting investors. Some contend that distributing dividends can raise share prices, thereby attracting investors, whereas others argue that retaining profits can increase reserves, fostering potential future growth, which, in turn, also appeals to investors.

In this study, we investigate how the dividend policy affects the financial performance of institutions. The dividend policy refers to the regulations employed by institutions to determine whether to distribute profits to shareholders or retain a portion as retained earnings for reinvestment purposes, thereby impacting the institution's performance concerning profits. Financial leverage means using external funds (i.e., debts) to finance an institution's investments, operations, and activities, aiming to

generate returns that enhance owners' profits. This financing method includes long-term and short-term borrowed funds. The degree of financial leverage increases with the increase in the use of external debt sources (Gatsi et al., 2013). Various perspectives have surfaced regarding the dividend policy, including supporters and opponents (Khalaf et al., 2023; Laksana et al., 2024; Phuong et al., 2023).

Nonetheless, researchers have presented divergent findings. Some indicate that institutions distributing high profits may achieve large profits in the future, but at a relatively low growth rate. Conversely, others suggest that future profit growth correlates with the distribution of low profits. To contribute to this discourse, our study aims to provide additional empirical evidence from the context of the Jordanian economy, which is considered a developing economy, about the relationship between dividend policy and financial performance in Jordanian institutions.

The primary objective of the study is to analyze the influence of the dividend policy on the financial performance of economic institutions listed on the Amman financial market. Additionally, the study aims to identify the theoretical framework encompassing both dividend distribution policy and financial performance, determine the profit distribution policy adopted by the economic institutions under examination, including the proportion of retained profits and distributed profits, in addition, to test and measure the impact of the dividend distribution policy, as represented by the ratio of dividends distributed per share and retained earnings, on the financial performance of economic institutions listed on the Amman financial market.

Given the evident disparities among researchers regarding the allocation of profits to shareholders versus retaining a portion for future reinvestment, and considering that institutions aspire to maximise their market value and improve their financial performance, they are tasked with assuming full responsibility for these goals by adopting a suitable dividend distribution policy. Therefore, the research problem centres on whether the dividend distribution policy has impacted the financial performance of economic institutions listed on the Amman financial market. Thus, the study poses the following overarching question:

RQ1: Does the dividend distribution policy impact the financial performance of economic institutions listed on the Amman financial market?

Subsequently, this central problem gives rise to the following questions:

RQ2: Do the dividends per share (DPS) affect the financial performance of economic institutions listed on the Amman financial market?

RQ3: Do retained profits affect the financial performance of economic institutions listed on the Amman financial market?

The significance of this study stems from the critical nature of the topic it addresses. Strategic decisions made by economic institutions depend on their profit distribution policies, alongside investment and financing decisions, owing to the substantial impact these factors collectively exert on financial performance. By testing and measuring the impact of profit distribution policies on the financial performance of economic institutions listed on the Amman financial market, this study addresses a crucial gap in research. Furthermore, the relevance of this investigation is heightened by the context in which these institutions operate — the Jordanian economy, which is characterized by its relative weakness compared with developed economies.

This research adds to the dividend policy literature by contributing a unique evaluation of an emerging economy, Jordan, which is marked by a different institutional and regulatory environment than developed markets. It reconciles rival theories, incorporating the bird-in-hand (a preference for dividends) and agency cost frameworks (a preference for retained earnings), while also elaborating on the more favorable dividend mechanisms that exist in the midst of instability within economies. It also includes financial leverage as a moderating variable through which excessive debt may exacerbate and worsen the negative relationship between dividends and financial performance.

The study's findings can encourage policies for Jordanian firms to continue to rely on retained earnings rather than dividends, notably in times of high interest. The study also provides an avenue for investors in an emerging market such as Jordan, where evaluating performance through metrics such as dividends is less reliable, to evaluate performance. Furthermore, the study emphasizes the need to manage debt to lessen the negative effect on the return on asset (ROA) in an emerging market.

This study allows for further, cross-regional evaluation of dividend policy implications for firms in developing and emerging market economies, using Jordan as a representative model for the issues faced more broadly in the Middle East. The study utilizes a replicable methodology that can be leveraged in future research collecting data in emerging markets, supporting global relevance.

The study also attempts to address empirical research gaps in the literature, one being the lack of evidence from an emerging market in the Middle East when examining dividend policies, and the other being the uncertainty in empirical evidence (e.g., high dividends correlated with positive performance in countries, while negatively correlated in others).

The structure of this paper is as follows. Section 2 reviews the relevant literature on the dividend policy, theories explore the relationship between the amount of dividends distributed and factors such as share price and return on investment (ROI), and gives research hypotheses. Section 3 outlines the research methodology, including the data collection sources, data analysis, and approved statistical tools. Section 4 presents the results of the empirical analysis. Section 5 provides a discussion. Finally, Section 6 presents the study conclusion and its recommendations.

2. LITERATURE REVIEW

2.1. Overview of theories

At the end of each year, if a company generates profits through its economic activities, it faces the decision of either distributing these profits to shareholders or utilizing them as internal financing for future expansion, thereby fostering additional growth. The dividend policy reflects the corporation's stance on this trade-off between distributing profits to shareholders and retaining them for reinvestment purposes (Mounir, 2007).

When a corporation distributes a portion of its achieved profits, several motives come into play. These motives include boosting investors' confidence in the corporation, as well as showcasing the soundness of the corporation's financial position. Additionally, distributing profits serves as a motivation for investors to retain their shares rather than selling them, and to subscribe when the corporation decides to increase its capital (Hadidi & Ghribi, 2016).

Institutions employ various methods for distributing profits, including free shares, stock derivatives, reverse derivatives, share repurchases, and in-kind distributions of profits. Dividend policy is the crucial link between distributions and growth, influencing both the level of distributions and the growth rate simultaneously. In this regard, growth is considered a component of the distribution model, framing the issue of distributions as a choice between current cash distributions and future growth rates (Al-Naimi & Al-Tamimi, 2019).

Furthermore, a group of theories aims to elucidate the impact of dividend policy on company performance or its absence. These theories explore the relationship between the amount of dividends distributed and factors such as share price and ROI. Among the most significant theories, we analyze the following.

2.2.1. Dividend irrelevance theory

Proponents of this theory, such as Miller and Modigliani (1961), argue that the decision to distribute dividends has no impact on the share price in the market. Instead, they contend that the value of the institution is influenced solely by its profits and the risks associated with its assets or investments. According to Miller and Modigliani (1961), the efficiency of investments is the primary determinant of shareholders' wealth. They posit that shareholders' wealth before distributions is reflected in the value of ordinary shares in the financial market, along with the value of announced dividends. When a company distributes profits, the market value of its shares decreases by the amount of the distributions, while withholding profits leads to an increase in the market value of shares by the amount of retained earnings (Miller & Modigliani, 1961).

2.2.2. Bird-in-the-hand theory

This theory, proposed by Gordon (1963), criticises Miller and Modigliani's (1961) theory. Gordon suggests that dividend policy directly impacts the market value of the institution by affecting the market share price. According to this theory, the required rate of return on owned funds decreases as dividend distributions increase because investors perceive retained earnings as more certain sources of financial gains than dividends.

2.2.3. Tax preference theory

Tax preference theory posits that investors prefer companies that distribute a lower percentage of their profits as cash dividends due to the lower tax rate on capital gains compared to the tax rate on income. This preference prompts investors to favour institutions that retain a larger portion of profits rather than distributing them to shareholders. By reinvesting these profits in company activities, the institution can achieve a higher growth rate and consequently, a higher share price (Brigham & Ehrhardt, 2003).

Financial performance refers to the ability of institutions to effectively utilise their resources and sources for both short-term and long-term purposes, with the aim of generating wealth. It serves as a means to assess an institution's performance and furnish decision-makers with the necessary information to facilitate rational financial decision-making. Financial performance evaluation entails monitoring the organization's operations, tracking its progress, and assessing its performance relative to available resources and established objectives. Moreover, it involves identifying obstacles, proposing corrective measures, and optimizing investment decisions in alignment with the institution's overarching goals of sustainability, survival, and competitiveness. By achieving optimal financial performance, institutions can effectively meet the expectations of investors.

Investors can track an organization's activities and understand its nature, as well as monitor economic and financial conditions. They can also assess the impact of financial performance indicators such as profitability, liquidity, and debt. Additionally, investors can conduct analysis, comparison, and interpretation of financial data to make the appropriate decision.

2.2. Previous studies

Many previous studies have tackled the impact of dividend policy on the financial performance of economic institutions, employing various methodologies, with outcomes that were divergent. For example, some studies investigated the significance of the impact of dividend policy on the financial performance of economic institutions included in the S&P 100 Index. The study aimed to test and measure the influence of dividend policy on the financial performance of economic institutions listed in the S&P 100 Index, using a sample of 51 economic institutions over the period from 2014 to 2018. The findings of the study revealed no statistically significant impact of the dividend policy, as represented by the DPS, on the financial performance measured by the ROA of the economic institutions listed in the S&P 100 Index. However, the study identified a positive and statistically significant effect of retained earnings on the ROA of the institutions under investigation. Furthermore, the results indicated a negative impact of financial leverage on the performance of the institutions under scrutiny.

Another study conducted by Ebire et al. (2018) aimed to examine the effect of dividend distribution policy on the performance of oil and gas companies listed in the Nigerian market. This study focused on nine companies during 2007–2016, using an aggregate regression model to explore the relationship between the study variables. The findings of the study revealed a positive effect of profits distributed to shareholders on earnings per share (EPS) in oil and gas companies in Nigeria. Additionally, the study identified a negative impact of dividend yield on EPS. Similarly, a study by Bossman et al. (2022) investigated the relationship between dividend policy and financial performance among listed companies in Ghana for the period from 2015 to 2019. The study found a significant impact of dividend distribution capacity on both

ROA and return on equity (ROE). Furthermore, free cash flow savings exerted a direct and significant impact on ROA.

In a study conducted by Narang (2018), the relationship between profit distributions and the financial performance of companies included in the index was examined. This study focused on a sample of 20 companies listed in the index (NSE) during 2012–2017, employing a fixed effects model. The findings of the study indicated a relationship between EPS and the percentage of profits distributed, as represented by dividends divided by ROE and ROA.

In Rachid's (2016) study, the impact of dividend distribution policy on the performance of shares of institutions listed in the financial market, specifically the Dubai financial market, was analysed. The study examined a sample of 30 institutions listed in the market from 2011 to 2014, representing various sectors. The analysis utilised multiple and simple linear regression models. The findings revealed a statistically significant relationship between the dividend distribution policy, as represented by the share of cash dividends and EPS, and the value of shares of institutions listed on the Dubai financial market. However, the study did not find a statistically significant relationship between retained earnings and the value of the share.

In the study conducted by Dogan and Topal (2014), the relationship between dividend distribution policies and the financial performance of companies operating on the Istanbul Stock Exchange (Borsa Istanbul) was examined. The study analysed a sample of 172 companies during 2008–2011, utilizing multiple regression models. The findings indicated a positive relationship between dividend policy, specifically regular dividend distributions, and share price, and the financial performance of companies listed on the Borsa Istanbul, as measured by the market index (Tobin's Q). However, the study did not find a relationship between dividend policy and financial performance expressed by accounting indicators such as ROA and ROE.

In a study conducted by Enebrand and Magnusson (2018), the investigation focused on how the relationship between company performance and stock price is affected by the level of dividends paid by the company. This study used correlation and regression analysis on data collected from medium and large capitalisation companies listed on the Stockholm Stock Exchange from 2007 to 2017. The results of the study indicated that the share prices of companies with a high dividend yield depend more on financial performance compared to companies with a low dividend yield. However, a generally positive relationship was found between financial performance and stock price across the board.

In a study by Kanakriyah (2020), the objective was to determine the nature of the relationship between dividend policy and company financial performance in emerging countries, alongside identifying the main variables that may impact financial performance. The study included 92 industrial and service sector companies listed on the Amman Stock Exchange (ASE) from 2015 to 2019. Panel data analysis, cross-sectional time series data, and simple and multiple linear regression models were employed. A multiple regression model was developed to test whether various factors, such as dividend yield, dividend payout ratio, company size, leverage ratio, and current ratio, may influence financial performance. The study concluded that dividend policy significantly explains a considerable portion of the company's financial performance.

Similarly, Amidu (2007) examined the impact of dividend policy on company performance in Ghana. The study utilised data from the financial statements of companies listed on the Ghana Stock Exchange over the previous eight years, using the ordinary least squares (OLS) model to estimate regression equations. The findings revealed positive relationships between ROA and dividend distribution policy, as well as growth in sales. Additionally, negative correlations were observed between ROA, dividend distribution ratio, and financial leverage.

Regarding Sufian's (2019) study, which aimed to explore the relationship between dividend distribution policy and stock price fluctuations in insurance companies listed on the ASE from 2008 to 2017, it identified a statistically significant negative relationship between stock price fluctuations and the dividend yield and distribution ratio. Notably, the variable most affecting stock price fluctuations was found to be the dividend yield.

A study by Khalaf et al. (2023) examined the impact of dividend policies on share price volatility, focusing on non-financial companies of the Gulf Cooperation Council (GCC) countries that were listed between 2010 and 2021. All non-financial companies (532) listed in Saudi Arabia, Oman, Qatar, the UAE, Kuwait, and Bahrain were collected but 380 companies were excluded due to an unavailable data set for the period of study. The panel regression is used to test the impact (fixed and random effects techniques) but the Hausman test favored the fixed effects results. The dependent variable is share price volatility, while the independent variable is the dividend yield, which serves as a stand-in for dividend policy. The relationship between share price volatility and a set of controls, including size, growth, and leverage, is also examined in this paper. According to the results, size and leverage have a significant negative relationship with share price volatility, but growth has an insignificant positive impact. Dividend policy has no impact on share price volatility. In other words, dividend policy does not fluctuate share prices in the GCC.

In the study of Laksana et al. (2024), the goal of the research was to determine how independent boards and family company controls affect capital structure and dividend policy. The nature of the independent board moderating variable on the impact of family company control on dividend and capital structure policies is also examined in this study. 26 firms that were listed on the Indonesia Stock Exchange (IDX) between 2018 and 2022 are used in this study's panel data. The findings indicate that although independent boards have a major positive influence on dividend policy and a negative impact on capital structure, family company control has a considerable negative impact on dividend policy. The independent board's moderating effect can change how negatively the family firm controls the dividend policy. However, the independent variable board has a significant detrimental impact on the capital structure and moderates the impact of family.

What sets this study apart from previous research on the same topic is its focus on investigating the impact of dividend policy on financial performance within the context of a developing country, specifically the Hashemite Kingdom of

Jordan. Furthermore, it serves as a continuation and validation of the results of many previous studies.

2.3. Hypotheses development

Based on the above, the following hypotheses were formulated:

H1: A statistically significant effect of the dividend distribution ratio per share on the return on total assets of economic institutions listed on the Amman financial market is evident.

H2: A statistically significant effect of retained earnings on the return on total assets of economic institutions listed on the Amman financial market is observable.

3. METHODOLOGY

3.1. Study model

Based on previous studies that have explored similar themes and after a thorough review of their findings and recommendations, the study has developed a model comprising independent (explanatory) variables. These variables include the dividend distribution policy, represented by the ratio of dividends per share (*DPS*) and earnings per share (*EPS*), supplemented by a control variable, financial leverage (*LEV*). The dependent variable in this model is expressed as the ROA.

Figure 1. Research framework

Source: Author's elaboration.

3.1.1. Data collection sources

The study utilised data from scientific books and articles to clarify the theoretical aspects of the study variables, along with financial statements published by the ASE for the period 2018–2021.

3.1.2. Study population

The population comprised 37 economic institutions listed on the ASE. A set of criteria was applied to ensure the measurement of the study variables, with a key requirement being the presence of these companies in the financial market throughout the study period, along with their classification as financial institutions and the absence of mergers or acquisitions. Companies failing to meet these criteria were excluded.

3.1.3. Data analysis

The study employed cross-sectional time series data (panel data) and utilized the fixed effects model. The mathematical model adopted for analysis is as follows:

$$ROA_{it} = A_i + \beta_1 DPS_{it} + \beta_2 EPS_{it} + \beta_3 LEV_{it} + \varepsilon_{it} \quad (1)$$

where,

- β — regression coefficients for explanatory variables ($\beta_1, \beta_2, \beta_3$);
- A_i — constant that expresses the value of the dependent variable when all explanatory variables are equal to 0;
- ROA_{it} — return on total assets;
- DPS_{it} — dividends per share ratio;
- EPS_{it} — earnings per share;
- LEV_{it} — control variable (financial leverage).

Table 1. Lists of the study variables and the means to measure them

Variable	*Code*	*Measurement method*	*Source*
Dependent variable			Brigham and Ehrhardt (2003)
Return on total assets	*ROA*	Net worth / Total assets	
Independent variables			
Percentage of dividends distributed per share	*DPS*	Dividends per share / Earnings per share	
Earnings per share	*EPS*	Retained earnings / Number of common shares	
Control variable			
Financial leverage	*LEV*	Total debts / Total assets	

Source: Author's elaboration.

The issue can be addressed and test the hypotheses by using the autoregressive distributed lag (ARDL) methodology through which the complementary relationship between the dependent variable and the independent variables can be determined in the short and long term in the same model, in addition to determining the size of the effect of each independent variable on the dependent variable (Pesaran et al., 2001).

Eliminate the problems related to the Atu correlation, therefore, its results are efficient and unbiased. Also, combines stable variables at *I*(0) or *I*(1), and it is not necessary that they all be stable at the same level, such as *I*(0) or *I*(1).

In addition to the ARDL approach, there are other econometric approaches to study the relationship between the dependent variable with other independent variables. One alternative is

fixed and random effects models for when studying panel data. Both models consider unobserved heterogeneity across the firms, accommodating time-invariant characteristics that may affect financial performance. Another approach is the generalized method of moments (GMM) when accounting for endogeneity (causality) and dynamic relationships in panel data. GMM would allow lagged dependent variables to be used as regressors and help explain how financial performance is temporally persistent. Another avenue of methodology is the vector error correction model (VECM); when observing cointegration between the variables, this methodology would help explain deviations from equilibrium in the short run to the long run and how passive dividend policies feed into financial performance. Each methodology could have its uses; it is more dependent on the structure of the data and the objectives of the study. Ultimately, ARDL was chosen because it allowed for varying orders of integration and allowed modeling both the short- and long-run dynamics of one of the dependent variables.

3.2. Approved statistical tools

To test the validity of the hypotheses and analyse the data, the statistical software EViews 12 was employed, along with descriptive statistical methods. The unit root test was used to test the stability of the study variables, while the Hausman test was conducted to compare the fixed effects model with the random effects model. Finally, a multiple regression model was used using the fixed effects model.

4. RESULTS

4.1. Descriptive statistics

The study was conducted on a sample of 37 economic institutions during 2018–2021, resulting in a total of 148 observations (4 * 37) for each of the study variables. The following table presents the descriptive statistics for the study variables.

Table 2 highlights that the average *ROA* is 6.04 with a standard deviation of 9.025, indicating variability in the rate of return among the institutions under study. Furthermore, the average percentage of *DPS* reached (0.29, with a standard deviation of 0.42, signifying disparity in the distribution ratio of profits per share among the same institutions. Additionally, the arithmetic mean of the *EPS* is high at 106.86, with a standard deviation of 256.67, suggesting significant variation among financial institutions themselves. As for the control variable, *LEV*, the average leverage ratio is 0.371, with a standard deviation of 0.293. This outcome indicates that institutions depend to some extent on debt, and variability exists in the financial leverage ratio among the institutions under study.

Table 2. Descriptive statistics

	ROA	***DPS***	***EPS***	***LEV***
Mean	6.044189	0.299345	106.8665	0.371220
Median	4.845000	0.148000	65.93000	0.272383
Maximum	893.0000	4.077000	2785.450	0.972877
Minimum	-12.52000	-0.371000	-34.90000	0.000000
Std. dev.	9.259589	0.4200253	256.6754	0.293384
Observations	148	148	148	148

Source: Author's elaboration based on the results from EViews 12.

4.2. Correlation matrix

A correlation matrix among the study variables must be constructed to ascertain the absence of multicollinearity issues before proceeding with estimating the appropriate regression model.

Table 3 presents that the correlation matrix indicates that the largest value of the correlation coefficient between the independent variables is estimated at 0.253444, which is less than 0.80. Multiple linear correlation among the study variables is not an issue.

Table 3. Correlation matrix between the study variables

Variables	***ROA***	***DPS***	***EPS***	***LEV***
ROA	1			
DPS	-0.491679	1		
EPS	0.482146	-0.606072	1	
LEV	-0.266184	-0.215114	0.253444	1

Source: Author's elaboration based on the results from EViews 12.

To confirm the absence of multicollinearity, we employ Farrar and Glauber's (1967) test, which comprises two stages:

1. First stage: We calculate the determinant (*Det*) of the matrix of correlation coefficients between the independent variables, namely, *DPS, EPS*, and *LEV,* which depends on the following two hypotheses (Kibala Kuma, 2018):

• H_0: $Det(D) = 1$, that is, no multicollinearity exists;

• $H1$: $Det(D) \leq 1$, that is, multicollinearity exists.

2. Second stage: We use the test: χ^2, which is based on the following two hypotheses (Alfa et al., 2016):

• H_0: $\chi^2 cal < \chi^2 tab$, that is, no multicollinearity exists;

• $H1$: $\chi^2 cal \geq \chi^2 tab$, that is, multicollinearity exists.

The value of the coefficient of determination is equal to 1, so we accept the null hypothesis, meaning we find no multiple linear correlation.

We then calculate $\chi^2 cal$:

$$\chi^2 cal = -\left((n-1) - \frac{1}{6(2k+4)}\right) LnDet(D)$$

$$\chi^2 cal = -\left((148-1) - \frac{1}{6(2*3+4)}\right) Ln(0.997) = -147$$

$$\chi^2 tab = \chi^{21/2} k(k-1) \quad (2)$$

$$\alpha = \chi^{21/2}(3(3-1))$$

$$0.05 = \chi^2 3.005 = 7.815$$

$$\chi^2 cal = -147 < \chi^2 tab \quad (3)$$

Therefore, the null hypothesis (H_0) is accepted.

4.3. Testing the stability of time series

The unit root test holds importance in time series analysis because it provides clear and meaningful insights into data behavior and aids in detecting the presence of a unit root. A unit root in a time series indicates a random trend, rendering the series non-stationary and thereby resulting in spurious regression. When a variable is stable, it indicates that average values remain constant over time, and variance remains stable as well. Fisher's statistic is one of the most important tests used in this field.

Table 4 shows the results of the unit root test for panel data using Fisher's statistic, considering various characteristics (with constant, with constant & trend, and without constant and trend). These results show that all variables are stable at this level.

Table 4. Unit root test

Panel A: At level					
		DPS	***EPS***	***LEV***	***ROA***
With constant	t-statistic Prob.	-9.1223 0.0000***	-8.2449 0.0000***	-3.4529 0.0107**	-10.7210 0.0000***
With constant & trend	t-statistic Prob.	-9.2786 0.0000***	-8.5365 0.0000***	-3..4425 0.0498**	-10.7367 0.0000***
Without constant & trend	t-statistic Prob.	-8.1092 0.0000***	-4.7950 0.0000***	-2.0231 0.0416**	-8.1227 0.0000***
Panel B: At the first level					
		D(DPS)	***D(EPS)***	***D(LEV)***	***D(ROA)***
With constant	t-statistic Prob.	-13.4484 0.0000***	-11.5348 0.0000***	-12.5227 0.0000***	-8.9034 0.0000***
With constant & trend	t-statistic Prob.	-13.4021 0.0000***	-11.7430 0.0000***	-12.4328 0.0000***	-8.8694 0.0000***
Without constant & trend	t-statistic Prob.	-13.4456 0.0000***	-11.8768 0.0000***	-12.5657 0.0000***	-8.93.66 0.0000***

Source: Author's elaboration based on the results from EViews 12.
*Note: Significance levels are denoted as follows: * for 10%, ** for 5%, and *** for 1%. Probabilities are calculated using MacKinnon's (1996) one-sided p-values.*

4.4. Testing the appropriate model for the study

By using the Hausman test to choose the appropriate model for the study, we evaluate the following hypotheses:

H_0: A random effects model is appropriate, estimated using the generalized least squares method.

H1: A fixed effects model is preferable, estimated using the ordinary least squares method.

Table 5 illustrates that the calculated statistic value is 7.62, surpassing the tabulated value (χ^2). Furthermore, the probability value of 0.0455 is less than the 5% level of significance. Therefore, we reject the null hypothesis H_0 and accept the alternative hypothesis *H1*, indicating that the fixed effects model is the appropriate model for the study data.

Table 5. Results of the Hausman test

Correlated random effects: Hausman test Equation: Untitled Test cross-section and period random effects			
Test summary	***Chi-sq statistic***	***Chi-sq-df***	***Prob.***
Cross-section random	7.622423	3	0.0455
Period random	0.000000	3	1.000

Source: Author's elaboration based on the results of EViews 12.

4.5. Analyzing the results of the multiple regression model using the fixed effects model

4.5.1. Significance test of estimated parameters

To ascertain the relationship between the variables and the limits, namely, the *ROA*, and the independent variables: *DPS* and *EPS*, along with the relationship of the dependent variable (*ROA*) to the control variable, *LEV*, the statistical significance of the coefficients must be tested. A coefficient is statistically significant if the probability values of the calculated values are less than 0.05. Table 6 shows the significance of the parameters is 0.0060

for *DPS*, which is less than 5%, indicating significance. Hence, a statistically significant relationship exists between *DPS* and the dependent variable, *ROA*, and for *EPS* is 0.0044, also less than 5%, indicating significance. Therefore, a statistically significant relationship exists between *EPS* and the dependent variable, *ROA*. Also, the coefficient of *LEV* is 0.0010, which is less than 5%, signifying significance. Thus, a statistically significant relationship exists between *LEV* and the dependent variable, *ROA*.

4.5.2. Testing the overall significance of the model

The coefficient of determination (R^2) and Fisher's coefficient were employed to assess the overall significance of the model. As depicted in Table 6, the coefficient of determination (R^2) stands at 0.9415, indicating a high value. This outcome suggests a robust correlation between the dependent variable and the independent (explanatory) variables. Specifically, it implies that 94.15% of the variations observed in the ROA of institutions listed on the ASE are accounted for by the explanatory variables. The remaining 5.58485% is attributed to other variables incorporated in the study model. Under the fixed effects model, the calculated Fisher statistic value of 44.58 surpasses the tabulated value. Additionally, the probability of the F-statistic equates to 0.0000, which is less than 0.05, indicating the complete significance of the model.

Table 6. Results of the multiple regression model using the fixed effects model

Variables	*Coefficient*	*St. error*	*t-statistic*	*Prob.*
C	50.60935	10.16544	4.978596	0.0156
Log(DPS)	-0.020778	0.002979	-6.975359	0.0060
Log(EPS)	7.566630	0.967618	7.819856	0.0044
Log(LEV)	-17.51175	1.360110	-12.87524	0.0010

Source: Author's elaboration based on the results of EViews 12.

Table 7. Effect specification

Panel A: Weighted statistic			
Statistic	***Value***	***Statistic***	***Value***
Root MSE	0.050338	R-squared	0.941515
Mean dependent var	23.42924	Adjusted R-squared	0.920396
S.D. dependent var	19.68232	S.E. of regression	0.058927
Sum squared resid.	0.375019	F-statistic	44.58030
DW stat.	2.152711	Prob. (F-statistic)	0.000000
Panel B: Unweighted statistic			
Statistic	***Value***	***Statistic***	***Value***
R-squared	0.493172	Mean dependent var.	4.660888
Sum squared resid.	0.399952	DW stat.	2.152711

Note: MSE — mean square error.
Source: Author's elaboration based on the results of EViews 12.

5. DISCUSSION

This research examined the impact of dividend policy on the financial performance of economic establishments listed on the ASE. The analysis demonstrated that a notable negative relationship exists between the *DPS* and ROA, whereby a unit increase in *DPS* generates an approximate 0.050 unit decrease in ROA. The present study's findings are in line with studies that have identified no noteworthy relationship between dividend policy and financial performance in S&P 100 corporations. Conversely, retained earnings were reported to promote market value and stability in the long run, demonstrating the findings of Bossman et al. (2022) to be correct by identifying a strong link between retained earnings (*EPS*), *ROA*, and ROE. An additional statistically notable positive association was identified for *EPS* with *ROA* to indicate that retained earnings, in fact, support subsequent investment, and wages led to improved profitability. The findings were observed to correlate with Bossman et al. (2022), identifying positive influences by free cash flow savings on both *ROA*. Moreover, Ebire et al. (2018) demonstrated notable positive influences from dividend allocation and dividend distribution or yield on *EPS,* meaning that the efficacy of dividend policies is reliant on reinvesting retained earnings.

LEV showed a strong negative correlation with *ROA*, with a one-unit increase in *LEV* producing a 17.51 unit decrease in *ROA*. Rachid (2016) concurred with this, stating that while tax benefits exist, high financial leverage has a negative effect on financial performance. Additionally, Khalaf et al. (2023) found that dividend policy does not influence stock price volatility in GCC markets, stressing that firm size and financial leverage are considerably more important to financial stability. Rachid's (2016) study also reinforces Narang's (2018 findings that dividends reacted differently when evaluated according to market structure and sector. Kanakriyah (2020) reinforced the importance of dividend policy in emerging markets and the role of retained earnings. Enebrand and Magnusson (2018) found that companies with high dividend yields are more heavily reliant on financial performance. Laksana et al. (2024) talked about the role of corporate governance when schools were making dividend policy decisions. In summary, the present study points out that it is important to balance which dividend policies will facilitate financial performance while managing leverage and reinvestment. Retained earnings should be encouraged and prioritized amongst firms to achieve long-term growth, and debt should be managed and carefully prioritized to provide financial stability.

6. CONCLUSION

Economic institutions of various sizes always seek to improve their performance to achieve the overarching objective of maximizing their value, thereby augmenting capital and thus increasing the owners' wealth, ensuring their sustainability in the business environment. Key strategic decisions, such as optimal financing choices (equity, debt, or

a combination) and profit distribution or retention policies, are pivotal in this pursuit. The study serves as a complement to prior research endeavours, aiming to elucidate and assess the impact of dividend distribution policy on the financial performance of institutions listed on the Amman financial market during 2018–2021 using cross-sectional time series data (panel data) via the fixed effects model. The results show that the DPS exhibits a negative and statistically significant effect on the ROA for institutions listed on the Amman financial market during the specified period, and EPS demonstrates a positive and statistically significant impact on the ROA for economic institutions listed on the Amman financial market within the stated timeframe and leverage exerts a negative and statistically significant effect on the ROA for economic institutions listed on the Amman financial market during the designated period.

However, this study is not without limitations. For example, the research sample only includes economic institutions listed on the Amman financial market, and, therefore, it is not recommended to generalize the results to other financial markets in the region, in addition that the study period was limited to the years (2018–2021), and therefore it is difficult to adapt it for other periods due to the significant changes that occur due to the recent geopolitical changes and its effect on the economic activity in Jordan. Although this study has four variables represented by the *ROA* as a dependent variable, *DPS* and *EPS* as independent variables, and *LEV* as a control variable. Therefore, the results can change, especially when other variables are entered.

Finally and based on these findings, the study offers several recommendations such as: economic institutions listed on the Amman financial market should persist in adhering to the policy of retained profits, as it leads to value augmentation and facilitates future investments, thereby enhancing performance; prudent financial management is essential when announcing profit distributions because their impact can be negative in addition to the influence of financial leverage on performance, institutions should devise a policy ensuring judicious and consistent use of both equity and debt. Also, the study is important for future research to introduce other variables that affect the financial performance of financial institutions, such as book value per share of net profit and market price of shares.

REFERENCES

Alfa, M. M., Edibo, L., & Davwar, P. P. (2016). Test of multicollinearity among some selected diseases: Case study of Zonal Hospital Idah, Kogi State (1994–2013). *International Journal of Public, 3*(3), 70–79. https://journals.rcmss.com/index.php/ijpamr/article/download/427/387/776

Al-Naimi, A. T., & Al-Tamimi, A. F. (2019). *Al'iidarat almaliat almutaqadimatu* [Advanced financial management]. Al-Yazouri Scientific Publishing and Distribution House.

Amidu, M. (2007). How does dividend policy affect performance of the firm on Ghana Stock Exchange. *Investment Management and Financial Innovations, 4*(2), 103–112. https://www.researchgate.net/publication/286355892

Bossman, A., Agyei, S. K., Asiamah, O., Agyei, E. A., Arhin, E. Y., & Marfo-Yiadom, E. (2022): Dividend policy and performance of listed firms on Ghana stock exchange. *Cogent, Economics & Finance, 10*(1), Article 2127220. https://doi.org/10.1080/23322039.2022.2127220

Brigham, E. F., & Ehrhardt, M. C. (2003). *Financial management: Theory and practice* (11th ed.). South-Western/Thomson Learning.

Dogan, M., & Topal, Y. (2014). The influence of dividend payments on company performance: The case of Istanbul Stock Exchange (BIST). *European Journal of Business and Management, 6*(3), 189–197. https://www.researchgate.net/publication/312447352

Ebire, K., Mukhtar, S., & Onmonya, L. (2018). Effect of dividend on policy of the performance of listed oil and gas firms in Nigeria. *International Journal of Scientific and Research Publications, 8*(6), 289302. https://doi.org/10.29322/IJSRP.8.6.2018.p7837

Enebrand, A., & Magnusson, T. (2018). *Dividend policy and its impact on firm valuation: A study of the relationship between dividend policy and stock prices on the Swedish market* [Master's thesis, Jönköping International Business School]. https://www.diva-portal.org/smash/get/diva2:1215968/FULLTEXT01.pdf

Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in regression analysis: The problem revisited. *The Review of Economics and Statistics, 49*(1), 92–107. https://doi.org/10.2307/1937887

Gatsi, J. G., Gadzo, S. G., & Akoto, R. K. (2013). Degree of financial and operating leverage and profitability of insurance firms in Ghana. *Canadian International Business and Management, 7*(2), 57–65. https://www.researchgate.net/publication/317784786

Gordon, M. J. (1963). Optimal investment and financing policy. *Journal of Finance, 18*(2), 264–272. https://doi.org/10.1111/j.1540-6261.1963.tb00722.x

Hadidi, A., & Ghribi, Y. S. L. (2016). Dawr hawkamat alsharikat fi tarshid qararat tawzie alairibah fi almuasasat alaiqtisadiat Aljazayiriat dirasatan aistitlaeiatan lueayinatan min atarat mujamae saydal fare suidyal [The role of corporate governance in rationalizing profit distribution decisions in Algerian economic institutions]. *Journal of Contemporary Economic Studies, 1*(1), 73–84. https://asjp.cerist.dz/en/article/84687

Kanakriyah, R. (2020). Dividend policy and companies' financial performance. *The Journal of Asian, Finance, Economics and Business, 7*(10), 531–541. https://doi.org/10.13106/jafeb.2020.vol7.no10.531

Khalaf, B. A., Awad, A. B., & Ahmed, S. S. (2023). The impact of dividend policy on share price volatility: Evidence from listed companies in Gulf Cooperation Council countries [Special issue]. *Corporate & Business Strategy Review, 4*(2), 289–295. https://doi.org/10.22495/cbsrv4i2siart8

Kibala Kuma, J. (2018). *Économétrie appliquée: Recueil des cas pratiques sur EViews* [Applied econometrics: Practices on EViews] (7th ed.). Centre de Recherches Économiques et Quantitatives (CREQ). https://hal.science/cel-01771168/document

Laksana, R. D., Shaferi, I., & Naznii, H. (2024). The impact of independent directors and family control on the dividend policy and capital structure: A family business strategy. *Corporate & Business Strategy Review, 5*(3), 168–175. https://doi.org/10.22495/cbsrv5i3art16

MacKinnon, J. G. (1996). Numerical distribution functions for unit root and cointegration tests. *Journal of Applied Econometrics, 11*(6), 601–618. https://www.jstor.org/stable/2285154

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business, 34*(4), 411–433. https://doi.org/10.1086/294442

Mounir, H. (2007). *Financial management: An introduction to contemporary analysis* (6th ed.). Modern Arab Bureau.

Narang, M. (2018). Dividend policy and firm performance: listed firm listed on National Stock Exchange. *International Journal of Advanced Educational Research, 3*(1), 286–289. https://themultidisciplinaryjournal.com/assets/archives/2018/vol3issue1/3-1-94-128.pdf

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics, 16*(3), 289–326. https://www.jstor.org/stable/2678547

Phuong, T. T., Hoang, L. D., Tuan, T. M., & Van, T. M. (2023). Minority shareholder protection and dividend policy: Evidence from the material industry. *Journal of Governance & Regulation, 12*(3), 163–170. https://doi.org/10.22495/jgrv12i3art17

Rachid, H. (2016). Study and analysis of the impact of dividend distribution policy on the performance of shares of institutions listed in the financial market — The case of the Dubai financial market in the period 2011–2014. *Algerian Journal of Accounting and Financial Studies, 2*(1), 39–52. https://asjp.cerist.dz/en/article/142816

Sufian, A. (2019). Dividend policy and share price volatility: Evidence from Jordan. *Accounting and Finance Research, 8*(2), 75–85. https://doi.org/10.5430/afr.v8n2p75