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The impact of firm characteristics on dividends in Jordan: Institutional ownership as moderating variable

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ABSTRACT

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The objective of this research was to look at how firm attributes like age, size, as well as profitability affected the number of dividends paid. It also looked at how institutional ownership affected the connection between all these corporate characteristics as well as dividend payments as a moderating factor. A sample of forty publicly traded industrial businesses that were listed between 2016 and 2020 on the stock exchange in Amman were included in the research. The research analyzed the variables utilizing acceptable descriptive statistical techniques and used a model of multiple regression to test its predictions. The study's conclusions demonstrated that a company's size, years of existence, and income all positively affect dividend payments. Additionally, it found that corporate ownership had a strong correlation with dividend influence, as did both firm size as well as profitability. On the other hand, it discovered a negative correlation between the age of the firm as well as institutional ownership in terms of dividend effect. The research concludes with a proposal that Jordanian industrial enterprises should take size, years of operation, and profitability into account when determining how much dividend to pay out, acknowledging their important roles as well as effects on dividend distribution.

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1. Introduction

The profit-sharing distribution policy is one of a company's financial policies; it requires that earnings be distributed to shareholders in line with their capital ownership. This procedure raises the market worth of the business. It is impossible to ignore the board of directors' influence on profit distributions based on investors' investment preferences. According to recent trends, shareholders often decide to hang onto their shares and choose to invest in businesses that give high dividend yields (Le Duc Hoang et al., 2020). One of the board of directors' most important financial choices is whether to share earnings or keep them for investment reasons. Dividends are the total amount of accrued and expected cash flows to shareholders; they may be paid out as cash, stock, or a mix of the two. Retaining earnings is a source of funding that is used to reinvest in the business in order to promote its development (Budagaga, 2017).

The best choice is dependent on a number of factors when determining whether to share earnings or keep them for investment. These determinants include company-specific characteristics like size, age, and profitability, as well as environmental factors including investment possibilities, revenue sources, and investor preferences for present or future income (Yusof & Ismail, 2016). Several prior research studies have shown that certain firm characteristics, such as size, and profitability, have a significant impact on the distribution of profits. Consequently, choosing firms that meet their needs and interests is the best criteria for shareholders to use when making an investment in company stocks. Major investors may resolve issues and disputes by using methods such as the dividend distribution policy. These conflicts result from management acting opportunistically to forward their own agendas at the expense of shareholders' interests. By reducing the amount of money

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under management's control and restricting their activities, profit distributions hinder management's capacity to use cash on hand for personal benefit by increasing dividend payments (Hayat et al. 2018).

The system of ownership is a crucial component that greatly influences choices on how to distribute dividends. This is because different ownership has different interests, goals, as well as impacts on the financial as well as leadership choices made by the company, which together make up their portion of the financial resources (Bayrakdaoglu et al., 2012). Large shareholders are able to keep resources within the firm and make choices that suit their interests. High ownership shares firms force the management of the company to avoid making choices that can annoy these shareholders, since this might damage their ties with the leadership as well as as a result, shape the views of the General Assembly of Shareholders. Therefore, the purpose of this research is to investigate how corporate ownership modifies the link between dividends and firm characteristics.

Making choices for dividend distribution have an immediate effect on a company's value since they are connected to management's goals as well as perspectives on sources of funding, profitability, as well as long-term returns. These choices provide concrete proof of a business's profitability along with its ability for self-financing, as well as accurate measures of its capacity to generate cash flows through ongoing operations. Additionally, market players within the financial market constantly follow the firm's actions about dividend payouts, which affects stock demand as well as the market value of the company. In light of this, a company's attributes may be very important when deciding how to distribute dividends, as long as they support both the company's internal goals as well as its long-term viability and marketability (Das, 2017). Therefore, the objective of this research is to show how corporate ownership structure affects the link between corporate characteristics as well as dividend distributions, as well as how company characteristics affect dividend distributions.

The study will be organized as follows: The theoretical structure as well as a review of relevant research which will be examined as well as debated will be the main topics of the subsequent part. Afterwards, the study design, gathering and analyzing data techniques, including hypothesis testing are going to be the primary focus of the study's methodology section. The key suggestions will be given after the presentation of the results and debate.

2. Literature Review

Businesses often have a set of economic traits that differentiate them apart from other comparable businesses in the same industry (Buigut & Soi, 2020). These qualities are essential to the business's activities and operations as well as to its capacity to endure and grow in the labor market. Businesses may be distinguished by a number of factors. In this research, we will talk about a few of the attributes of businesses that affect the distribution of dividends in Jordan, such as size, age, and profitability.

2.1 Company Size

Capital structure is mostly determined by the size of the company. It contributes favorably to the business's profitability as well as yearly returns, which raises the value of shareholders (Nyere & Wesson, 2019). Additionally, the company's scale enhances as well as diversifies its production process, which boosts its total economic capacity as well as allows for more versatility in its investment strategy (Areri & Nyang, 2018). Because it is a crucial element for gauging firm profitability, company size is thought to be a significant driver of dividend payouts. Bigger businesses may obtain greater funding because they are less likely to go bankrupt as well as having easier access to financial markets than smaller businesses. As a result, they become less reliant on internally produced capital as well as are more likely to increase dividend payments to lessen the issue of agency that arises among shareholders and the management (Areri & Nyang, 2018). Compared to small businesses, which have few possibilities for investment as well as limited financial resources, large businesses often pay substantial dividends. To finance their development, small businesses often keep their earnings (Nyere & Wesson, 2019).

The connection between payouts of dividends as well as business size has been the subject of several studies. According to Baker's (2019) research, there is a positive correlation between the size of a firm therefore its dividend payments. This suggests that bigger organizations are better able to earn revenues while offering higher dividends to their shareholders. However, Brahmaiah et al. (2018) contend that a company's size has a negative impact on dividend distributions as bigger businesses often provide more alternatives for investing again, which results in lower payouts for dividends. In addition, compared to smaller enterprises, corporations with significant growth opportunities could have lower payout rates for dividends policies. In this instance, smaller enterprises with lesser levels of debt are often preferred by investors who desire larger dividend payouts (Chanasit, 2014). However, Roy, (2015) analysis of 51 Indian businesses spanning a five-year period between 2007 and the year 2012 revealed no connection between dividend payments and the size of the business.

2.2 Company Age

According to Cole (2008), the firm's age is the total number of decades since the business was founded and when it first started operating. The years of existence of a corporation is significant since it serves as a basic indicator of its standing in the marketplace. It sheds light on the business's capacity for self-sufficiency and, as a result, its decreased need for borrowing money. The reason for this is since younger businesses often have less financial variety than older, larger companies (Farre-Mensa et al., 2014). The years of existence of the corporation has an impact on dividend payments. Younger businesses often struggle to seek cash in the market yet need significant sums to support their progress. They therefore keep an important portion of their profits to finance their expansion. Older businesses, on the other hand, employ large dividend payouts as they

have built up retained profits over time to fund their activities (Farre-Mensa et al., 2014). Small and young businesses are less well-known to banks and investors in the financial markets, which is one of the reasons they depend on retained profits as a source of funding as well as do not paying dividends.

2.3 Company Profitability

A company's profitability is determined by how well it uses its assets and skills to maximize shareholder value (Chang et al., 2020). The notion of profitability describes "the business's capacity to generate profits throughout a particular period of time while minimizing risk that may arise via its business activities, demonstrating the connection between the investments made by the business that contribute to the realization of its earnings" (Chang et al., 2020). Because it has a big influence on the company's financial success, competitiveness constitutes one of the key variables that owners and investors consider. Companies see maximizing profits as their fundamental objective since it allows them to preserve and expand their ownership rights, sustain themselves, and safeguard the interests of investors and shareholders, all of which help them become more robust to setbacks (Emanuel & Wong, 2003). The net profit before taxes is divided by the entire book worth of assets to determine profitability.

One of the main factors influencing the distribution of dividends is profitability. Pecking Order Theory states that businesses that are profitable enough to not need outside funding. Because they depend on internal resources or retained revenues, the corporation is able to keep more profits by paying smaller dividends (Bae & Elhousseiny, 2017). According to Rafailov, D., & Trifonova (2011), profitability is a measure of a company's capacity to make a profit as a return on capital spent. It takes into account profitability ratios, the company's competitive standing, and the calibre of its management. Profitability is another indicator of a company's success or failure. Moreover, Lahiri (2019) noted that, in contrast to small businesses with investment possibilities that often pay smaller dividends, big organizations typically possess elevated performance levels, resulting in greater payouts of dividends in the absence of lucrative investment prospects. Profitable businesses often distribute their dividends at a greater rate than unprofitable businesses. A key factor in determining dividend distribution policies is profitability levels. Higher dividend payments are often paid by businesses with strong returns on their assets and equity (Franc-Dabrowska et al., 2020). According to Labhane (2019), highly successful businesses may pay out larger dividends than less lucrative ones since they don't need outside funding as well as can depend on retained revenues.

2.4 Dividends

Investors rely on dividend payouts as a source to cover their operating costs. Investors learn about management's forecasts for the company's potential for expansion and profitability via these announcements. Given that investors often lack the opportunity to thoroughly watch the operations of an organization, it is seen as a measure of the management's success in conducting the company's operations. As a result, people see the payment of dividends as evidence of the business's success. The organization seeks to achieve equilibrium between dispersed profits as well as retained earnings (Lahiri, 2019). The board of directors of the firm must make important choices on dividend distribution since it affects both the company's worth as well as the wealth of its shareholders. The director of the board oversees the company's earnings and how they are distributed to shareholders. Retained earnings are meant to be used towards funding the company's future initiatives. To secure future business development, the board of directors of the firm must strike a balance between retained profits and current dividend payouts (Tijjani, 2019). To attain growth and, therefore, build value for the firm, profits from the company's operations and business ventures are usually reinvested in the company's ongoing operations or in new ventures. Dividend payments are often made on a per-share basis and are reported as a cash amount per share for many investors. As a result, owners earn larger dividends the more shares they own (Baker, 2015).

Dividend policies influence how different companies distribute their dividends. If a business has a dividend distribution policy, the dividend distribution schedule changes as well. Dividends may be paid by companies every three months, every six months, or once a year. Most financially sound businesses want to raise their dividends while maintaining a steady payout schedule. They usually keep a regular schedule and avoid cutting down on or stopping dividend payments until necessary (Biza-Khupe & Themba, 2016).

2.5 The Relationship between Institutional Ownership and Dividends

Sending an announcement to stakeholders about the organization's worth is the main goal of the payment of dividends. Shareholders may make their final decisions regarding investments according to the signals offered by dividend payouts, particularly large shareholders who are well aware of the company's genuine worth. The link between payouts of dividends as well as institutional ownership has been the subject of conflicting research in the past. According to Nguyen and Li (2020), there seems to be a beneficial relationship between the utilization of dispersed profits and the attraction to institutional investors. This indicates that the company's value has risen, making it more appealing to institutional investors. This was discovered in research on building as well as real estate firms registered on the Indonesian Stock Exchange conducted by Kautsar (2019).

Conversely, shareholder groups are important for corporate governance because they can keep a close eye on leadership, which lowers the cost of agency and eliminates the need for large dividend payments. This is consistent with research by Al-Najjar & Kilincarslan (2015), that discovered a negative correlation between payouts of dividends increased ownership by institutions. It also aligns with research by Kamanguya (2020) that found an adverse association among institutional stock ownership as well as dividend payments for financial firms registered on Kenya's Nairobi Securities Exchange. The company's board of directors decides whether to distribute earnings to shareholders in accordance with their capital contribution to the firm. Because they affect the tastes of shareholders and their demand for returns, dividend distributions are significant. It influences the financial structure as well as financing of investment policies of the firm, on the one hand. It also affects its future growth rate, cash flows, liquidity, and the price of its funding sources.

A favorable relationship between company size as well as profitability and distribution of dividends policy was found in the findings of Balagobei's (2013) study, which looked at the influence of business factors on payments of dividends distribution policy for a sample of ten businesses mentioned on the Colombo Stock Exchange between 2008 and 2011. According to Monoarfa's research (2018), prosperity has an advantageous and substantial influence on dividend distribution. The study analyzed data from a sample of industrial businesses registered in the Indonesia Stock Exchange between 2014 and 2019. The market value of a business is maximized when its financial performance rises, which increases the likelihood that it will be able to distribute dividends and provide greater funding possibilities.

Conversely, opposing perspectives have been offered by other investigations. Juhandi et al. (2013) shown that, for manufacturing companies listed between 2005 and the year 2010, the size of the company had no impact on its dividend allocation policy. This suggests that the business's scale is not a determining factor in income distribution policy. It was argued that larger businesses (as measured by their assets) typically distribute greater amounts of dividends for shareholders because they are more likely to be able to expand as well as pay dividends, which lowers ambiguity about their capacity to turn profits and enables them to rely fewer on their own financial sources.

The impact of additional companies owning large percentages of a company's shares on choices about how to distribute dividends has also been emphasized by several studies. Nendi, (2013) discovered an adverse association between the distribution of dividends as well as institutional ownership for an assortment of 26 Australian firms from 2011 to 2015. The influence on institutional the ownership upon the distribution of dividends ratios was found to be unfavorable in Duhri and Diantimala's (2018) study, which looked at 187 non-financial businesses that were stated upon the Indonesian Stock Exchange between 2012 and 2016. Lower distributions of dividends ratios were correlated with increasing institutional ownership. This outcome was explained by professional investors' propensity to support businesses that use their revenue to pursue opportunities for investment and share a smaller portion of earnings, suggesting effective leadership and potential for future earnings.

Nendi, (2013) research, in contrast, showed that institutional investment had a positive and substantial impact on dividend payments across a sample of 55 manufacturing businesses that were listed between 2005 and 2010, respectively, on the Indonesian Stock Exchange. They said that organizations that own a significant portion of the stock of a company are considered large shareholders and, as a result, have a big say in the choices and payment of dividends practices of the business. Due to their status as shareholders in control and greater influence over distributing dividend policies, business entities with a large institutional stake pay dividends that are greater. Research conducted by Chang et al., (2016) discovered a favorable correlation between the payment of dividends as well as institutional ownership.

3. Study Methodology

The research used a descriptive-analytical technique, concentrating on Jordanian public industrial businesses for the period of 2016-2020, to characterize the study's topic based on data gathered linked to the investigation's model's variables. To accomplish the goals of the research, the results were then examined as well as hypotheses were put to the test using the proper statistical techniques.

3.1 Study Population and Sample

According to the authorized directory made available before the Amman Stock Exchange's website, the study's population comprises of Jordanian public industrial businesses that appear on the Amman Stock Exchange, which will number 54 industrial enterprises by the end of 2020.

The research sample consisted of Jordanian public industrial businesses that satisfied the following criteria:

1. Throughout the research period, the business's stock was traded on the financial market.
2. The business has all the information required to compute the research model's variables between 2016 and 2020.

Following an assessment of the businesses, it was discovered that 40 commercial enterprises throughout the research timeframe satisfied the predetermined requirements. Consequently, 74.1% of the studied area was represented by the research sample.

3.2 Study Variables

The purpose of the research was to look at how the corporate ownership structure, another moderating factor, affected dividend payments in Jordanian public industrial enterprises. The research variables were thus made up of the following:

First, dividend distributions are a dependent variable. All projected reward shares as well as cash dividends were included in this variable. By looking at the reports as well as accounting records of Jordanian public industrial enterprises from 2016 to 2020, content analysis was used to quantify these distributions. Every firm that paid dividends, whether in cash or in the form of proposed dividend shares, was given a value of (1); otherwise, as in the research by Mladenoska (2017) as well as Villanueva-Villar et al. (2016), a value of (0) was awarded.

Second: An Independent Variable (Furniture of the Company) The following sub-variables were a part of this variable:

According to Hamdan's (2016) research, a natural logarithm of the total assets is used to calculate the dimensions of the company.

Company Age: Calculated, as in the research by Villanueva-Villar et al. (2016), utilizing a natural logarithm of the number of years from the company's founding.

Business profitability is determined by calculating the rate of return on assets, which is the ratio of net profit after taxes to the sum of assets, as per the research conducted by Darus et al. (2013).

Third: Business Ownership, a regulating Variable as in the research by Oh et al. (2011), determined by corporate ownership, which represents the amount of business shares (i) in year (t) held by institutional investors.

Fourth: Control Variable: The number of directors, both executive and non-executive, on the boards of Jordanian public industrial businesses was used to assess the dimensions of the board of directors. The number of members is decided by the internal policies of the firm, as stated in the Villanueva-Villar et al. (2016) research.

3.3 The Standard Model for Testing the Study Hypothesis

Based on the study's problem and to test the study's hypothesis, the following standard model was formulated:

$$\text{Div}_{it} = a_0 + B_1 \text{BSIZE}_{it} + B_2 \text{SIZE}_{it} + B_3 \text{AGE}_{it} + B_4 \text{ROA}_{it} + B_5 \text{SIZEINO}_{it} + B_6 \text{AGEINO}_{it} + B_7 \text{ROAINO}_{it} + e$$

Where:

Div_{it} : Company (i) dividend distributions for period (t).

SIZE_{it} : Company (i) size for period (t).

AGE_{it} : Company (i) age for period (t).

ROA_{it} : Company (i) profitability for period (t).

INO_{it} : Corporate ownership for company (i) in period (t).

BSIZE_{it} : Board of directors' size for company (i) in period (t).

3.4 Study Hypotheses

The following theories were developed in light of the study's goals as well as problem:

H₀₁: In Jordanian commercial industrial enterprises, the number of employees of the company has no statistically noteworthy impact upon dividend distributions at the statistically significant level ($\alpha \leq 0.05$).

H₀₂: In Jordanian public industrial enterprises, the current age of the company has little or no impact on dividend distributions at the statistically important level ($\alpha \leq 0.05$).

H₀₃: In Jordanian public industrial enterprises, there exists no statistically significant effect of corporate performance on the distribution of dividends near the statistically significant level ($\alpha \leq 0.05$).

H₀₄: In the association between firm size and dividend payments in Jordanian commercial industrial enterprises, institutional ownership does not have a statistically significant influence at the statistically significant level ($\alpha < 0.05$).

H₀₅: In the link between firm age and dividend payments in Jordanian public industrial enterprises, corporate ownership does not have an effect that is statistically significant at the significance level ($\alpha < 0.05$).

H₀₆: Among Jordanian public industrial enterprises, institutional investment has no statistically significant effect on the link among business profitability and dividend payments above the statistically important level ($\alpha \leq 0.05$).

3.5 Operational Definitions Company Characteristics

A group of characteristics and elements, in both financial and non-financial terms, that make businesses apart. The following features are covered in the present study:

According to Ani et al. (2012), a natural logarithm from the company's total asset worth represents its size.

The age of the firm is the number of years that has elapsed between its founding to the present.

Firm Profitability: The capacity of the organization to produce earnings from its activities and expenditure. The rate of return on Assets (ROA), referred to as a percentage of the net profit following taxation to total assets, was used to determine it. It shows how profitable the firm can make use of its resources.

Dividend Distributions: The board of directors' choice to distribute profits, either as dividends in cash or suggested reward shares, to stockholders in accordance with the value of their shares in the business (Tijjani, 2019).

Institutional Ownership: The proportion of the business's assets that are owned by financial institutions (Nagata & Nguyen, 2017).

4. Statistical Analysis

4.1 Description of Study Variables

The dependence on others, facilitating discussions, and independent variables involved in the research are described statistically in this part using both financial and other information covering Jordanian public industrial businesses from 2016 to 2020.

The variable that is dependent (Dividends) comes first. Content analysis was the method employed to assess the variable that was dependent, and it included looking through reports and accounts payable from Jordanian public industrial enterprises from 2016 to 2020. A monetary amount of (1) was given to any firm that paid dividend payments, regardless of if they were planned dividends on stocks or cash dividends, and (0) otherwise. This is how the statistical characteristics for the given variable are displayed:

Table 1
Descriptive Statistics of Profit Distributions

Undistributed Profits	Dividends	
	Distributed Profits	
122	78	
61%	39%	

It is clear through Table 1 that most Jordanian public industrial businesses declined to distribute dividends between 2016 and 2020. In contrast to the 39% of manufacturing businesses that did give payments at this time, 61% of companies had inaccessible earnings. This suggests that most manufacturing businesses have a tendency to hold onto their earnings in order to utilize resources to support new initiatives and take advantage of investment possibilities (Arshad et al., 2013).

4.2 Independent Variables (Company Characteristics)

The size, age, and profitability of Jordanian public industrial enterprises throughout the 2016–2020 period were variables that were autonomous. The following is a presentation of the descriptive statistics regarding these variables:

Table 2
Descriptive Statistics for the Characteristics

Independent Variables	Mean	Std. Deviation	Max	Min
Company Size	8.060	8.474	9.158	5.652
Company Age	33	16	71	6
Company Profitability	-1.145	11.537	19.089	-85.716

According to Table 2, the mean size of public industrial enterprises in Jordan from 2016 to 2020 was recorded at 8.060%. Table 2 further shows that, between 2016 and 2020, the median age of Jordanian public industrial businesses was 33 years old, having a standard deviation of 16 years. During this time, the oldest age ever recorded was 61 years old, whereas the oldest was just 6 years old. The existence of companies that were founded during the last century is shown by the variance in the ages of the companies.

Furthermore, Table 2 demonstrates that, for the years 2016 to 2020, the mean profitability of public industrial enterprises in Jordan was (-1.145%), with a deviation from the mean of (11.537%). During this time period, the greatest documented profitability was 19.089%, whilst the lowest was -85.716%. This variation of return on assets is a reflection of how differently

industrial enterprises may and will use their strengths as well as readily accessible resources to produce a profit and meet their yearly return targets.

4.3 Moderate and Control Variables

The institutional ownership of Jordanian public industrial businesses from 2016 to 2020 is included in the adjusted variable. The following are the summary statistics for this variable:

Table 3
Descriptive Statistics of Moderate and Control Variables

Moderate Variable	Mean	Std. Deviation	Max	Min
Institutional Ownership	59.258	27.411	100	5.681
Control Variable				
Board Size	8	3	19	2

According to Table 3, Jordanian public industrial businesses' average institutional ownership from 2016 to 2020 was 59.258%. With a maximum value of 100.0% and the lowest value of 5.681% over the time, the mean deviation was 27.411%. This shows that institutional ownership varies across industrial enterprises, which might be explained by variances in institution investors' investment preferences. The board of directors' size in Jordanian private industrial businesses from 2016 to 2020 was one of the controlling variables. According to Table 3, Jordanian public industrial businesses' average board sizes between 2016 and 2020 had eight people on it, having an average deviation of three members. There were 19 members, the highest recorded number, and 2 participants, the lowest documented figure. This shows that manufacturing businesses' boards vary in size, which may be explained by variations in the size, kind of company operations, length of functioning, as well as capital of the business in question.

4.3 Data Suitability Tests for the Study Model

To make sure the data were suitable for the research model, several tests were run. To determine if multiple linear relationships were present, correlation coefficients among the dependent, independent, as well as control variables were computed. To make sure there was no link between accidental mistakes in the model of regression, a self-correlation test was also run for the research hypotheses. The test results are listed below.

4.4 Multivariate Linear Correlation Test (Linear Extension)

The basis for the General Linear Model's (GLM) applicability is the presumption of an independent variable independence. If the presumption is not satisfied, the framework cannot be deemed appropriate for the estimation of parameters. The regression coefficient of determination (R^2) is inflated and seems higher than it really is when the Multicollinearity Test reveals a nearly perfect linear relationship among two or more variables. Consequently, correlation coefficients among the separate research variables were computed, and the following outcomes were obtained:

Table 4
Correlation Matrix between Independent, Dependent, and Control Variables

Variables	Company Size	Company Age	Company Profitability	Institutional Ownership	Board Size
Company Size	1.000				
Company Age	0.273**	1.000			
Company Profitability	0.283**	0.067	1.000		
Institutional Ownership	0.276**	0.044	0.202**	1.000	
Board Size	0.232**	0.084	0.117	0.023	1.000

The relationship between the factors "Company Size" as well as "Profitability" was the strongest, achieving 0.283, as Table 5 demonstrates. Considering this value was smaller than (± 0.80), it cannot indicate that there is multiple linearity among the independent variables. It follows that the sample in question clearly does not have a large multiple linearity issue. The Variance Inflation Factor, or VIF, values for each variable were calculated to validate the preceding conclusion. The findings were as follows:

Table 5
VIF results among Independent, Dependent, and Control Variables

Variables	VIF
Company Size	1.289
Company Age	1.082
Company Profitability	1.111
Institutional Ownership	1.106
Board Size	1.063

Table 5 demonstrates that there were no multicollinearity problems among the research variables, with all of the VIF values being larger than 1 and fewer than 10.

4.5 Autocorrelation Test

The test for autocorrelation is used to confirm that the spurious variances in the least squares-estimated model of regression do not correlate with one another. This contributes to the assurance of impartiality in the computed variables by ensuring that the mistakes are accidentally as well as randomly distributed. A Durbin-Watson test (D-W test), whose test statistic values range from 0 to 4, was performed to look for this problem. Whenever the statistic calculated by Durbin-Watson is close to 2, there are no autocorrelation problems in the data. The Durbin-Watson test findings concerning the study's hypotheses are shown in the following table.

Table 6
Results of the Autocorrelation Test for Study Hypotheses

Hypotheses	D-W test
H ₀₁	1.709
H ₀₂	1.770
H ₀₃	1.944
H ₀₄	1.754
H ₀₅	1.781
H ₀₆	1.957

Table 6 indicates that there are no autocorrelation problems in the data, and the entire Durbin-Watson (D-W) test outcomes being around the value of (2).

4.6 Hypothesis Testing

The study's hypotheses seek to determine if corporate ownership has a moderating effect on the effects of firm size, maturity, and performance on dividend payments. The technique of multiple regression analysis was employed to evaluate these assumptions, and the following results are reported:

At a significance threshold of $\alpha \leq 0.05$, the impact of business size on the payment of dividends in publicly traded industrial firms in Jordan is not statistically significant.

Table 7
Results of the First Hypothesis Test

Variables	(B)	Standard Error	T	Sig (T)
Company Size	0.167	0.017	10.135	0.000
Board Size	0.081	0.025	3.224	0.002
Regression Coefficient	-1.023	0.100	-10.206	0.000
R²	0.354			
F	53.899			
Sig (F)	0.000			

Given that the result ($F=53.899$) having a significant threshold ($\text{Sig}F=0.000$) is less than 0.05, Table 7 clearly shows the importance of the model. Furthermore, with all other variables kept constant, the corresponding coefficient of determination value ($R^2=0.354$) shows that the variation in the independent variables accounts for around 35.4% of the total variance in (dividend distributions). The variable of business size has a correlation coefficient of 0.167, showing an important impact of the size of the firm on dividend distributions and a T-level significance threshold of less than 0.05 ($\text{Sig}T=0.000$). Consequently, the other hypothesis, which asserts that "company size has a statistically significant influence on the distribution of dividends in Jordanian public industrial companies at a significance level ($\alpha \leq 0.05$)," is accepted and the null hypothesis, H_{01} , is rejected. One reason for this outcome might be that a greater firm size reflects both its power in the market and its capacity to produce earnings. This increases its ability to pay dividends and draw in new buyers, thereby as investors often base their choice of investments on a company's dividend policy. In Jordanian private industrial enterprises, there is no statistically noteworthy impact of company age on dividend payouts at the threshold of significance ($\alpha \leq 0.05$).

Table 8
Results of the Second Hypothesis Test

Variables	(B)	Standard Error	T	Sig (T)
Company Age	0.547	0.142	3.836	0.000
Board Size	0.614	0.158	3.894	0.000
Regression Coefficient	-1.062	0.216	-4.910	0.000
R²	0.168			
F	19.906			
Sig (F)	0.000			

Table 8 makes the model's significance clear since the result ($F=19.906$) is less than 0.05 at a significance level ($\text{Sig}F=0.000$). Furthermore, the variation in the independent variables accounts for around 16.8% of the variance in the dividend distributions, according to the correlation of determination value ($R^2=0.168$). Using a T-level significance value ($\text{Sig}T=0.000$), that is less than 0.05, the value of the regression coefficient for the variable (company age) was (0.547), showing a significant influence of business age on dividend distributions. Consequently, the different hypothesis, which reads as follows, is accepted as well as the null hypothesis, H_{02} , is rejected.

There is a significant statistical impact at the level of significance ($\alpha \leq 0.05$) of the age of the company on the distribution of dividends in Jordanian commercial industrial companies.

One possible reason for this outcome might be that organizations with more extensive histories have been able to stabilize their cash flow and profitability, establishing a solid reputation in the marketplace. This encourages them to expand their quarterly dividend payout since it enables them to raise money and boost their financial resources at any moment. This result is consistent with research conducted by Arshad et al., (2013) that discovered a favorable correlation among dividend distribution as well as firm age.

In Jordanian public industrial enterprises, there's no statistically noteworthy impact of corporate profitability on dividend payments at a level of significance ($\alpha \leq 0.05$).

Table 9

Results of the Third Hypothesis Test

Variables	(B)	Standard Error	T	Sig (T)
Company Profitability	0.020	0.002	9.008	0.000
Board Size	0.546	0.159	3.506	0.001
Regression Coefficient	-0.133	0.139	-0.957	0.340
R²	0.339			
F	50.458			
Sig (F)	0.000			

Table 9 clearly shows the relevance of the model since the result ($F=50.458$) is less than 0.05 at a significance level ($\text{Sig}F=0.000$). Furthermore, the correlation coefficient of determination value ($R^2=0.339$) shows that the variation in the independent variables accounts for around 33.9% of the total variance in (dividend distributions). Using a T-level significance level ($\text{Sig}T=0.000$), which is less than 0.05, the value of the regression coefficient for the variable (business profitability) was (0.020), showing the significant impact of firm profitability on dividend distributions. Thus, the alternate theory, which reads, "There is a statistically significant impact of business profitability upon distributions of dividends within Jordanian public industrial companies at a significance level ($\alpha \leq 0.05$)," is accepted and the null hypothesis, H_{03} , is rejected. A possible explanation for this outcome is that a company's increased profitability raises its price on the market, which in turn improves the company's capacity to pay dividends and project a favorable image to potential investors, luring them to make an investment.

In the association between firm size as well as payouts of dividends in Jordanian public industrial enterprises, the amount of institutional ownership as a mean variable has no statistically significant influence at the level of significance ($\alpha \leq 0.05$).

Table 10

Results of the Fourth Hypothesis Test

Variables	(B)	Standard Error	T	Sig (T)
Company Size	0.046	0.036	1.285	0.200
Institutional Ownership	-0.900	0.381	-2.365	0.019
Company Size*Institutional Ownership	0.187	0.054	3.461	0.001
Board Size	0.129	0.028	4.632	0.000
Regression Coefficient	-0.450	0.234	-1.919	0.056
R²	0.387			
F	30.726			
Sig (F)	0.000			

Table 10, which displays the significance criterion of $\text{Sig}F=0.000$, indicates that the model is significant since the result ($F=30.726$) is smaller than 0.05. Moreover, the variation in the factors that are independent seems to account for around 38.7% of the overall variation in (dividend distributions), according to the coefficient of regression of determination ($R^2=0.387$). Regression coefficient value for the variable (enterprise size institutional ownership) was 0.187, indicating that the variables had a significant effect on reward distributions. At the threshold of significance T-level, this result remained less than 0.05 ($\text{Sig}T=0.001$). This indicates that the null hypothesis, H_{04} , is rejected and that the alternative hypothesis, "There was a statistically significant impact on institutional the ownership as a percentage of variable in the connection among the organization's size and the pattern of distribution during payments of dividends within Jordanian public industrial companies", was ultimately accepted.

This finding could be explained through the fact that institutionalized ownership of the firm leads to a greater level of agreement among shareholders about decisions about the amount of money to put towards the company's assets in order to maximize earnings and returns. Therefore, they are motivated to increase dividend payouts. Consistent with their findings, Nendi, (2013) and Shaheen & Ullah, (2018) found that corporate ownership had a significant positive impact on dividend disbursements. Consistent with their study results, Nendi, (2013) found a positive correlation between dividend distributions and ownership by institutions.

In the link between firm age as well as the distribution of dividends in Jordanian public industrial enterprises, corporate ownership being an average variable has no statistically significant influence at the level of statistical significance ($\alpha \leq 0.05$).

Table 11
Results of the Fifth Hypothesis Test

Variables	(B)	Standard Error	T	Sig (T)
Company Age	0.729	0.073	10.001	0.000
Institutional Ownership	1.286	0.277	4.640	0.000
Company Age*Institutional Ownership	-0.472	0.195	-2.418	0.017
Board Size	0.496	0.071	6.957	0.000
Regression Coefficient	-1.544	0.124	-12.428	0.000
R²	0.342			
F	25.325			
Sig (F)	0.000			

Table 11 makes the model's significance clear since the result ($F=25.325$) is less than 0.05 at a significance level ($SigF=0.000$). Furthermore, the regression coefficient of value determination ($R^2=0.342$) shows that the variation in the independent variables accounts for around 34.2% of the total variance in (dividend distributions). With a T-level significance value ($SigT=0.017$), that is less than 0.05, the value of the regression coefficient for the variable (company age institutional ownership) was (-0.472), showing the significant impact on the variables (company age institutional ownership) on the distributions of dividends. Consequently, the alternative hypothesis, which reads, "There was is a statistically significant effect of institutional investment as an average parameter in the connection between the age of the company as well as the distribution of dividends in Jordanian public manufacturing companies," is accepted and the null hypothesis, H_{05} , is rejected. A plausible reason for this outcome might be that firms with a longer history of operation and ownership by other organizations have a smaller dividend distribution rate. This is due to the fact that, unlike prospective investors, elder stockholders are steadier and less concerned about dividend distribution. Moreover, the primary objective of institutional investments in mature firms is usually to maintain the company's worth instead of generating dividend payments.

In Jordanian public industrial enterprises, the average variable of institutional ownership has no statistically significant impact on the link between company profitability as well as dividend payments at a level of significance ($\alpha \leq 0.05$).

Table 12
Results of the Sixth Hypothesis Test

Variables	(B)	Standard Error	T	Sig (T)
Company Profitability	0.005	0.005	1.037	0.301
Institutional Ownership	0.0496	0.085	5.856	0.000
Company Profitability*Institutional Ownership	0.023	0.008	2.781	0.006
Board Size	0.436	0.137	3.178	0.002
Regression Coefficient	-0.334	0.125	-2.661	0.008
R²	0.423			
F	35.812			
Sig (F)	0.000			

Table 12 clearly shows that the model's importance, as shown by the value ($F=35.812$) and the significance level ($SigF=0.000$), both of which have a value less than 0.05. Furthermore, the correlation coefficient of value determination ($R^2=0.423$) shows that the volatility in the variables that are independent may account for around 42.3% of the variation in the dividend distributions. With a level of significance value ($SigT=0.002$), that is less than 0.05, the value of the regression coefficient for the variable (company profitability institutional ownership) was (0.023), demonstrating the significant impact of the parameter (company profitability institutional possession) on dividend distributions. Consequently, the alternative hypothesis, which reads as follows, is accepted and the null hypothesis, H_{06} , is rejected:

But there is a statistically significant impact at the level of significance ($\alpha \leq 0.05$) of the presence of institutional ownership as a mean factor in the causal connection among business profitability as well as the distribution of dividends in Jordanian public industrial companies.

A plausible reason for this outcome might be that financial institutions often fund businesses that generate large or comparatively steady profits, that encourages management to grow and make investments to satisfy institutional demands by raising dispersed earnings. This finding is in line with research by Lahiri, (2019), who found that corporate ownership had an

effect on dividend distribution practices. It is not the same as the findings of research by Duhri & Diantimala (2018), which indicated that institutional ownership had a detrimental effect on the distribution of dividends ratios.

5. Conclusion and Recommendations

In order to examine this connection in light of the inclusion of the company's ownership variable as a regulating factor, this research set out to investigate the effects of separate variables encompassing business features (size, age, and profitability) upon the variable that is dependent, which is represented by profit distributions. To ascertain the nature of these factors across the population studied of Jordanian publicly traded industrial enterprises on the Amman Stock Exchange, the study was carried out (2016-2020). The following findings of the research were obtained by using techniques of descriptive analysis for the variables in question and the outcomes of hypothesis testing:

Earnings distributions in Jordanian openly traded industrial enterprises are influenced by the company's size. This effect suggests that larger companies distribute their profits to shareholders at a greater rate. Big businesses are more likely to share gains because they have greater financial resources as well as can take advantage of investment possibilities.

Profit distributions in publicly traded industrial enterprises in Jordan are also influenced by the years of existence of the company. This effect implies that organizations tend to deliver more earnings to shareholders as they become older. This might be explained by the fact that small businesses, as opposed to more established ones with a variety of financing sources and enough liquidity to meet their commitments and foster development, keep their earnings to finance their operations and growth.

Profit distributions in Jordanian publicly traded industrial enterprises are influenced by the profitability of the company. This impact suggests that greater profitability leads to larger shareholder profit distributions. Profits are often distributed by profitable businesses to provide a favorable picture of their financial success.

In Jordanian publicly traded industrial enterprises, the link among the size of the company and profit distributions is influenced by ownership by corporations as a moderating element. This effect implies that a greater degree of corporate ownership in businesses results in a broader range of commercial endeavors and investment activities because of the improved ability to track business performance. In consequence, this promotes a larger profit distribution to lessen agency issues.

In Jordanian publicly listed industrial enterprises, the link among company age and profit distributions is also influenced by corporate ownership as a moderating element. This effect suggests that larger profit distributions are the outcome of growing ownership by companies in more recent ventures. Conversely, research from earlier companies indicates that when there's corporate ownership, investors pay more attention to market capitalization than to distributed profits.

In Jordanian publicly traded industrial enterprises, the link between business profitability as well as profit distributions is influenced by ownership by corporations as a moderating element. This effect implies that more corporate ownership of businesses raises the profitability of such businesses by using their knowledge and skills to take advantage of resources that may be used to generate profits, hence boosting profit distributions.

Last but not least, profit distribution in Jordanian publicly traded industrial businesses are influenced by the board of directors' size as an indicator of control. This finding suggests that larger boards result in larger revenue distributions. By safeguarding the interests of minority shareholders and exerting more control over senior management, a bigger board's size always results in higher profit distributions. By limiting the flows that managers may use for their own gain, profit distribution serves to reduce tensions between managers and shareholders.

The link among corporate ownership, income distributions, as well as firm characteristics in the Jordanian manufacturing industry is better understood because of these studies. The findings have ramifications for regional corporate governance standards, investors, and legislators.

The study's conclusions lead the investigator to make several suggestions. First, while making judgements, Jordanian industrial businesses are encouraged to take into account all elements that affect profit distributions. By considering these variables, the administration will be able to make informed decisions about the distribution of earnings, guaranteeing openness and conformity with the wishes of shareholders.

Second, it is advised that Jordanian businesses focus on striking a balance between retention and profit distribution. Achieving this equilibrium may enhance their ability to grasp opportunities for investment while satisfying the demands of investors and shareholders. The companies should also make available to shareholders all pertinent aspects and variables pertaining to the distribution of profits policies. Future research needs to examine the connection between the traits of companies, the ownership arrangements, and how they distribute profits across different industries. Additional factors like business governance as the level of quality of external audits may be included in this research. Expanding the study scope may provide

a more thorough knowledge of the variables driving income distribution, in addition to regard to both financial and non-financial firm features in addition to extending the time.

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