



THE EFFECT OF FINANCIAL LEVERAGE ON DIVIDEND PAYOUT RATIO: AN APPLIED STUDY FOR INDUSTRIAL COMPANIES LISTED ON THE QATAR STOCK EXCHANGE

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| Article history: | Abstract: |
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| <p>Received: 6th August 2023 Accepted: 6th September 2023 Published: 6th October 2023</p> | <p>The current research aims to uncover the impact of financial leverage on the dividend payout ratio for a number of companies listed on the Qatar Stock Exchange and the extent to which the company's debt affects this ratio. To achieve the research objectives, the necessary data for the study variables were collected. These variables include financial leverage (the independent variable) according to the Debt Ratio (DR) index and the Debt-to-Equity Ratio (DER) index. The data for the Dividend Payout Ratio (DPR) were collected based on the ratio of dividends per share to earnings per share (DPS/EPS). This data was collected from the audited financial statements of industrial companies listed on the Qatar Stock Exchange for the period 2018-2022. The statistical program E-views 13 was used to test the research sample and validate the hypotheses. The research found, through the analysis of the study data, a statistically significant impact of the Debt Ratio (DR) index on the Dividend Payout Ratio (DPR). However, there was no statistically significant impact of the Debt-to-Equity Ratio (DER) index on the dividend payout ratio for the companies in the study sample. The research recommended the use of low-cost external financing tools, especially those compliant with Islamic principles. This is because Islamic external financing tools do not expose the companies in the research sample to the risk of financial distress.</p> |

Keywords: Financial Leverage, Dividend Payout Ratio, Debt Ratio and the Debt-to-Equity Ratio

INTRODUCTION:

Since Modigliani and Miller (MM) introduced the theory of capital structure irrelevance, stating that it does not affect the value of the company, dividend policy has become one of the most researched topics in financial economics. This theory suggests that the value of the company and the wealth of shareholders are unrelated to the company's capital structure decisions. In contrast, the Bird-in-Hand theory, named after the famous saying, 'A bird in the hand is worth two in the bush,' explains that investors prefer current dividends for their stocks, even if they are small, over capital or future dividends, even if they are large.

Numerous studies have addressed the topic of financial leverage and reached varying results regarding its impact on earnings per share and dividend per share. Additionally, research and studies have examined the effect of financial leverage on the dividend payout ratio due to the multitude of factors influencing this ratio. Many factors explored by scholars and researchers affect dividend policy, including liquidity, profitability, return on equity, return on investment, financial leverage, company size, sales

growth, and others. Therefore, the focus of our current research has been on the dividend payout ratio and its significant relationship with financial leverage, utilizing various financial leverage indicators.

CHAPTER ONE: THE METHODOLOGICAL FRAMEWORK OF THE STUDY AND PREVIOUS STUDIES

THE METHODOLOGICAL FRAMEWORK

FIRST: RESEARCH PROBLEM:

In the face of intense competition and increasing growth requirements, many companies have started financing their activities and projects through borrowing, which is known as financial leverage. Often, companies need additional capital to expand their operations and obtain this funding through debt to reduce financing costs. This leads to changes in the profit levels of companies, especially industrial companies, and subsequently affects the dividend payout ratio to shareholders.

The company's dividend distribution policy may lead to a conflict between management and shareholders. The reason for this lies in the



management's adoption of activities and projects that increase the risk of its investments due to its use of debt in its financing structure. The increasing use of debt leads to an increase in financial leverage, which poses risks to the company due to its increased obligations in paying interest, as well as an increase in the amount of debt owed to investors (lenders). This affects the company's ability to meet the shareholders' expectations, as it may not be able to raise the dividend payout ratio, which is something shareholders do not desire.

The number of theoretical and empirical studies on dividend policy has significantly increased, and it is necessary to reconsider dividend distribution because some important questions have remained unanswered. Consequently, determining a company's dividend distribution policy remains a subject of controversy and requires decision-makers' judgment. In addition, there is a consensus that no single factor influences the dividend payout ratio (Gill & et al., 2010:8). There are many factors that determine the dividend payout ratio, including, for example, return on assets, company size, company profitability, sales growth, and financial leverage. Analyzing the extent of debt's impact on dividend distributions is crucial.

In this context, the study problem is defined by raising the following question:

What is the impact that financial leverage can have on a company's dividend payout ratio?

SECOND: STUDY SIGNIFICANCE:

The significance of the current study lies in the importance of the variables it addresses. Researchers have varied in their opinions regarding the role of financial leverage in the dividend payout ratio, which can be summarized as follows:

1. This study aims to reveal the extent of the impact of debt usage by industrial companies listed on the Qatar Stock Exchange and its repercussions on the dividend payout ratio.
2. This study contributes to guiding the financial decisions of the researched companies' financial managers regarding the use of debt in the financing structure of industrial companies in a way that achieves better returns for the company's investors. They anticipate returns from their investments in the company, which are represented by the dividend payout ratio.
3. Shedding light on a crucial variable that directly affects financing costs, namely financial leverage, which in turn reflects on the dividend payout ratio.

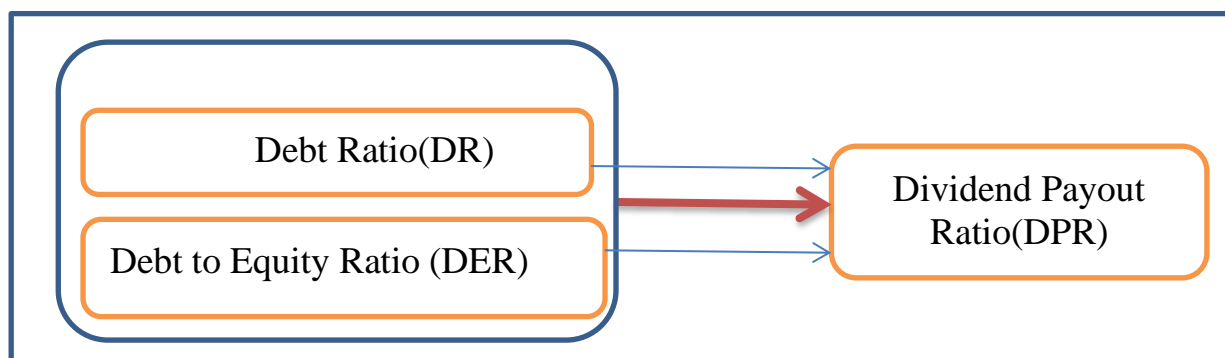
THIRD: STUDY OBJECTIVES:

In light of the study problem, the primary objective of the current study is to investigate the impact of financial leverage as an independent variable on the dividend payout ratio as a dependent variable, elucidating the nature of the relationship between these variables and quantifying the extent of that impact. Furthermore, the study aims to determine the variation in the dividend payout ratio according to the financial leverage indicators we will use in the research model, namely the Debt Ratio (DR) and the Debt-to-Equity Ratio (DER). Additionally, the study will address the concepts of financial leverage and dividend payout ratio.

FOURTH: STUDY FRAMEWORK:

The relationship between financial leverage and the dividend payout ratio can be illustrated through the following hypothetical framework:

Figure (1): The Hypothetical Study Framework



Source: Prepared by the researcher based on the assumed relationship

FIFTH: STUDY HYPOTHESES:



After addressing the study problem regarding the impact of financial leverage on the dividend payout ratio, the following hypotheses have been formulated:

- There is no significant effect between financial leverage according to index the Debt-to-Assets Ratio and the dividend payout ratio.
- There is no significant effect between financial leverage according to index the Debt-to-Equity Ratio and the dividend payout ratio.

SIXTH: STUDY POPULATION AND SAMPLE

The study population consists of companies listed on the Qatar Stock Exchange, with a focus on companies in the industrial sector for the period (2018-2022). Data for the research sample were collected from the financial statements of the selected companies and their annual reports. A sample of (10) companies was taken for the study, while other companies on this exchange were excluded to concentrate on financial leverage in industrial companies listed on this exchange and assess its impact on the dividend payout ratio.

SEVENTH: RELATED STUDIES

Study by Ozdagli (2012): Financial Leverage, Corporate Investment, and Stock Returns

This study aimed to rationalize financial leverage in the market, book leverage, market-to-book ratios, and stock returns across various underwriting portfolios to the market using a corporate finance model. The analytical model demonstrated that the tax discount on interest payments increases the ineffectiveness of investment and that the ineffectiveness of investment weakens the relationship between book-to-market value and returns. This provides a clear and novel mechanism illustrating how financial leverage affects stock returns. The study concluded that market leverage, rather than operating leverage, explains a significant portion of value addition.

Study by Al-Zubon and Khazaaleh (2015): The Impact of Financial Leverage, Operating Cash Flows, and Company Size on Dividend Distribution - An Empirical Study in Jordanian Commercial Banks for the Period (2000-2011)

This study aimed to measure the impact of financial leverage, operating cash flows, and company size on dividend distribution decisions in Jordanian commercial banks during the period (2000-2011). To achieve the study's objective, a multiple linear regression model was constructed to link the study variables. The study's results revealed a statistically significant positive impact of both bank size and bank profitability on dividend distribution in Jordanian commercial banks. On the other hand, there was a statistically

significant negative impact of financial leverage on dividend distribution in these banks. As for the remaining variables, they had no impact on dividend distributions.

Study by Al-Qurashi (2020): Determinants of Dividend Distribution Policy in Yemen Mobile Company

The aim of this study was to examine the determinants of dividend distribution policy in Yemen Mobile Company, one of the Yemeni telecommunications companies, during the time period (2008-2017). The independent variables in the study included company profitability, financial leverage, company growth, liquidity, asset structure, the previous year's dividend ratio, business risks, and company size, in addition to the tax ratio. The dependent variable was the dividend distribution policy. The study used the autoregressive distributed lag (ARDL) model to investigate the relationship between the independent and dependent variables. The study found a statistically significant negative impact of company profitability, company liquidity, and previous years' dividend distributions on the dividend distribution policy at Yemen Mobile Company. On the other hand, there was a statistically significant positive impact of financial leverage, company asset structure, and business risks on the dividend distribution policy at Yemen Mobile Company. However, the remaining variables had no impact on the dividend distribution policy.

Study by Arsyad & et al. (2021): The Effect of Activity Ratios, Liquidity, and Profitability on the Dividend Payout Ratio

This study aimed to highlight the importance of dividend distribution for investors' interests, as it is considered a crucial factor in retaining shareholders. Activity ratios, liquidity, and profitability in the consumer goods industry for companies listed on the Indonesia Stock Exchange for the period between 2015 and 2019 play a significant role in competing in the capital market. The results of this study, using multiple regression analysis, indicate that the return on investment has a positive and significant impact on the dividend payout ratio. This suggests that profitability is a positive signal for investors in the capital market regarding a company's dividend distribution policy.

Study by Adiputra (2021): The Influence of Profitability and Financial Leverage on Dividend Policy: Evidence from Manufacturing Industrial Companies in Indonesia

This study emphasizes the impact of profitability and financial leverage on the dividend policy of industrial



manufacturing companies listed on the Indonesia Stock Exchange from 2015 to 2019. The sample of this study consisted of 18 manufacturing companies selected purposively. The data of the companies were obtained from the official website of the Indonesia Stock Exchange, idx.co.id. Regression analysis was conducted with the assistance of E-Views program version 11. The results indicate that profitability does not have a significant impact on dividend policy, while financial leverage has a significant and positive impact on dividend policy.

Study by Okoye & et al. (2016): Effect of Financial Leverage on Dividend Policy of Quoted Conglomerates (2010-2015)

This study evaluated the impact of financial leverage on dividend policy for companies listed on the Nigerian Stock Exchange (NSE) from 2010 to December 31, 2015. Nine different sectors were selected for this study. Researchers used data obtained from annual reports and accounts of selected consumer goods companies in Nigeria. The relevant data were subjected to statistical analysis using STATA 13 program. The results of the study showed that financial leverage (short-term debt, long-term debt, and total debt) had a statistically significant impact on dividend policy in the sectors at a 5% level of significance.

Study by Malik & et al. (2013) - Factors influencing corporate dividend payout decisions of financial and non-financial firms.

This study examined the determinants of dividend policy for companies listed on the Karachi Stock Exchange, which is part of the KSE-100 index. It used data from 100 financial and non-financial companies during the period from 2007 to 2009. The study employed two models for companies that distribute dividends and companies that do not distribute dividends. The study found that liquidity, financial leverage, earnings per share, and firm size have a positive impact on dividend distributions. On the other hand, the results of the study revealed that growth opportunities reduce the likelihood of dividend distribution.

Chapter Two: Theoretical Framework of the Study

FINANCIAL LEVERAGE

refers to the proportion of debt used to finance a company's investments. As a company's debt increases, so do the risks faced by investors, leading them to seek higher returns on their investments (Fiscal & Steviny, 2015:14). As financial leverage increases, the amount of debt in the

company's capital structure also rises (Rayan, 2008:6). Companies that have debt in their capital structure are referred to as leveraged companies. There are several positive effects of financial leverage, including the tax shield on interest payments and lower capital costs compared to equity costs for some fixed expenses, such as fixed interest payments made by the company. Based on the financial leverage in its capital structure, a company's profits change, affecting its distribution policy (Singh, 2010:8).

Financial leverage is calculated according to the following formula: (Altemimi & et al. 2016:11):

$$FLR = (\text{total debt} / \text{total assets})$$

Leverage can potentially reduce the percentage of profits distributed to shareholders, and therefore, leverage can be used as a control tool to mitigate agency problems (Rizqia & Sumiati, 2013:121). However, increasing leverage can result in utilizing a source of financing with fixed interest in the hope of generating additional profits greater than these interest costs, thereby increasing the available profits for shareholders. Thus, using funds from fixed expenses can augment the income available to shareholders (Devi & et al., 2018:113). One of the most critical decisions facing managers is the ratio of distributing company profits to shareholders versus the proportion to be retained for reinvestment (Okoye & et al., 2016:124).

Cuong and Canh (2012) pointed out that the ideal debt ratio (total debt to total assets) should not exceed 59.27% because an increase in the debt ratio negatively impacts the company's value. Moreover, an excessive increase in financial leverage increases the chances of bankruptcy, which in turn undermines investor confidence (Obradovich & Gill, 2013:2). Additionally, financial leverage significantly affects the overall performance of companies (Enekwe & et al., 2014:18). The debt-to-equity ratio is a metric that reflects a company's financial leverage, explaining its ability to meet all its obligations. It's observed that companies with high financial leverage pay lower dividends to investors because the profits they generate are used to cover their obligations, negatively affecting dividend distribution (Fitri & et al., 2016:90), (Rafique, 2012:80).

Nelaeva and Semnov add that the importance of financial leverage is one of the key elements that reveal the risks and returns of the debt ratio to total assets, as it indicates the use of debt to invest in company assets. An increase in debt usage implies increased risks from obligations to creditors (Ta'is, 2023:460). Conversely, a decrease in



financial leverage leads to a reduction in the return rate and risk. Therefore, it is essential to consider the financial leverage ratio when making financing decisions within the company (Mazloom & Saeed, 2021:284).

Despite the returns that company owners receive from financial leverage, it carries a set of constraints, including the inability to meet obligations to lenders according to their maturity dates, which exposes the company to financial distress. Additionally, there are agency costs to lenders and their control over the company's performance within the agreements concluded between the parties.

THE DIVIDEND PAYOUT RATIO (DPR)

The decision regarding dividend distribution in companies is one of the most important financial decisions. It involves whether the company distributes dividends to its shareholders or retains these profits for reinvestment in new opportunities. Therefore, the company must consider choosing the appropriate dividend distribution policy that maximizes shareholder wealth (Mashkooor & Sadiq, 2019:377).

The dividend distribution policy is one of the most debated and significant issues for companies, as it has a significant impact on all of their investments (Raza & et al., 2018:34). Furthermore, dividend distribution is important to investors for the following reasons (Gill & et al., 2010:8).

- Stock dividends undoubtedly provide financial well-being for the company's investors.
- Stock dividends are attractive to investors who seek to secure a regular income.
- Dividend distributions help maintain the market value of their shares.

The stability of the dividend payout ratio in the company and its ability to increase this ratio send positive signals to investors about the expected future profits of the company. Furthermore, the leverage ratio is important for measuring the extent of the company's asset financing through debt, as an increase in this ratio increases the likelihood of the company's inability to meet its obligations. Therefore, debt should be invested wisely to achieve higher profits, thereby increasing the dividend payout ratio (Husna & Satria, 2019:50-51).

Regular and stable profits are considered a desirable policy by the management of most companies, and

shareholders also prefer this policy, valuing stable profits more than volatile ones, with other factors held constant. Stable profits can have a positive impact on share value, leading to consistent distributions to shareholders (Adeiza & et al., 2020:373). It is noteworthy that companies adopt different policies or ratios for dividend distribution due to several factors, resulting in variations in the findings of studies on dividend payout ratios (Malik & et al., 2013:36).

The dividend distribution policy has a highly significant impact because it has conflicting effects between the interests of the company and its shareholders. The company needs additional financing to improve its capital structure and foster growth. Simultaneously, the company is committed to providing greater prosperity for its shareholders through dividend distribution. A dividend distribution policy that strikes a balance between current dividend distributions and future company growth is considered an optimal policy (Fitri & et al., 2016:88). The dividend payout ratio is used instead of dividend yield and dividend per share for two reasons (Rafique, 2012:79):

- Dividend payout ratio takes into account both dividend yield and earnings per share.
- Dividend yield and earnings per share do not consider investors' income levels.

The dividend payout ratio can be measured using the following equation (Adeiza & et al., 2020:379)

$$\text{Dividend payout ratio (DPR)} = \frac{\text{Dividend Per Share (DPS)}}{\text{Earning Per Share (EPS)}}$$

It can also be measured using the following formula (Asmaul & Ibnu, 2019:53)

$$\text{Dividend payout ratio (DPR)} = \frac{\text{Shared dividend (SD)}}{\text{Earning after Tax (EAT)}}$$

The dividend payout ratio reflects the management's efficiency in utilizing its financial resources to generate profits, representing the past, present, and future state of the company. This is of particular interest to investors because they look at the company's history and base their expectations on receiving dividends if they invest in the company (Khan & Ashraf, 2014:391).

There are a set of determinants that both positively and negatively influence the dividend payout ratio, in addition to financial leverage and other variables, which include (Gill & Tibrewala, 2010:9-10).

| Factors | Impact |
|----------------------------|---------------|
| 1- Corporate Profitability | + |
| 2- Cash Flow | + |
| 3- Tax | - |
| 4- Sales Growth | + |



| | |
|-------------------------|---|
| 5- Market-to-Book Value | + |
|-------------------------|---|

Furthermore,(Qasim 2015: 84-85) adds other determinants such as:

- 6- Retained earnings
- 7- Earnings stability
- 8- Shareholder preferences

Chapter Three: The Practical Framework of the Study

Our current study focuses on elucidating the impact of financial leverage on the dividend payout ratio. We chose the Qatar Stock Exchange for the efficiency of this market in the Arabian Gulf region, and we sampled industrial companies listed on this exchange. We will analyze the data for these companies, which were obtained from the reports and annual publications released by this exchange for the period (2018-2022). The selected indicators for the independent variable (financial leverage) were the Debt Ratio (DR) and the Debt-to-Equity Ratio (DER), with the dependent variable being the Dividend Payout Ratio (DPR).

1- DATA COLLECTION

We collected data for the researched industrial companies from the Qatar Stock Exchange (QSI) database, which contains information about the companies under investigation and listed on this market. We utilized the financial reports available in this market's database, as well as annual reports summarizing the performance of these companies during the period (2018-2022). The official website of the Qatar Stock Exchange (QSI) at the following link: <https://www.qe.com.qa/ar/> was also used as a source of data.

The number of industrial companies listed on the Qatar Stock Exchange, or the Doha Securities Market, is ten (10) industrial companies. We collected data for the variables of the research model to begin its application. The annual reports for each industrial company in this market were identified for a period of five years. The following table illustrates the names of the researched companies on this exchange:

Table (1) Companies

| | Corporate Name | Corporate Symbol |
|----|---|-------------------------|
| 1 | Estithmar Holding | IGRD |
| 2 | AAMAL | AHCS |
| 3 | Qatar National Cement Company | QNCD |
| 4 | Qatari Industrial Transformation Industries Company | QIMD |
| 5 | Gulf International Services | GISS |
| 6 | Qatari Investors Group | QIGD |
| 7 | Industries Qatar | IQCD |
| 8 | Qatar Aluminum Manufacturing Company | QAMC |
| 9 | National Water and Electricity Company | QEWS |
| 10 | Mesaieed Petrochemicals Holding Company | MPHC |

Source: Compiled by the researcher based on company reports.

2- STUDY VARIABLES AND MEASUREMENT INDICATORS

After reviewing the financial reports of the researched companies and assessing the availability of the required data for the research, the study identified three variables: total liabilities, total assets, and total net equity, to calculate financial leverage ratios as an independent variable. These ratios are represented by the formula (Total Liabilities / Total Assets) to determine the Debt Ratio (DR) as the first independent variable. This ratio indicates the extent to which the researched companies utilize debt in their asset investment. It is one of the most commonly used indicators of financial leverage because it measures

the extent of a company's reliance on external funds (Al-Dabbagh & Moeen, 2022: 553).

Additionally, (Total Debt / Equity) (D/E) is calculated to find the Debt-to-Equity Ratio as the second independent variable. This ratio indicates the extent to which a company relies on debt compared to equity in its capital structure.

Data for net income and the number of issued shares were determined to calculate Earnings per Share (EPS), represented by (Net Income / Number of Issued Shares). Subsequently, Dividend per Share (DPS) was determined by dividing the total dividends by the number of issued shares. This ratio is represented by (Total Dividends / Number of Issued



Shares). Then, the Payout Ratio (DPR), which is the dependent variable, was calculated by dividing Dividend per Share (DPS) by Earnings per Share (EPS).

The calculation of these research variables is summarized in the equations in Table (2) below:

The Table (2) Equations for Calculating Variable Values

| | |
|-----------------------------|---|
| Independent variable | $DR = (\text{Total Liabilities} / \text{Total assets})$ |
| Independent variable | $DER = (\text{Total debt} / \text{Equity})$ |
| Dependent variable | $DPR = \text{Dividend Per Shsre} / \text{Earning Per Sher}$ |

The Source: The table was prepared by the researcher based on theoretical literature

3- DESCRIPTIVE ANALYSIS OF STUDY VARIABLES"

To analyze the financial indicators related to the leverage variables as independent variables, the researcher used two indices: Debt Ratio (DR) and

Debt-to-Equity Ratio (DER). Meanwhile, the researcher employed the Dividend Payout Ratio (DPR) index to measure the dependent variable. Through reviewing the data and utilizing the E-views 13 program , the following descriptive statistics were obtained.

A- FOR THE DEBT RATIO (DR) INDEX:

Table (3) Debt Ratio

| Descriptive Statistics | | | | | |
|----------------------------------|----|---------|---------|-------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Total Liabilities / Total Assets | 50 | .000 | 1.00 | .2804 | .23684 |

The Source: Compiled by the researcher using E-views 13 program

From the observation of Table (3), the lowest value for the Debt Ratio index (Total Liabilities to Total Assets) was (0.000) for Qatar Aluminum Industries, indicating that the company does not utilize borrowed funds in its investment structure compared to the industry average of (0.280) with a standard deviation of (0.236). This suggests that the company relies on

its equity rather than debt financing when executing its investments. On the other hand, the highest value for this index (1) was recorded for Qatar Industries, which is higher than the industry average mentioned above. This implies that Qatar Industries adopts external financing for its investments instead of relying on its internal funds.

B- AS FOR THE DEBT-TO-EQUITY RATIO (DER) INDEX:

Table (4) Debt Equity Ratio

| Descriptive Statistics | | | | | |
|------------------------|----|---------|---------|-------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| Debt / Equity | 50 | 0.006 | 6.420 | 0.645 | 1.241 |

The Source: Compiled by the researcher using E-views 13 program

From the observation of Table (3), the lowest value for the Debt Ratio index (Total Liabilities to Total Assets) was (0.000) for Qatar Aluminum Industries, indicating that the company does not utilize borrowed funds in its investment structure compared to the industry average of (0.280) with a standard deviation of (0.236). This suggests that the company relies on its equity rather than debt financing when executing its investments. On the other hand, the highest value for this index (1) was recorded for Qatar Industries, which is higher than the industry average mentioned

above. This implies that Qatar Industries adopts external financing for its investments instead of relying on its internal funds.

C- TO ANALYZE THE FINANCIAL INDICATORS RELATED TO THE DIVIDEND PAYOUT RATIO (DPR) AS THE DEPENDENT VARIABLE

The researcher utilized the index of Cash Dividend per Share (DPS) to Earnings per Share (EPS), and the following descriptive statistics were obtained:

Table (5) Dividend Payout Ratio

| Descriptive Statistics | | | | | |
|------------------------|--|--|--|--|--|
|------------------------|--|--|--|--|--|



| | N | Minimum | Maximum | Mean | Std. Deviation |
|-----|----|---------|---------|-------|----------------|
| DPR | 50 | 0.00 | 4.75 | 0.739 | 0.752 |

The Source: Compiled by the researcher using E-views 13 program

From the observation of Table (5), the lowest value for the Dividend Payout Ratio index (DPS / EPS) was (0.007) for Gulf International Company in 2018. This indicates that the company's dividend distribution ratio was very low compared to the industry average of (0.739) with a standard deviation of (0.752). On the other hand, the highest value for this index (4.75) was recorded for the same company in 2022, which is significantly higher than the industry average mentioned above. This suggests that Gulf International Company has a highly variable dividend distribution policy, as indicated by the high standard deviation.

4- STUDY TEST RESULTS

The researcher used a set of tests in the E-views 13 program to verify the research hypotheses, and the results of the tests are as follows:

A - Test of Cross-Sectional Data Stationary:

We infer through unit root tests (Levin, Lin, and Chu-LLC) and the Im, Pesaran, and Shin (IPS) test whether the included variables do not possess stability and suffer from unit roots. In this case, we accept the null hypothesis ($H_0=0$) and reject the alternative hypothesis. Conversely, if the variables do not have unit roots and are stable, we accept the alternative hypothesis ($H_1=1$) and reject the null hypothesis. We can observe the results of these tests in Table (6), where all variables have stabilized at the Level and First Difference (1) levels:

Table (6) Panel Unit Root Tests

| Panel unit root test | | | | | |
|----------------------|----------------|----------------------|--------|------------------------------|--------|
| Variables | | Levin, Lin & Chu t | | I'm , Pesaram and Shin (IPS) | |
| | | Individual Intercept | | Individual Intercept | |
| | | t-Statistic | Prob. | t-Statisti | Prob. |
| DPR | Level | -4.76543 | 0.0065 | -4.9653 | 0.0000 |
| | 1st Difference | -8.65432 | 0.0043 | -8.1273 | 0.0004 |
| D/A | Level | 2.76547- | 0.0098 | -6.9984 | 0.0000 |
| | 1st Difference | 6.46404 | 0.0023 | -2.5432 | 0.0002 |
| D/E | Level | -442071 | 0.0002 | -2.8873 | 0.0000 |
| | 1st Difference | -2.43899 | 0.0032 | -6.8283 | 0.0000 |

The Source: Compiled by the researcher using E-views 13 program

B - Estimating the Impact of Financial Leverage on Dividend Payout Ratio Using the Dynamic Panel Analysis Model in the Pooled Mean Group (PMG) - PANEL ARDL Samples

In this step, we will estimate the impact of financial leverage on the dividend payout ratio using the PANEL ARDL method. Table (7) illustrates this, as follows:

Table (7) Results of Estimating the Impact of Financial Leverage on the Dividend Payout Ratio

| Dependent Variable: D(DPR_DPS_EPS) | | | | |
|---|-------------|------------|-------------|--------|
| Method: ARDL | | | | |
| Sample: 2019 2022 | | | | |
| Included observations: 40 | | | | |
| Number of cross-sections: 10 | | | | |
| Max. dependent lags: 1 (Fixed) | | | | |
| Fixed-lag linear repressors: D_A D_E | | | | |
| Deterministic: Restricted constant and no trend (Case 2) | | | | |
| Selected model: PMG(1,0,0) | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| Long-run (Pooled) Coefficients | | | | |
| D/A | 0.82722 | 0.263511 | 3.139231 | 0.0033 |
| D/E | -0.18315 | 0.106602 | -1.718081 | 0.0941 |
| C | 0.66397 | 0.086408 | 7.684167 | 3.5452 |



| Short-run (Mean-Group) Coefficients | | | | |
|-------------------------------------|-----------------|-----------------|------------------|---------------|
| COINTEQ | -0.75003 | 0.196820 | -3.810783 | 0.0004 |
| Log-Likelihood: | -22.5092 | | | |

The Source: Compiled by the researcher using E-views 13 program

The results from Table (7) above reveal the following:

- 1- There is a statistically significant positive impact between the Debt-to-Assets Ratio (D/A) as an independent variable and the Dividend Payout Ratio (DPR) as a dependent variable. This means that there is a positive relationship between the Debt-to-Assets Ratio (D/A) and the Dividend Payout Ratio (DPR), and at a significance level of (0.0033). This implies that a one-unit change in (D/A) leads to a change of (0.82722) units in (DPR), while keeping other factors constant.
- 2- There is a negative impact between the Debt-to-Equity Ratio (D/E) as an independent variable and the Dividend Payout Ratio (DPR) as a dependent variable. This indicates an inverse relationship between the Debt-to-Equity Ratio (D/E) and the Dividend Payout Ratio (DPR), and the significance level is (0.0941). However, this relationship is not statistically significant, meaning that a one-unit change in (D/E) leads to a very slight change of (-0.18315) units in (DPR), while keeping other factors constant.
- 3- The results in the table show that the Error Correction Coefficient has a negative sign of 0.75003, and this value is statistically significant with a probability value of (0.0004), which is less than (0.05). This indicates that the first condition has been met, and this value suggests that (75%) of short-term errors can be corrected within the time unit represented here by the year, to return to the long-term equilibrium state.

5- DISCUSSION OF THE RESULTS AND VERIFICATION OF STUDY HYPOTHESES

After analyzing the test results we conducted, we observe that:

- The presence of a statistically significant positive impact between the Debt-to-Assets Ratio and the Dividend Payout Ratio implies that the use of external

funds by industrial companies in their investment structure enhances the dividend payout ratio of these companies to shareholders. This leads to an increase in earnings per share, which is positively related to the dividend payout ratio, as confirmed by the results of the PANEL ARDL test in Table (7). Consequently, we reject the first null hypothesis of the study (There is no significant effect between financial leverage according to index the Debt-to-Assets Ratio and the dividend payout ratio) and accept the alternative hypothesis, which is:

There is significant effect between financial leverage according to index the Debt-to-Assets Ratio and the dividend payout ratio.

- The results of this test also indicate that there is no statistically significant effect between the Debt-to-Equity Ratio and the Dividend Payout Ratio. In other words, there is no difference in dividend distribution among the sampled companies, whether they are financed by debt or equity. Cash flow from debt financing, in comparison to equity financing, does not influence the dividend payout ratio. In this case, we accept the second null hypothesis of the study

There is no significant effect between financial leverage according to index the Debt-to-Equity Ratio and the dividend payout ratio.

- To determine the extent of the impact of financial leverage on the Dividend Payout Ratio (DPR) based on the Debt-to-Assets Ratio (D/A) or the Debt Ratio (DR), and based on the Debt-to-Equity Ratio (D/E) or the Debt-to-Equity Ratio (DER) and to confirm the theoretical



model of the study, the regression equation becomes as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e \quad \text{OR} \quad Y = \alpha + \beta_1 \text{DR} + \beta_2 \text{DER} + e$$

Where:

Y=Dividend Per Ratio(DPR)= Dependent variable of companies

α = Constant

$\beta = \beta_1, \beta_2$ =Regression Coefficient

X_1 =Debt Ratio(DR), X_2 =Debt/Equity Ratio(DER) = Independent variable of companies

e = Error

According to the results in Table (7), the extent of this impact can be determined as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

$$\text{DPR} = 0.66 + 0.82(\text{DR}) + (-0.18)(\text{DER}) + (-0.75)$$

In other words, a one-unit change in the Debt Ratio (DR) leads to a change in the Dividend Payout Ratio (DPR) by approximately 0.82, while a one-unit change in the Debt-to-Equity Ratio (DER) results in a very small change of approximately -0.18 in the Dividend Payout Ratio.

6- CONCLUSIONS AND RECOMMENDATIONS

A- CONCLUSIONS

In light of the study's findings and the empirical tests conducted, the following conclusions can be drawn:

There is an impact of the company's use of external financing that enhances the management's ability to make decisions to increase the dividend payout ratio by reinvesting this financing in its financial assets, which positively reflects on the shareholders' wealth. This is in line with the study by Adiputra (2021) and the study by Okaye et al. (2016). However, dividend distribution decisions for company management are not affected by leverage compared to the size of self-financing for the study's sample companies. This is because the companies did not utilize their funds to generate higher profits due to the high cost of self-financing.

It is noteworthy that the study's sample companies rely on financing their activities through issuing new shares with high costs instead of utilizing low-cost borrowed financing

B- RECOMMENDATIONS:

The researcher recommends that the companies in the study sample use low-cost external financing tools, especially those compliant with Islamic

principles. Islamic financing tools do not expose the sample companies to the risk of financial distress due to their lower costs, in addition to helping companies achieve better returns compared to high-interest financing tools, which may lead to pressure on company management to reduce the dividend payout ratio (DPR) due to increased interest expenses. This is not desired by the investors in the study sample companies.

Company management in the study sample is advised to adopt a dividend distribution policy based on highly effective financial performance indicators to determine the optimal dividend distribution ratio. This contributes to maximizing the value of companies and benefiting shareholders, owners, and all stakeholders.

We recommend that companies utilize external financing due to the confirmed tax savings it provides, which reflects on company profits and consequently the dividend payout ratio. This maximizes the expected return compared to the cost of that return.

Furthermore, the researcher encourages other researchers to explore sectors other than the industrial sector to obtain additional insights that contribute to expanding knowledge in scientific research.

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