

The Role of Profitability on Dividend Policy in Property and Real Estate Registered Subsector Company in Indonesia

Andri Panahatan Siahaan¹, Djoko Hanantijo²

^{1,2}Post Graduate Program in Management, Perbanas Institute, Jakarta, Indonesia



Abstract – Nowadays, the company's dividend payout policy is the subject of much analysis and debate among financial practitioners. In the business phenomenon that occurs, there are several factors influence the company in carrying out its dividend policy, including financial performance. The company's financial performance reflected in financial ratios, such as leverage and firm size. The purpose of this study was to determine the role of profitability on dividend policy in listed property and real estate sub-sector companies in Indonesia for the period 2012 - 2019. Furthermore, the focus of this study is to examine profitability in mediating the effect of leverage and firm size on company dividend policy. The research method in this study uses a quantitative approach. The data were processed and analyzed statistically using Eviews v.10 software. The main results in this study reveal that profitability mediates the effect of leverage and firm size on dividend policy positively and significantly. Contribution of the results of this study to company management as input for developing dividend policies to safeguard shareholders' wealth by considering the company's profits and the benefits of investing for shareholders.

Keywords – *Dividend Policy, Firm Size, Leverage, Profitability.*

I. INTRODUCTION

In the current globalization era, the necessities of life have increased. So, this has caused inflation where prices have increased every year. There are several ways that people can do to increase their income, one of which is an investment. One form of investment that is in great demand by investors is "Stock." The stock traded on the capital market and the capital market is a funding facility provided by the government for companies. According to Parvez et al.[1], the capital market is a market for sharing long-term tradable financial instruments (securities), in the form of bonds (bonds), equity (stocks), mutual funds, and other instruments issued by the government, public authorities, and companies. private.

In activities in the capital market, investors expect their investment, namely in the form of capital gains and

dividends. Dividend policy has a significant meaning for a company because dividend policy has an impact on the funding program, capital budget of a company and is related to the source of financing for the company's operational activities[2].

It is necessary to make the right dividend policy so that the interests between the company and shareholders can be in line. The company's dividend policy can illustrate in the Dividend Payout Ratio (DPR), which is the percentage of profit distributed in the form of cash dividends distributed to shareholders. Of the various business sectors in Indonesia, the property and real estate sector has become one of the business sectors that has experienced very significant fluctuations in dividend payments over the past six years. Based on this business phenomenon, several factors influence the company in implementing its dividend policy, including external factors and financial performance[3]. There are several

financial ratios in this study. These financial ratios include leverage, firm size.

Leverage describes how much of a company's assets are financed by debt. In this study, the leverage indicator used is the Debt to Equity Ratio (DER), which is a ratio that measures how much the company financed by debt. The Firm size(FS) is the size of the company is determined by total sales[4]. The size of the company is also one of the factors that investors consider before investing. Firm size can have a positive and significant effect on dividend policy[5],[6]. However, company size also may not have a significant effect on dividend policy[7]. Profitability is the profit the company gets through the company's sales activities(Kasmir, 2017). In this study, profitability measured the ratio of Return On Equity (ROE). Return On Equity is information about the extent to which the company can achieve profit or profit by using its capital[8].

There have been several previous studies related to dividend policy in several countries. Research on Nigerian Listed Firms by Kajola[6], the results state that profitability, company size, leverage have a significant effect on dividend policy.. A study based on evidence from MENA stock markets in Morocco by Jabbouri[9] revealed that firm size, and profitability have a significant effect on dividend policy, then but the leverage has negatives effects significantly on dividend policy. A study related to the determinants of dividend policy of Banks in Ghana by Marfo-yiadom and Agyei[10] stated that profitability, collateral capacity, changes in dividend payout, leverage, growth, age of firm have a significant effect on dividend policy. In another study by Odum and Odum[11], the results of his research stated that long-term leverage, company age, and profitability have a significant positive effect on dividend policy.

The aims of this study to investigate the role of profitability on dividend policy in property and real estate registered subsector companies in Indonesia. The main focus to be achieved in this study, especially to examine the profitability in mediating the effect of leverage and firm size on dividend policy of the companies.

As a result, contributions from this study can provide insight and understanding for financial practitioner's financial managers, finance directors, and shareholders in managing the company's dividend policy, specifically in property and real estate registered subsector companies in Indonesia. This research model using profitability as a mediating variable that developed is the novelty of this study.

II. MATERIAL AND METHODS

Signaling Theory[12] shows the existence of information asymmetry between managers and shareholders. This theory state that a signal is an action taken by a company to guide investors on how management views the company's prospects.

2.1 Dividend Policy

Dividend policy is the issue of interest in financial literature since many years. Much work has been done on this by many experts[13]. The behavior of dividend policy is the most contentious issue in the corporate finance literature and still keeps its prominent place both in developing and emerging markets[8]. In this study, Dividend policy is a decision whether the profits earned by the company will be distributed to shareholders as dividends or will be retained in retained earnings for investment financing in the future.

$$DPR = \frac{DPS}{EPS} \times 100\% \quad (1)$$

Dividend policy is one of the most debated issues in contemporary corporate finance[14].

2.2 Leverage

Leverage ratio consist of financial leverage and operations leverage[8]. Debt to Equity Ratio (DER) is a ratio used to calculate the value of debt to equity.

$$DER = \frac{Total\ Debt}{Total\ Equity} \times 100\% \quad (2)$$

Financial leverage used to calculate the financial leverage of a company to get an idea of the company's methods of financing or to measure its ability to meet financial obligations and operations leverage used to measure a company's mix of operating costs, giving an idea of how changes in output will affect operating income[8].

2.3 Firm Size

Firm size or company size is a description of the company, the size of the company with services. Company size is a measure of the size of a company that is shown or seen by total assets, total sales, total profit, tax expense, and others. Firm size formulated with the following formula:

$$firm\ size = \ln. total\ sales \quad (3)$$

Related to firm size, then the larger the size of the firm, it is expected to have the ability to generate greater profits so that it can pay higher dividends than smaller firms[7].

2.4 Profitability

Profitability is the ratio to assess the company's ability to seek profit. Profitability as measured by the extent to which the company can generate profits from the results of the company's operations[15].

$$ROE = \frac{EAT}{Total\ Equity} \times 100\% \quad (4)$$

This ratio also provides a measure of the level of management effectiveness of a company. This is addressed by the profit generated from sales and investment income.

2.5 Research Model

The proposed research model is shown in Figure 1. The research model has three independent variables (leverage, firm size, liquidity), one dependent variable (dividend policy), and one intervening variable (profitability). Besides, profitability is a mediating variable, which is a special variable as a novelty in this research. Hypotheses of the effect of the mediating variables (H_8 , H_9 , and H_{10}) are also novelties in this study.

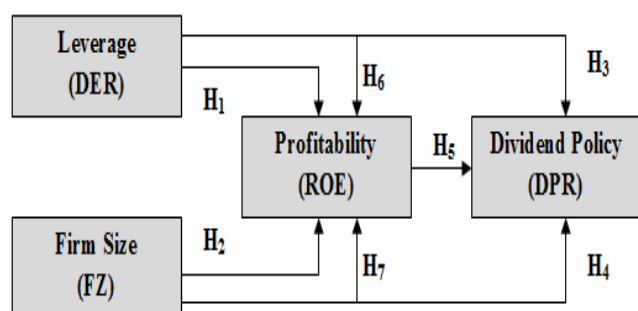


Figure 1. Research Model

2.6 Hypothesis Development

Companies that have a large total capital ratio will be able to finance all operational activities, to generate profit great for the company. Research results from Kartikasari & Merianti[16] dan Singapurwoko & Wahid[17] stated that leverage has a significant effect on profitability. Based on the results of that study, the proposed hypothesis is as follows:

H₁: *Leverage has a positive and significant effect on profitability*

1. The company that owns large sales will be able to generate a large profit. The results of the research of Isik et al.[18] and studies from Singapurwoko & Wahid[17] stated

that firm size has a significant effect on profitability. Thus, it can be expressed the development of the hypothesis:

H₂: *Firm size has a positive and significant effect on profitability.*

2. The optimal level of debt will be reached when the company can manage debt to finance its operating activities. The more value of the debt to equity ratio indicates that the company's capital structure is increasingly utilizing debt to equity. Research results from Odum[11]; Mehta[2]; Malik[3]; Nerviana[7]; Kajola[6]; Marfo-yiadom[10]; Komrattanapanya and Suntraruk[19] state that leverage has a significant effect on dividend policy. Thus, it can be expressed the development of the hypothesis:

H₃: *Leverage has a positive and significant effect on dividend policy.*

Firm size plays a role in explaining the ratio of dividend payments within the company because the firm has a large size considered more capable of paying dividends than the firm the small one. Research results from Mehta[2]; Hossain et al.[5]; Ihejirika & Nwakanma[20]; Malik[3]; Ahmad & Wardani[8]; Kajola[6]; Baah[14]; Komrattanapanya & Suntraruk[19]; Hashemi[4]; Jabbouri[9] states that company size has a positive and significant effect on dividend policy.

H₄: *Firm size has a positive and significant effect on dividend policy*

The greater it is the profit the company gets, the will greater the opportunity for the company will distribute large dividends to shareholders. Research results from Odum[11]; Finingsih et al.[15]; Kajola[6]; Marfo-yiadom & Agyei[10] states that profitability affects dividend policy. Thus, it can be expressed the development of the hypothesis:

H₅: *Profitability has a positive and significant effect on dividend policy*

Komrattanapanya and Suntraruk[19] state that leverage has a significant effect on dividend policy. And, the research results from Kajola[6] and Marfo-yiadom & Agyei[10] state that profitability affects dividend policy. Thus, it can be expressed the development of the hypothesis:

H₆: *Profitability mediates the effect of leverage on dividend policy positively and significantly.*

The results of the research of Isik et al.[18] and from Singapurwoko & Wahid[17] stated that firm size has a significant effect on profitability.

3. On the other hand, research results from Odum[11] states that profitability affects dividend policy. Thus, it can be expressed the development of the hypothesis:

H7: *Profitability mediates the effect of firm size on dividend policy positively and significantly*

2.7 Sample and Data Collection Method

In this research, the required data collection uses literature study techniques and secondary data from the official website of the Indonesia Stock Exchange. The population used in this study adalah perusahaan properti dan real estate yang terdaftar secara berturut - turut di Bursa Efek Indonesia periode 2012 sd. 2019, totaling 42 companies. Purposive sampling is a sampling technique used in this study by using criteria or considerations.

The criteria or sampling considerations used are: (1) Property and real estate companies listed consecutively on the Indonesia Stock Exchange for the period 2012 to. 2019, (2) Property and real estate companies that did not delist from 2012 to 2019, (3) Property and real estate companies that did not record a loss for the 2012-2019 period, (4) Property and real estate companies that consistently pay out cash dividends for the 2012-2019 period. Based on the criteria already mentioned, the sample of financial data comes from 4 companies that meet the predetermined criteria, or nearly 60 percent of the total population.

2.8 Data Analysis Method

The data analysis conducted in this study was econometric analysis and multivariate analysis[21]. The econometric analysis can use to analyze economic phenomena, while multivariate analysis can define as an analytical technique used to examine the relationship between various variables. Data processing analysis in this study using the Eviews v.10 software program. The Eviews program is a multivariate and econometric data analysis software that is quite well known for processing various types of data such as cross-sections, time-series, and panels.

III. RESULT AND DISCUSSION

3.1 The Result of Model Testing

The multiple regression analysis (MRA) used to demonstrate the economic trend of a transitory economy[22]. Analysis of the model testing in this study uses Moderated Regression Analysis (MRA) with the dependent variables, namely: Dividend Policy (DPR) and the independent variables are Leverage (DER), Firm Size(FS), and the mediating variable Profitability (ROE).

Data processing in this study uses the program Eviews (Econometric Views) 10 for Windows.

Table 1 Regression Equation-1

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-22.40467	16.04349	-1.396496	0.1748
DER	-1.276901	3.134111	-0.407420	0.6872
FS	8.908476	5.099339	1.746986	0.0929

Based on Table 1., the regression equation-1 obtained, as follows:

$$ROE = -1.276901DER + 8.908476FZ + \varepsilon_1 \quad (1)$$

Table 2 Regression Equation-2

Variable	Coefficient	Std. Error	T-Statistic	Prob
C	36.79062	13.37907	2.749864	0.0112
DER	0.037836	0.071929	0.526021	0.6037
FS	0.383711	0.356637	1.075913	0.2927
ROE	-1.100819	0.356686	-3.086241	0.0051

Based on Table 2., the moderation regression equation-2 obtained, as follows:

$$DPR = 0.037836DER + 0.383711FS - 1.100819ROE + \varepsilon_2 \quad (2)$$

Model testing by using the Classical Assumption Test, namely: Multicollinearity and Heteroscedasticity.

(1) Multicollinearity Test.

This test aims to test whether in the regression model there is a high or perfect correlation between the independent variables.

Table 3 Multicollinearity Test Results

	DER	FS
DER	1.000000	-0.135447
FS	-0.135447	1.000000

From the output above in Table 2, it can be seen that there is no problem in terms of multicollinearity. So it can be concluded that the regression model in this study does not occur multicollinearity and the regression model is suitable for use.

(2) Heteroscedasticity Test.

The heteroscedasticity test aims to test whether the regression model has inequality of variance from residuals or observations to other observations.

Table 4 Heteroscedasticity Test Results

Variable	Coeffisien t	Std.Erro r	T- Statistic	Prob.
C	-22.40467	16.04349	- 1.39649 6	0.174 8
LOG(DER)	-1.276901	3.134111	- 0.40742 0	0.687 2
LOG(FS)	8.908476	5.099339	1.74698 6	0.092 9

From the output above, it is known that there is no heteroscedasticity problem. The probability of producing a value smaller than the level of significance ($\alpha = 5\%$ or 0.05). Then, it means that the residual stated to have a homogeneous variety. Thus the assumption of the absence of heteroscedasticity in the model is fulfilled.

Panel data or pooled data is data that has a combination of two elements, namely time series and cross-sectional. Regression using panel data is called a panel data regression model. According to Shyti and Valera[22], to estimate model parameters using panel data, there are three techniques (models), namely: Fixed Effects, Common Effects, and Random Effects. There are three tests carried out to decide which model to use, namely the Chow test, Hausman test, and Lagrange Multiplier test. This study used the Hausman test.

The Hausman test this test conducted to determine which fixed effect model or random effect model is suitable for use in this study.

Table 5 Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Probability
Cross-section random	60.484411	3	0.0000

From the output above, the probability value of random cross-section is 0.0000, where the probability value is smaller than the alpha value $\alpha = 0.05$. From these results, it concluded that the right model for panel data regression is the Fixed Effect Model.

3.2 The Result of Hypothesis Testing

Hypothesis testing able to used determine whether there is an influence of the independent variables partially (individually) or simultaneously (together) on the dependent variable.

(1) Feasibility test (F-test)

Based on the output table, the value of the probability (F-statistic) is 0.00000, where the P-value is smaller than the error rate value $\alpha = 5\%$ or 0.05. This suggests that the regression model is feasible to use to explain the relationship between variables.

(2) Parsial Test (T-Test)

Partial Testing able to use to test hypotheses about whether there is a partial influence of the independent variable on the dependent variable. The test criteria stated that if the probability value is $<$ level of significance ($\alpha = 5\%$ or 0.05), it revealed that the effect of the independent variable on the dependent variable partially is declared.

The results of hypothesis testing in this study, which are based on statistical data, are shown in Table 6.

Table 6 Hypothesis Test Results

Hypothesis	Coeffisient	Std.Error	t- Statistic	Prob
DER→ROE	0.12023	0.03238	3.71331	0.0010
FS→ROE	0.45347	0.17823	2.54415	0.0017
DER→DPR	0.03783	0.00719	0.52602	0.6037
FS→DPR	0.38371	0.35664	1.07591	0.2927
ROE→DPR	0.32008	0.35669	3.08624	0.0015
DER→ROE→DPR	0.03848	0.01155	2.14601	0.0021
FS→ROE→DPR	0.14515	0.00636	2,76357	0.0042

H₁: Leverage (DER) has a positive and significant effect on profitability(ROE)

The leverage (DER) coefficient value is 0.12023, the T-statistic value =3.71331 (> 1.96), and the P-Value is 0.0010 (< 0.05). The results are in line with research results from Kartikasari & Merianti[16] and Singapurwoko & Wahid[17].

H₂: Firm size(FS) has a positive and significant effect on profitability(ROE)

The firm siza (FZ) coefficient value is 0.453437, the T-statistic value =2.54415 (> 1.96), and the P-Value is 0.0017 (< 0.05). The results are in line with research results from Isik et al.[18] and studies from Singapurwoko & Wahid[17].

H3: Leverage (DER) has no positive and significant effect on dividend policy (DPR)

The leverage (DER) coefficient value is **0.03783**, the T-statistic value = **0.52602** (< 1.96), and the P-Value is **0.6037** (> 0.05). The results are not in line with research results from Odum[11], Mehta[2], Malik[3], Nerviana[7], Kajola[6], Marfo-yiadom[10], Komrattanapanya and Suntraruk[20].

H4: Firm size (FS) has no positive and significant effect on dividend policy (DPR)

The firm size (FS) coefficient value is **0.38371**, the T-statistic value = **1.07591** (< 1.96), and the P-Value is **0.2927** (> 0.05). The results are not in line with research results from Mehta[2], Hossain et al.[5], Ihejirika & Nwakanma[20], Malik[3], Ahmad & Wardani[8], Kajola[6], Baah[14], Komrattanapanya & Suntraruk[19], Hashemi[4], and Jabbouri[9].

H5: Profitability (ROE) has a positive and significant effect on dividend policy (DPR)

The profitability (ROE) coefficient value is **1.10082**, the T-statistic value = **3.08624** (> 1.96), and the P-Value is **0.0015** (< 0.05). The results are in line with research results from Odum[11]; Finingsih et al.[15]; Kajola[6]; Marfo-yiadom & Agyei[10].

H6: Profitability (ROE) can positively and significantly mediate the effect of leverage (DER) on dividend policy (DPR).

Beta coefficient value = **0.12023** x **0.32008** = **0.03848** (> 0.03783), the T-statistic value = **2.14601** (> 1.96), and the P-Value is **0.0021** (< 0.05). This hypothesis with the mediating variable is a novelty of this research.

H7: Profitability (ROE) can positively and significantly mediate the effect of firm size (FS) on dividend policy (DPR)

Coefficient value = **0.45347** x **0.32008** = **0.14515** (> 0.38371), the T-statistic value = **2.76357** (> 1.96), and the P-Value is **0.0042** (< 0.05). This hypothesis with the mediating variable and also this main finding is a novelty of this research.

3.3 Discussion

This study is to investigate the role of profitability on dividend policy in property and real estate registered subsector companies in Indonesia. There have been several previous studies related to dividend policy in several countries. Research on Nigerian listed firms by Kajola[6], a

study based on evidence from MENA stock markets in Morocco by Jabbouri[9], a study related to the determinants of dividend policy of banks in Ghana by Marfo-yiadom and Agyei[10], and another study by Odum and Odum[11] dividend policy study in Nigeria. Economic growth conditions are different in each country, causing the results of studies related to Dividend Policy in each resulting country to be different.

Based on model testing, the regression model in this study does not occur multicollinearity, and the regression model is suitable for use. Using Heteroscedasticity testing, the regression models have homogeneous variety. Thus the assumption of the absence of heteroscedasticity in the model is fulfilled. Furthermore, the regression models have no autocorrelation, and the normality assumption had fulfilled. From Hausman Test Results, it concluded that the right model for panel data regression is the Fixed Effect Model[22].

The results of hypothesis testing menunjukkan bahwa Leverage (DER) has a positive and significant effect on profitability (ROE). This results are in line with research results from Kartikasari & Merianti[16] and Singapurwoko & Wahid[17]. Firm size (FS) has a positive and significant effect on profitability (ROE). This results are in line with research results from Isik et al.[18] and studies from Singapurwoko & Wahid[17]. Leverage (DER) has no positive and significant effect on dividend policy (DPR). The results are not in line with research results from Odum[11], Mehta[2], Malik[3], Nerviana[7], Kajola[6], Marfo-yiadom[10], Komrattanapanya and Suntraruk[20]. Firm size (FS) has no positive and significant effect on dividend policy (DPR). The results are not in line with research results from Mehta[2], Hossain et al.[5], Ihejirika & Nwakanma[20], Malik[3], Ahmad & Wardani[8], Kajola[6], Baah[14], Komrattanapanya & Suntraruk[19], Hashemi[4], and also study from Jabbouri[9]. Profitability (ROE) has a positive and significant effect on dividend policy (DPR). The results are in line with research results from Odum[11]; Finingsih et al.[15]; Kajola[6]; Marfo-yiadom & Agyei[10].

Profitability (ROE) can positively and significantly mediate the effect of leverage (DER) on dividend policy (DPR). And, Profitability (ROE) can positively and significantly mediate the effect of firm size (FS) on dividend policy (DPR).

Profitability is a mediating variable, and both findings of this hypothesis are the novelty of this study.

3.4 Implications

There are several implications of this study which may be relevant for managers and scientific research for working capital management.

First, the results of this study have managerial implications that managers must be able to manage working capital properly by paying attention to financial constraints. Second, theoretically, the findings of this study have broad implications regarding the relevance of dividend policy through control over profitability.

3.5 Limitations

This study still has several limitations. Firstly, the subjects in this study only examined companies in the property and real estate sector listed on the Indonesia Stock Exchange. Secondly, the financial data reports had collected from 2012 - 2019. Thirdly, the limitations of the sample and data make it possible that the study results are not representative.

IV. CONCLUSION

In summary, the main results in this study reveal that profitability has a significant role in dividend policy in property and real estate registered subsector companies in Indonesia..

Firstly, profitability (ROE) can positively and significantly mediate the effect of leverage (DER) on dividend policy (DPR). An increase in the percentage of profit will increase the company's chances of financing operational activities and paying its obligations, including paying dividends to shareholders.

Secondly, profitability (ROE) can positively and significantly mediate the effect of firm size (FZ) on dividend policy (DPR). Companies with a large size that have a large percentage of profitability have much access to the capital market so that they have the opportunity to get capital and the availability of large funds to finance all operational activities, plan company expansion and pay dividends.

Finally, this study reveals that leverage (DER) and firm size (FS) do not have any influence on dividend policy (DPR) without profitability (ROE).

This study can make contributions to management companies as input for developing dividend policies for the sake of safeguard the wealth of the shareholders by deciding the right proportion taking into account the company's profits and profits investing for shareholders.

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REFERENCES

- [1] S. M. A. Parvez, A. S. M. Sarwar, R. Hoq, and M. R. Chowdhury, "Capital Market: Opportunities and Challenges," *Sch. J. Econ. , Bus. Manag.*, no. February, 2017.
- [2] A. Mehta, "An Empirical Analysis of Determinants of Dividend Policy - Evidence from the UAE Companies," *Glob. Rev. Account. Financ.*, vol. 3, no. 1, pp. 18–31, 2012.
- [3] F. Malik, S. Gul, M. Khan, and S. Rehman, "Factors influencing corporate dividend payout decisions of financial and non-financial firms," *Res. J. Financ. Account.*, vol. 4, no. 1, pp. 35–47, 2013.
- [4] S. A. Hashemi and F. Z. K. Zadeh, "The Impact of Financial Leverage Operating Cash Flow and Size of Company on The Dividend Policy (Case study of Iran)," *Interdiscip. J. Contemp. Res. Bus.*, vol. 3, no. 2009, pp. 264–270, 2012.
- [5] F. Hossain, R. Sheikh, and S. M. Akterujjaman, "Impact of Firm Specific Factors on Cash Dividend Payment Decisions: Evidence from Bangladesh," *Int. Rev. Bus. Res. Pap.*, vol. 10, no. 2, pp. 62–80, 2014.
- [6] S. O. Kajola, A. A. Desu, and T. F. Agbanike, "Factors Influencing Dividend Payout Policy Decisions of Nigerian Listed Firms," *Int. J. Econ. Commer. Manag.*, vol. 3, no. 6, pp. 539–557, 2015.
- [7] R. Nerviana, "The Effect of Financial ratios and Company size on Dividend policy," *Indones. Account. Rev.*, vol. 5, no. 1, p. 23, 2016.
- [8] G. N. Ahmad and V. K. Wardani, "The Effect of Fundamental Factor To Dividend Policy: Evidence in Indonesia Stock Exchange," *Int. J. Bus. Commer.*, vol. 4, no. 02, pp. 14–25, 2014.
- [9] I. Jabbouri, "Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets," *Res. Int. Bus. Financ.*, vol. 37, pp. 283–298, 2016.
- [10] E. Marfo-Yiadom and S. K. Agyei, "Determinants of dividend policy of banks in Ghana," *Int. Res. J. Financ. Econ.*, vol. 61, no. January 2011, pp. 99–108, 2011.
- [11] A. N. Odum and C. G. Odum, "International Digital Organization for Scientific Research IDOSR," *Idosr J.*

- Sci. Technol.*, vol. 3, no. 1, pp. 37–46, 2018.
- [12] B. L. Connelly, S. T. Certo, R. D. Ireland, and C. R. Reutzel, “Signaling Theory: A Review and Assessment,” *J. Manage.*, vol. 37, no. 1, pp. 39–67, 2011.
- [13] M. Asad and S. Yousaf, “Impact of Leverage on Dividend Payment Behavior of Pakistani Manufacturing Firms,” *Int. J. Innov. Appl. Stud.*, vol. 6, no. 2, pp. 216–221, 2014.
- [14] B. K. Baah, “Industry Sector Determinants of Dividend Policy and Its Effect on Share Price in Ghana,” *Int. J. Econ. Bus. Financ.*, vol. 2, no. 5, pp. 1–19, 2014.
- [15] O. Finingsih, S. Nurlaela, and K. H. Titisari, “The Influence of Profitability , Liquidity , Leverage , and Company Abstract :,” vol. 2018, no. 2017, pp. 427–437, 2018.
- [16] D. Kartikasari and M. Merianti, “The effect of leverage and firm size to profitability of public manufacturing companies in Indonesia,” *Int. J. Econ. Financ. Issues*, vol. 6, no. 2, pp. 409–413, 2016.
- [17] A. Singapurwoko and M. S. M. El-Wahid, “The impact of financial leverage to profitability study of non-financial companies listed in Indonesia stock exchange,” *Eur. J. Econ. Financ. Adm. Sci.*, vol. 32, no. 32, pp. 136–148, 2011.
- [18] E. Aydın Unal, Y. Unal, and O. Isık, “the Effect of Firm Size on Profitability: Evidence From Turkish Manufacturing Sector,” *Pressacademia*, vol. 6, no. 4, pp. 301–308, 2017.
- [19] P. Komrattanapanya and P. Suntraruk, “Factors Influencing Dividend Payout in Thailand: A Tobit Regression Analysis,” *Int. J. Account. Financ. Report.*, vol. 3, no. 2, p. 255, 2014.
- [20] P. O. Ihejirika and P. C. Nwakanma, “An Empirical Analysis of the Propensity to Pay or Not to Pay Dividends: A Test of the Life Cycle Theory with Nigerian Data,” *Oman Chapter Arab. J. Bus. Manag. Rev.*, vol. 1, no. 12, pp. 74–87, 2012.
- [21] J. W. Creswell and J. D. Creswell, *Research Design*, 5th Editi. London, United Kingdom: SAGE Publication, Inc, 2017.
- [22] B. Shyti and D. Valera, “The Regression Model for the Statistical Analysis of Albanian Economy,” *Int. J. Math. Trends Technol.*, vol. 62, no. 2, pp. 90–96, 2018.