

RELATIONSHIP BETWEEN CAPITAL STRUCTUR FACTORS AND FIRM PERFORMANCE

Rizaldi Yusfiarto

Faculty of Islamic Economics and Business, Islamic State University of Sunan Kalijaga, Yogyakarta, Indonesia rizaldi.yusfiarto@uin-suka.ac.id

Abstract

Measurement of firm performance becomes very important for management to evaluate and planning for future goals. Several factors can affect firm performance, including profitability, ownership structure, and company size. For that this study aims to examine effect of profitability, ownership structure, company size on firm performance with capital structure as an intervening variable. Data obtained during period 2016-2018 from manufacturing companies listed on Indonesia Stock Exchange. The results in this study indicate profitability, ownership structure and firm size simultaneously (together) affect capital structure. Profitability, ownership structure, firm size, and capital structure simultaneously (together) affect firm's performance.

Keywords: Profitability, ownership structure, firm size, capital structure, firm performance

INTRODUCTION

Measurement of firm performance becomes very important for management to evaluate company's performance and planning for future goals. This is done to achieve efficiency and effectiveness in all company business processes. Matters relating to performance of each company can be known from various sources of information. (Hull, 2002) explains that information and a description of financial development or company performance can be obtained by holding an interpretation of financial statements, i.e. connecting elements in statements (Gray, Matear, & Matheson, 2002). Success of a company's performance can be seen from Return on Equity (ROE) owned by company. So far, there has been a lot of research on ROE because ROE is an important thing and is considered by many parties, both investors and creditors who influence ROE in investing their capital. According to Brigham and (Muange & Maru, 2015) firm performance is measured by ROE because it reflects influence of all other ratios that can provide information to shareholders on company's ability to make a profit. Several factors can affect company performance, including profitability, ownership structure, and company size (El-Sayed Ebaid, 2009).



According to (Qoyum, Mutmainah, Setyono, & Qizam, 2017) profitability is ability of a company to generate profits at a certain level of sales, assets, and share capital. (Nur, Ela, & Qoyum, 2019) defines profitability to what extent company generates profits from company's sales and investment. If profitability is good, stakeholders consisting of employees and management, creditors, suppliers, surrounding communities, companies, governments, and shareholders will see extent to which company can generate profits from sales and investment companies (Qizam, Ardiansyah, & Qoyum, 2017). In research conducted by (Kyissima, Xue, Yapatake Kossele, & Abeid, 2019; Qashou & Saleh, 2018) profitability has a positive effect on company performance, because high profitability values indicate that company performance is increasing and it is estimated that company has good prospects. Profitability achieved by managers is of concern to shareholders in capital market. Shareholders certainly want a good manager's performance, but there are times when managers take action in interest. Differences in interests of managers and shareholders are called agency conflicts. This agency conflict causes a decline in company performance so that supervision of management behaviour is carried out by shareholders (Jensen, Marshall, & Pugh, 2006).

Ownership structure is one way to reduce conflicts that exist in a company (Shyu, 2013) relationship between management ownership and company performance because it can affect investors' perceptions of company, and ownership will have a positive impact on company performance because, by increasing ownership of company's management, control on management activities will increase so that each activity and decision will be maximized. This was proven by (Kyereboah-Coleman & Biekpe, 2007; Shyu, 2013; Tunyi, 2019), which states that ownership structure significantly positively influences company performance. In contrast to results of research conducted by (Pacheco, 2019) which states otherwise that there is no significant influence of ownership structure on company performance. Size of a firm describes size of business in terms of field of business that is run. Determination of size of company can be determined based on total sales, total assets, average sales level (Al-Najjar & Hussainey, 2011). Large size companies have greater and wider access to external funding sources, so getting loans will be easier because it is said that large size companies have a greater chance of winning a competition or surviving in industry (Hermuningsih, 2014). Size of company can affect performance of company because larger a size or scale of company, easier it will be to obtain funding sources that are internal or external. (Mcnamee, Greenan, & Mcferran, 1999) research (Jean & Kim, 2019) found that company size had a positive effect on company performance. But (Kyissima et al., 2019), (Farooq, 2015) found that there was no influence of company size on company performance.

Besides, this study also examines capital structure, which is used as an intervening variable between independent variable and dependent variable. Capital structure is permanent financing consisting of long-term debt, preferred shares, and shareholder capital. Capital structure can also be interpreted as a comparison or balance of company's long-term debt funding, as indicated by ratio of long-term debt to equity (Al-Najjar & Hussainey, 2011). To improve company's



high capital performance, according to (Farooq, 2015), decision to choose source of funds used will affect capital structure. Several factors can affect capital structure, including profitability, ownership structure and company size. The results of research conducted by (El-Sayed Ebaid, 2009) show that profitability has a negative and significant effect on capital structure. This finding is consistent with results of a previous study conducted by (Qoyum et al., 2017) stating that higher level of profitability of a company, lower level of debt because it already has sufficient internal funds to fund its investment. The results of (Shyu, 2013) managerial ownership have a negative and significant effect on capital structure, and this indicates that companies whose shares are partly owned by management tend to be cautious in using debt policy, so increasing management ownership by management will reduce amount of debt. In financial aspect, sales can be seen from planning side, and realization side measured in rupiah. In planning side, sales are reflected in form of targets that are expected to be realized by company (Gray et al., 2002). Companies with a larger size to obtain loans from creditors will be easier because companies with large sizes have a greater probability to win competition or survive in industry (Gray et al., 2002; Schellhorn & Sharma, 2013).

On the other hand, small-scale companies are more flexible in dealing with uncertainty because small companies react more quickly to sudden changes. Therefore, large companies can have greater levels of leverage than smaller companies. This is in line with research by (Muange & Maru, 2015) which states that company size has a positive effect on capital structure. Based on capital structure theory, if position of capital structure is above optimal capital structure target, then any additional debt will reduce value of company. Capital structure is key to improving company productivity and performance (Pacheco, 2019). Research from (Müller & Neubaeumer, 2018) which shows positive influence of capital structure on company performance. However, (Shyu, 2013; Singh, Kumar, & Singh, 2018; Wilson, 1977) stated that there is a negative relationship between capital structure and company performance. This study aims to examine effect of profitability, ownership structure, company size on company performance with capital structure as an intervening variable in manufacturing companies listed on Indonesia Stock Exchange.

LITERATURE REVIEW

Firm Performance and Profitability

Firm performance is ability of a firm to manage existing resources so that it can measure level of efficiency and productivity of company. Besides that, company's performance evaluation is useful to find out extent of development of a company. According to (El-Sayed Ebaid, 2009)) company performance is measured by return on equity (ROE) because it reflects influence of all other ratios that can provide information to shareholders on company's ability to make a profit. Profitability ratios are ratios to assess a company's ability to seek profits (Gray et al., 2002). This is shown by profits generated from sales and investment income. Companies that have high profitability use retained earnings to fund company activities. Thus, companies use low debt. Low debt usage, risk of bankruptcy is low. In line with theory of Pecking Order Theory, which states companies prefer



to use sources of funds from within or internal funding rather than external funding. Internal funds are obtained from retained earnings generated from company's operational activities. According to (Qoyum et al., 2017) in general, there are four main types of analysis used to assess level of profitability, namely profit margins, return on assets (ROA), and return on equity (ROE).

Ownership Structure and Firm Size

The ownership structure is a comparison between number of shares owned by an insider and number of shares owned by an investor. Management ownership is percentage of share ownership by management of board commissioners and directors who also take managerial ownership decisions is managerial ownership, amount of which can be calculated from a certain period in percentage units (Farooq, 2015). Management ownership aligns interests between management and shareholders so that manager will directly feel all results of manager's decision. In other words, managers join companies that do not take opportunistic decisions in debt policy by increasing amount of debt. Managers will try to reduce agency costs and will improve company performance. According to (Kyereboah-Coleman & Biekpe, 2007) states size of company describes size of company. Size of business in terms of field of business that is run. Determination of size of company can be determined based on total sales, total assets or total equity. Large size of company will present a positive signal to investors or creditors to invest their capital in company, causing use of external funds to increase. (Muange & Maru, 2015) revealed that large companies would tend to be more diversified and risk of bankruptcy will be greater, besides that financial difficulties will below

Capital Structure

According to (El-Sayed Ebaid, 2009) states that capital structure is a balance of amount of short-term debt that is permanent, long-term debt, preferred shares and ordinary shares. Capital structure decisions include selection of sources of funds both from their capital and foreign capital in form of debt. These funds are external, which can affect company performance (Al-Najjar & Hussainey, 2011). Every change in capital structure will affect overall cost of capital, and this is because each type of capital has its capital costs. Besides, capital structure theory is considered important because magnitude of this overall capital cost, will later be used as a cut of rate on investment decision returns. According to (El-Sayed Ebaid, 2009; Kyissima et al., 2019; Qoyum et al., 2017; Schellhorn & Sharma, 2013) theories regarding capital structure consist:

- 1. Trade-off Theory
 - The theory of balance (trade-off theory) is a counterweight to benefits and sacrifices that arise as a result of use of debt. If benefits generated are greater, portion of debt can be added. Based on this theory, company seeks to maintain structure of capital that is targeted to maximize market value.
- 2. Pecking Order Theory
 According to pecking order theory, financial managers do not consider optimal level of debt. Investment needs to determine funding requirements. If there is



an investment opportunity, company will look for funds to fund investment needs.

3. Signaling Theory

Signaling theory (signaling theory) is based on idea of managers who have good information about trying to convey that information to outside investors so that company's stock price increases. According to (Kyissima et al., 2019) shows that a good company performance can signal a high portion of debt in its capital structure. Companies with poor performance will not dare to use large amounts of debt because bankruptcy will be high.

4. Agency Theory

Agency theory emphasizes importance of company owners (shareholders) giving up management of company to professionals called agents who are more understanding in running their daily business. Purpose of separating management from company ownership is, so that company owners get maximum possible profit at most cost as possible by managing company by professionals. (El-Sayed Ebaid, 2009).

RESEARCH METHODS Data

Population in this study is manufacturing companies listed on Indonesia Stock Exchange in 2016-2018 period. Population is 149 registered manufacturing companies in a row from 2014-2016. Sampling technique of this research is purposive sampling method, following sampling criteria: companies that provide financial reports in rupiah and experience profits (positive profits) in succession between 2016-2018. Operational definitions of variables can be seen in Table 1 below:

Table 1 Operational Variable

No	Variable	Definition	Measurement
1	Firm Performance (ROE)	Comparison of total net income compared to equity and expressed as a percentage (%)	$\frac{\text{Net Profit}}{\text{Equity}} \times 100\%$
2	Profitability (NPM)	Comparison of net profit after tax compared to net sales and expressed in percentage (%)	$\frac{\text{Net Profit after Tax}}{\text{Sales}} \times 100\%$
3	Ownership Structure	Comparison between number of shares owned by management and number of shares in company	$\frac{\text{Management Shares}}{\text{Total Shares}} \times 100\%$
4	Firm Size	Size of company is defined as a scale of classification of size of a company	Size = Ln Total Asset



Capital Structure Comparison of total debt to equity and expressed as a percentage (%)	$\frac{\text{Debt Amount}}{\text{Equity}} \times 100\%$
--	---

Data Analysis

The analytical method used is as follows:

1. Descriptive Statistics

Descriptive statistics used are mean (mean), standard deviation, variance, frequency distribution, minimum and maximum values and standard deviations (Masnidar Nasution, 2017)

2. Classical Assumption Test

In this classic assumption test, analysis model used will produce an unbiased estimator if it fulfils some of classic assumptions as follows (Supriyadi, Mariani, & Sugiman, 2017):

a. Normality Tests

Test residual normality using one-sample Kolmogorov-Smirnov test was used. Residual data are normally distributed if significance of Kolmogorov Smirnov test is> 0.05.

b. Multicollinearity Test

Multicollinearity test in regression model can be seen from value of tolerance (tolerance value) and value of Variance Inflation Factor (VIF). Cut-off value commonly used to indicate presence of multicollinearity is a tolerance value ≤ 0.10 or equal to a VIF value ≥ 10 .

c. Autocorrelation Test

Autocorrelation symptoms can be identified using Durbin-Watson (D-W) test. Decision making in absence of autocorrelation is if DW value is between -2 to 2.

d. Heteroscedasticity Test

The way to find out whether there is heteroscedasticity is to use Glejser Test. Glejser proposes to regress absolute value of residuals to independent variables. If probability is significant > 0.05, regression model does not occur heteroscedasticity.

3. Multiple Linear Regression Analysis

The multiple linear regression equation is as follows:

Equation 1:
$$M = a + \beta 1X1 + \beta 2X2 + \beta 3X3 + e1$$

Equation 2:
$$Y = a + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4M + e^2$$

Explanation:

Y = Company Performance

a = Constant

 β_1 , β_2 , β_3 , β_4 = Regression Coefficient

X1 = Profitability

X2 = Ownership structure

X3 = Size



M = Capital structure

e = Error

4. Hypothesis test

a. Determination Coefficient Test (R2)

The coefficient of determination (R2) basically measures how far model's ability to explain variation of dependent variable.

b. F statistical test (test F)

F statistical test shows whether independent variable has a simultaneous influence on dependent variable and measures whether regression model can predict relationship between independent variable and dependent variable. Simultaneous testing is done by comparing significant level of F of test results with significance value used, which is 0.05 (Yusfiarto & Pambekti, 2020).

c. Partial Test (t-test)

t-test aims to determine magnitude of influence each independent variable individually on dependent. Then it was formulated hypothesis testing as follows:

1) Hypothesis 1

Ho: $\beta 1 \ge 0$: Profitability has no negative effect on capital structure

Ha: $\beta 1 < 0$: Profitability has a negative effect on capital structure

2) Hypothesis 2

Ho: β2 ≥ 0: OS has no negative effect on capital structure

Ha: $\beta_2 < 0$: OS negatively influences structure capital

3) Hypothesis 3

Ho: β 3 \leq 0: Firm size has no positive effect on capital structure

Ha: β 3 > 0: Firm size has a positive effect on capital structure

4) Hypothesis 4

Ho: $\beta 4 \le 0$: Profitability has no positive effect on firm performance

Ha: $\beta 4 > 0$: Profitability has a positive effect on firm performance

5) Hypothesis 5

Ho: $\beta 5 \le 0$: OS has no positive effect on firm performance

Ha: $\beta 5 > 0$: OS has a positive effect on firm performance

6) Hypothesis 6

Ho: $\beta 6 \le 0$: Firm size has no positive effect on firm performance

Ha: $\beta 6 > 0$: Firm size has a positive effect on firm performance

7) Hypothesis 7

Ho: β 7 \leq 0: Capital structure has no positive effect on firm performance

Ha: $\beta 7 > 0$: Capital structure has a positive effect on firm performance

5. Intervening Effect Test

Testing mediation hypothesis (intervening) can be done with a procedure developed by Sobel (1982) and known as Sobel Test (Masnidar Nasution, 2017; Supriyadi et al., 2017). Sobel test is carried out by testing strength of indirect effect of independent variable (X) on dependent variable (Y) through intervening variable (M). The indirect effect of X to Y through M is calculated



by multiplying path $X \to M$ (a) by the path $M \to Y$ (b) or ab. So, coefficient ab = (c - c1), where c is the effect of X on Y without controlling M, while c1 is the coefficient of effect X on Y after controlling M. Standard error coefficients a and b are written with Sa and Sb, the magnitude of standard error is not directly (indirect effect) Sat calculated by the following formula:

Sab = b2Sa2 + a2Sb2 + Sa2Sb2

RESULT

The population used in this study is manufacturing companies listed on Indonesia Stock Exchange (IDX) in 2016-2018 period. Company sampling in this study was conducted with a purposive sampling technique, which is a sampling technique with certain considerations or criteria. Based on sample selection process. Eighty-one data obtained during period 2016-2018, but some data are subject to problem of classic assumption test so that researchers conduct casewise diagnostics. In regression equation one does not pass heteroscedasticity test, so sample data becomes 70, and in regression equation two, data is not normal, so the sample data becomes 77. Descriptive statistical results of two regression equations can be seen in table 2 and table 3 below:

Table 2
Descriptive Statistics of First Equation

		1		1	
	N	Minimum	Maximum	Mean	Std. Deviation
Capital Structure	70	7.929344704	122.1773191	61.46155646	32.91898863
Profitability	70	0.340126306	23.52052635	7.695581398	5.073046306
Structure Ownership	70	0.000576789	33.58130488	7.489612751	9.375791186
Firm Size	70	25.61948306	33.19881203	28.4226639	2.079412103
Valid N (listwise)	70				

Source: Data processed, 2019

Table 3
Descriptive Statistics of Second Equation

		1		1	
	N	Minimum	Maximum	Mean	Std. Deviation
Firm Performance	77	0.100870179	31.76234223	9.861232243	6.116433232
Profitability	77	0.116529833	35.71908622	7.201475116	5.740687916
Structure	77	0.000576789	33.58130488	6.958892806	9.254173375
Ownership	11	0.000576769	33.30130400	0.930092000	9.204173373
Firm Size	77	25.61948306	33.19881203	28.38254105	2.022194086
Capital Structure	77	7.929344704	171.9017757	65.62756614	39.61320404
Valid N (listwise)	77				

Source: Data processed, 2019

Determine accuracy of regression model. It is necessary to test several classic assumptions underlying the regression model. Based on normality test with Kolmogorov-Smirnov One-Sample test, equations 1 and 2 indicate that data are normally distributed as indicated by significance values greater than 0.05 (5 %). Based on multicollinearity test using Tolerance value and its opposite Variance Inflation Factor (VIF) equations 1 and 2 show that tolerance values> 0.10 and VIF <10, it can be concluded that regression model is free of multicollinearity. Based on autocorrelation test by doing Durbin-Watson test (DW test) that



equations 1 and 2 are free from autocorrelation because DW numbers between -2 to +2 mean there is no autocorrelation. Based on heteroscedasticity test using Glejser test that equations 1 and 2 did not occur heteroscedasticity because significance value> 0.05.

Table 4
Determination Test Results Equations 1 and 2

	Model Summary b							
	First Equation Second Equation							
Model	Model R R Square Adjusted R Square R R Square Adjusted R Square							
1	1 .733 ^a .533 .512 .764 ^a .584 .565							
a. Predictors: (Constant), Firm Size, Profitability, Ownership Structure								
b. Dependent Variable: Capital Structure								

Source: Data processed, 2019

Based on table 4, first equation obtained by Adjusted R Square shows that magnitude of simultaneous contribution of profitability, ownership structure, and company size is 0.502 or 50.2% and remaining 49.8% is influenced by other factors outside research variable namely liquidity ratios and growth company. In second equation, obtained by Adjusted R Square shows that amount of contribution in simultaneous from profitability, ownership structure, company size, and capital structure is 0.566 or 56.6% and remaining 43.4% is influenced by other factors outside research variable namely liquidity ratio, corporate growth, and corporate governance.

Hypothesis test

Testing is done by looking at significance value of F and comparing significance value of F and comparing value of F calculate with F table if significance value is smaller than 0.05 and F count> F table then first equation shows that simultaneous profitability, ownership structure, and company size affect capital structure. And second equation shows that simultaneous profitability, ownership structure, company size and capital structure affect company performance.

Table 5
First Equation t Test Results

		1						
Coefficients ^a								
Model	Unstandardize	ts	Standa	rdized Coe	efficients			
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	4.612	47.607		.097	.923		
	Profitability	-3.725	.582	.574	-6,406	.000		
	Ownership Structure	-1.781	.364	507	-4.894	.000		
	Firm Size	3.478	1.633	.220	2.130	.037		
Depende	Dependent Variable: Capital Structure							

Source: Data processed, 2019

Table 5 shows results of testing each independent variable on dependent variable. It can be seen that profitability, ownership structure, and company size influence capital structure, it can be shown from significance value of each independent variable smaller than $\alpha = 0.05$. From table 6 shows results that



variable profitability, ownership structure, and company size on capital structure influences capital structure, it can be shown from t significance value of each independent variable smaller than $\alpha = 0.05$.

Table 6
Second Equation t Test Results

	Coefficients ^a								
Model	Unstandardiz	ts	Standa	ardized Co	efficients				
		В	Std. Error	Beta	t	Sig.			
1	(Constant)	-23,051	8.000		-2.881	.005			
	Profitability	.838	.096	.786	8.731	.000			
	Ownership Structure	.162	.065	.246	2.499	.015			
	Firm Size	.778	.277	.257	2.812	.006			
	Capital Structure	.056	.014	.364	3.940	.000			
Depend	Dependent Variable: Firm Performance								

Source: Data processed, 2019

Based on table 7 shows results of Sobel test that profitability, ownership structure, and company size variables have an influence on company performance through capital structure variable, this is indicated by t-value greater than t table 1.66660.

Table 7 Sobel Test

Variable	Ab	$\sqrt{(b2.Sa2) + (a2.Sb2) + (Sa2.Sb2)}$	t-count
Profitability	-0.2086	0.062034272	-3,362657354
Ownership Structure	-0.099736	0.032606457	3.058780673
Firm Size	0.194768	0.106095799	1.835774851
	1		

Source: Data processed, 2019

Effect of Profitability on Capital Structure

Based on results of first hypothesis test that profitability has a negative and significant effect on capital structure. It means that companies with high profitability will reduce company's debt ratio. Companies with higher profits are usually not too high in their capital structure mix. This supports pecking order theory, which states that companies that have high profitability will tend to use funding through internal sources, namely using profits instead of having to do debt when they need funding. The results of this study are supported by previous studies of (Gede & Astini, 2012; Karaye, Nasidi, Amos, & Ibrahim, 2015) states that profitability has a negative and significant effect on capital structure

Effect of Ownership Structure on Capital Structure

Based on results of second hypothesis test, it was found that ownership structure had a negative and significant effect on capital structure. This means that companies use an increasingly large debt will have an impact on increasing risk bankruptcy, which means an increased risk that cannot be diversified by



managers so that management share ownership will be reduced. The results of this study support agency theory state that supervision is carried out through use of debt; each additional debt in capital structure can reduce use of shares to minimize agency costs. This is supported by previous research by (Boateng, Cai, Borgia, Bi, & Ngwu, 2017; Gede & Astini, 2012), which states that ownership structure has a negative and significant effect on capital structure.

Effect of Firm Size on Capital Structure

Based on results of third hypothesis test, it is found that company size has a positive and significant effect on capital structure. This means that size of company is very influential on decision to use debt in capital structure, especially related to ability to get a loan. The results of this study support signaling theory whereby use of debt is a positive signal to creditors and investors, which is expected to signal that reflects a good prospect in a company that impacts on availability to provide loans. This is supported by previous research by (Karaye et al., 2015) that company size has a positive and significant effect on capital structure.

Effect of Profitability on Firm Performance

Based on fourth hypothesis, test results obtained that profitability has a positive and significant effect on firm performance. This means that companies that have high profitability values show company's performance has increased. These results support signaling theory in which generating profits is a positive signal to creditors and investors that signal is expected to reflect good prospects in future so that value of its shares will increase. This is supported by previous research (Hughes, Hodgkinson, Elliott, & Hughes, 2018; Karaye et al., 2015), which states that profitability has a positive and significant effect on firm performance.

Effect of Firm Size on Firm Performance

Based on results of sixth hypothesis test, it was found that company size had a positive and significant effect on company performance. This means that size of company has large resources that will also make wider disclosures and be able to finance provision of information for internal purposes. The results of this study support signaling theory whereby information is at same time material for disclosure of information to external parties such as investors and creditors, so it does not require a high additional cost for wider disclosure. This is supported by previous research by (Egbunike & Okerekeoti, 2018; Theacini & Wisadha, 2014) states that company size has a positive effect on company performance.

Effect of Capital Structure on Firm Performance

Based on seventh hypothesis, test results obtained that capital structure has a positive and significant effect on firm performance. This means that higher capital structure can also provide benefits for companies because interest costs from debt that can be used as a tax deduction make companies that have debt have good performance than companies that do not have debt. The results of this study



support Modigliani and Miller (MM) theory concludes that companies that use debt will produce better performance than companies that do not use debt. This is supported by previous research (Boroujeni, Noroozi, Nadem, & Chadegani, 2013; Chen & Chang, 2003; Liang, Huang, & Lin, 2011) states that capital structure has a positive effect on company performance.

Effect of Profitability on Firm Performance Through Capital Structure

Based on eighth hypothesis test results obtained that capital structure can mediate effect of profitability on firm performance. This means that companies that have high profitability use retained earnings to fund activities company. These results support pecking order theory, which states companies prefer funding from inside first, and if company requires external funding in form of debt. This is supported by previous research by (Duasa, Raihan Syed Mohd Zain, & Tarek Al-Kayed, 2014; Gede & Astini, 2012) which states that capital structure can mediate effect of profitability on company performance.

Effect of Ownership Structure on Firm Performance Through Capital Structure

Based on ninth hypothesis test results obtained that capital structure can mediate effect of ownership structure on firm performance. This means that as a manager as well as a shareholder of a company, manager does not want company to experience financial difficulties or even go bankrupt. As a manager, you will lose incentives, and as a shareholder, you will lose the return on your invested funds. Therefore, managers will minimize possibility of using debt as funding and rely more on capital from shareholders. This is supported by previous research by (Shyu, 2013; Ukaegbu & Dada, 2014), which states that capital structure can mediate effect of ownership structure on company performance.

Effect of Firm Size on Firm Performance through Capital Structure

Based on tenth hypothesis test results obtained that capital structure can mediate effect of firm size on firm performance. This means that a company that has a large size of company access to get funding (debt) will be easy. With funds obtained, if company uses debt exceeds optimal level, it will reduce company's performance. These results support trade-off theory, which states that companies use an optimal capital structure if company is not optimally managing capital it will affect decline in company performance.

CONCLUSION

The results in this study indicate that profitability, ownership structure and firm size simultaneously (together) affect capital structure. Profitability, ownership structure, firm size, and capital structure simultaneously (together) affect firm's performance. While partially, it can be concluded that results obtained in this study indicate that there is influence partially profitability, ownership structure, and firm size to capital structure. Profitability, ownership structure, firm size, and capital structure on firm performance. Based on analysis and conclusions, it can be suggested for researchers, researchers should conduct



further research by conducting research in sector financial or non-financial. For practitioner, it is expected that companies pay attention to profitability, ownership structure, firm size, and capital structure in determining firm performance.

REFERENCES

- Al-Najjar, B., & Hussainey, K. (2011). Revisiting the capital-structure puzzle: UK evidence. *Journal of Risk Finance*, 12(4), 329–338.
- Boateng, A., Cai, H., Borgia, D., Bi, X. G., & Ngwu, F. N. (2017). The influence of internal corporate governance mechanisms on capital structure decisions of Chinese listed firms. *Review of Accounting and Finance*, 16(4), 444–461.
- Boroujeni, H. N., Noroozi, M., Nadem, M., & Chadegani, A. A. (2013). The impact of capital structure and ownership structure on firm performance: A case study of Iranian companies. *Research Journal of Applied Sciences, Engineering and Technology*, 6(22), 4265–4270.
- Chen, S. J., & Chang, T. Z. (2003). A descriptive model of online shopping process: Some empirical results. *International Journal of Service Industry Management*, 14(5), 556–569.
- Duasa, J., Raihan Syed Mohd Zain, S., & Tarek Al-Kayed, L. (2014). The relationship between capital structure and performance of Islamic banks. Journal of Islamic Accounting and Business Research, 5(2), 158–181.
- Egbunike, C. F., & Okerekeoti, C. U. (2018). Macroeconomic factors, firm characteristics and financial performance. *Asian Journal of Accounting Research*, 3(2), 142–168.
- El-Sayed Ebaid, I. (2009). The impact of capital-structure choice on firm performance: empirical evidence from Egypt. *Journal of Risk Finance*, 10(5), 477–487.
- Farooq, O. (2015). Effect of ownership concentration on capital structure: evidence from the MENA region. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(1), 99–113.
- Gede, L., & Astini, S. (2012). Kepemilikan Terhadap Struktur Modal Dan Kinerja Perusahaan Farmasi Yang Terdaftar Di Bursa Efek Indonesia (BEI) Fakultas Ekonomi dan Bisnis Universitas Udayana, Bali, Indonesia. 3309–3321.
- Gray, B. J., Matear, S., & Matheson, P. K. (2002). Improving service firm performance. *Journal of Services Marketing*, 16(3), 186–200.
- Hughes, P., Hodgkinson, I. R., Elliott, K., & Hughes, M. (2018). Strategy, operations, and profitability: the role of resource orchestration. *International Journal of Operations and Production Management*, 38(4), 1125-1143.
- Hull, B. (2002). A structure for supply-chain information flows and its application to the Alaskan crude oil supply chain. *Logistics Information Management*, 15(1), 8–23.
- Jean, R.-J. "Bryan," & Kim, D. (2019). Internet and SMEs' internationalization: The role of platform and website. *Journal of International Management*, (June), 100690.



- Jensen, M. R. H., Marshall, B. B., & Pugh, W. N. (2006). Does quantity reflect quality? Financial disclosure size and future performance. *Managerial Finance*, 32(1), 39–50.
- Karaye, Y. I., Nasidi, M., Amos, B., & Ibrahim, G. (2015). The determinants of capital structure of firms listed in Nigerian food/beverages and tobacco industry. *International Journal of Innovative Science*, Engineering and Technology, 2(10), 800–812.
- Kyereboah-Coleman, A., & Biekpe, N. (2007). On the determinants of board size and its composition: Additional evidence from Ghana. *Journal of Accounting & Organizational Change*, 3(1), 68–77.
- Kyissima, K. H., Xue, G. Z., Yapatake Kossele, T. P., & Abeid, A. R. (2019). Analysis of capital structure stability of listed firms in China. *China Finance Review International*.
- Liang, C. J., Huang, T. T., & Lin, W. C. (2011). Does ownership structure affect firm value? Intellectual capital across industries perspective. *Journal of Intellectual Capital*, 12(4), 552–570.
- Masnidar Nasution, L. (2017). Statistik Deskriftif Leni Masnidar Nasution. *Jurnal Hikmah*, 14(1), 49–55.
- Mcnamee, P., Greenan, K., & Mcferran, B. (1999). The competitive analysis model: A new approach to strategic development for small businesses. *Benchmarking: An International Journal*, 6(2), 125–148.
- Muange, R., & Maru, L. C. (2015). Strategic alliances on performance of retail firms in Nairobi county, Kenya. *TQM Journal*, 27(6), 732–740.
- Müller, S., & Neubaeumer, R. (2018). Size of training firms the role of firms, luck, and ability in young workers' careers. *International Journal of Manpower*, 39(5), 658–673.
- Nur, S., Ela, N., & Qoyum, A. (2019). Short-run and Long-run Relationship between Economic Growth, Foreign Direct Investment, Trade Liberalization and Education on Income Inequality: Evidence from Indonesia. Journal of Islamic Finance, 8, 047–055.
- Pacheco, L. (2019). Internationalization effects on financial performance: The case of portuguese industrial SMEs. *Journal of Small Business Strategy*, 29(3), 97–116.
- Qashou, A., & Saleh, Y. (2018). E-marketing implementation in small and mediumsized restaurants in Palestine. *Arab Economic and Business Journal*, 13(2), 93– 110.
- Qizam, I., Ardiansyah, M., & Qoyum, A. (2017). The Resilience of Non-Sharia Compliant Company in Indonesia Stock Exchange (IDX) and its Determinants: Evidence from 2005-2013. 11(2), 269-290.
- Qoyum, A., Mutmainah, L., Setyono, J., & Qizam, I. (2017). The Impact of Good Corporate Governance, Company Size nn Corporate Social Responsibility Disclosure: Case Study of Islamic Banking in Indonesia. *Iqtishadia*, 10(1), 130–159.



- Schellhorn, C., & Sharma, R. (2013). Using the Rasch model to rank firms by managerial ability. *Managerial Finance*, 39(3), 306–319.
- Shyu, J. (2013). Ownership structure, capital structure, and performance of group affiliation: Evidence from Taiwanese group-affiliated firms. *Managerial Finance*, 39(4), 404–420.
- Singh, V., Kumar, A., & Singh, T. (2018). Impact of TQM on organisational performance: The case of Indian manufacturing and service industry. *Operations Research Perspectives*, 5(August 2017), 199–217.
- Supriyadi, E., Mariani, S., & Sugiman. (2017). Perbandingan Metode Partial Least Square (PLS) dan Principal Component Regression (PCR) Untuk Mengatasi Multikolinearitas pada Model Regresi Linear Berganda. UNNES Journal of Mathematics, 6(2), 117–128.
- Theacini, D., & Wisadha, I. (2014). Pengaruh Good Corporate Governance, Kualitas Laba Dan Ukuran Perusahaan Pada Kinerja Perusahaan. *E-Jurnal Akuntansi*, 7(3), 733–746.
- Tunyi, A. (2019). Firm size, market conditions and takeover likelihood. *Review of Accounting and Finance*, 18(3), 483–507.
- Ukaegbu, B., & Dada, F. (2014). The Impacts of Ownership Structure on Capital Structure and Firm's Performance in Nigeria. *Research Journal of Finance and Accounting*, 5(15), 82–90.
- Wilson, T. L. (1977). A Cross-Sectional Study Of Business. 53-66.
- Yusfiarto, R., & Pambekti, T. (2020). Analisis Pengaruh Variabel Makro Terhadap Return Indeks Saham Syariah Al-Mal: Jurnal Akuntansi dan Keuangan Islam Analisis Pengaruh Variabel Makro Terhadap Return Indeks Saham Syariah Di Indonesia: Studi Pada Fenomena Perang Dagang Global Lecturer U. 01(01).