ATLANTIS PRESS

Advances in Economics, Business and Management Research, volume 65

1st International Conference on Economics, Business, Entrepreneurship, and Finance (ICEBEF 2018)

Financial Leverage and Profitability of Pharmaceutical Companies in Indonesia Stock Exchange

Badria Munthashofi, Imas Purnamasari
Faculty of Economic and Business Education
Universitas Pendidikan Indonesia
Bandung, Indonesia
Badria muntashofi@upi.edu, imaspurnamasari@upi.edu

***Abstract*—The problems that analyzed in this study are a decrease in the profitability of pharmaceutical sub sector companies. The decrease in the profitability indicates a company's financial performance it's also declined, thus the company's capability to generate earnings also decreased. This study aims to determine the effect of financial leverage as measured by debt to equity ratio (der) to profitability as measured by return on equity (roe). The research used verification methods. These populations included pharmaceutical companies that listed in Indonesia stock exchange period of 2011-2015. The statistical analysis used simple linear regression. The results obtained that financial leverage has a negative and significant impact on profitability.**

Keywords—financial leverage; rofitability

I. INTRODUCTION

The company was established with the aim of increasing the value of the company so as to provide prosperity for the owners or shareholders [1]. To achieve these objectives required management with a high level of effectiveness. Measurement of management effectiveness level shown by the profit generated from sales and from investment income, can be done by knowing how much profitability ratio [2]. Profitability is the ability of a company to earn profits in relation to sales, total assets, and owner's equity [3].

The main components that affect the profitability of their own capital are profit margin, total asset turnover, and financial leverage. Of the three factors, the use of debt (leverage) as capital is the most important factor in determining the profitability achieved [4]. Financial leverage is an alternative used to increase profits [5]. Financial leverage is the use of company assets financed by securities (debt with fixed interest rate or preferred stock with constant dividend rate) with a fixed rate of return that is expected to increase the profit for shareholders [6].

The use of debt is intended to increase (leverage) profitability [7]. Ward S. Curran stated *The use of debt, called leverage, can greatly affect the level and degree of change is the common earnings. Leverage refers to the use of fixed costs in on attempt to increase (or level up) profitability* [8]. Syamsyuddin stated that the use of leverage is intended to boost the potential return of shareholders [9]. In other words, the use of leverage is shown to make the profits more than the cost of assets and sources of funds, so as to increase the profits of the company and shareholders. Increased leverage describes the condition of companies increasingly using funds from external or called funding derived from debt. Leverage has an effect that the higher the debt will increase the expected Return On Equity (ROE), but it also increases the risk [5]. If the cost of debt (reflected in borrowing costs) is greater than the cost of owner's equity, then the average cost of capital (weighted average cost of capital) will be greater so that Return on equity (ROE) will be smaller and vice versa [10]. The higher the use of debt the riskier the company because the debt raises a fixed commitment in the form of interest expenses and repayment of principal debt. Failure to meet fixed expenses can be associated with bankruptcy.

Several studied that have been done previously there is inconsistency research results. Falope, Olufemi I., Lubanjo T. Ajilore's study stated that financial leverage has a positive effect on profitability [11-13]. In contrast to Abdul Raheman & Mohamed Nasr's research there is a negative effect of financial leverage on profitability [14-18]. Based on the above description there is a gap between the theory with empirical evidence so interested in examining the effect of leverage on profitability in pharmaceutical sub-sector companies listed on the stock exchange Indonesia.

II. METHOD

The research used verification methods. In this research. Verifikatif method used to determine the effect of financial leverage on profitability. The research design used is a causal research design. The type of data used in this study is secondary data. Secondary data used in the form of financial statements of pharmaceutical sub-companies listed on the Indonesia Stock Exchange. Data collection techniques conducted in this study are documentation. These populations included pharmaceutical companies that listed in Indonesia Stock Exchange period of 2011-2015. The sampling technique used in this research is purposive sampling. So based on the predetermined criteria there are 8 companies used as research

samples for 5 years and 40 observation data. The statistical analysis used simple linear regression panel data.

III. RESULT

A. Hausman Test

The Hausmann test is a statistical test to determine whether the most appropriate fixed effect or random effect model is used. The hypothesis in the Hausmann test is:

Ho : Random Effect Model

H1 : Fixed Effect Model

TABLE I. SELECTION OF PANEL DATA REGRESSION MODEL WITH HAUSMAN TEST

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.832784	1	0.0503

Based on table I it can be seen that the p-value of 0.053, thus the Hausmann statistic value is greater than the critical value of 0.05 it can be concluded that the appropriate model for the data in this study is to follow the Random effect.

B. Random Effect MODEL

TABLE II. PANEL DATA REGRESSION TEST WITH RANDOM EFFECT MODEL APPROACH

Dependent Variable: ROE				
Method: Panel EGLS (Cross-section random effects)				
Date: 07/19/18 Time: 19:22				
Sample: 2011 2015				
Periods included: 5				
Cross-sections included: 8				
Total panel (balanced) observations: 40				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	25.09473	4.065938	6.171942	0.0000
DER	-13.76935	4.549639	-3.026471	0.0044
	Effects Specification			
			S.D.	Rho
Cross-section random			9.539986	0.8564
Idiosyncratic random			3.905697	0.1436
	Weighted Statistics			
R-squared	0.183219	Mean dependent var		3.328549
Adjusted R-squared	0.161724	S.D. dependent var		4.421991
S.E. of regression	4.048660	Sum squared resid		622.8825
F-statistic	8.524084	Durbin-Watson stat		1.592249
Prob(F-statistic)	0.005864			

From table II it can be seen that the coefficient value is 25.09473 while the coefficient value for the variable Financial leverage is -13.76935. So it can be formulated regression equation: ROE = 25.09473 - 13.76935DER.

Coefficient value 25.09473 shows that the relationship between independent variables and dependent variable is positive. 25.09473 means that if all independent variables do not change, then the profitability of the company is worth 25.09473. Financial leverage has a regression coefficient of -13.76935 means that any increase in financial leverage of one percent, it will be followed by a decrease in Profitability of -13.76935 times.

Based on the results of data processing in table II can be seen that the value of F arithmetic of 8.524084 and significance of 0.005864 seen that the value of F arithmetic> F table and significance smaller than 0.05 then it can be concluded that the regression means. The value of P value of probability of 0.0044 is smaller than the specified significance value (0.0044 <0.05) then the hypothesis is accepted, meaning financial leverage negatively affect profitability.

IV. DISCUSSION

The result of empirical research shows that financial leverage measured by Debt equity ratio (DER) has a negative and significant influence on profitability measured by Return on Equity (ROE) of pharmaceutical Sub Sector companies. The higher Debt equity ratio (DER) will affect the amount of profit (Return On Equity) achieved by the company [19]. The higher the financial leverage the lower the return on equity. This is because with the higher the level of financial leverage, the more debt is used so that more corporate cash to pay the debt. Unfavorable or negative leverage occurs if the company does not have as much as its permanent funding cost [20].

Financial leverage is the magnification of risk and return introduced through the use of fixed-cost financing, such as debt and preferred stock. The more fixed-cost debt a firm use, the greater will be its expected risk and return [21]. Dermawan Sjahrial said that higher debt use will cause the level of financial risks faced and also increase the risk of decreasing Return on Equity [22]. The higher the use of debt will be the higher the risks faced and the greater the expected return and income levels [23]. Van Horne and Wachowicz said the higher the debt to total asset ratio, the greater the financial risk [24]. Timothy stated Financial leverage is the additional volatility of net income caused by the presence of fixed cost funds (such fixed rate debt) in the firm capital structure [25]. Based on Pecking Order Theory, the greater this ratio, indicating that the greater the cost to be borne by the company to fulfill its obligations. Increased risk of a possible default because the company is too much to finance the assets of the debt. With the risk of default, the costs incurred by the company to overcome this problem the greater. The ratio of leverage (debt) emphasizes the important role of debt funding for companies by showing the percentage of company assets supported by debt financing.

The result of this research is in line with Abdul Raheman and Mohamed's research there is a negative influence on financial leverage that is the profitability of the company is reduced due to the use of large corporate debt, thus causing the fixed cost is greater than the operating income generated by the debt [14-18]. However, this study is not in line with Falope research, Olufemi I., Lubanjo T. Ajilore stated that leverage has a positive effect on profitability [10-13].

ACKNOWLEDGMENT

We would like to thank the Faculty of Economics and Business Education Universitas Pendidikan Indonesia that has facilitated international conferences so we can publish.

REFERENCES

[1] H. Siallagan, M. U. Machfoedz, Mekanisme corporate governance, kualitas laba dan nilai perusahaan. Simposium Nasional Akuntansi IX. Padang. Sep:23-6, 2006.

[2] W. J. Fred, T. E. Copeland, Manajemen Keuangan, Alih Bahasa: Yohanes Lamarto dan Mariana Adinata, Edisi Kedelapan, Jilid 2, Erlangga, Jakarta, 1991.

[3] A. Sartono, Manajemen Keuangan (Teori dan Aplikasi). Yogyakarta: BPFE, 2008.

[4] L. S. Atmadja, Teori dan Praktik Manajemen Keuangan. Yogyakarta: Andi, 2012.

[5] E. F. Brigham, J. F. Houston, Fundamental of Financial Management. 12th Edition. South Western: Cengage Learning, 2009.

[6] A. Keown, "The Impact of Financial Leverage to Return On Equity", Journal of Financial and Quantitative Analysis, vol. 36, No. 1, 2011.

[7] J. C. V. Horne, J. M. Wachowicz, Fundamental of Financial Management. Twelfth Edition. Prentice Hall, 2007.

[8] W. S. Curran, Principles of Financial Management. McGraw-Hill. Inc. New York, 2009.

[9] L. Syamsuddin, Manajemen Keuangan Perusahaan: Konsep Aplikasi dalam: Perencanaan, Pengawasan, dan Pengambilan Keputusan. Jakarta: Rajawali Pers, 2009.

[10] J. J. Wild, K. R Subramanyan, R. F. Hasley, Financial Statement Analysis. Edisi Kedelapan, Buku I. Jakarta: Salemba Empat, 2009.

[11] O. I. Falope, O. T. Ajilore. 2009. Working Capital Management and Corporate Profitability; Evidence from Panel Data analysis of Selected Quoted Companies in Nigeria.

[12] A. Singapurwoko, M. S. M. El-Wahid, The Impact of Financial Leverage to Profitability Studi of Non-Financial Companies Listed in Indonesia Stock Exchange. Disertasi. UGM, 2011.

[13] B. C. Siregar, Analisis Pengaruh Financial Leverage Terhadap Return On Equity (ROE) dan Earning Per Share (EPS) pada Perusahaan Perkebunan yang Terdaftar di Bursa Efek Indonesia, 2011.

[14] A. Raheman, M. Nasr, "Work Capital Management and Profitability Casa of Pakistani Firms", vol 69, Issue 1, pp. 49-66, 2007.

[15] F. Samiloglu, K. Demirgunes, "The Effect of Working Capital Manage ment on Firm Profitability: Evidence from Turkey", The International Journal of Applied Economics and Finance, vol. 2, No. 1, pp. 44-50, 2008.

[16] C. Martono, "Analisis Pengaruh Profitabilitas Industri, RasioLaverage Keuangan Tertimbang dan Intensitas Modal Tertimbang serta Pangsa Pasar terhadap "ROA dan "ROE" Perusahaan Manufaktur yang Go Public di Indonesia". Jurnal Akuntansi Keuangan, pp. 126-140, 2002.

[17] A. Gill, N. Mathur, "Factors that Influence Financial Leverage of Canadian Firms". Journal of Applied Finance & Banking, vol. 1, no 2, pp. 19-37, 2011.

[18] E. Yoon, S. C. Jang, "The Effect of Financial Leverage on Profitability and Risk of Restaurant Firm", Journal of Hospitality Financial Management, vol. 13, Issue. 1, Article 24, 2005.

[19] R. A. Brealey, S. C. Myers, A. J. Marcus, Dasar-Dasar Manajemen Keuangan Perusahaan. Edisi 5 (Jilid 2). Jakarta: Erlangga, 2008.

[20] W. S. Curran, Principles of Financial Management. New York: McGraw-Hill. Inc., 2009.

[21] L. J. Gitman, Principle of Managerial Finance. Twelfth Edition. Prentice Hall, 2009.

[22] D. Sjahrial, Manajemen Keuangan. Edisi Ketiga. Jakarta: Mitra Wacana Media, 2009.

[23] S. Syahyunan, Manajemen Keuangan I. Medan: USU Press, 2007.

[24] J. C. V. Horne, J. M. Wachowicz, Prinsip-prinsip Manajemen Keuangan. Jakarta: Salemba Empat, 2009.

[25] J. Timothy, "Influence of financial risk on profitability of life insurance industry in Taiwan". Journal of Modelling in Management, vol. 4, no. 1, pp. 7-18, 2012.