

Determinants of Capital Structure in Indonesian Banking Sector

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ABSTRACT : This study aims to analyze and explain determinants of capital structure of the firms. The research object is the banking sector companies listed in Indonesia Stock Exchange for the period of 2012-2014. The Capital Structure (CS) is measured from Debt to Equity Ratio (DER). Dividend Payout is calculated from Dividend Yield. Firm Size is measured by the natural logarithm of total assets. Non Performing Loan (NPL) and Loan to Deposit Ratio (LDR) are used as the indicators of the Firm Risk. The Profitability is determined from the Return on Equity (ROE) and Net Interest Margin (NIM). Firm Growth is calculated using the year-on-year percentage change in total assets. The data analysis is done by employing the Structural Equation Model (SEM) with SmartPLS 3.0. The results show that the Firm Size has insignificant effect to the Dividend Payout but negative significant effect to the Capital Structure. Meanwhile, the Risk has positive significant effect to the Dividend Payout but insignificant effect to the Capital Structure. In one side, the Profitability has insignificant effect to the Dividend Payout but negative significant effect to the Capital Structure. In the other side, the Firm Growth has insignificant effect to the Dividend Payout but positive significant effect to the Capital Structure. Dividend Payout has positive significant effect to the Capital Structure.

KEYWORDS – Firm Size, Firm Risk, Profitability, Firm Growth, Dividend Payout, Capital Structure

I. INTRODUCTION

Capital is the financial foundation of banking industry which supports its operational by providing a buffer to absorb unexpected losses from its activities. If a problem occurred, banks can still operate by using the capital, while the problem is discussed and resolved. Capital structure is the comparison between external capital (long term debt or short term one) and internal capital (retained earnings and equity capital). The decision about the capital structure is the main point in banking industry because it relates with the interests of many parties such as shareholders, creditors and the management of the company. That is why, it must be planned and budgeted for the future operational. If the company has higher debt nowadays, it will charge more interest in the future. In the other hand, if the company issues the equity, the increasing of numbers of shares will push the company to pay more dividend in the future. As the result, the company will have less available cash flow to maintain sustainable growth.

Since the authority of the executive in the implementation of policies and operational of the company is substantial, managers have the obligation to make business decision. It is formulated not only depend on the contract from the maximization of shareholder wealth through the creation of profit, but also for their own interests and advantages. This can lead to the so-called agency problem. In general, the existence of asymmetric information can lead the executives to generate real free cash flow for the company, if the negative impact on the company is not harmful to their careers. Another possibility is that the executive can concentrate on the amount of dividends distributed to shareholders. Investors and shareholders do not only act as principal, but also act as consumers. In addition, shareholders also have the right to switch their investments from stocks to obligations issued by the company or switch their investments into other companies. Changes in dividend payments may lead to misunderstandings and even conflict between partners because of distrust and uncertainty on dividend policy. Theoretically, the dividend policy may reach equilibrium solution for both the company and investors.

The crisis occurred in 2008 was the impact of the condition of the banking sector in the various countries that deplete the quality of capital. But the banks in Indonesia have shown very rapid progress in terms of asset growth, the type of products offered, as well as the use of information technology. These developments lead to tight competition between banks. This condition will continue, even will increase with the formation of the ASEAN Economic Community in 2015. Only banks with good capital structure will be able to survive.

Bank is the largest part of financial institutions in Indonesia. Liabilities related to the regulatory capital are the most important factor in determining the capital structure. Banks generally hold more capital than the minimum capital ratio required by the regulations of Bank Indonesia (BI) as a regulator. The minimum capital requirement for commercial banks stated in the Regulations of Bank Indonesia No.15/12/PBI/2013. The minimum capital of banks is determined in accordance to the specified ratings of the bank's risk profile.

However, recent studies have shown that factors which determine capital adequacy ratio is not only limited to the regulation of Bank Indonesia. A special variable for bank is also important in determining the capital structure. The banking sector plays an important role in the Indonesian economy, therefore the bank should select and adjust the mix of capital strategies for maximizing the value of the company and ensure that the operational is directed to achieve optimal capital structure. Lack of capital will always be identified as the main cause of business risk. To optimize the capital structure, bank must combine the debt and equity. Capital structure is measured by leverage, which is derived from long-term debt divided by equity or short-term debt divided by equity. Short-term funding is needed for working capital. Although equity financing is more expensive than using debt, but the public can assess the company from its share price. The balance between debt and equity reflects the health condition of the bank.

This study aims to implement an empirical model with the data obtained from banking companies listed in the Indonesia Stock Exchange for the period of 2012-2014. Previous empirical study is conducted by Ayanda *et al.* (2013) on the banking industry. It shows that the determinant factor of the capital structure, is the bank size, dividend payout profitability, fixed assets, growth, business risks, and tax costs.

II. LITERATURE REVIEW AND HYPOTHESES

2.1 Literature Review

An assessment of the capital structure includes an evaluation of the adequacy of capital and capital management. In calculating the capital, banks are obliged to refer to the provisions of Bank Indonesia that regulates the minimum capital requirement for banks. Banks must also associate capital adequacy with risk profile. The higher the risk of the bank, the greater the capital should be provided to anticipate such risks. Banks also need to consider the level of trend as well as the capital structure and stability by observing the performance of the peer group and the adequacy of capital management.

Modigliani and Miller`s Theory

Modigliani and Miller (1958) opine that capital structure does not affect the value of the company. The company's value depends only on the cash flow and does not depend on the ratio of debt and equity. Modigliani and Miller propose a number of assumptions in developing their theory, that is (1) no taxes, (2) no brokerage fees, (3) no fees for bankruptcy, (4) investors can borrow at the same rate as the company, (5) all investors have the same information with the management about the investment opportunities of the company in the future, (6) earning before interest and tax (EBIT) is not affected by the use of debt. This theory is considered less relevant because of the reduction in income tax on the use of debt.

In 1963, Modigliani and Miller revise their initial stance that companies with higher profits must use more debt. Trade off theory states the company's value will increase with increasing value of the debt but the value will begin to decline at a certain point where the debt level is optimal. At this approach, the company cannot use debt too much, since it will cause greater interest rate. The greater the interest rate to be paid, the greater the possibility of being unable to pay the interest, and thus the greater the probability of bankruptcy.

Agency Theory

Agency theory proposed by Jensen and Meckling (1976) state that management is an agent of the shareholders as the owners of the company. The shareholders delegate authority to the agency and expect them to act in accordance with his business. The selection of the capital structure is based on the agency costs, that is the costs incurred because of the conflicts of interest. The conflict between shareholders and management is triggered by incentive received by managers as an additional income although they have less effort to maximize the profits. On the other hand, managers will bear all the costs to maximization of profit while they do not receive its benefits. By increasing external funding in the form of debt, the agency costs can be reduced.

Pecking Order Theory

Pecking order theory by Myers (1984) and Myers and Majluf (1984) state that the company exchanges tax benefits of debt financing with the problems posed by the bankruptcy potential. Interest paid as a tax deduction makes the debt burden becomes cheaper compared to stocks. It results in the increasing of the profit received by investors and the stock prices. Graham (2000) estimates that the tax benefits associated with funding through debt would raise the value of the company about seven percent. However, the use of debt ratios that are too large will also have an impact on the probability of bankruptcy.

Signaling Theory

Ross (1977) developed a model where the capital structure (debt use) is a signal delivered by the manager to the market. If the managers believe that the company has a good prospect and want the stock rising, it will be communicated to the investors.

The choice of capital structure occurs because of the asymmetric information that happens between managers and shareholders (Miller and Rock, 1985). Greater asymmetric information will lead to higher risks faced by the investors. In reality, managers often have better information than the investors.

Factors affecting Capital Structure

According to Brigham and Houston (2011), factors affecting the capital structure of a company are:

1. The risk of business if the company does not use debt.
2. The position of corporate tax.
3. The financial flexibility or the ability to raise capital on reasonable terms if the condition gets worse.
4. Conservatism or aggressiveness of management in the use of debt.

Each of these factors is determined by the characteristics of industrial companies. The bank's capital structure is determined by external factors, namely tax policies, inflation rates, capital market conditions, and internal factors such as the characteristics of the bank linked with the theory of capital structure. Banks with an optimal capital structure produce a balance between risks and returns. It will maximize the value of the company. Different theories have produced different conclusions about optimal capital structure, and no one was able to prove that a theory is better than the other theories. So the company cannot estimate an optimal capital structure accurately. Hence financial managers should treat the optimal capital structure as a range of values.

Firm Size

The size of the company is a picture of the financial ability of the company within a certain period. The size of large companies considered to be an indicator that illustrates the risks for investors to invest in the company. If companies have good financial capability, it is believed that the company would be able to meet all its obligations and provide adequate returns for investors. Financial ability of a company can be seen from the number of owned assets or of net sales.

Firm Risk

Risk is a deviation between the obtained and expected results. The risk profile is an assessment of the inherent risks and the quality of risk management in the operational activities of the bank. An assessment of the inherent risk is an assessment of the risks inherent in the business activities of the bank, whether it can be quantified or not. The inherent risk may affect the financial position of banks.

In accordance with the regulation of Bank Indonesia No.13/1/PBI/2011 regarding the rating of commercial banks, the obligatory inherent risk assessment of banks consists of credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputation risk.

Profitability

Assessment of profitability factors include an assessment of the earnings performance, sources of earnings, and bank earnings sustainability. Large profit is not a measurement that banks have been working efficiently. Efficient can be seen by comparing the profits obtained with the capital that produce such profits. Bank Indonesia as the bank supervisors requires banks to increase the ability to generate profits through increasing the efficiency and volume of business in regards with the prudent principle.

The company's net profit is distributed to shareholders as dividends. The higher profitability, the higher the cash flow of the company, and the company is expected to pay higher dividends. According to the signaling theory (Bhattacharya, 1979) and the asymmetry information (Miller and Rock, 1985), the optimal dividend payments may be seen as a signal of future profitability. Companies are able to produce stable earnings.

Profitability is also one factor in determining the capital structure. A company with a high return on investment uses debt in relatively small quantities. A high rate of return does allow the company obtain its capital through internally generated funds.

In determining the peer group, banks need to consider the scale of the business, the characteristics and / or the complexity of the banks, as well as the availability of data and information. Profitability measurements can be performed using a variety of indicators, such as Return on Equity (ROE) and Net Interest Margin (NIM).

Firm Growth

Companies with growth options are companies that have more expansion projects, new product lines, acquisition of companies and other maintenance, and replacement of current assets. Companies with a high growth and high volatility of cash flows have an incentive to reduce debt in their capital structure during a specific time period. Firm growth is measured by the percentage of change in total assets.

Dividend Payout

According to Husnan (2000), the amount of the dividend will be influenced by the presence or absence of profitable investment opportunities. The profit obtained from the company's operations will be used for investment, and the remaining profit is distributed as dividends. Dividend policy also has a close relation with funding decisions. If a company needs funds, one alternative that can be done is issuing new shares as a dividend payment (stock dividend).

Capital Structure

According to Jensen and Meckling (1976), the optimal capital structure is obtained by trading off the agency cost of debt against the benefit of debt. Here, Jensen and Meckling first identified disputes between shareholders and managers because of management's ownership being less than 100% of the equity (Handoo and Sharma, 2014)

Capital structure is referred to the way in which the firm finances itself through debts, equity and securities. It is the composition of debt and equity that is required for a firm to finance its assets. The capital structure of a firm is very important since it is related to the ability of the firm to meet the needs of its stakeholders. The board of directors or the financial manager of a company should always endeavor to develop a capital structure that would be beneficial to the equity shareholders in particular and to the other groups such as employees, customers, creditors and society in general (Velampy and J. Aloy Nireesh, 2012)

Firm Size and Capital Structure

Çekrezi (2013) research results indicate that firm size (calculated by the natural logarithm of total assets) has a significant impact on leverage. Thippayana (2014) shows that the size of the company is a significant determinant of capital structure in Thailand. Tarazi (2013) figures out that the size of the company has a dominant role in explaining variations in the company's total debt ratio Thailand.

Bereznicka (2013) examines the company's non-public enterprises in nine EU countries, unlike most studies that verify the theory of capital structure using a sample of large and listed companies. The result shows that leverage is affected more by the industry in which the company operates, not in the size of the company. Meanwhile, Hossain (2015) and Alom (2013) find no significant relationship between firm size and leverage variables.

The Growth Rate and Capital Structure

Hossain (2015) research results indicate that growth positively and significantly associated with leverage. Tarazi (2013) finds that the growth opportunities have a dominant role in explaining the variation in the total debt ratio of companies in Thailand. While Thippayana (2014) finds that there is no significant relationship between growth opportunities and leverage ratio.

Profitability and Capital Structure

Çekrezi (2013) find that profitability (the ratio of profit after tax to total assets) has a significant impact on leverage. Thippayana (2014) finds that profitability is a significant determinant of capital structure in Thailand. Jahan (2014) find that profitability is a significant explanatory variable for the total debt ratio.

Addae *et al.* (2013) discovers that there is a significant positive relationship between short-term debt and profitability for the banking and finance sector. But for the pharmaceutical sector, food and beverages, it shows different results. Results of the study also shows there is a negative relationship between profitability and long-term debt. Only the manufacturing industry shows a similar result at the industry level. Rest of the other industries shows no significant relationship between profitability and long-term debt. Finally, the results shows a significant negative correlation between profitability and total debt at the company of mining and food industries and beverages. For the pharmaceutical industry, the results show a positive and significant relationship between profitability and total debt. While the results for the rest of the industrial sector show that there is a significant relationship between profitability and total debt. Overall, the results show that companies listed Ghana is more dependent on short-term debt than long-term debt.

Alom (2013) finds that the profitability has significant and negative impact on leverage. Shubita (2012) discovers a significant negative relationship between debt and profitability. These findings imply that the increase in the debt position will decrease profitability/. The results also show that profitability increases with the size and growth of sales as the control variables. This may be due to the economic downturn in Jordan. During the economic crisis, the level of sales tends to fall. It causes cash flow problems for companies. As the result, the payment obligations of the company are default.

Tarazi (2013) discovers that profitability, growth opportunities, asset structure, and size of the company have a dominant role in explaining variations in the Thai company's total debt ratio.

Rametulla Ferati and Elsana Ejupi (2012) find that the return rates present a positive correlation with short-term debt and equity, and an inverse correlation with long-term debt.

Dividen Payout and Capital Structure

Jiang *et al.* (2013) research result shows that the equity financing will further define the dividend payment company on the NYSE than in SSE. Debt financing is less important for companies in SSE than on the NYSE. A combination of stocks play a role in determining the dividend payment in SSE. This evidence implies that investors are more concerned for the payment of dividends from the company's interest in the stock market. Companies in the SSE stock market should consider an optimal capital structure by relying more on debt financing so that the investor can invest more in fixed income stocks. It will provide a space for investors to diversify their portfolios. The market development should be the main focus so that the company will not rely heavily on bank loans.

Afza *et al.* (2010) examines the impact of the special characteristics of the company to the company dividends in Pakistan. The data is from 2005-2007 of the 100 companies listed on the Karachi Stock Exchange (KSE). The analysis employs Ordinary Least Square (OLS) regression. The results show that the ownership structure and profitability negatively related to the cash dividend. Managerial ownership and individual ownership is the most significant determinant of behavior dividend. In line with the research of Hossain (2015) and Alom (2013), the dividend payments are not significant to leverage.

Firm Risk and Capital Structure

Shubita (2012) states that the default risk is defined as the uncertainty of the company's ability to pay its debts and liabilities within a specified period (for example, less than one year for current liabilities, more than one year for long-term liabilities). Debt also increases the danger of the liquidity of the company when the economy experienced a recession (Hale, 1988). To improve efficiency, it is important for lending institutions to understand the risk of default of a company in different industries, such as services and manufacturing.

Risk assessment techniques of the Basel framework underlies the research model Gornall and Strebulaev (2014). The research measures the impact of capital regulation and government intervention to leverage. Deposit insurance and government bailouts hopes improve not only the risk of the bank, but also the risk of the borrower. Thippayana (2014) discovers there is no significance relationship between business risk and leverage ratio.

2.2 Hypoteses

- H₁ : Firm Size has significant effect to Dividend Payout.
- H₂ : Firm Size has significant effect to Capital Structure.
- H₃ : Firm Risk has significant effect to Dividend Payout.
- H₄ : Firm Risk has significant effect to Capital Structure.
- H₅ : Profitability has significant effect to Dividend Payout.
- H₆ : Profitability has significant effect to Capital Structure
- H₇ : Firm Growth has significant effect to Dividend Payout.
- H₈ : Firm Growth has significant effect to Capital Structure.
- H₉ : Dividend Payout has significant effect to Capital Structure .

III. RESEARCH MODEL

This research uses secondary data in the period of 2012-2014 that is available in annual report and financial statement of the companies. This research analyzes the factors of capital structure with path analysis using software SmartPLS 3.0.

Population and Sample

The population of this research is 16 banking sector companies listed in the Indonesia Stock Exchange in the year of period 2012-2014. Sampling method is saturated population or census. There are 10 companies that meet the sample criteria, that are listed in the banking sector since 2012-2014.

Research Variables

The exogenous variables used in this research are Firm Size (X₁), Firm Risk (X₂), Profitability (X₃) and Firm Growth (X₄). The endogenous variables are the Dividend Payout (Y₁) and Capital Structure (Y₂). The indicators of each variable are displayed in Table 1.

Tabel 1. Description of the Variables

Variable	Construct	Indicator	Measurement
Exogenous	Firm Size (X ₁)	Ln Total Assets	Ln (TA)
	Firm Risk (X ₂)	Non Performing Loan Ratio (NPL)	Non Performing Loans/Total Loans
		Loan to Deposit Ratio (LDR)	Total Loans/ Total Third-Party Funds
	Profitability (X ₃)	Return on Equity (ROE)	Net Profit After Tax/ Total Equity
		Net Interest Margin (NIM)	Net Interest Margin/ Average Invested Assets
Firm Growth (X ₄)	% Δ Total Assets	(TA _n - TA _{n-1}) * 100%	
Endogenous	Dividend Payout (Y ₁)	Dividend Yield (DY)	Dividend per share / share price
	Capital Structure (Y ₂)	Debt to Equity Ratio (DER)	Total Liabilities / Total Equity

IV. RESULTS AND DISCUSSION

4.1 Goodness of Fit Test.

The goodness of fit of the model is tested using the predictive-relevance value (Q²). It is calculated with the formula as follows

$$Q^2 = 1 - (1 - R_1^2) (1 - R_2^2) \dots (1 - R_n^2) \tag{1}$$

The R² value for each endogenous variable is shown in Table 2.

Table 2. Result of R Square

Variable	R Square
Dividend Payout	0.333
Capital Structure	0.744

Based on Table 2, the predictive-relevance value is 0.6030, meaning that the model is able to explain the phenomena of the Capital Structure at the amount of 60.30 %. The remaining 39.70% is explained by the other variables that have not been included yet into the research model and the error.

4.2 Hypothetical Testing

The path analysis shows the effect among the latent variables. The path analysis result is displayed in Fig.1. The hypothetical testing is done by Bootstrap resampling method, and the result is shown in Fig.2.

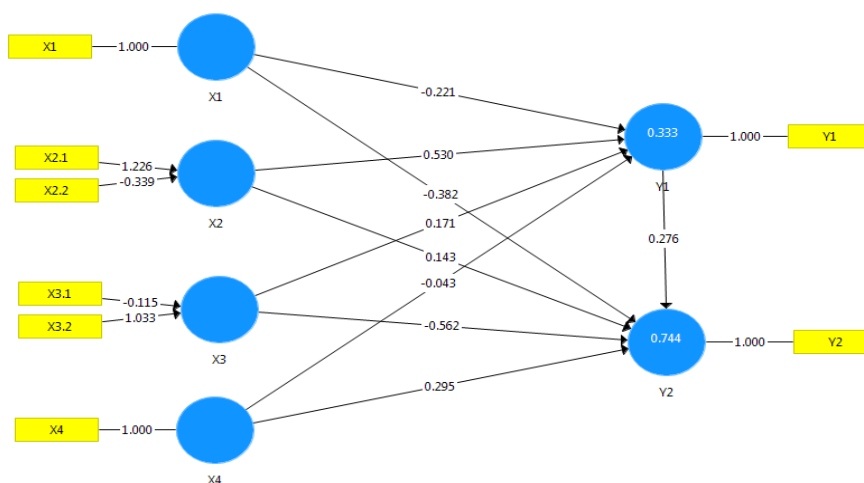


Figure 1. Ouput of Algorithm in the form of Path Diagram

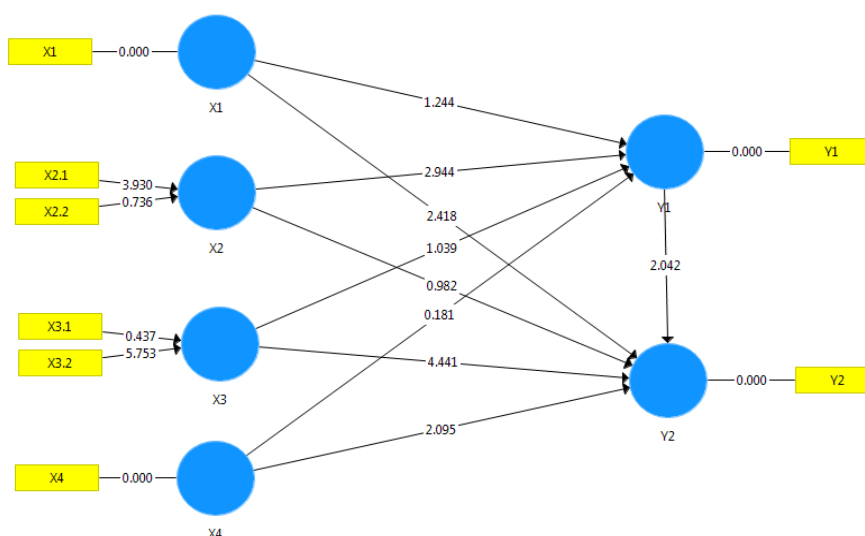


Figure 2. Output of Bootstrapping analysis in the form of Path Diagram

The result for the effect among the latent variables can be seen in Table 3.

Table 3. Result of the Effect between Variables

Variables Relationship	Original Sample (O)	T Statistics (O/STDEV)	P Values	Significance (α = 5%)
Firm Size --> Dividend Payout	-0.221	1.244	0.214	Insignificant
Firm Size --> Capital Structure	-0.382	2.418	0.016	Significant
Firm Risk --> Dividend Payout	0.530	2.944	0.003	Significant
Firm Risk --> Capital Structure	0.143	0.982	0.326	Insignificant
Profitability --> Dividend Payout	0.171	1.039	0.299	Insignificant
Profitability --> Capital Structure	-0.562	4.441	0.000	Significant
Firm Growth --> Dividend Payout	-0.043	0.181	0.857	Insignificant
Firm Growth --> Capital Structure	0.295	2.095	0.037	Significant
Dividend Payout --> Capital Structure	0.276	2.042	0.042	Significant

Firm Size and Dividend Payout

The Firm Size has insignificant effect to the Dividend Payout. The path coefficient is -0.221 and the p-value is 0.214 (negative and insignificant). Therefore, hypothesis 1 is rejected. It is because of the economic crisis in the research period. Thus, companies consider reducing the dividend payout.

Firm Size and Capital Structure

The Firm Size has negative significant effect to the Capital Structure. The path coefficient is -0.382 and the p-value is 0.016 (negative and significant). Therefore, hypothesis 2 is accepted. The negative path coefficient means that better firm size reduces capital structure of the firm. It is since the owned capital is bigger than debt.

Firm Risk and Dividend Payout

The Firm Risk has positive significant effect to the Dividend Payout. The path coefficient is 0.530 and the p-value is 0.003 (positive and significant). Therefore, hypothesis 3 is rejected. The positive path coefficient means that the bigger the firm risk, the higher the dividend payout. It is because the company wants to show the performance and good company image to the investor and public.

Firm Risk and Capital Structure

The Firm Risk has insignificant effect to the capital structure. The path coefficient is 0.143 and the p-value is 0.326 (positive and insignificant). Therefore, hypothesis 4 is rejected.

Profitability and Dividend Payout

The profitability has positive insignificant effect to the Dividend Payout. The path coefficient is 0.171 and the p-value is 0.299 (positive and insignificant). Therefore, hypothesis 5 is rejected.

Profitability and Capital Structure

The profitability has negative significant effect to the capital structure. The path coefficient is -0.562 and the p-value is 0.000 (negative and significant). Therefore, hypothesis 6 is accepted. The negative path coefficient means that profitability reduces capital structure of the firm.

Firm Growth and Dividend Payout

The Firm Growth has insignificant effect to the Dividend Payout. The path coefficient is -0.043 and the p-value is 0.857 (negative and insignificant). Therefore, hypothesis 7 is rejected.

Firm Growth and Capital Structure

The growth has positive significant effect to the capital structure. The path coefficient is 0.295 and the p-value is 0.037 (positive and significant). Therefore, hypothesis 8 is accepted. The positive path coefficient means that firm growth increases capital structure of the firm.

Dividend Payout and Capital Structure

The dividend payout has positive significant effect to the capital structure. The path coefficient is 0.276 and the p-value is 0.042 (positive and significant). Therefore, hypothesis 9 is accepted. The positive path coefficient means dividend payout increases capital structure of the firm.

V. CONCLUSION

This research discusses the determinant of capital structure. The research object is the banking sector companies listed in Indonesia Stock Exchange for the period of 2012-2014. The Capital Structure (CS) is measured from Debt to Equity Ratio (DER). Dividend Payout is calculated from Dividend Yield. Firm Size is measured by the natural logarithm of total assets. Non Performing Loan (NPL) and Loan to Deposit Ratio (LDR) are used as the indicators of the Firm Risk. The Profitability is determined from the Return on Equity (ROE) and Net Interest Margin (NIM). Firm Growth is calculated using the year-on-year percentage change in total assets. The data analysis is done by employing the Structural Equation Model (SEM) with SmartPLS 3.0. From the result of the data analysis, we can conclude as follows.

1. The Firm Size has insignificant effect to the Dividend Payout but negative significant effect to the Capital Structure.
2. The Firm Risk has positive significant effect to the Dividend Payout but insignificant effect to the Capital Structure.
3. The Profitability has insignificant effect to the Dividend Payout but negative significant effect to the Capital Structure.
4. The Firm Growth has insignificant effect to the Dividend Payout but positive significant to Capital Structure.
5. Dividend Payout has positive significant effect to Capital Structure.

This research is expected to give a contribution to knowledge in the field of financial management, especially in capital structure topic. This research is limited to the banking companies listed in the Indonesia Stock Exchange for the year period of 2012-2014. Further research can be done for several types of companies for longer time period.

REFERENCES

- [1] Addae, Albert Amponsah, Michael Nyarko Baasi and Daniel Hughes. 2013. The Effects of Capital Structure on Profitability of Listed Firms in Ghana, *European Journal of Business and Management*, Vol.5, No.31.
- [2] Afza, Talat, and Hammad, Hassan Mirza. 2010. Ownership Structure and Cash Flows as Determinants of Corporate Dividend Policy in Pakistan. *International Business Research*, Vol. 3, No. 3.
- [3] Alom, Khairul. 2013. Capital Structure Choice of Bangladesh Firms: An Empirical Investigation, *Asian Journal of Finance & Accounting*, Vol. 5, No. 1.
- [4] Arif, Ahmed, and Bilal Aslam. 2014. Determinants of Capital Structure: An Age Wise Analysis from Non-Financial Sector of Pakistan, *International Journal of Empirical Finance*, Vol. 3, No. 2, pp. 76-89.
- [5] Ayanda, M.A., Christopher, I.E., Mudashiru, M.A., and Isaac, A.S. 2013. Determinants of Capital Structure in Nigerian Banking Sector. *International Journal of Academic Research in Economics and Management*, Vol. 2, No.4, pp. 27-43.

- [6] Bereznicka, Julia Koralun. 2013. The Relative Importance of Industry and Size Effect in Corporate Capital Structure: Empirical Evidence from the EU Countries, *Eurasian Journal of Economics and Finance*, 1(2), 1-27.
- [7] Bhattacharya, S. 1979. Imperfect Information, Dividend Policy, and "The Bird in the Hand" Fallacy. *The Bell Journal of Economics*, Vol. 10, No.1, pp.259-270.
- [8] Brigham, E.F., and Houston, J.F. 2011. *Fundamental of Financial Management, 13th Edition*. New York: Thomson South Western McGraw Hill.
- [9] Cebenoyan, A. Sinan, and Philip E. Strahan. 2004. Risk Management, Capital Structure and Lending at Banks, *Journal of Banking & Finance*, Vol. 28, pp.19-43.
- [10] Cekrezi, Anila. 2013. Impact Of Firm Specific Factors On Capital Structure Decision: An Empirical Study Of Albanian Firms, *European Journal of Sustainable Development*, Vol. 2, No. 4, pp. 135-148.
- [11] Gornall, W., and Strebulaev, I.A. 2014. Financing as a Supply Chain: The Capital Structure of Banks and Borrowers. *Working Paper No.3102*. Stanford Graduate School of Business.
- [12] Graham, J.R. 2000. How Big are the Tax Benefits of Debt?. *The Journal of Finance*, Vol. 4, No.5, pp.1901-1941.
- [13] Gropp, Reint and Florian Heider, The Determinants of Bank Capital Structure, *ECB Working Paper*, <http://www.ecb.europa.eu/pub/scientific/wps/date/html/index.en.html>
- [14] Hale, D., 1988. How to Lower the Leverage Boom. *Wall Street Journal*, pp. 1.
- [15] Handoo, Anshu and Kapil Sharma (2014), A Study on Determinants of Capital Structure in India, *IIMB Management Review*, Vol. 26, pp.170-182.
- [16] Hossain, M.I, and Hossain M.A. 2015. Determinants of Capital Structure and Testing of Theories: A Study on the Listed Manufacturing Companies in Bangladesh. *International Journal of Economics and Finance*, Vol. 7, No.4, pp. 176-190.
- [17] Husnan, Suad. 2000. *Teori Portofolio dan Analisis Sekuritas*, YKPN Yogyakarta.
- [18] Inderst, Roman and Holger M. Mueller. 2008. Bank Capital Structure and Credit Decisions, *Journal Finance Intermediation*, Vol. 17, pp. 295-314.
- [19] Jahan, Nusrat. 2014. Determinants of Capital Structure of Listed Textile Enterprises of Banglades. *Research Journal of Finance and Accounting*, Vol. 5, No. 20, pp. 11-20.
- [20] Jensen, and Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305-360.
- [21] Jiang, Jun and Komain, Jiranyakul. 2013. Capital Structure, Cost of Debt and Dividend Payout of Firms in New York and Shanghai Stock Exchanges. *International Journal of Economics and Financial Issues*, Vol. 3, No. 1, pp. 113-121.
- [22] Jiraporn, Pomsit and Yixin, Liu. 2008. Capital Structure, Staggered Boards, and Firm Value, *Financial Analysis Journal*.
- [23] Kodongo, O., Mokoaleli, M.T., and Maina, L. 2014. Capital Structure, Profitability and Firm Value: Panel Evidence of Listed Firms in Kenya. *MPRA Paper*. <http://mpra.ub.uni-muenchen.de/57116>.
- [24] Miller, Merton and Kevin, Rock. 1985. Dividend Policy Under Asymmetric Information, *Journal of Finance*, Vol. 40, No. 4, pp. 1031-1051.
- [25] Modigliani, F., and Miller, M.H. 1958. The Cost Of Capital, Corporation finance and The Theory of Investment, *The American Economic Review*, Volume XLVIII.
- [26] Myers S.C., and Majluf N. 1984. Corporate Financing and Investment Decisions when Firms have Information that Investors do not have, *Journal of Financial Economics*, Vol. 13, pp. 187-221.
- [27] Myers, Stewart C. 1984. The Capital Structure Puzzle, *Journal of Finance*, Vol. 39, pp. 575-592.
- [28] Rametulla, F., and Ejupi, E. 2012. Capital Structure and Profitability: The Macedonian Case. *European Scientific Journal*, Vol. 8, No.7, pp. 51-58.
- [29] Ranti, Uwuiigbe Olubukunola. 2013. The Effects of Board Size and CEO Duality on Firm's Capital Structure: A Study of Selected Listed Firms in Nigeria, *Asian Economic and Financial Review*, Vol. 3, No. 8, pp.1033-1043.
- [30] Ross, Stephen A. 1977. The Determination of Financial Structure: The Incentive-Signalling Approach. *The Bell Journal of Economics*, Vol. 8, No. 1, pp. 23-40.
- [31] Shubita, Mohammad Fawzi and Jaafer, Maroof Alsawalhah. 2012. The Relationship between Capital Structure and Profitability, *International Journal of Business and Social Science*, Vol. 3, No. 16.
- [32] Tarazi, Ramzi E.N. 2013. Determinants of Capital Structure: Evidence from Thailand Panel Data, *Proceedings of 3rd Global Accounting, Finance and Economics Conference 5 - 7 May, 2013, Rydges Melbourne, Australia*.
- [33] Thippayana, Pornpen. 2014. Determinants of Capital Structure in Thailand, *Procedia - Social and Behavioral Sciences*, Vol. 143, pp. 1074 - 1077.
- [34] Velnampy, T and J. Aloy, Niresh. 2012. The Relationship between Capital Structure and Profitability, *Global Journal of Management and Business Research*, Vol. 12, No. 13.