

# International Journal of Applied Business and Economic Research

ISSN: 0972-7302

available at http: www.serialsjournals.com

© Serials Publications Pvt. Ltd.

Volume 15 • Number 22 • 2017

Investment Opportunity Set as the Mediation Effect of Capital Structure, and Corporate Dividend Policy on Firm Value: A Study on Manufacturing Firms in Indonesia Stock Exchange

# Sugeng Sulistiono<sup>1</sup>, Moeljadi<sup>2</sup>, Atim Djazuli<sup>3</sup> and Solimun<sup>4</sup>

### **ABSTRACT**

Firm value is an assessment of capital market on the firm. Firm value is associated with the firm's growth that is measured through Investment Opportunity Set. Investment Opportunity Set is the investment opportunities of the firm and the value of market capitalization with equity. Investment Opportunity Set is utilized as the mediating variable of capital structure, and dividend policy on firm value. The aims of this study are to examine and analyze (1) the direct effect of capital structure and dividend policy on investment opportunity set (2) the direct effect of capital structure, dividend policy and the investment opportunity set on firm value, and (3) the indirect effect of capital structure, and dividend policy on firm value through the mediation of investment opportunity set. This study was performed on the firms listed in the Indonesia Stock Exchange (BEI) During 2009 to 2013 period. The data collection was done by using purposive sampling while the population is chosen based on population criteria. The Firm involved as research sample are saturated sample or census as the number of research samples are 15 firms. The method of data analysis is Path Analysis and Sobel Test that are used to test are mediating role of investment opportunity set variable. The research findings show that the direct effect of capital structure and on investment opportunity set is not significant, but the direct effect of dividend policy on investment opportunity set is significant. The direct effect of capital structure and dividend policy on firm value is not significant whereas the direct effect of investment opportunity set on firm value is significant. The indirect effect of capital structure on firm value through the mediation of investment opportunity set is not significant, mean while the indirect effect of dividend policy on the firm value through the mediation of investment opportunity set is significant.

**Keywords:** Investment opportunity set; Firm value; Capital structure; Dividend policy.

<sup>&</sup>lt;sup>1</sup>State Polytechnic of Malang, Jalan Soekarno Hatta, Malang, East Java, Indonesia. Email: penkpoltek@gmail.com

<sup>&</sup>lt;sup>24</sup>Brawijaya University Malang, Jalan Veteran, Malang, East Java, Indonesia. Email: moeljadi@fe.unibraw.ac.id, atim@fe.unibraw.ac.id, solimun@ub.ac.id

#### 1. INTRODUCTION

Corporate Financial Theory states that the company financial management aims at optimizing the firm value. It can be explained from the relationship between the financial decision, company strategy and firm value (Damodaran, 1994:8). Firm value is determined by the investment decision, capital structure and dividend policy made by the company. It can be seen from the company business management strategy aiming at optimizing the welfare of the shareholders, and it can be achieved by optimizing the firm value (Weston dan Copeland, 2010:10). Van Horne states that (2002:3), "The objective of a company must be to create value for the shareholders. Value is represented by market price of the company's common stock, which, in turn, is a function of the firm's investment, financing, and dividend decisions". The statement affirms that the company goal is to perform value creation for the shareholders. The firm value is represented through the share price of common stock, and it is the function of the investment decisions, financing decisions, and dividend decisions. Moeljadi (2006) states that the goal of optimizing the shareholders' welfare can be attained through various relevant financial decisions that affect the firm value. In this case the financial decisions involve investment decisions, financing decisions and dividend decisions. Thus, the firm value can be created through investment decisions, financing decisions and dividend policy, both of short- and long-term strategic decisions. Investment decision is basically independent. However, as soon as the investment decision is taken, the investment finance is related to the financing decision (Moeljadi, 2006:235).

Companies in Indonesia face various profit-promising business opportunities, and they can use the profitable investment opportunities in a long term. The investment opportunities owned by the company are called Investment Opportunity Set (IOS). IOS gives broader picture of the investment opportunities, and it is related to the company goal as the achievement base of the company's main objective, that is, optimizing the welfare of the shareholders(Myers,1977). This research responds to the question of whether the investment opportunity set (that indicates growth) plays an important role in mediating the capital structure and dividend policy toward the company goal. IOS is used as the mediation variable, because IOS gives the picture of the company investment decision in utilizing the profitable investment opportunities and indicates growth. The empirical testing of the effect of capital structure, dividend policy and investment opportunity set as the mediation toward the company goal. The results of this study is to develop the previous research related to the firm value.

Based on the background afore-mentioned, the statements of the problems are as follows:

- (a) Does capital structure affect firm value?
- (b) Does dividend policy affect firm value?
- (c) Does capital structure affect investment opportunity set?
- (d) Does dividend policy affect investment opportunity set?
- (e) Does investment opportunity set affect firm value?
- (f) Does investment opportunity set mediate the effect of capital structure on firm value?
- (g) Does investment opportunity set mediate the effect of dividend on firm value?

Investment Opportunity Set as the Mediation Effect of Capital Structure, and Corporate Dividend Policy on Firm Value:...

Based on the statement of the problems, the objectives of this research are formulated as follows:

- (a) test and analyze the effect of the capital structure on firm value.
- (b) test and analyze the effect of dividend on firm value.
- (c) test and analyze the effect of capital structure on investment opportunity set.
- (d) test and analyze the effect of the dividend policy on investment opportunity set.
- (e) test and analyze the effect of investment opportunity set on firm value.
- (f) test and analyze investment opportunity set in mediating the effect of capital structure on firm value.
- (g) test and analyze investment opportunity set in mediating the effect of dividend on firm value.

#### 2. RUDIMENTARY

# 2.1. Firm Value Theory

Firm value Measurement is conducted with Tobin's Q. Tobin's Q measurement consists of elements of equity, company payables, and company asset values. The measurement involves all company assets, in this case the company does not only pay attention to investors' interest but also creditors'. It is caused by utilization of several fund resources in the company capital structure. The higher Tobin's score is, the better the company's prospect is. The higher value of company asset value than the company asset book value boosts investors to buy the company shares.

# 2.2. Investment Opportunity Set and Investment Decision

Investment Opportunity Set (IOS) is a term indicating the existence of company investment opportunities in the future. The choice of investment taken by the company is an opportunity for the company to grow. Gaver and Gaver (1993) states that the choice of investment is not only oriented to the research-and-development-supported projects but also indicated by the company capability in utilizing the investment opportunity to gain profits. Investment opportunity set (IOS) is the base for determining the category of a company, whether the company belongs to the growing category or non-growing category.

### 2.3. Capital Structure Theory

Weston dan Copeland(2010:19) define capital structure as permanent financing consisting of long term debt, preferred stock and common stock. The definition shows proportion of some types of capitals used by the company. The modern capital structure theory was first proposed by Modigliani-Miller (1958), that with certain assumptions it states that capital structure does not affect firm value (Brigham dan Houston, 1998: 31). In this case MM explains the irrelevancy of the types of the fund resources used in the company operation on the firm value. The development of capital structure theory is tax preference theory, signaling theory, pecking order theory and static trade-off theory.

## 2.4. Dividend Policy Theory

The dividend distribution with certain proportion can be seen how far the implication of the policy on the shareholders, as investors basically have different preferences in responding to the dividend policy. The company, in determining the dividend policy, considers the effect of the policy on the objective of optimizing the welfare of the shareholders or firm value. Some theories on dividends were the first time developed by Modigliani-Miller in 1958, that is *dividend irrelevance theory*. The following dividend theories were *bird in the hand theory, tax preference theory, signaling theory, clientele effect theory* and *residual theory*.

#### 3. RESEARCH HYPOTHESES AND PROPOSED METHOD

# 3.1. Hypotheses

Hypothesis of Capital Structure and Firm value: Famadan French (1998) in their study showed that the tax effect on the debt policy negatively affects the firm value. The result of this research is consistent to that by Miller on the tax effect on income and signalling theory, describing the debt use that indicates company growth.

Hypothesis 1: The increase of debt use affects the decrease of firm value.

Hypothesis of Dividend Policy and Firm value: The study by Famadan French (1988) showed the relationship between tax effect and dividend policy, indicating there is a positively significant effect of dividend policy on firm value. The study by Dhaliwal, Li danTrezevant (2003) showed that dividend yield positively affects the stock return with the decrease of institutional level of the ownership and corporate ownership. This study showed that main stock return will increase related to the increase of dividend yield.

Hypothesis 2: The increase of dividend distribution affects the increase of the firm value.

Hypothesis of Capital Structure and *Investment Opportunity Set:* The study by Peterson danBenesh (1983) showed that debt policy has a positive and significant effect on the investment decision. While the relationship between dividend policy and investment is positively significant. Later the study by Han and Wang (2009) showed that investment and financing has positive and significant relationship, while the relationship between financing and dividend was not significant. The investment on high-tech has positive and significant effect on the company performance. However, the relationship between dividend policy and company performance was not significant.

Hypothesis 3: The increase of debt use affects the increase of IOS

Hypothesis of Dividend Policy and *Investment Opportunity Set:* Study on IOS was conducted by Smith dan Watts (1992) found that IOS affects financing policy with low debt use by prioritizing the stock issues, giving less dividend and higher company compensation. This study was expanded by Gaverdan Gaver (1993) by using the combined IOS. The research results showed that growing company has lower debt to equity ratio, lower dividend yield, and pays higher company executive compensation than non-growing company does.

Hypothesis 4: Increase of dividend distribution affects the increase of IOS

Hypothesis of *Investment Opportunity Set* and Firm Value: The study of Hutchinson dan Gul (2003) showed negative relationship between growth (measured with IOS) and firm value, the relationship is weakened by corporate governance moderation variable. The study by Hasnawati (2005) showed that the investation decision (either realized investment or future investment opportunity) has a positive and

significant effect on firm value. While, study by Dehning, Richardson, Stratopoulos (2005) showed that investment on information technology increases firm value.

Hypothesis 5: Increase of IOS affects increase of firm value

Hypothesis Investment Opportunity Set (IOS) as Effect Mediation of Capital Structure, Dividend Policy on Firm Value: Study of Smith dan Watts (1992) showed that IOS affects financing policy, dividend and company compensation. It showed that IOS affects financing policy, dividend and company compensation. A company with higher growth uses lower debt fund, because it is related to low incentive for the company management and dividend (enlarging the retained earnings). The study by Chen (2002) showed positive and significant relationship between debt and firm value for the company with low growth. While, for the company with high growth opportunities the relationship between debt and firm value is not significant. The study by Hutchinson and Gul (2003) showed negative relationship between growth (measured with IOS) and firm value.

Hypothesis 6: IOS mediates the effect of increase of debt use on increase of firm value.

Hypothesis 7: IOS mediates the effect of increase of dividend distribution on increase of company improvement.

### 3.2. Theoretical Background

**Firm value:** The measurement of firm value is based on the stock price as the representation of stock market value. Tobin's Q is the standard of firm value covering the elements of equity, company debt, and company asset value. The Tobin's Q formula is as follows:

Tobin's Q = 
$$\frac{(OS \times P) + (D + I) - CA}{TA}$$

Investment Opportunity Set: The IOS proxy used is MVE/BVE ratio or market to book value of equity. This ratio describes stock capitalization value in the stock exchange. The calculation of the number of circulating shares and stock price describes the market capability to evaluate internal fund source, that is equity (Smith dan Watts, 1992, Kallapur & Trombley, 1999, Adam & Goyal, 2008).

$$MVE/BVE Ratio = \frac{Outstanding Share \times Share Price}{Total Equity}$$

Capital Structure: Modigliani-Miller (MM) in their theory (1958) states that any type of fund used (with certain assumption) is not relevant to the firm value. The research conducted by Miller (1963) showed relevance of the type of fund source to the firm value. The capital structure variable uses long term debt to total assets ration (LTDTA) proxy (Masulis;1983, Chen; 2002, Sudarma;2004; JIraporn and Liu; 2008).

$$LTDTA = \frac{Long term debt}{Total assets} \times 100\%$$

**Dividend Policy:** Dividend policy uses dividend payout ration proxy (Masulis and Trueman; 1988, Agrawal and Jayaraman; 1994, Djazuli; 2010, Ikbal, Sutrisno, and Djamhuri; 2011, Hussainey, MgBame and MgBame; 2011):

$$DPR = \frac{Dividend paid}{Net Income} \times 100\%$$

#### 3.3. Research Method

The approach of this study was positivist paradigmn. It is a quantitative mainstream approach. This study is confirmatory research, intended to confirm a theory on the research object either for explanation or prediction. Furthermore, this study is an explanatory research, aiming at testing the theory or hypothesis in order to affirm or even refute a theory or hypothesis of the existing research results.

This study was conducted at the companies registered in Bursa Efek Indonesia (Indonesian Stock Exchange). Based on the criteria of population, there were 15 companies that met the requirements. Thus, the population of the research were 15 companies. This research applied census method and saturated sampling, a sampling technique which takes all the population members as the samples.

#### Variable Measurement Identification:

- (a) Capital structure  $(X_1)$ , uses long term debt to total assets ratio (LTDTA) proxy.
- (b) Dividend policy  $(X_3)$ , uses dividend payout ratio (DPR) proxy.
- (c) IOS (Y<sub>1</sub>), uses market to book value of equity (MVE/BE) proxy.
- (d) Firm value( $_{Y2}$ ), uses *Tobin's Q ratio* proxy.

Data Source and Data Collection Method: The data collected in this study were taken from secondary source. The secondary data were collected from statistics data through documentation technique. They were financial reports and stock prices published by PT. Bursa Efek Indonesia from 2009-2012 period. The data in the research were pooling data, that is time series combination and cross sectional data. Based on the research conceptual model designed, the analysis method in this study used path analysis. This analysis method was used because there was complex inter-variable relationship that cannot be solved with multiple regression.

The Use of Distributed-Lag in Research Model: This research used time series data, so that it enables the use of Distributed-lag model. This is due to the fact that regression model does not only consist of independent variable  $X_t$  (the current variable), but also independent variable  $X_{(t-1)}$ , that is called lagged variable (Gujarati, 2003:656). The structural equation of firm value describes the presence of time lag of the capital structure variable, managerial ownership, dividend policy and IOS toward firm value. 1 year time lag is the rational time length between capital structure variable, managerial ownership, dividend policy and IOS toward firm value. The time lag between those variables is finite lag model. The analysis method in this study is to design path analysis model as shown in the Figure 1 below:

### 4. RESEARCH RESULTS AND DISCUSSION

Based on the previous related theories and research findings, the path diagram is displayed at Figure 1.

**Direct Effect:** The direct effect between variables in the research model is the direct effect of capital structure and dividend policy variables on IOS. Furthermore, it is the direct effect of capital structure, dividend policy, and IOS on firm value (See Table 1).

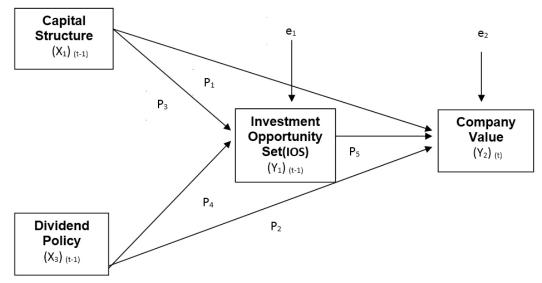


Figure 1: Path Analysis Diagram Model

Table 1
Path Coefficient of Direct Effect of Capital Structure, Managerial Ownership, and Dividend Policy, on IOS and Direct Effect of Capital Structure,
Dividend Policy and IOS on Firm value

No	Inter Variable Direct Effect	Path Coefficient	p-value	Conclusion
1	Effect of Capital Structure $(X_1)$ on Firm value $(Y_2)$ .	-0.037	0.679	Not Significant
2	Effect of Dividend Policy (X <sub>3</sub> ) on Firm value (Y <sub>2</sub> ).	0.116	0.260	Not Significant
3	Effect of Capital Structure $(X_1)$ on IOS $(Y_1)$ .	-0.152	0.253	Not Significant
4	Effect of Dividend Policy (X <sub>3</sub> ) on IOS (Y <sub>1</sub> ).	0.500	0.000	Significant
5	Effect of IOS $(Y_1)$ on Firm value $(Y_2)$ .	0.757	0.000	Significant

*Notes:*  $\alpha = 0.05$ 

**Indirect effect:** The indirect effect of research variables are (1) effect of capital structure on company value through mediation variable IOS, (2) effect of managerial ownership on company value through mediation variable IOS, and (3) effect of dividend policy on firm value through mediation variable IOS (See Table 2).

Table 2
Sobel Test of Indirect Effect of Capital Structure, and Dividend Policy on
Firm value with IOS Mediation

No	Indirect Effect	Coefficient Change ( $a \times b$ )	SE	Z	p-value
1	Indirect effect of capital structure on firm value through IOS	-1.460	1.274	-1.146	0.252
2	Indirect effect of dividend policy on firm value through IOS	4.621	1.356	3.408	0.001

The calculation of regression coefficients of indirect effects of capital structure, managerial ownership, and dividend policy on firm value through IOS is as follows (See Table 3).

Table 3
Regression Coefficients of Direct Effect of Capital Structure, Managerial Ownership, and Dividend Policy on Firm value through IOS

No	Indirect Effect	Path Coefficient of Oxogen Variable on IOS	Path coefficient of IOS on NP	Regression coefficient of indirect effect	P-Value	Conclusion
1	Indirect effect Capital Structure variable	-0.152	0.757	-0.115064	0.252	Not
	$(X_1)$ on Firm value $(Y_2)$ through IOS $(Y_1)$					Significant
2	Indirect effect of Dividend Policy variable $(X_3)$ on Firm value $(Y_2)$ through IOS $(Y_1)$	0.500	0.757	0.3785	0.001	Significant

Notes:  $\alpha = 0.05$ 

Next, based on the statistical calculation, the result path diagram of path analysis model is as follows (See Figure 2).

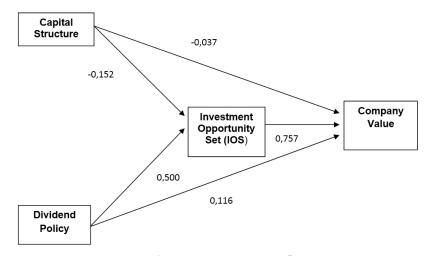


Figure 2: Analysis Results Path Diagram

**Examination of Model Validity:** Model validity is shown with Total Determination Coefficient  $(R^2_M)$ , that is calculated based on  $R^2$  value of each endogen variable (See Table 4).

Table 4
Test result R Square (R<sup>2</sup>) of endogen variable

No	Endogen Variable	$V$ alue of R Square ( $R^2$ )
1	Investment Opportunity Set (IOS)	0,305
2	Firm value	0,681

The total determination coefficient value is calculated as follows (Solimun, 2011:133):

$$R_{M}^{2} = 1 - P_{e1}^{2} P_{e2}^{2} \dots P_{ep}^{2}$$

$$R_{M}^{2} = 1 - (0.305) (0.681)$$

$$R_{M}^{2} = 1 - 0.207705$$

$$R_{M}^{2} = 0.792295$$

Based on total determination coefficient calculation ( $R_{\rm M}^2$ ), it shows data diversity total of 79.23% that can be explained with the research model or, in other words, the information contained in the data of 79.23% can be explained with such model. While 20.77% can be explained by other variables not included in the research model. According to Solimun (2011:133), the total determination coefficient is between 0% and 100%. The greater the total determination coefficient is, the better the research model is. Thus, total determination coefficient of 70.23% shows that the research model is good.

#### 5. CONCLUSION AND SUGGESTION

Based on the hypothesis testing and research discussions, the conclusions of this research are as follows:

- (a) The effect of capital structure on firm value is not significant. It is due to the investors' perception on dillematic debt use in the capital structure. The investors predict profits from their stock ownership based on possibilities of changes that will affect stock prices in stock exchange. Changes of stock prices in stock exchange reflect changes of firm value.
- (b) The effect of dividend policy on firm value is not significant. The effect of dividend policy (with one year lag time) on firm value is not significant. It is due to the relatively constant dividend payout ratio that shows the contant earnings proportion distributed in the form of dividends. The investors make speculations before the dividends distribution by predicting the amount of the dividends distributed. It is related to the expected return of the investors by making speculations to make profitable stock trade transactions.
- (c) The effect of capital structure has insignificant effect on IOS. It shows that the debt use in financing some company investments is not related to the company growth. IOS as the standard of company growth is considered by the company management in relation to the type of fund to be used. In this case the debt use does not significantly affect the company growth.
- (d) The effect of dividend policy on IOS is significant. It is due to the fact that the dividend proportion distributed is relatively constant to give shareholders certainty. It describes that dividend policy can be connected to the investments by the company that can increase the stock capitalization value.
- (e) The effect of IOS on firm value is significant. It shows that shareholders consider company growth as the basis for determining stock price. The IOS fluctuation shows the dynamic of company business performance that is shown from the investment opportunity utilization that is positively responded by shareholders.
- (f) The indirect effect of capital structure on firm value with IOS mediation is not significant. The effect of IOS on firm value is significant, but the research results show that capital structure does not significantly affect on IOS. It indicates that debt use in the company capital structure does not affect company growth.
- (g) The indirect effect of dividend policy on firm value with IOS mediation is significant. It is due to the fact the effect of dividend policy on IOS is significant and that the effect of IOS on firm value is significant. This research shows that the company growth measured by IOS affects the investors' perception in stock exchange.

Based on the research conclusions, the following are recommendation to consider:

- (a) The company management is expected to consider the proportion of optimum debt amount in the company capital structure. The management normally assumes that the increase of debt amount can increase profits (tax deductible expenses effect). Besides, the company management courage to use debts is related to better future company prospects. The financing decision with debts will create financial distress that is sensitive to the economic condition changes. Besides, management needs to pay attention to the financial risk level related to the debt use by the company. It is necessary because debt use creates investors' perception that the increase of debt will cause increase of financial risks.
- (b) The dividend policy with constant proportion should describe the increase of dividend per share for shareholders. Although shareholders often make speculations before the publication of dividend amount to be distributed, the information about the dividend amount will signal prospective profits of the company. The increase of dividend per share will be perceived by investors as the increase of company profits. Although the results of this research show the effect of dividend policy on company value is not significant, the dividend policy that prioritizes the welfare of shareholders will be positively responded by investors.
- (c) The company decision to utilize prospectively profitable investment opportunities will boost company growth, IOS as the company growth indicator that describes company success representation in running its business in business situations and ever-changing macro economy.
- (d) The company growth and firm value are determined by stock prices. Investors' pragmatism in stock exchange is often an object of quite strong argumentation for the stock exchange price formation. It means that the stock price formation is much affected by investors' prediction on the external macro condition of the company, especially macro economy macro which is affected by global economic condition. This external macro condition can be a strong argumentation for management to consider the external macro condition of the company in company financial decision. The integration of strategy, goal, and internal policy of the company with the prediction of economic macro condition can give adequate information for investors. Thus, the investors can take investment decisions by more comprehensive considerations.

# References

- Adam, Tim, and Goyal, Vidhan K., (2007). *The Investment Opportunity Set and Its Proxies Variables*, Massachusetts Institute of Technology, Hong Kong University of Science and Technology, August 6, 2007, diunduh 10/15/2012, 8.07 AM.
- Agrawal, Anup, Jayaraman, and Narayanan, (1994). The Dividend Policies of All-Equity Firm: A Direct Test of The Free Cash Flow Theory, *Managerial and Decisions Economics*; 15, pp. 139-148.
- Brigham, Eugene F, and Houston, Joel F., (1998). *Manajemen Keuangan*, Herman Wibowo (Penerjemah), Penerbit Erlangga, Jakarta.
- Chen, Kaifeng. (2002). The Influence of Capital Structure on Company Value with different growth opportunities, *paper* for EFMA 2002 Annual meeting, FAME and University of Lausanne.
- Damodaran, Aswath, (1994). Damodaran on Valuation, Security Analysis for Investment and Corporate Finance, John Wiley & Sons, Inc.

- Investment Opportunity Set as the Mediation Effect of Capital Structure, and Corporate Dividend Policy on Firm Value:...
- Dehning, Bruce, Richardson, Vernon J., and Stratopoulos, Theopanis, (2005). Information Technology Investments and Firm Value, *Information & Management*, pp. 989-1008.
- Dhaliwal, Dan, Li, Oliver Zhen, and Trezevant, Robert, (2003). Is a Dividend Tax Penalty Incorporated into the Return on a Firm's Common Stock?, *Journal of Accounting & Economics 35*, pp 155-178.
- Djazuli, Atim, (2010). Analisis Variabel Finansialdan Makro Ekonomi yang berpengaruhterhadap Hargasaham (studi di PT. Bursa Efek Indonesia), Disertasi, Program Pascasarjana Universitas Brawijaya Malang.
- Gaver, Jennifer J & Gaver, Kenneth M, (1993). Additional Evidence on the Association between the Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies, *Journal of Accounting and Economics* 16 (1-3), 125-160.
- Fama, Eugene.F., and. French, Keneth.R, (1998). Taxes, Financing Decisions and Firm Value, *The journal of Finance*; Vol. LIII, No. 3, June pp. 819-843.
- Gujarati, Damodar N, (2003). Basic Econometrics, Fourth Edition, International Edition, McGraw-Hill.
- Han, David, and Wang, Min, (2009), Corporate Investment, Financing, and Dividend Policies in the High-tech Industry, *Journal of Business Research* 63 pp. 486-489.
- Hasnawati, Sri, (2005). Dampak Set Peluang Investasi Terhadap Nilai Perusahaan Publik di Bursa Efek Jakarta, *Jurnal Akuntansi & Auditing Indonesia, Vol. 9*, No. 2.
- Hussainey, Khaled, MgBame, Chijoke Oscar, MgBame, and Aruoriwo M. Chijoke, (2011). Dividend Policy and Share Price Volatility: UK Evidence, *Emerald, The Journal of Risk Finance, Vol. 12, No. 1, pp 57-68.*
- Hutchinson, Marion, and Gul, Ferdinand A., (2003). Investment Opportunity Set, Corporate Governance Practices and Firm Performance, *Journal of Corporate Finance*, pp. 595-614.
- Ikbal, Muhammad, Sutrisno, dan Djamhuri, Ali, (2011). Pengaruh Profitabilitasdan Kepemilikan *Insider* terhadap Nilai Perusahaan dengan Kebijakan Utangdan Kebijakan Dividensebagai Variabel *Intervening* (Studipada Perusahaan Manufaktur di Bursa Efek Indonesia, *Simposium Nasional Akuntansi XIV* Aceh 2011.
- Jiraporn, Pornsit. and Yixin. Liu. (2008). Capital Structure, Staggered Boards, and Firm Value, *Financial Analysts Journal*, p.49 60.
- Kallapur, Sanjay, and Trombley, Mark A, (1999). The Association Between Investment Opportunity Set Proxies and Realized Growth, *Journal of Business Finance & Accounting*.
- Masulis, Ronald W., (1983), The Impact of Capital Structure Change on Firm Value: Some Estimates, *The Journal of Finance*, Vol. 38, No. 1, pp. 107-126.
- Masulis, Ronald W., and Trueman, Brett., (1988). Corporate Investment and Dividend Decisions Under Differential Personal Taxation, *Journal of Financial and Quantitative Analysis*; Dec 1988; Vol. 23, 4; pp. 369-385, JStore, University of Washington School of Business Administration.
- Moeljadi, (2006). Manajemen Keuangan, Jilid I, Penerbit Bayumedia.
- Myers, Stewart C, (1977). Interactions of Corporate Financing and Investment Decisions Implication for Capital Budgeting: Reply *The Journal of Finance*, 32(1): 218-220.
- Peterson, Pamela P., and Benesh, Gary A., (1983), A Reexamination of the Empirical Relationship between investment and Financing Decisions, *The Journal of Financial and Quantitative Analysis*, Vol. 18, No. 4, pp. 439-453.
- Smith, Clifford W., Jr., and Watts, Ross L., (1992). The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies, *The Journal of Financial Economics*, pp. 263-292.

### Sugeng Sulistiono, Moeljadi, Atim Djazuli and Solimun

- Solimun, (2011). Analisis Multivariat Pemodelan Struktural Metode Partial least Square-PLS, CV. Citra Malang.
- Sudarma, Made, (2004). Pengaruh Struktur Kepemilikansaham, Faktor Intern dan Faktor Ekstern Terhadap Struktur Modal dan Nilai Perusahaan (Studipada Industri yang go public di Bursa Efek Jakarta), Disertasi, Program Pascasarjana Universitas Brawijaya, Malang.
- Van Horne, James C., (1997). *Prinsip-prinsip Manajemen Keuangan*, Terjemahan, Salemba Empat, Simon & Schuster (Asia Pte), Ltd, Prentice Hall.
- \_\_\_\_\_\_, (2002). Financial Management and Policy, Twelfth Edition, Prentice Hall, Inc, USA.
- Weston, J Fred, and Copeland, Thomas E., (2010). *Manajemen Keuangan*, Jaka Wasanadan Kibrandoko (Penerjemah), Binarupa Aksara Publisher, Jakarta.