

# SIMULTANEOUS RELATIONSHIP BETWEEN LEVERAGE POLICY AND DIVIDEND POLICY

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#### **ABSTRACT**

This study aims to analyze the simultaneous relationship between dividend policy and leverage policy along the factors influence them. Dividend policy is measured by dividend payout ratio, while leverage policy is measured by debt ratio. The factors influencing these two policies are profitability, size, asset structure, and growth. This study uses secondary data from Indonesia Stock Exchange (IDX), within companies that always listed on LQ45 Index during 2009 – 2014 are used as sample. Two stage least square (2SLS) is used as regression method. The result shows that both of two policies have simultaneous relation and give positive effect. Profitability gives positive effect, while size gives insignificant effect to dividend policy. Profitability and growth give negative effect, while asset structure gives insignificant effect to leverage policy.

Keywords: dividend policy, leverage policy, profitability, size, asset structure, growth, 2SLS.

## 1. Introduction

As we know, science and technology are the things that always have development year by year. Some advantages due to this development are we can gain some information and build our networking easily. But in other ways, it will cause demands and competitions in business to be more competitive.

Due to demands and competitions in business are more competitive, every company needs to face with some important issue like financing decisions and dividend decisions. Financing decision is a critical decision in financial management that related to do fund raising to financing company's operational activity. The fund raising can be debt, stock or stock preference. Dividend decision is a decision to decide how much dividend that need to be paid to stake holders.

This study aims to analyze and find empirical evidence about simoultaneous influence between leverage policy and dividend policy along their determinants. The determinants are profitability, size, asset structure, and growth. There have been some research papers discussing dividend policy, leverage policy, or both with different result.

Some study analyzing how leverage policy, profitability and size influence dividend policy have been done by several researchers. Kim, Rhim, and Friesner (2007) and Ritha and Koestiyanto (2013) claim leverage policy gives positive effect to dividend policy. In the opposite, Setia-Atmaja (2010), Lee (2014), Vo and Nguyen (2014), Kuzucu (2015), and Manneh and Naser (2015) claim it gives negative effect. Study done by He, Li, Shi, and Twite (2009), Lee (2014), Vo and Nguyen (2014), Manneh and Naser (2015), and Pan, Shi, and Zhu (2015) show profitability gives positive effect to dividend policy. But, according to Kim, Rhim, and Friesner (2007), Setia-Atmaja (2010), Wang, Ke, Liu, and Huang (2011), Lopolusi (2012), and Ritha and Koestiyanto (2013), it gives

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insignificant effect to dividend policy. About how size influences dividend policy, He, Li, Shi, and Twite (2009), Setia-Atmaja (2010), Kuzucu (2015), Manneh and Naser

Ke, Liu, and Huang (2011) and Lopolusi (2013) claim the result is negative effect. Similar with dividend policy, some study analyzing leverage policy and it determinants have been done by several researchers and show different result. First, Kim, Rhim, and Friesner (2007) and Widyarini and Muid (2014) claim that dividend policy gives positive effect to leverage policy, while Setia-Atmaja (2010), Umer (2014), Vo and Nguyen (2014), Fauzi and Suhadak (2015), and Pan, Shi, and Zhu (2015) claim the opposite. Second, according to study done by Hardiningsih and Octaviani (2012) shows profitability gives positive to leverage policy. This result is refused by Cole (2008), Al-Najjar and Taylor (2008), Al-Fayoumi and Abuzayed (2009), Setia-Atmaja (2010), Hestuningrum and Darsono (2012), Umer (2014), and Widyarini and Muid (2014) which their study showing a negative effect. Third, result of study done by Cole (2008), Al-Najjar and Taylor (2008), Al-Fayoumi and Abuzayed (2009), Setia-Atmaja (2010), Hardiningsih and Oktaviani (2012), and Umer (2014) show asset structure gives positive effect to leverage policy. In the other hand, result of study done by Hestuningrum and Darsono (2012) and Widyarini and Muid (2014) show it gives negative effect. Last, according to Cole (2008), Al-Najjar and Taylor (2008), Al-Fayoumi and Abuzayed

(2009), Hestungingrum (2012), and Widyarini and Muid (2014) a corporate growth gives positive effect to leverage policy. But, the result is refused Hardiningsih and Oktaviani

(2012) and Fauzi and Suhadak (2015) which claim it gives negative effect.

(2015), and Pan, Shi, and Zhu (2015) claim it gives positive effect. Meanwhile, Wang,

## 2. Literature Review and Hypotheses

Financial management has responsibility to manage and make decision about how much fund that company should take. The right decision can bring the company to have a well financial position. Myers (1984) said, companies tend to choose internal funding than external one. And if they have to use external funding, first they are better off to take debt over than new equity or retained earning. Moreover, a balance between the benefits and the sacrifices from the use of debt is needed in capital structure. We are allowed to increase the number of debt in capital structure as long as we have more benefits from it. Otherwise, if the sacrifices from the use of debt are more than it benefits we are not allowed (Utami, 2014).

Stock market is the most alternative that often used by investors to invest their funds. Stock market has role as a connector between investors and companies or institutions that need long term funding. According to Ritha and Koestiyanto (2013), investors generally do invest to gain dividend yield and capital gain. Stakeholders wish company will pay them with high dividend, or at least realatively stable, from year by year. Those dividend are expected to be able increasing their welfare.

Leverage policy is a financial policy about how much the corporate uses debt as external funding. The corporate with high debt is usually has low agency cost. Agency cost becomes low due to supervision to manager is done by both stakeholders and creditors. A supervision done by creditors is usually an agreement on limitation of how much dividend that allowed to be paid to stakeholders. Limitation of how much dividend that allowed to be paid is intended for corporate to pay their debt first. Corporate will pay their debt from their profit. Therefore, if they use most of their profit to pay debt, it will cause rest of the profit that can be paid as dividend becomes less. It can be concluded that the leverage policy gives negative effect to dividend policy.

A dividend policy is something critical to corporate. Dividend distributed to stakeholders a as gain from corporate profit. A stable corporate will always pay dividend



to their stakeholders regularly. With this regular dividend payment, stakeholders are expected not to move away to another corporate. Corporate will provide hints to stakeholder about their condition. A well corporate will always pay dividend to their stakeholder regularly. Total dividend will be paid by corporate is rely on their internal funds in the current year. The use of internal fund is intended to reduce agency cost and some surplus in corporate free cash flow. Dividend payment has impact to the use of debt due to this payment will be done after the corporate pay their liabilities. The more liability that corporate has to pay, the less dividend that can be paid. So, it can be concluded that dividend policy gives negative effect to leverage policy.

Dividends paid to shareholders out of corporate profits. Changes in dividend payout are likely to be influenced by fluctuations in the levels of the achieved annual profit. A corporation is therefore likely to increase its dividend payout alongside with rising profits. Profit is, therefore, viewed as a major factor in formulating corporate dividend policy (Manneh and Naser, 2015). Corporate with high profit tends to distribute some of their profit to stakeholders as dividends. In the contrary, corporate with low profit tends not to pay dividend to their stakeholders due to the profit will be used to pay their liabilities. Due to this explanation, profitability gives positive effect to dividend policy.

Profitability is corporate ability to generate net profit during their operations. Corporate with high profitability means that they can manage their fund without need aditional debt. The pecking order theory postulates that firms prefer to use internally generated funds when available and choose debt over equity when external financing is required. Thus, this theory suggests a negative relationship between profitability (a source of internal funds) and leverage (Sheikh and Wang, 2011). This statement means that profitability gives negative effect to leverage policy.

Large companies tend to pay more dividends than small companies since the prospect of growth and expansion in their activities are less than small companies. Hence, they do not need to retain a significant part of their profit for future expansion and growth. Large companies are always noticeable and subject to the scrutiny of the outside market. They might use dividend payout to signal information about themselves (Manneh and Naser, 2015). The bigger and more estabilished company is, the easier for the company to enter stock market. It is enable them to get additional fund to increase their profit that will be used to pay dividend. With all of that, big companies tend to pay dividend to their stakeholder regularly. In the contrary, small and less well-estabilished companies are more difficult to enter stock market and tend not to pay dividend regularly. It can be concluded that corporate size gives positive effect to dividend policy.

The use of debt is one way that can be used to reduce agency conflict as consequence on differences of interest between stakeholders and managers. In the use of debt, corporate has to return their loan within it interest. Because of it, corporate needs something to be their collateral so investors are willing to give their fund. Investors tend to give their fund onto corporate that can give them guarantee. Tangible assets are the most widely accepted source for the bank borrowing and secured debts, since it can serve as collateral, which diminish the risk of the lender (Umer, 2014). Trade-off theory predicts tangibility gives positive effect to the level of debt.

A corporate in industry that has high growth rate needs to have sufficient capital to fund corporate spending (Utami, 2014). Pecking order theory argues that growing firms which use first internal sources of finance may not be sufficient for investment purpose and the next option is to use debt financing (Umer, 2014). The more debt is needed to fund growing corporate indicates that corporate growth gives positive effect to leverage policy.

According to literature review above, the hypotheses of this study following:

H1: Leverage policy gives negative effect to dividend policy.

H2: Dividend policy gives negative effect to leverage policy.

*H3* : *Profitability gives positive effect to dividend policy.* 

H4: Profitability gives negative effect to leverage policy.

*H5* : *Corporate size gives positve effect to dividend policy.* 

H6: Asset structure gives positive effect to leverage policy.

H7: Corporate growth gives positive effect to leverage policy.

# 3. Data and Empirical Methodology

#### 3.1 Variables

Two endogenous variables and four exogenous variables are used in this study. The endogenous variables are dividend policy and leverage policy, whereas exogenous variables are profitability, corporate size, asset structure, and corporate growth.

Table 1 Variables

Variable	Definitions	Measurement	
Dividend policy (DPR)	Dividend payout ratio is a comparison between the amounts of dividend per share to earning per share.	DPS EPS	
Leverage policy (DR)	Debt ratio is a ratio between total liabilities and total assests of the company overall.	Total LBest Total Assets	
Profitability	Profitability measured by a comparison between the amounts of operating income to total assets.	Total Akints Oper-gratings house Total Akints	
Asset structure	Asset structure measured by a comparison between the amounts of inventory and fixed assets to total assets of the company.	ETotal Adsets  Env. +F. J. Assets  Total assets	
Corporate growth	Corporate growth measured by comparing the difference of total assets in current year and total assets in last year to total assets in last year.	$\frac{\frac{TAt}{TAt}}{\frac{TA}{TA}t-1} \frac{TA_{t-1}}{TA}$	
Corporate size	Firm size measured by the natural logarithm of company total assets.	Ln Total Assets	

## 3.2 Sample

The population used in this study are the companies that always listed on LQ45 Index during 2009 – 2014. Purposive sampling used as sampling technique. The use of purposive sampling based on several criteria, like:

- 1. The company must always be listed in Indonesia Stock Exchange during 2009 2014,
- 2. The company must always be listed in LQ45 Index during 2009 2014,
- 3. Presenting annual report and performance summary periodically during 2009 2014, and
- 4. The company must be excluded in the banking sector.

Due to these criteria, the numbers of sample that can be collected are 16 companies.



#### 3.3 Model

#### 3.4 Method

To analyze data with simultaneous model, two stage least square (2SLS) is used in this study. Moreover, simultaneous test is used to determine simultaneous relationship between dividend policy and leverage policy. Before the data will be tested with 2SLS, descriptive statistic and classical assumption tests are needed to use. Classical assumption tests including normality test, multicollinieraty test, autocorellation test, and heteroscedsticity test.

#### 4. Result

# 4.1 Descriptive Statistic

Ghozali (2011) stated that the descriptive statistic provides an overview of data that is shown by mean, standard deviation, maximum, minimum, sum, range, kurtosis, and skewness. Here is the result of descriptive statistic of research variables.

Table 2
Descriptive Statistic

Descriptive Statistic							
	DPR	DR	Profitability	Size	Asset Structure	Growth	
Mean	51.670	0.388	21.863	16.709	56.087	14.847	
Median	49.795	0.400	20.890	16.715	57.145	13.925	
Maximum	100.000	0.680	56.310	18.760	89.730	56.360	
Minimum	0.000	0.110	3.970	13.900	13.070	-11.000	
Std. Dev.	19.949	0.156	12.037	1.040	17.093	11.643	
Skewness	0.645	-0.099	1.092	-0.391	-0.288	0.584	
Kurtosis	3.725	1.856	4.098	3.263	2.491	4.326	

Table 2 shows the descriptive statistic of 16 companies that always listed in LQ45 Index. Dividend payout ratio (DPR) has mean value about 51,67%, with minimum value at 0,00% and maximum value at 100,00%. Debt ratio (DR) has mean value about 0,39×. Minimum value is recorded at 0,11×, whereas maximum value at 0,68×.

Result at Table 2 shows that mean value of profitability is about 21,86%, with minimum value at 3,97% and maximum value is recorded at 56,31%. Moreover, mean value of corporate size is about  $16,71\times$ . It minimum value is recorded at  $13,9\times$ , and the maximum value at  $18,76\times$ .

Mean value of asset structure from the used of 96 samples is about 56,09%. The minimum value is recorded at 13,07%, whereas maximum value at 89,73%. Corporate growth variable has mean value about 14,85%, with minimum value at–11,00% and maximum value at 56,36%.

#### 4.2 Empirical Results

Classical assumption tests provides that the equation model used in this study has data that distributed normally, free from multicollinierity and autocorellation, and

included to homoscedasticity. This equation model is overidentified and has simultaneous problem. Thus, this model can be tested with 2SLS.

Table 3
Simultaneous Model of Dividend Policy and Leverage Policy Tested with 2SLS

Simulations with a private of britain a forcy and beverage forcy rested with appearance						
Endogenous Var.	Exogenous Var.	t-Stastistic	Probability			
DPR	DR	3.899445	0.0002			
	Profitability	9.731502	0.0000			
	Size	-1.412132	0.1613			
DR	DPR	5.552173	0.0000			
	Profitability	-5.788750	0.0000			
	Asset Structure	-0.688646	0.4928			
	Growth	-1.807779	0.0739			

The testing result of first hypotheses shows this hypotheses is rejected. Testing with two stage least square (2SLS) on leverage policy to dividend policy shows t-statistic is positive and probability value is at 0,000, less than significant value at 0,05. It means that leverage policy gives positive effect to dividend policy partially. This finding refuses result of research paper done by Setia-Atmaja (2010), Lee (2014), Vo and Nguyen (2014), Kuzucu (2015), and Manneh and Naser (2015), but supports Kim, Rhim, and Friesner (2007) and Ritha and Koestiyanto (2013). Similiarly to first hypotheses, the second hypotheses is rejected. The testing result shows dividend policy gives positive effect to leverage policy partially. This finding refuses result of research paper done by Setia-Atmaja (2010), Umer (2014), Vo and Nguyen (2014), and Pan, Shi, and Zhu (2015), but supports Kim, Rhim, and Friesner (2007) and Widyarini and Muid (2014). This can be caused by the companies increase their external funding due to their profit are not high enough to pay dividends.

Based on Table 3, third hypotheses of this study is accepted. The testing of profitability to dividend policy shows t-statistic is positive and probability value is at 0,000, less than significant value at 0,05. It means profitability gives positive effect to dividend policy. This finding supports He, Li, Shi, and Twite (2007), Lee (2014), Vo and Nguyen (2014), Manneh and Naser (2015), and Pan, Shi, and Zhu (2015). As well as third hypotheses, forth hypotheses of this study is also accepted. The testing of profitability to leverage policy shows t-statistic is negative and probability value is at 0,000, less than significant value at 0,05. It means profitability gives negative effect to leverage policy partially and has similar result with research paper done by Cole (2008), Al-Najjar and Taylor (2008), Al-Fayoumi and Abuzayed (2009), Setia-Atmaja (2010), Hestuningrum and Darsono (2012), Umer (2014), and Widyarini and Muid (2014).

Our finding shows that fifth and sixth hypotheses is rejected and insignificant. Corporate size has no significant effect to dividend policy due to probability value is at 0,1613, more than significant value at 0,05. This finding doesn't support finding results by He, Li, Shi, and Twite (2009), Setia-Atmaja (2010), Kuzucu (2015), Manneh and Naser (2015), and Pan, Shi, and Zhu (2015). Meanwhile, asset structure has no significant effect to leverage policy due to probability value is at 0,4928, more than significant value at 0,05. It means finding results by Cole (2008), Al-Najjar and Taylor (2008), Al-Fayoumi and Abuzayed (2009), Setia-Atmaja (2010), and Umer (2014) are refused.

Finding result of this study shows seventh hypothes is rejected. The testing of corporate growth to leverage policy shows t-statistic is negative and probability value is at 0,0739, less than significant value at 0,10. It means corporate growth gives negative effect to leverage policy partially. This can be caused by the companies get more profit



when their growth is increased, so their need of external funding become less. This finding result is refused Cole (2008), Al-Najjar and Taylor (2008), Al-Fayoumi and Abuzayed (2009), Hestuningrum and Darsono (2012), and Widyarini and Muid (2014). But in the other hand, it supports Hardiningsih and Oktaviani (2012) and Fauzi and Suhadak (2015).

## 5. Conclusion

This study shows a simultaneous relationship leverage policy and dividend policy along their determinants. Our finding for dividend policy is leverage policy and profitability give positive effect significantly, but corporate size gives insignificant effect. For leverage policy, our finding shows that dividend policy gives positive effect significantly, while profitability and corporate growth give negative effect significantly. But, asset structure gives insignificant effect.

There are several limitedness in this study. First, time periode that we use is so limited, only six years. Second, this study sample uses corporates that listed in LQ45 Index. It means there are various sectors and make it unable to see how they affect in a specific sector. Third, our findings show corporate sze gives insignificant effect to dividend policy and asset structure gives insignificant effect to leverage policy. And lastly, there are three critical issues in financial management for corporate: investment decision, financing decision, and dividend decision. This study just examines simultaneous relationship between financing decision and dividend decision.

With the limitedness as mentioned above, the further researchers suggested to find another factors that determine dividend policy and leverage policy. Overmore, a study of a specific corporate sector needs to be examined to determine any factors that most influence dividend policy and leverage policy in that sector.

### REFERENCES

- Adyani. Lyla Rahma. 2011. *Analisis Faktor-Faktor yang Mempengaruhi Profitabilitas (ROA)*. Skripsi yang Tidak Dipublikasikan.
- Al-Fayoumi, Nedal A. and Bana M. Abuzayed. 2009. *Ownership Structure and Corporate Financing*. Applied Financial Economics, Vol. 19 pp. 1975 1986.
- Al-Malkawi, Husam-Aldin Nizar. 2007. *Determinants of Corporate Dividend Policy in Jordan: An Application of the Tobit Model*. Journal of Economic and Administrative Sciences, Vol.23 Iss. 2, pp. 44 70.
- Al-Najjar, Basil, and Peter Taylor. 2008. *The Relationship Between Capital Structure and Ownership Structure*. Managerial Finance, Vol. 34 Iss. 12 pp. 919 933.
- Asnawi, Said Kelana and Chandra Wijaya. 2005. Riset Keuangan: Pengujian-Pengujian Empiris. Jakarta: PT Gramedia Pustaka Utama.
- Brigham, Eugene F. 2001. *Manajemen Keuangan I*. Edisi kedelapan. Jakarta : Erlangga.
- Cole, Rebel A. 2008. What Do We Know About the Capital Structure of Privately Held U.S. Firms? Evidence from the Surveys of Small Business Finance. Annual Meeting of the Academy of Entrepreneurial Finance.
- Efendi, Mochamad Yusuf. 2016. Analisis Hubungan Simultan Kebijakan Investasi , Hutang & Dividen Perusahaan (Studi Kasus Perusahaan Property &



- Real Estate yang Terdaftar si BEI Tahun 2011 2014). Skripsi yang Tidak Dipublikasikan.
- Erkaningrum F., Indri. 2008. Faktor-Faktor Penentu Financial Leverage Dalam Struktur Modal. Jurnal Bisnis dan Akuntansi "Analisis", Vol 01 No. 02.
- Fauzi, Mohammad Nur and Suhadak. 2015. Pengaruh Kebijakan Dividen dan Pertumbuhan Perusahaan Terhadap Struktur Modal dan Profitabilitas. Jurnal Administrasi dan Bisnis (JAB). Vol. 24 No.1.
- finance.yahoo.com
- Ghozali, Imam. 2009. Analisis Multivariate Lanjutan dengan Program SPSS. Semarang: BP Undip.
- Ghozali, Imam and Dwi Ratmono. 2013. Analisis Multivariate dan Ekonometrika: teori, konsep, dan aplikasi dengan Eviews 8. Semarang : BP Undip.
- Gujarati, Damodar and Dawn C. Porter. 2013. Dasar-Dasar Ekonometrika I. Jakarta : Salemba Empat.
- Gujarati, Damodar and Dawn C. Porter. 2013. Dasar-Dasar Ekonometrika II. Jakarta : Salemba Empat.
- Hanafi, Mahmud M. and Abdul Halim. 2009. Analisis Laporan Keuangan. Yogyakarta: UPP STIM YKPN.
- Hardiyawan, Aditya Tri. 2015. Analisis Pengaruh Corporate Governance Dan Leverage Terhadap Profitabilitas Perusahaan Dengan Variabel Kontrol Firm Size. Skripsi yang Tidak Dipublikasikan.
- Hardiningsih, Pancawati and Rachmawati M. Oktaviani. 2012. Determinan Kebijakan Hutang (Dalam Agency Theory Dan Pecking Order Theory). Dinamika Akuntansi, Keuangan dan Perbankan, Vol. 1 No.1 Hal. 11 – 24.
- He, Xi, Mingsheng Li, Jing Shi, and Gary Twite. 2009. Determinants of Dividend Policy in Chinese Firms: Cash versus Stock Dividends. Journal of Corporate Finance Special Conference.
- Hestuningrum, Ratri Dian and Darsono. 2012. Pengaruh Karakteristik Perusahaan Terhadap Struktur Modal Perusahaan Pemanufakturan yang Terdaftar Pada Bursa Efek Indonesia. Diponegoro Journal of Accounting, Vol.1 No.1.
- Jensen and Meckling. 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, Vol. 3
- Kim, Yong H, Jong C. Rhim, and Daniel L. Friesner (2007), Interrelationships among Capital Structure, Dividends, and Ownership: Evidence from South Korea, Multinational Business Review, Vol.15 Iss. 3 pp. 25–42.
- Kusumaningrum, Candra. 2011. Analisis Faktor-Faktor yang Mempengaruhi Return On Assets Pada Bank Daerah Di Indonesia Periode 2005 – 2008. Skripsi yang Tidak Dipublikasikan.
- Kusumastuti, Nurita. 2015. Hubungan Simultan Antara Volume Perdagangan dan Order Imbalance (Studi Kasus pada Perusahaan yang Termasuk dalam Indeks LQ45 Periode 2014). Skripsi yang Tidak Dopublikasikan.
- Kuzucu, Narman. 2015. Determinants of Dividend Policy: A Panel Data Analysis for Turkish Listed Firms. International Journal of Business and Management, Vol. 10, No. 11.



- Lee, Seok Weon. 2014. Bank Characteristics and Payout Policy, Asian Social Science, Vol. 10 No. 1.
- Lopolusi, Ita. 2013. Analisis Faktor-Faktor yang Mempengaruhi Kebijakan Dividen Sektor Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2007 2011. Jurnal Ilmiah Mahasiswa Universitas Surabaya, Vol. 2 No.1.
- Manneh, Marwan Abu and Kamal Naser. 2015. Determinants of Corporate Dividends Policy: Evidence from an Emerging Economy. International Journal of Economics and Finance, Vol. 7, No. 7.
- Myers, Stewart C. 1984. *The Capital Structure Puzzle*. The Journal of Finance, Vol 39 No.3.
- Natasari, Enny Yulia. 2014. Pengaruh Business Risk, Non Debt Tax Shield, Dividend Payout Ratio dan Tangibility Asset Terhadap Penggunaan Hutang. Skripsi yang Tidak Dipublikasikan.
- Novitasari, Clara Dewi (2015). Analisis Pengaruh Struktur Kepemilikan, Board Size, Leverage, dan Growth Opportunity Terhadap Profitabilitas Perusahaan (Studi Empiris Pada Perusahaan BUMN Non Keuangan yang Listing di Bursa Efek Indonesia Tahun 2010–2013). Skripsi yang Tidak Dipublikasikan.
- Nursandari, Meilina. 2015. Analisis Faktor Yang Mempengaruhi Kebijakan Dividen Dengan Size (Ukuran Perusahaan) Sebagai Variabel Moderasi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. Skripsi yang Tidak Dipublikasikan.
- Pan, Rulu, Jing Shi, and Wiaoqiao Zhu. 2015. *Dividend Policy, Corporate Governance and Stock Liquidity*. Asian Finance Association (AsianFA) 2015 Conference Paper.
- Riyanto, Bambang. 2001. *Dasar-Dasar Pembelanjaan Perushaan*. Edisi Keempat. Yogyakarta: BPFE Yogyakarta.
- Ritha, Henny, and Eko Koestiyanto. 2013. Faktor-Faktor yang Mempengaruhi Dividend Payout Ratio (DPR). E-Jurnal Manajemen dan Bisnis, Vol. 1, No. 1.
- Sawir, Agnes. 2004. *Kebijakan Pendanaan dan Restrukturisasi Perusahaan*. Jakarta: PT Gramedia Pustaka Utama.
- Scott, William R. 2000. *Financial Accounting Theory*. Second edition. Canada: Prentice Hall.
- Sekaran, Uma. 2006. *Metodologi Penelitian untuk Bisnis I : Research Methods For Business*. Edisi Keempat. Jakarta : Salemba Empat.
- Setia-Atmaja, Lukas (2010), *Dividend and Debt Policies of Family Controlled Firms*, International Journal of Managerial Finance, Vol. 6 Iss. 2 pp. 128 142.
- Sheikh, Nadeem Ahmed, and Zongjun Wang. 2011. Determinants of Capital Structure: An Empirical Study of Firms in Manufacturing Industry of Pakistan. Managerial Finance, Vol. 37 Iss 2, pp. 117-133.
- Sudana, I Made. 2011. *Manajemen Keuangan Perusahaan Teori dan Praktik*. Jakarta: Penerbit Erlangga.



- Suwito, Edy and Arleen Herawaty. 2005. Analisis Penaruh Karakteristik Perusahaan Terhadap Tindakan Perataan Laba yang Dilakukan oleh Perusahaan yang Terdaftar di Bursa Efek Jakarta. SNA VIII Solo.
- Titman, Sheridan, and Roberto Wessels. 1988. *The Determinants of Capital Structure Choice*. The Journal of Finance, Vol. XLIII No.1.
- Umer, Usman Muhammed. 2014. Determinants of Capital Structure: Empirical Evidence from Large Taxpayer Share Companies in Ethiopia. International Journal of Economics and Finance, Vol. 6, No. 1
- Utami, Tiara Jati. 2014. Analisis Faktor-faktor yang Mempengaruhi Leverage pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2009-2012. Skripsi yang Tidak Dipublikasikan.
- Van Horne, James C. and John M. Wachowicz. 2013. *Prinsip-Prinsip Manajemen Keuangan*. Edisi Ketiga Belas, Jilis II. Jakarta: Salemba Empat.
- Vo, Duc Hong and Van Thanh-Yen Nguyen. 2014. Managerial Ownership, Leverage and Dividend Policies: Empirical Evidence from Vietnam's Listed Firms. International Journal of Economics and Finance, Vol. 6, No. 5.
- Wang, Ming-Hui, Mei-Chu Ke, Day-Yang Liu, and Yen-Sheng Huang. 2011. Dividend Policy And The Life Cycle Hypothesis: Evidence From Taiwan. The International Journal of Business and Finance Research, Vo; 5 No. 1.
- Widyarini, Rahmadian and Dul Muid. 2014. *Analisis Faktor-Faktor yang Mempengaruhi Leverage Pada Perusahaan Tambang Yang Terdaftar di Bursa Efek Indonesia Pada Periode Tahun* 2009 2012. Diponegoro Journal of Accounting, Vol. 3 No. 3.
- Wirjolukito, A. Yanto, H. and Sandy. 2003. Faktor-Faktor Yang Merupakan Pertimbangan Dalam Keputusan Pembagian Dividen: Tinjauan Terhadap Teori Persinyalan Dividen Pada Perusahaan Go Public Di Indonesia. Jurnal Ekonomi dan Bisnis. Universitas Katolik Indonesia Atma Jaya. Jakarta.

www.idx.co.id www.sahamok.com