# THE EFFECT OF AGENCY COSTS, OWNERSHIP STRUCTURE, SIGNALING, INVESTMENT OPPORTUNITIES, SIZE, FINANCIAL LEVERAGE, AND PROFITABILITY ON DIVIDEND POLICY OF COMPANIES LISTED IN INDONESIAN STOCK EXCHANGE

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#### **ABSTRACT**

The purpose of this research is to determine the effect of agency cost, ownership structure, signaling, investment opportunities, size, financial leverage, and profitability on dividend policies on public companies listed on the Indonesian Stock Exchange (IDX) period 2014 - 2019. This research sample uses the entire list of companies listed on the Indonesian Stock Exchange period 2014 - 2019. The data analysis method used is tobit regression. The results of this research analysis suggest that agency cost, ownership, investment opportunities, size, financial leverage, and profitability have a significant effect on dividend policy on companies listed in IDX period 2014 - 2019.

**Keywords:** Dividend policy, ownership structure, agency cost, profitability, size.

#### INTRODUCTION

According to Tangkilisan (2003), dividends are part of the company's net income distributed to shareholders. The amount of value and timing of dividend payment is determined in the General Meeting of Shareholders (GMS) based on the company's ability to generate profits and each company's dividend policy. According to Brigham & Houston (2011), the dividend policy determines the amount of profit that must be given to shareholders and the amount of retained earnings that will be used for company investment. Dividend policy involves two opposing interests, namely the interests of shareholders who expect dividends and the company's interests in retained earnings. Managers often act to maximize their interests, which are not in line with the interests of shareholders and managers who own shares in the company will try to align with their interests as shareholders (Devi & Erawati, 2014). The problem that arises because of this difference in interest is called the agency problem. In preventing and controlling the agency conflict, it is necessary to charge the agency (agency cost), such as the cost of monitoring by the owners, the cost of bonding by management, and residual loss (Jensen & Meckling, 1976). A survey on the behavior of dividend policy in companies listed on the Indonesian Stock Exchange was conducted previously by Baker & Powell (2012). This survey was conducted to assess the perspective of company management on dividend policy in Indonesia. The results obtained indicate that dividends are considered to have an essential role by management for the company.

Based on the signaling theory, dividends can be used as a company signal that is given to shareholders. This theory is based on the assumption that the information received by each party is not the same or there is information asymmetry. According to Brigham & Houston (2007), a signal is a sign or clue from the company for shareholders regarding how management views the company's prospects. Based on observations of 473 companies in the period 2015-2019, there were 227 (48%) companies that did not distribute dividends at all in the 2015 - 2019 period, 194 (41%) companies did not regularly distribute dividends between 2015 - 2019, and 52 (11%) routinely distributed dividends in the 2015 - 2019 period.

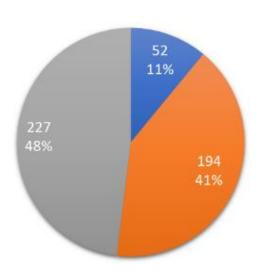


Figure 1. Observations of dividend-paying companies in 2015-2019 (data processed)

The growth of dividend-paying companies also did not experience significant growth. In 2016, there was an increase of 7.3%. In 2017, there was an increase of 7.3%. In 2018, there was a decrease of 2.4%, and in 2019 it experienced a decrease of 57%.

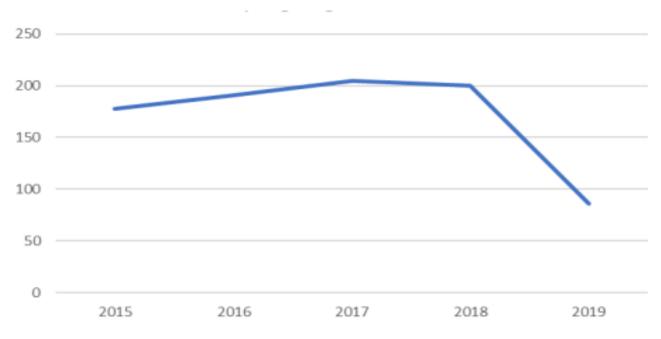


Figure 2. Total dividend-paying companies in 2015-2019 (data processed)

Previous research that addresses this topic, conducted by Al-Malkawi (2007), Nursandari (2015), Bae & Elhusseiny (2017), Neves (2018), Sirait & Siregar (2015), Shanthana & Basana, (2020) and Nugroho (2009) that there are factors that influence dividend policy, such as agency cost, profitability, ownership structure, size, and leverage. Therefore, the aim of this study is to examine the influence of agency cost, ownership structure, signaling, investment opportunities, size, financial leverage, and profitability on dividend policy. Hopefully, this research can provide new information about the factors that can affect dividend policy in companies in Indonesia.

#### LITERATURE REVIEW

# Dividend

The dividend is part operating profit that the company receives and is given by the company to its shareholders as a reward for their willingness to invest their assets (Rudianto, 2012).

# **Dividend Policy Dividend**

Dividend policy is a policy related to dividend payments by the company, in the form of determining the amount of dividends to be distributed and the amount of retained earnings for the company's benefit (Wijaya & Wibawa, 2010). Management is faced with the decision to use the profit. The alternative options are distributed as dividends or to keep as retained earnings.

# Agency Theory (Agency Cost)

In agency theory, what is meant by the principal is the shareholder. And what is meant by the agent are professionals/management / CEO, or who is trusted by the principal to manage the company. Agency problems can occur between owners (shareholders) and managers; managers with debtholders; managers and shareholders with debtholders (Brigham, Gapenski & Daves, 1999). To be able to control agent behavior, of course, requires costs. These costs are known as agency costs, which can be in the form of (1) expenses to monitor the actions of managers; (2) expense by the "principal," namely the cost for controlling the agent, so that the possibility of undesirable managerial behavior becomes smaller; (3) Residual Loss (Brigham, Gapenski, & Daves, 1996).

## Signaling Theory

This theory suggests how a company should provide signals to users of financial statements (Jama'an, 2008). This signal theory suggests how companies should give signals to users of financial statements/investors. So that management decisions in deciding the amount of dividends can be a signal for the company's future performance. According to Brigham and Houston (2007), the information conveyed by companies is important because it involves investment decisions for external parties. By providing information in the form of an annual report can minimize information asymmetry.

## The Relationship between Concepts

# The Effect of Agency Costs on Dividend Policy

The difference in interests between management and shareholders often creates conflicts between the two (Jensen & Meckling, 1976). In preventing and controlling the agency conflict, it is necessary to charge the agency (agency cost), such as the cost of monitoring by the owners, the cost of bonding by management, and residual loss (Jensen & Meckling, 1976). According to Rozeff (1982) and Jensen & Meckling (1976), agency costs can be reduced by increasing insider ownership because it can help align the desires of shareholders and management. Thus, the higher management ownership, the fewer dividends are used to reduce agency costs. These results are also supported previous research by Mollah, Keasey, & Short (2000) and Alli, Khan, and Ramirez (1993), stating that the agency cost has a positive significant effect on dividend policy.

## The Effect of Ownership Structure on Dividend Policy

Ownership structure can influence company decisions, including dividend decisions (Mondher & Moncef, 2009). The founder or family members usually control family ownership. Research by Attig (2015), Pindado, Requejo & de la Torre (2010), Schmid, Ampenberger, Kaserer & Achleitner (2010), and Atmaja (2009) states that family firms pay more dividends than non-family firms. Institutional ownership will tend to be able to control management in dividend decisions. Institutional ownership can also reduce the agency problems that arise, while ownership of many parties can increase agency problems (Aguenaou, Farooq & Di, 2013). Previous research by Firth (2016) and Murhadi (2010) proves that there is a positive influence between institutional ownership and dividend policy.

State ownership can affect dividend decisions because the state can manage companies, improving and protecting companies (Rafiei & Far, 2014). ). Companies with state ownership have the goal of assisting the government in improving people's welfare so that their ownership will affect the company's dividend policy (Wuisan, Randa, & Lukman, 2018). Previous research by Setiawan (2016) suggests a positive influence between state ownership and dividend policy. Multiple ownership will cause the company's shares to spread. The increasing number of shareholders can cause agency problems, and the power of shareholders to control management is weak and will force the company to pay dividends (Trianto, 2011). Shadeva (2015) previous research results, Chandrakusuma (2012) showed a positive influence between multiple ownership and dividend policy. Meanwhile, research by Damarsiwi (2010) & Crutchley & Hansen (1989) states that there is a negative influence between multiple ownership and dividend policy.

## The Effect of Signaling on Dividend Policy

The company management has more information about the company that is unknown to outsiders. This results in the occurrence of information asymmetry between interested parties (Jogiyanto, 2013). One of the alternatives to reduce the information asymmetry is by providing signals to outsiders through financial information that can reduce uncertainty about the company's prospects. Lack of information for outsiders can make investors protect themselves; therefore, investors generally invest in companies that are better known in the market, that is, with less information asymmetry. The lower the information asymmetry, the higher the share trading volume of the stock (Al-Malkawi, 2007). Companies with low stock trading volume will make investors more likely to expect dividends on their investment (Banerjee, Gatchev, & Spindt, 2007).

# The Effect of Investment Opportunities on Dividend Policy

Companies with many profitable investment opportunities will tend to pay small dividends (Myers & Majluf, 1984). Meanwhile, according to Jensen (1986), companies that have investment opportunities will prefer to use internal rather than external funding because internal funding is cheaper. Internal funds can reduce the amount of dividends to be distributed because dividends also come from internal funding.

# The Effect of Size on Dividend Policy

Large companies tend to have the convenience of generating profits and easier access to the capital market than small companies. The ease of access to the capital market has made large companies gain the trust of investors and the opportunity to get more funds. Large companies will tend to pay dividends due to the company's stable ability to operate and generate profits. In contrast, small companies will reduce dividend distribution to maintain retained earnings or serve as company assets.

# The Effect of Financial Leverage on Dividend Policy

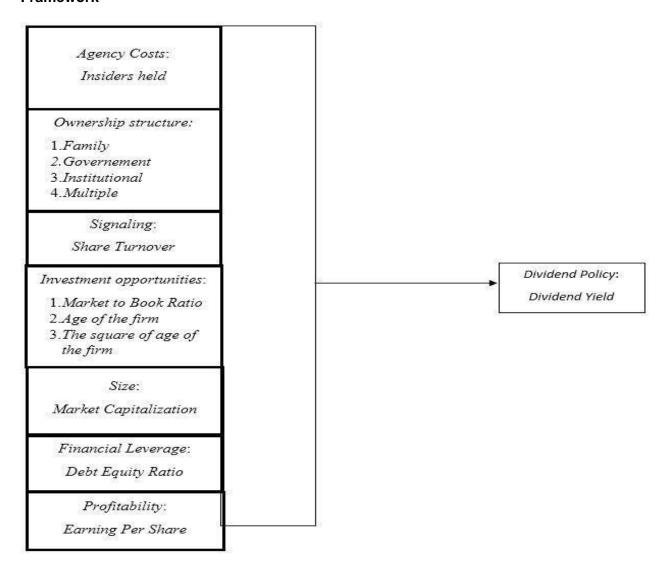
Payment of corporate debt, both principal and interest on debt, must take precedence in payment and must also take precedence before dividing profits in the form of dividends (Syamsuddin, 2007; Francisca, & Malelak, 2020). Dividend payments will create a financial burden for the company because it will reduce its cash (Bae & Elhusseiny, 2017; Shanthana & Basana, 2020). The use of too high debt will cause a decrease in dividend payments because most of the profits are allocated to reserves for debt repayment (Kartika, 2005; Francisca, & Malelak, 2020).

# Effect of Profitability on Dividend Policy

Profitability is a company's ability to generate profits. This profit will later become the basis for distributing the company's dividends (Kadir, 2010). Therefore, the companies that owns the

higher profits will pay higher dividends (Mohamed, Hui, Omar, Rahman, Mastuki, Aziz, & Zakaria 2008).

#### **Framework**



# **Hypothesis**

- H1: There is an influence between Agency Costs and dividend policy.
- H2: There is an influence between Ownership Structures and the dividend policy.
- H3: There is a negative influence between signaling and dividend policy.
- H4: There is a negative influence between Investment Opportunities and the dividend policy.
- H5: There is a positive influence between Size and the dividend policy.
- H6: There is a negative influence between Financial Leverage and the dividend policy.
- H7: There is a positive influence between profitability and dividend policy.

#### **METHODOLOGY**

This research is a study quantitative, and the data required in this study are historical. The population of this study is all companies listed on the Indonesia Stock Exchange for the period 2015- 2019. The data processing uses E-Views 10.

Dependent Variable

a. Dividend Policy

Decisions regarding the amount of company net income to be distributed or retained by the company.

Empirical indicator: Dividend Yield (DY) =  $\underline{Annual\ dividend\ per\ share}\ x\ 100$ 

Price per share

# Independent Variable

1. Agency Cost

Total ownership of the company by management.

Proxy: Data percentage held by insiders in the Annual Report.

2. Ownership Structure

FML : 1, if family-owned, and 0 if not family-owned STATE : 1 if state-owned, and 0 if not family-owned INST : 1 if institutional owned, and 0 if not family-owned MULT : 1 if the owner is many, and 0 if not many owners.

3. Signaling

Comparison between volume of shares traded in a certain period with the number of shares in the same period.

Empirical indicators: TURN = Volume of shares traded at time t

The number of shares i that were outstanding at time t

Investment Opportunities market-to-book ratio

Comparison between book value per share and market value of equity.

Empirical indicators:  $MBR = \frac{Equity market value}{Equity book value}$ 

Age of firm

The age of the company since it was founded.

Proxy : AGE = Data from the company's Annual Report.

Age Squared of the firm.

Squares of the age of the company since its inception.

Empirical Indicators :  $(AGE)^2$ 

4. Size

Market Capitalization is the market value of the shares issued by the issuer.

Empirical Indicators: In (share price per share in period n x number of shares outstanding in period n)

5. Financial Leverage

Comparative ratio to assess total debt to equity.

Empirical indicators: Debt to Equity Ratio (DER) = Total Debt (DEBT)

Ekuitas (Equity)

6. Profitability

Total income earned in one period for each outstanding share.

Empirical indicators: Earning Per Share (EPS) = net profit after tax (INI

The number of shares outstanding

## **Data Analysis Techniques**

Statistical data processing in this study uses the E-Views 10 with the Tobit Regression. The method used to estimate the parameters in the Tobit regression is Maximum Likelihood. This method conducts analysis starting with a 'general' unrestricted model involving all variables. The analysis process eliminates the variables whose coefficients are not significant so that, in the end, they produce the best model (Owen, 2003). So, the model of systematic research as follows:

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DYLD = \alpha + \beta1 INSD + \beta2 DV_FAML + \beta3 DV_STATE + \beta4 DV_INST + \beta5 DV_MULT - \beta6TURN - \beta7 MBR + \beta8 AGE - \beta9 AGESQ + \beta10 MCAP- \beta11 DER + \beta12 EPS + \epsilon
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In the models Tobit, the dependent variable of this research is dividend policy (DYLD) as follows:

yit= 0, if yit ≤ 0, = it, if yit ≥ 0 To test the Tobit model simultaneously and partially, the test is carried out. Likelihood Ratio and the Test Wald. Both tests are often used in the Tobit model (Robinson, Bera and Jarque, 1985).

## **Descriptive Statistical Analysis**

This research analysis on descriptive calculates the average, standard deviation, minimum value, maximum value, and coefficient of variation of the data used.

## **Classical Assumption Test**

In this study, the classical assumption test was not carried out as is done in linear regression because the Tobit method assumes that the independent variable is not limited in value (non-censored). Only the dependent variable has censored data so that all variables are measured correctly, and there is no autocorrelation. There is no heteroscedasticity, and there is no perfect multicollinearity so that the mathematical model used is correct (Endri, 2011) and Arifin (2005).

# **Model Feasibility Test (Likelihood Ratio)**

The Likelihood Test (G Test) is used to test the role of the independent variables in the model together. Based on Hosmer & Lemeshow (2000), the test likelihood can be described in terms of the G statistic<sup>2</sup>. In the simultaneous test, the G value is expressed by:

G= -2 
$$\ln \left[ \frac{(maximum\ likelihood\ for\ model}{(maximum\ likelihood\ for\ sturated\ model} \right]$$

If the G value is less than the Chi-Square ( $\chi^2$ ) table value or the output result is illustrated in the P-value greater than  $\alpha$  (= 0.0.5), then reject H<sub>0</sub> or failing to reject H<sub>0</sub> at the  $\alpha$  level (Garson, 2009). The determination of the hypothesis is as follows:

 $H_0$ : β1 = β2 = β3 = ... = Bi = 0 $H_1$ : β1 ≠ β2 ≠ β3 ≠ ≠ βi ≠ 0

## **Wald Test**

Wald test has gradually disposed of parameters (independent variables) the most insignificant until finally acquired all the significant parameters. Hosemer & Lemeshow (2000) write down the test statistic Wald. Wald test values spread over a normal distribution.

(Z). In the Wald test, if the P-value is greater than  $\alpha$  or the Wald test value (Z count) is smaller than the Z table, then either reject  $H_0$  or fail to reject  $H_0$  at the  $\alpha$  level. The determination of the hypothesis is as follows:

 $H_0$ : β1, β2, β3, β4, β5, β6, β7 = 0  $H_1$ : β1, β2, β3, β4, β5, β6, β7 ≠ 0

#### **Eligibility Criteria for Model Tobit**

The method used in estimating the Tobit regression model is Maximum Likelihood. However, in some applications, the maximum value of the likelihood function is not known, so that the AIC (Akaike Information Criterion) method can be used (Jedidi, Ramaswamy & Desarbo, 1993). The Akaike Information Criterion and Schwarz method is a method that can use to select the best regression model (Grasa, 1989). In the AIC and Schwarz methods, the best regression models have the smallest AIC and Schwarz values (Widarjono, 2007). To calculate the Akaike Information Criterion, the following formula is used:

$$AIC = -2 \ln (L) + 2k$$

Where:

L: the maximum value of the likelihood function.

k: the number of parameters in the model

Whereas to calculate the Schwarz Criterion, can use the following formula:

SIC = In [n] k -2In [Lmax]

Where:

n: number of observations

k: number of parameters in the model

Lmax: maximum value of the likelihood function

#### **ANALYSIS AND DISCUSSION**

# Model Feasibility Test (Likelihood Ratio)

Following are the results of the test Likelihood Ratio from the Tobit estimation model, which has been done.

Table 1. Likelihood Ratio Test

LR	Decision
307.65	Reject H0
307.19	Reject H0
307.17	Reject H0
306.13	Reject H0
304.79	Reject H0
302.71	Reject H0
	307.65 307.19 307.17 306.13 304.79

Table 2. Result of Wald Test

	Model 1	Model 2	Model 3	47	Model 4	Model 5	Model 6
INSD	0.0339	0.0330	0.0329	INSD	0.0308	0.0314	0.0293
FAML	0.4995	0.8652	P. E	FAML	2		
STATE	0.2861	0.0311	0.0285	STATE	0.0374	0.0422	0.0316
INST	0.5087		8	INST			
MULT	0.3940	0.2650	0.2596	MULT	0.2475		
TURN	0.3081	0.3118	0.3138	TURN			
MBR	0.1731	0.1741	0.1734	MBR	0.1780	0.2068	
AGE	0.0010	0.0011	0.0010	AGE	0.0009	0.0009	0.0007
AGESQ	0.0217	0.0228	0.0220	AGESQ	0.0188	0.0199	0.0138
MCAP	0.0000	0.0000	0.0000	MCAP	0.0000	0.0000	0.0000
DER	0.0102	0.0106	0.0096	DER	0.0129	0.0103	0.0086
EPS	0.0000	0.0000	0.0000	EPS	0.0000	0.0000	0.0000

Based on the results of data processing described above, Data It is concluded that:

1. Agency cost has a negative significant effect on dividend policy, indicates that the higher management ownership will reduce dividend payments to shareholders. The results of this study are in line with previous studies conducted by Pujiastuti (2008), Hommei (2011), and Mangasih & Asandimitra (2017), which state that insider ownership has a negative influence on dividend policy. The opinion of previous research also supports the results of this study by Rozeff (1982) that insider ownership is oriented to minimize risks to do things that are beneficial to management's interests.

- 2. State-ownership has a significant effect on company's dividend policy, meanwhile, family, institutional, and multiple ownership do not have a significant effect on dividend policy. The higher the state-ownership, the easier it is for companies to get capital, investment opportunities, so that the higher the dividends paid. This is also in accordance with several previous studies such as Al-Malkawi (2007), Wang, Manry & Wandler (2011), and Setiawan (2016) that the presence of the state as a controlling shareholder can increase dividend payments to investors.
- 3. Signaling does not have a significant effect on dividend policy, indicates that the high or low level of asymmetry information in a period will not affect the company's dividend policy. This result is also in line with previous research conducted by Al-Malkawi (2007).
- 4. Investment opportunities have a significant effect on dividend policy on the AGE and AGESQ indicators. Meanwhile, the market to book ratio does not have a significant effect on dividend policy. This proves that the company's age has an effect on dividend policy, the longer the company's age or the more mature it will be the stronger the company's business will be. AGESQ indicates that when the company moves to the next phase of development or gets new investment opportunities, the company will reduce or eliminate dividend payments. This result is also supported by previous research by Grullon, Roni & Bhaskaran (2002).
- 5. Size has a positive significant effect on dividend policy. This indicates that large companies tend to pay dividends. Large companies find it easier to get funding and investment opportunities so that cash flow and company performance will be maintained. The results of this study also support previous research conducted by Fama & French (2002).
- 6. Financial leverage has a significant negative effect on dividend policy. This indicates that the higher the debt owned by the company will reduce dividend payments to shareholders. This result is also supported by previous research conducted by Sinabutar & Nugroho (2014) and Rachmawati & Pinem (2015), which state that leverage has a negative significant effect on dividend policy.
- 7. Profitability has a positive significant effect on dividend policy. This indicates that the level of profitability will affect the level of dividends paid to shareholders. The results of this study are also supported by previous research conducted by Pradana & Sanjaya (2007) and Farisah (2015) mentioned that companies with high profitability tend to pay dividends.

 Table 3. Conformity Criteria for the Tobit Model

Model	Akaike Info Crit.	Schwarz Crit.
1	-0.5326	-0.4934
2	-0.5334	-0.4969
3	-0.5344	-0.5007
4	-0.5349	-0.5040
5	-0.5352	-0.5072
6	-0.5352	-0.5099

According to AIC, Schwarz, the best model is the sixth model indicated by the smallest value in the sixth model compared to the first to fifth models.

#### **CONCLUSIONS AND RECOMMENDATIONS**

#### Conclusions

- 1. Agency cost with insider ownership (INSD) proxies has a negative significant effect on dividend policy.
- 2. Ownership structure with proxy state-ownership (STATE) has a positive significant effect on dividend policy.
- 3. Investment opportunities with the proxy age of the firm (AGE) have a positive significant effect on dividend policy. The square of AGE (AGESQ) has a negative significant effect on dividend policy.
- 4. Size with the proxy market capitalization (MCAP) has a positive significant effect on dividend policy.

- 5. Financial leverage with proxy debt to equity ratio (DER) has a negative significant effect on dividend policy.
- 6. Profitability with earnings per share (EPS) has a positive significant effect on dividend policy.

#### Recommendations

- 1. This study shows that during the study period 2015 2019, the determinants that affect dividends are: insider, ownership, government ownership, investment opportunities, company size, level of debt, and profitability. Therefore, investors who want to maximize profits through dividend distribution can pay attention to these determinants to be a reference in investment decisions.
- 2. For further researchers interested in researching the topic of dividend policy, they can use different independent variables, such as free cash flow or lagged dividend.

#### REFERENCES

- Aguenaou, S., Farooq, O. & Di, H. (2013). Dividend policy and ownership structure: evidence from the Casablanca stock exchange. GSTF Journal on Business Review (GBR), 2(4), 116-121.
- Al-Malkawi, H. N. (2007). Determinants of orporate dividend policy in Jordan: an application of the tobt model. Journal of Economics & Administrative Science, 23(2), 44-70.
- Attig, N., Boubakri, N., El Ghoul, S., & Guedhami, O. (2015). The global financial crisis, family control, and dividend policy. Financial Management, 45(2), 291-313.
- Bae, B., & Elhusseiny, M. F. (2017). The relationship between dividend payment patterns and firm characteristics. Research in Finance, 33, 33–42.
- Baker, H. K., & Powell, G. E. (2012). Dividend policy in Indonesia: survey evidence from executives. Journal of Asia Business Studies, 6(1), 79–92.
- Banerjee, S., Gatchev, V., & Spindt, P. (2007). Stock market liquidity and firm dividend policy. Journal of Financial and Quantitative Analysis, 42(2), 369-397.
- Brigham, E., Gapenski, L. C., & Daves, Philip R. (1996). Intermediate financial management (8th). Texas: The Dryden Press.
- Brigham, E. F., Gapenski, L. C., & Dave, P.R. (1999). Intermediate financial management (6th ed.). Texas: The Dryden Press.
- Brigham, E. F., & Houston, J. F. (2007). Essentials of financia Imanagement (Chap. 18). USA: Thompson South Western.
- Brigham, E. F., & Houston, J. F. (2011). Dasar dasar manajemen keuangan 2 (11th ed.). Jakarta: Salemba Empat. Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeover. American Economic Review, 76(2), 323-329.
- Jama'an. (2008). Pengaruh mekanisme corporate governance dan kualitas kantor akuntan public terhadap integritas informasi laporan keuangan (studi pada perusahaan public Di BEJ). Unpublished undergraduate thesis, Universitas Diponegoro, Semarang.
- Firth, M, Gao, J., Shen, J., & Zhang, Y. (2016). Institutional stock ownership and firms cash dividend policies: evidence from China, Journal of Banking and Finance, 65, 91-107. Jensen, M. (1986). Agency costs of free cash flow, corporatefinance, and takeover. American Economic Review, 76(2), 323-329.
- Francisca, & Malelak, M.I. (2020). Pengaruh corporate governance terhadap firm's debt pada perusahaan sektor industri barang konsumsi periode 2013-2018. International Journal of Financial and Investment Studies (IJFIS), 1(1), 30-41. https://doi.org/10.9744/ijfis.1.1.30-41
- Devi, & Erawati. (2014). Pengaruh kepemilikan manajerial, leverage, dan ukuran perusahaan pada kebijakan dividen perusahaan manufaktur. E-Jurnal Akuntasi Universitas Udayana, 709-716.
- Mondher, K., & Moncef, G. (2009). Increase in German firm's payout ratio with the increase power of second largest equity holder. European Journal of Scientific Research, 25(1), 42-53.
- Neves, Maria E. D. (2018). Payout and firm's catering. International Journal of Managerial Finance, 14(4), 2-22. Nursandari, M. (2015). Analisis faktor yang mempengaruhi kebijakan dividen dengan size (ukuran perusahaan) sebagai variabel moderasi pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. Unpublished undergraduate thesis, Universitas Negeri Yogyakarta, Yogyakarta.
- Murhadi, W.R. (201. Study on dividend policy: antecedent and its Impact on share price. Unpublished undergraduate thesis, Universitas Surabaya, Surabaya.
- Nugroho, Abraham M. (2009). Pengaruh variabel-variabel agency cost terhadap kebijakan dividend payout ratio perusahaan-perusahaan go public di PT Bursa Efek Jakarta (BEJ) periode tahun 2002-2006. (TA No. 2010075/AKT/2009). Unpublished undergraduate thesis, Universitas Kristen Petra, Surabaya.

- Pindado, J., Requejo, I., de la Torre, C. (2012). Do family firms use dividend policy as a governance mechanism? evidence from the Euro zone. Corporate Governance International Review, 20(5), 413-431.
- Rafiei, M. & Far, S. A. H. (2014). Effect of state ownership on firm performance and dividend payout policy. International Journal of Academic Research in Business and Social Sciences, 4(7), 213-219
- Rudianto. (2009). Pengantar akuntansi. Jakarta: Erlangga. Schmid, T., Ampenberger, M., Kaserer, C., & Achleitner, A.- K., (2010). Controlling shareholders and payout policy: do founding families have a special taste for dividends. CEFS Working Paper, (1).
- Shanthana, L.S. & Basana, S.R. (2020). pengaruh firm size terhadap leverage pada perusahaan manufaktur publik Indonesia periode 2013-2017. International Journal of Financial and Investment Studies (IJFIS), 1(1), 53-66. https://doi.org/10.9744/ijfis.1.1.53-66
- Setia-Atmaja, L., Tanewski, G. A., & Skully, M. (2009). The role of dividends, debt and board structure in the governance of famil controlled firms. Journal of Business Finance & Accounting, 36(7), 863–898.
- Sirait, F., & Siregar, S. V. (2014). Dividend payment and earnings quality: Evidence from Indonesia. International Journal of Accounting and Information Management, 22(2), 103–117.
- Setiawan. (2016). Ownership structure and dividend policy in Indonesia. Journal of Asia Business Studies, 10(3), 230- 252.
- Tangkilisan, H. N. S. (2003). Manajemen keuangan bagi analisis kredit perbankan. Yogyakarta: Balairung & Co.
- Trianto, W. A. (2011). Pengaruh shareholder dispersion, free cash flow, collateral asset, dan debt terhadap kebijakan dividen (Studi kasus pada perusahaan terdaftar di BEI periode 2004-2007). Unpublished undergraduate thesis, Universitas Diponegoro, Semarang.
- Wijaya, Lihan R.P., & Wibawa, A. (2010). Implikasi keputusan investasi, keputusan pendanaan, dan kebijakan dividen terhadap nilai perusahaan. Simposium Nasional Akuntansi XIII.
- Wuisan, F., Randa, F., Lukman. (2018). Pengaruhstruktur kepemilikan terhadap kebijakan dividen perusahaan. Jurnal Sistem Informasi, Manajemen, dan Akuntansi, 16(2), 119-141.