



Influence of Investment Opportunity Set, Effective Tax Rate and Firm Size on Dividend Policy with Liquidity as a Moderation Variable

Lintang Anggi Permatasari¹, Suci Atiningsih²

^{1,2}Accounting Department of STIE Bank BPD Jateng

Email : anggilintang29@gmail.com dan atiningsih.suci@gmail.com

ARTICLE INFO

Article history:

Received: 10/03/2021

Revised: 20/03/2021

Accepted: 21/03/2021

Keywords:

investment opportunity set,
effective tax rate, firm size,
dividend policy, liquidity

ABSTRACT

This study aimed to analyze empirical evidence about the effect of investment opportunity set, effective tax rate, and firm size on dividend policy with liquidity as a moderating variable. This research uses 90 manufacture company listed at BEI in the periode 2014-2018. The analyze method used is SEM-PLS and sample selection was carried out using purposive sampling method. The results showed the investment opportunity set and firm size have a negative effect on dividend policy. Effective tax rate has a positive effect on dividend policy. Liquidity cannot moderate the effect of investment opportunity set and effective tax rate on dividend policy but liquidity moderate the effect of firm size on dividend policy.

Copyright © 2021 Jurnal Mantik.
All rights reserved.

1. Introduction

The capital market in Indonesia plays a major function in raising funds from investors who will invest their capital. The objective of the investor to invest is to get a return on a given investment, in the form of dividend income. Investors investing their shares in the company are sometimes not too big, but the prospect of getting a profit tends to be greater than the funds issued so that more investment in stocks is chosen by investors, by participating in investing in the company, investors can also have rights over the company.

Aini (2017) explains that the actions taken by companies in increasing dividend payments per share can be seen from investors as companies who have high confidence about the company's financial condition in the future. With the existence of a new regulation made by the IDX which contains a capital of one hundred thousand rupiah, potential investors can buy or carry out sale and purchase transactions of shares with their own balance. Where the company management must get a large profit, with the profits obtained can be distributed to investors as the right of company shareholders and investors are satisfied with the investment given to the company. The company is able to maintain or increase its capital so as to attract investors to invest in the company. There are issuers that do not distribute dividends on the grounds that they are used as retained earnings which have the aim of increasing the company's capital so as to increase the company's sales growth in the following year.

Damayanti (2015) explains that dividends are a feed back from companies that are given to shareholders or investors, dividend policy is important because dividend announcements will be responded to by the market.

Table 1
Dividend Payout Ratio for Manufacturing Companies 2014-2018

Nama Perusahaan	Dividend Payout Ratio (%)									
	2014		2015		2016		2017		2018	
	L/R	DPR	L/R	DPR	L/R	DPR	L/R	DPR	L/R	DPR
Indocement Tunggal Prakarsa Tbk	5.274.009	62,81	4.356.661	114,07	3.870.319	39,47	1.837.668	183,77	617.691	4,17
Gudang Garam Tbk	5.368.568	28,67	6.441.336	77,73	6.590.482	74,92	7.701.923	64,51	5.761.178	64,20
Indo Acitama Tbk	14,456	0,00	15,505	0,00	11,056	0,00	17,699	0,00	4,68	32,049



Goodyear Indonesia Tbk	34,096	0,00	-1,627	0,00	22,25 2	24,82	-	12,11 5	0,00	-7,987	0,00
Unilever Indonesia Tbk	5.738. 523	44,6 7	5.864. 386	99,87	6.390 .672	99,69	7.004 .562	99,67	9.109.4 45	34,3 4	

Source: www.idx.co.id

Companies experiencing dividend policy problems are PT. Indocement Tunggal Prakarsa (INTP) managed to record sales growth of up to 5.26% to Rp. 15.19 trillion. However, the sales growth could not help the performance of net profit which fell drastically by 38.38%. INTP posted a decrease in net profit for 4 consecutive years and the last time the company posted an increase in net profit was in 2014. PT. Indocement Tunggal Prakarsa succeeded in recording revenue last year before revenue continued to fall in 2015 to 2017.

Obtained income of Rp. 15.19 trillion came from sales growth with third parties in the cement and ready mix concrete business sector. However, last year's achievement was actually lower than the sales achievement in 2016. Even though it rose, the company could not be proud of itself, because the company still failed to reduce its production costs which ultimately resulted in the company's net profit not being able to grow positively this year. The ratio of the company's cost of revenue increased to 71.24%, whereas in 2017 the value was only 65.3%. So that the total cost of revenue for INTP in 2018 will be IDR 10.82 trillion, from the previous IDR 9.42 trillion. As a result, the margins obtained from income are certainly getting lower. The failure of PT. Indocement Tunggal Prakarsa suppressed its cost of goods, causing net profit to contract by 38.38% to Rp 1.15 trillion from 2017 of 1.86 trillion. Finally, investors can only enjoy a net profit per share of IDR 311.29 from the previous IDR 505.22. With this, companies with dividend payout ratios to investors have decreased each year.

Source: https://www.cnbcindonesia.com/market/201903211130281762035/empat_tahun_berturut-turut-laba-indocement-turun.

Amah & Prasetyowati (2019) explain that paying the amount of dividends to shareholders must be based on the total shares obtained and the payment made for each sheet. The company will distribute dividends based on the resolution of the General Meeting of Shareholders (GMS), if the company gets a profit within a certain period.

Investment opportunity set is an investment opportunity taken by investors. Companies that have high investment opportunities prefer to pay low dividends because the company management thinks that these funds should be reinvested into retained earnings for the survival of a company in the future. Several studies examining the effect of the investment opportunity set on dividend policy have had inconsistent results. Simarmata & Hutajulu (2017); Wulandari & Suardana (2017) found that the investment opportunity set (IOS) has a negative and significant effect on dividend policy. In contrast to (Ariandani & Yadnyana, 2016) which proves that investment opportunities have no effect on dividend policy.

The effective tax rate is used as a reference in making a company policy and will make a conclusion regarding a company policy regarding the tax system of a company as a management decision. Gill, et al., (2010) explained that taxes have a positive effect on dividends. If the tax liability increases, the dividend payment will also increase. However, it is different from (Putri & Irawati, 2019) that the effective tax rate does not have a significant effect on dividend policy.

Firm size is an average where a company is classified as large or small in a number of ways, namely from total assets, number of employees, etc. Large companies prefer to pay large dividends compared to small companies, because companies that have larger assets will find it easier to access the capital market, while small companies that have slightly more assets prefer to pay low dividends because the profits earned will be allocated to retained earnings to increase the company's capital. Damayanti (2015) explains that size has a negative and insignificant effect on dividend policy. In contrast to Amah & Prasetyowati (2019); Ulfah (2019) concluded that firm size affects the dividend payout ratio. The size of a large company will pay high dividends, because the company is considered capable of generating large profits.

The formulation of the problem in this study is (1) Does the investment opportunity set have a negative effect on dividend policy? (2) Does the effective tax rate have a positive effect on dividend policy? (3) Does firm size have a positive effect on dividend policy? (4) Is liquidity able to moderate the effect of investment opportunity set on dividend policy? (5) Is liquidity able to moderate the effect of effective tax rate on dividend policy? (6) Is liquidity able to moderate the effect of firm size on dividend policy?

2. Literature review

2.1 Agency Theory

Jensen and Meckling (1976) explained that there is a relationship between shareholders as principals and management as agents. This relationship is often at odds between owner and manager. Conflicts that occur due to human activity, who are economic creatures, are more concerned with personal interests. Managers and shareholders have different interests. Managers act as agents who have a responsibility to shareholders to increase their profits, but management also has a personal interest in improving their welfare. When management has personal interests, it can be concluded that management does not act in accordance with shareholders, but acts in accordance with what they want to be achieved, with this, a conflict of interest arises.

2.2 Investment Opportunity Set

Investment in general is an activity carried out by shareholders in investing in a company in order to get a large return compared to their expenses. Investing in a company requires an opportunity, a plan or a project that can be chosen to be able to realize its goals in generating more funds. Investment opportunity set is an investment decision which is a combination of assets owned and investment options in the future. Companies that have high investment opportunities prefer to pay low dividends because the company management thinks that these funds should be reinvested as retained earnings for the survival of a company in the future.

2.3 Effective Tax Rate

The effective tax rate is used as a reference in making a company policy and will make a conclusion regarding a company policy regarding the tax system of a company as a management decision. For companies, the effective tax rate is used to measure the effect of changes in tax policy on the company's tax burden so that they can find out the size of the percentage to be paid on the profits obtained from the company.

2.4 Firm Size

Firm size or company size is an average where a company is classified as large or small in a company in various ways, namely from total assets, number of employees, etc. Large companies prefer to pay large dividends compared to small companies, because companies that have larger assets will find it easier to access the capital market, while small companies that have small assets tend to pay low dividends because the profits earned will be allocated to profits. was held to increase the company's capital.

Companies that have higher total assets can be used as a determinant for company management to pay dividends to shareholders or prefer to be retained for the survival of a company and the increasing total assets will affect obtaining capital.

2.5 Dividend Policy

Dividends are a source of information that provides signals to investors in the capital market. The main objective of investors is to improve the welfare of the company by expecting high returns in the form of dividends or capital gains. Dividends are part of the company's profits distributed to shareholders. As an investor who buys a share, of course, he expects the company to experience a large profit (profit). If the company records a large profit, the company can distribute the profit to shareholders in the form of dividends. Dividends paid by the company are to determine the ability of a company to increase profits and good prospects in the future.

2.6 Liquidity

Liquidity is a company's ability to meet short-term obligations that must be fulfilled immediately. Liquidity is good when the company has current assets available to meet short-term obligations that are due and in terms of dividend payments. An important factor in making decisions to determine the amount of dividends to be distributed to shareholders is the cash or liquidity position of the company.

The liquidity of the company will affect the size of the dividends paid, so that the stronger the liquidity of the company, the greater the ability to pay dividends. The higher the current ratio, the higher the company's ability to pay dividends.

2.7 Hypothesis Development

a. Effect Investment Opportunity Set on Dividend Policy

Investment opportunity set is the company value whose amount depends on the expenditures made by management and has been determined in the future, which for now are investment options that are expected to have a large return and reflect the growth of assets and equity. The company has the opinion that available funds are better off reinvested and retained as retained earnings. Companies tend to use internal sources of funds rather than using external funds. Internal sources of funds originating from retained earnings will have an influence on dividend policy if the company gets profitable investment opportunities (Wulandari & Ketut, 2017).

Wulandari & Ketut (2017) stated that the set of investment opportunities that will come through a positive net present value (NPV) will make the company prefer not to distribute its dividends to shareholders, because for companies the cost of expansion is more important to support the life of the company in the future. If the company's investment opportunity increases, it is likely that the dividend payout ratio should decrease, so there is an inverse relationship with the amount of investment and the rate of return that investors get. Wulandari & Suardana (2017); Simarmata & Hutajulu (2017) which explains that investment opportunities have a significant negative effect on dividend policy

H₁ : Investment opportunity set negative effect on dividend policy

b. Effect Effective Tax Rate on Dividend Policy

Taxes are a factor that is considered in determining dividend policy. With the existence of taxes, investors prefer not to pay dividends because they have to pay taxes so that the dividend distribution is low. Effective tax rate (ETR) is a measure of the company's tax burden which reveals the percentage level of tax paid to company profits, so for companies the effective tax rate is used to measure the impact of changes in taxation within the company so that they can find out how much tax the company actually issued on commercial profit obtained from the company (Putri & Irawati, 2019). (Gill et al., 2010) explained that there is a significant positive relationship between the effective tax rate in dividend payments.

H₂ : Effective tax rate positive effect on dividend policy

c. Effect Firm Size on Dividend Policy

The size of a company can be indicated by its total assets, sales, labor, and market capitalization. One measure of the size of a company can be seen from the total assets of the company owned by the company. If total assets are higher, it can be used as an indicator in distributing dividends to shareholders or maybe a company prefers to retain earnings because if total assets are continuously increasing it will also affect the company in obtaining capital. Damayanti (2015) argues that size has a negative effect on the dividend payout ratio. Ulfah (2019) states that firm size has a positive effect on dividend policy.

H₃ : Firm size berpengaruh positif terhadap dividend policy

d. Effect Investment Opportunity Set on Dividend Policy with Liquidity as a Moderation Variable

Liquidity is a ratio used to measure how liquid a company is. So, liquidity is very important in a company because by doing so investors can see a company paying its maturity obligations. Investors and shareholders think that managers can perform well and can generate profits. Companies that invest more funds will cause the amount of dividends paid to be reduced, but good liquidity will weaken this hypothesis. Because the company can delay the payment of short-term debt.

Kristanti & Fitrianiingsih (2013) stated that liquidity is able to moderate the relationship between the investment opportunity set and dividend policy. It is different from research conducted by Ariandani & Yadnyana (2016) which states that liquidity is not able to moderate the effect of investment opportunity set on dividend policy.

H₄ : Liquidity is able to moderate the effect of the investment opportunity set on dividend policy

e. Effect Effective Tax Rate on Dividend Policy with Liquidity as a Moderation Variable

The effective tax rate is used to measure the impact of changes in tax policy on the company's tax burden so that companies can find out the amount of expenditure to pay actual taxes from the commercial profits earned by the company (Putri & Irawati, 2019). Therefore, companies can find out how big or small the company pays taxes from the predetermined rate. If the company has a high percentage of effective tax rates than the predetermined rate, then the company can be said to be less than optimal in utilizing existing tax incentives.

Liquidity is the company's ability to carry out short-term financial obligations that must be fulfilled. A company can be said to be good if the company reflects current assets with available short-term liabilities, especially in fulfilling tax obligations that will be due soon as well as in dividend payment obligations. (Putri & Irawati, 2019) said that liquidity succeeded in moderating the relationship between the effective tax rate and dividend policy.

H₅: Liquidity is able to moderate effect effective tax rate on dividend policy

f. Effect Firm Size on Dividend Policy with Liquidity as a moderating variable

The size of a company is said to be large or small in a company by using several methods, including in terms of total assets, number of employees and others. The size of the company is divided into 3, namely large companies, medium companies, and small companies. If a company has bigger assets, then the company can be said to have a stable financial condition, so that companies that have stable assets can easily obtain capital compared to companies that have low assets. Ulfah (2016) shows that liquidity does not moderate the effect of firm size on dividend policy.

H₆ : Liquidity is able to moderate effect firm size on dividend policy

3. Research Method

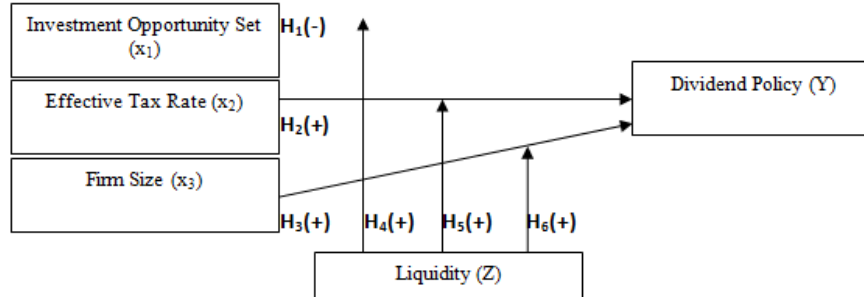


Fig 1. Research Models

3.1 Dependent Variable

The dependent variable used in this study is dividend policy. The proxies for the dividend policy use the dividend payout ratio (Putri & Irawati, 2019):

$$Dividend\ payout\ ratio = \frac{Dividen\ Per\ Share}{Earning\ Per\ Share} \times 100\ %$$

3.2 Independent Variables

a. Investment opportunity set
Investment opportunity set (Simarmata & Hutajulu, 2017) with Proxy:

$$MTBV = \frac{Total\ aktiva - Total\ ekuitas + (jumlah\ lembar\ saham\ beredar \times saham\ penutup)}{Total\ aktiva}$$

b. Effective tax rate
Effective tax rate (Tiyanto, 2019) with Proxy:

$$ETR = \frac{Beban\ Pajak\ Penghasilan}{Laba\ Sebelum\ Pajak}$$

c. Firm size
(Amah & Prasetyowati, 2019). The proxy for measuring firm size:

$$Size = Ln (Total\ asset)$$

3.3 Moderating Variable

The moderating variable used in this study is liquidity. Nursandari (2015) proxies for liquidity is the current ratio:

$$Current\ ratio = \frac{Aset\ Lancar}{Hutang\ Lancar} \times 100\ %$$

3.4 Population and Sample

The population in this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX) in the 2014-2018 period. This study uses purposive sampling method which is the determination of the sample based on certain criteria.

3.5 Data Collection Method

This study uses secondary data obtained from indirect sources (www.idx.co.id) in the form of financial statements of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2014-2018 period, Indonesian Capital Market Directory (ICMD) and web-related web and also study literature related to problems in research both from print and electronic media.

3.6 Data Analysis Methods

The data analysis method used was SmartPLS (Partial Least Square) software. SmartPLS is software used to test the relationship between variables. PLS (partial least square) is an analysis method which is often

called soft modeling because it eliminates OLS (Ordinary Least Squares) regression assumptions, such as data that must be normally distributed multivariate and there is no multicollinearity problem between endogenous or dependent variables (Ghozali). & Latan, 2016: 5).

3.7 Descriptive Statistics

Table 2
Descriptive Statistics Results

Variabel	N	Minimum	Maximum	Average	Standard Deviation
MTBVA	90	0.640	41.059	9.515	-0.526
ETR	90	0.057	1.386	0.389	0.520
SIZE	90	26.671	33.474	28.905	-0.517
CR	90	0.318	8.260	2.267	-0.341
DPR	90	0.007	1.459	0.484	1.000

Source: Secondary data processed, 2020

4. Result and Discussion

4.1 Inner Model Testing

a. R-Square Test

Table 3
R-Square Test Results

	R Square
<i>Dividend Payout Ratio</i>	0,595

Source: Secondary data processed, 2020

The effect of investment opportunity set, effective tax rate, firm size on dividend policy, which is proxied by dividend payout ratio, gives an R-Square value of 0.595 which means that it is included in the moderate category. This means that all independent variables consisting of investment opportunity set, effective tax rate, firm size and moderating variable, namely liquidity, are able to explain the dependent variable, namely dividend policy as measured by a dividend payout ratio of 59.5%, while the remaining 40.5% can be obtained. explained by other variables not listed in this study.

b. Significance Test (Hypothesis Test)

P value <0.05 and t statistic > 1.96 then Ha is accepted, it can be concluded that the independent variable has a significant effect on the dependent variable, whereas if the P value > 0.05 and t statistic < 1.96 then Ha is rejected, it can be concluded that the independent variable has no effect on the dependent variable. (Ghozali & Latan, 2015). The results of the model used as a reference for testing the hypothesis in this study can be seen in the following figure:

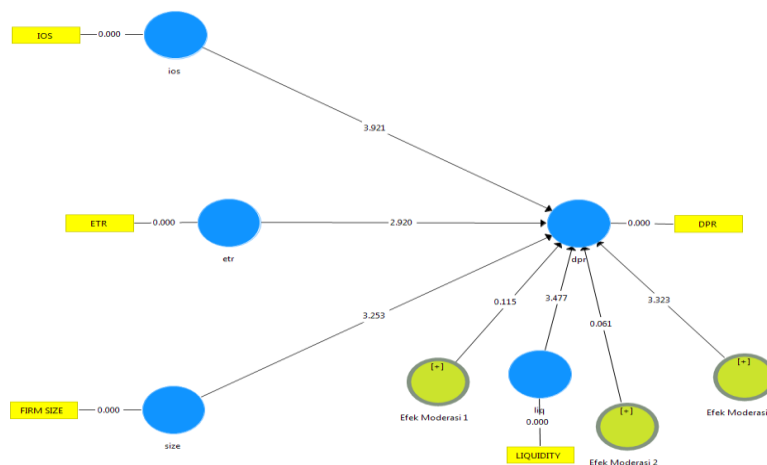


Fig 2 PIs Model Results - Bootstrapping

Source: Secondary data processed, 2020

The results of the significance value can be found through the output path coefficient. The following is the structural model obtained from the SmartPLS calculation as follows:



Tabel 4
 Hasil Path Coefficients (Direct Effect)

	Original Sample (O)	T Statistics	P Value
IOS → DPR	-0,272	3,921	0,000
ETR → DPR	0,302	2,920	0,004
SIZE → DPR	-0,236	3,253	0,001
Efek moderasi 1 → DPR	-0,008	0,115	0,908
Efek moderasi 2 → DPR	-0,09	0,061	0,951
Efek moderasi 3 → DPR	0,299	3,323	0,001

Source: Secondary data processed, 2020

4.2 Discussion

a. Effect Investment Opportunity Set on Dividend Policy

The significant value is $0.000 < 0.05$ with a statistical t value of $3.921 > 1.95$ and shows a negative direction of -0.272 as seen from the original sample. These results provide evidence that the investment opportunity set has a negative and significant effect on dividend policy. This means that the better the condition of a company, the management prefers to invest in new rather than pay high dividends, so that company funds are used to purchase investments that come from company profits which are turned into capital to increase company sales and the operations of a company. Thus, the distribution of dividends or received by investors is getting smaller. So the first hypothesis which states that the investment opportunity set has a negative and significant effect on dividend policy is accepted.

The results of this study support Simarmata & Hutajulu (2017); Kristanti & Fitriarningsih (2013); and Suharli (2007) which state that the investment opportunity set has a significant effect in a negative direction on dividend policy. Where the high investment opportunity set of companies is marked by large company growth, so it will require more large funds for investment. So that companies tend to choose to use funds that come from internal sources, the dividends to be distributed to investors tend to decrease.

b. Effect Effective Tax Rate on Dividend Policy

The significance value is $0.004 < 0.05$ with a t statistic of $2.920 > 1.96$ indicating a positive direction, it can be concluded that H2 is accepted. These results provide evidence that the effective tax rate has a positive and significant effect on dividend policy. This means that the tax liability imposed by the company increases, so the proportion for dividend payments will also increase.

These results support several previous studies, namely (Gill et al., 2010) which states that the effective tax rate has a positive and significant effect on dividend policy. Where the dividend policy of a company is high, the tax rate imposed by a company will also be high, because in reality the tax is always in the company.

c. Effect Firm Size on Dividend Policy

The firm size variable on dividend policy has a significance value of $0.001 < 0.05$ with a statistical t value of $3.253 > 1.96$ and shows a negative direction, it can be concluded that H3 is rejected. These results provide evidence that firm size has a negative effect on the dividend payout ratio. This shows that the size of the company that is large or small does not necessarily guarantee high or low dividend distribution.

The results of this study support previous research conducted by (Damayanti, 2015) which states that company size has a negative and significant effect on dividend policy. This shows that the larger the company size, the lower the dividends distributed to investors, and vice versa. This is because the company is classified as a large company, the management tends to prefer to reinvest its income to develop the company.

d. Effect Investment Opportunity Set on Dividend Policy with Liquidity as a moderating variable

The results of the first hypothesis state that the investment opportunity set has an effect on dividend policy, but after being moderated by liquidity, it does not show any effect of liquidity on the effect of investment opportunity set on dividend policy, this is because liquidity as measured by cash ratios varies widely in different amounts. significant. Variations in the level of liquidity in the sample companies dominate the low level of liquidity so that it is unable to moderate the effect of the investment opportunity set on dividend policy.

The results of this study support research (Ariandani & Yadnyana, 2016) which states that liquidity is not able to moderate the effect of investment opportunity set on dividend policy.

e. Effect of Effective Tax Rate on Dividend Policy with Liquidity as a moderating variable

The results show a P value of $0.951 > 0.05$ and a statistical t value of $0.061 < 1.96$ and an original sample value of 0.09 . This study shows that the P-Value of 0.951 is more than 0.05 , which explains that

liquidity is not able to moderate the effect of the effective tax rate on dividend policy. The large liquidity value will not strengthen the dividend policy. That is, if the liquidity value is high, it could be that a company does not distribute dividends because the company's profits will be used for company development, but if the liquidity value is low, a company may pay dividends due to dividend distribution of a company policy.

A company is said to be liquid if it reflects that the company has the availability of current assets to meet its short-term obligations and tax obligations. If, a company does not have the availability of current assets to meet its short-term liabilities and tax obligations, the liquidity cannot strengthen in terms of dividend payments, so it can be proven that liquidity is unable to moderate the effect of the effective tax rate on dividend policy.

f. **Effect of Firm Size on Dividend Policy with Liquidity as a moderating variable**

The results show a P-value of $0.001 < 0.05$ and a statistical t value of $3.323 > 1.96$ and an original sample value of 0.299. This study shows that the P-Value of 0.001 less than 0.05 explains that liquidity is able to moderate the effect of firm size on dividend policy. This means that the liquidity value is able to strengthen the existence of a dividend policy.

The larger the company size, the greater the dividend distribution in the presence of high liquidity. If liquidity is high, it will be able to strengthen the company in distributing dividends if the size of the company is high. High company size and high liquidity are able to pay high dividends as well. So it can be proven that liquidity is able to moderate the influence of the firm size on the dividend policy.

5. Conclusions

Based on the research results that have been described, the following conclusions can be drawn:

- The investment opportunity set and firm size have a negative effect on the dividend policy.
- The effective tax rate has a positive effect on the dividend policy
- Liquidity is not able to moderate the effect of investment opportunity set and effective tax rate on dividend policy
- Liquidity is able to moderate the effect of firm size on dividend policy.

6. References

- Abor, J. & Bokpin, Godfred., A. (2010). *Investment Opportunity, Corporate Finance, and Dividend Payout Policy: Evidence From Emerging Markets*. Emerald Group Publishing Limited Economics and Finance, 27(3).
- Aini, F. (2017). Pengaruh Likuiditas, Profitabilitas, dan Harga Saham Terhadap Kebijakan Dividen. *Skripsi Universitas Negeri Padang*, 1–14.
- Amah, N., & Prasetyowati, E. D. (2019). Pengaruh Profitabilitas, Firm Size Terhadap Dividend Payout Ratio Dimoderasi Likuiditas Pada BUMN Indonesia. *Jurnal Akuntansi*, 3(2), 97–107.
- Ariandani, P., & Yadnyana, I. (2016). Likuiditas Memoderasi Pengaruh Profitabilitas Dan Investment Opportunity Set (Ios) Pada Kebijakan Dividen. *E-Jurnal Akuntansi*, 17(1), 615–634.
- Damayanti, I. P. (2015). Pengaruh Struktur Kepemilikan, Leverage, Return On Assets, Dan Size Terhadap Kebijakan Dividen Denga Growth Sevbagai Variabl Moderasi. *Jurnal Akuntansi Dan Sistem Teknologi Informasi*, 11(2), 39–55.
- Dewasiri, N, Jayantha., et, al. (2018). *Determinants Of Dividend Policy: Evidence From an Emerging and Developing Market*. Emerald Publishing Limited Managerial Finance.
- Fahriyani, I. (2016). Pengaruh Ukuran Perusahaan, *Investment Opportunity Set*, Dan Profitabilitas Terhadap Kebijakan Dividen Dengan *Debt To Equity Ratio* Dan Kepemilikan Institusional Sebagai Moderating Variable. 27–44.
- Ghozali, I. Latan, H. (2012). *Partial Least Squares : Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0*. Semarang: Badan Penerbit Universitas Diponegoro
- Gill, A., Biger, N., & Tibrewala, R. (2010). Determinants of Dividend Payout Ratios: Evidence from United States. *The Open Business Journal*, 3(1), 8–14.
- <https://doi.org/10.2174/1874915101003010008>
- Kristanti, F. T., & Fitrianiingsih, F. (2013). The Effect Of Profitability And Investment Opportunity Set On Cash Dividend With Liquidity As Moderate Variables (Studied at Kompas 100 that listed on JSX in 2008–2012 period). *Jurnal Manajemen Dan Bisnis Indonesia*, 1(1), 54–71.
- Nursandari, M. (2015). Analisis Faktor Yang Mempengaruhi Kebijakan Dividen Dengan Size Sebagai Variabel Moderasi. *Skripsi Universitas Negeri Yogyakarta*, 16(2), 39–55.
- Prihatini, P., Rahmiat, & Susanti, D. (2018). *Pengaruh Profitabilitas, Investment Opportunity Set, Dan Kepemilikan Manajerial Terhadap Kebijakan Dividen (Studi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2016)*. 1(2), 298–307.
- Puspitaningtyas, Z., Prakoso, A., & Masruroh, A. (2019). Pengaruh Profitabilitas Terhadap Kebijakan Dividen



- Dengan Likuiditas Sebagai Pemoderasi. *Jurnal Administrasi Bisnis*, 9(3), 1.
- [15] Putri, N. R., & Irawati, W. (2019). Pengaruh Kepemilikan Manajerial dan Effective Tax Rate terhadap Kebijakan Dividen dengan Likuiditas sebagai Variabel Moderating. *Jurnal Kajian Akuntansi*, 3(1), 93.
- [16] Simarmata, H. Y., & Hutajulu, L. (2017). Pengaruh profitability dan investment opportunity set terhadap kebijakan dividen tunai dengan likuiditas sebagai variabel penguat. *Jurnal Akuntansi & Keuangan Daerah*, 12(2), 29–42. <https://doi.org/10.1016/j.jce.2013.07.003>
- [17] Suharli, M. (2007). Pengaruh Profitability Dan Investment Opportunity Set Terhadap Kebijakan Dividen Tunai Dengan Likuiditas Sebagai Variabel Penguat (Studi pada Perusahaan yang Terdaftar di Bursa Efek Jakarta. *Jurnal Akuntansi Dan Keuangan*, 9(1), 9–17. <https://doi.org/10.9744/jak.9.1.pp.9-17>
- [18] Tiyanto, A. A. (2019). Pengaruh Tangibility, Pertumbuhan Penjualan, Set Kesempatan Investasi dan Effective Tax Rate Terhadap Struktur Modal. *Skripsi Institut Agama Islam Negeri Surakarta*, 4(1), 75–84.
- [19] Ulfah, I. F. (2019). Faktor-faktor Yang Mempengaruhi Kebijakan Dividend Dengan Likuiditas Sebagai Variabel Moderasi. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- [20] Wulandari, D. U., & Ketut Alit Suardana. (2017). Pengaruh Profitabilitas, Kesempatan Investasi, Free Cash Flow, dan Debt Policy pada Kebijakan Dividen Perusahaan Manufaktur. *E-Jurnal Akuntansi Universitas Udayana*, 20(1), 202–230.
- [21] https://www.cnbcindonesia.com/market/201903211130281762035/empat_tahun_berturut-turut-laba-indocement-turun.
- [22] www.idx.com