

International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2019, 9(3), 154-162.



Model of Firm Value – Indonesian Stock Exchange Case

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Received: 05 March 2019 **Accepted:** 15 April 2019 **DOI:** https://doi.org/10.32479/ijefi.8036

ABSTRACT

Aim of the research is to investigate whether cash dividend tax, institution ownership and retained earning (RE) influence on dividend policy and their implications on the firm value (FV). Based on panel data of 73 companies that listed in Indonesian stock exchange, the results of research using Eviews 10 version application as follows: Institution ownership has positive dan significant influenced on dividend policy. However, cash dividend tax has negative influence on dividend policy insignificantly and RE has positive and insignificant influenced on dividend policy. Cash dividend tax, institution ownership and RE together have significant influence on dividend policy. Cash dividend tax has positive and significant influence on FV. Institution ownership and RE have negative and significant influence on FV. Cash dividend tax, institution ownership, RE, dividen policy have significant influence on FV. Cash dividend tax, institution all ownership, dan RE have direct connection on FV while dividend payout ratio fails to be as intervening variable on FV.

Keywords: Cash Dividend Tax, Institutional Ownership, Retained Earnings, Dividend Policy, Firm Value

JEL Classifications: E10, E32, E60

1. INTRODUCTION

Research of dividend policy has been done by a lot of empirical studies. However, there is still no consensus that has yet been achieved. As Black (1976) said, "the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together."

Dividend policy question has been a controversial issue since the introduction of irrelevance of dividend policy theory by (Modigliani and Miller, 1961) when they believed in the world of perfect capital market assumptions (for example: No taxes, no transaction and agency costs, and information freely available to everyone) where dividend policy does not affect the shareholder's wealth.

Some researchers who disagree with MM's dividend irrelevance theorem are Farrar and Selwyn (1967), Brennan (1970), and DeAngelo and DeAngelo (2006). They argue that the perfect

market assumption cannot be found in real world. One assumption of the perfect capital market is no tax. In fact, almost all countries in the world put and levy tax on dividend and any revenue received by companies and individuals. Therefore, argumentation of dividend irrrelevance preposition cannot be maintained. Dividend revenue and capital gain usually being taxed with different tariffs. Tax tariff on capital gains tends less than that on dividend revenue. Tax Preference Theory (Baker and Powell, 1999) argue investors are more profitable if company does not pay dividend. However, Gordon (1959) argued that investors prefer receive dividend to capital gains because it is certain. The argumentation is known as "the bird in hand" theory. Another argument was came from Bernheim (1991) who argued that dividend payment is a signal of profitable company.

Academic synthesis by Denis and Stepanyan (2009) showed determinants of dividend policy involve not only based on firm characteristic such as profitability, firm growth, leverage but also based on market characteristics such as tax. Tax tariff regulation

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for dividend revenue has been revised in some countries such as Canada, United State of America and Australia. The tariffs gave incentive for investors. Based on the tax incentive some researches about tax influence on dividend policy have done with different results.

Tax reform in Indonesia started on 1983 by enactmenting six number of Indonesian republic Act of 1983 concerning general provisions and tax procedures and seven number of indonesian republic act of of 1983 concerning income tax. During 24 years some amendments of the income tax act has been taken place 3 times and the last amendment was thirty six number of Indonesian republic act of 2008 concerning the fourth amendment of seven number of indonesian republic act of 1983 concerning income tax. The law regulates that.

There shall be excluded from taxable object are dividends or distribution of profit received by or accrued by a resident limited corporation, cooperative, state-owned enterprises, or local government-owned enterprises through ownership in enterprise established and domiciled in Indonesia, with requirement that: (1) dividends are paid out from retained earnings (RE); and (2) limited corporations and state-owned enterprises and local-owned enterprises receiving the dividends must own at least 25% of the total paid-in capital.

Due to unfulfilled of perfect capital market by Miller and Modigliani (1961), the conclusion that there is no relationship between dividends and share prices cannot be maintained. Therefore, it is interesting to research whether there is a relationship between dividend policy and firm value (FV). Based on the data derived from Indonesian stock exchange (IDX) 2010–2014 for all companies listed excluding banking and financial institutions, the graphic shows companies that pay dividends and their FV (Figure 1).

2. LITERATURE REVIEW

2.1. Theoretical Review

2.1.1. Agency theory

Jensen and Meckling (1976) explained that shareholders delegate mandate to company's managers in managing the company's activities for the benefit of shareholders. Agency problem is taken place when manager denies his or her obligation to maximize the

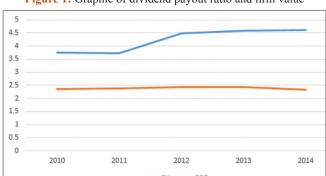


Figure 1: Graphic of dividend payout ratio and firm value

Source: Processed secondary data, 2018

FV. He or she acts the company for his or her own interests. Rozeff (1982) suggested to minimize the agency problem is by distributing a portion of profit as a dividend. By doing that, manager can be prevented to invest the company cash flow in unprofitable project.

2.1.2. Dividend irrelevance hypothesis

Given that in a perfect market, Miller and Modigliani (1961) argued that dividend policy has no effect on either the price of a firm's stock or its cost of capital, shareholders wealth is not affected by the dividend decision and therefore they would be indifferent between dividends and capital gains. The reason for their indifference is that shareholder wealth is affected by the income generated by the investment decisions a firm makes, not by how it distributes that income. Therefore, in M and M's world, dividends are irrelevant. Miller and Modigliani (1961) argued that regardless of how the firm distributes its income, its value is determined by its basic earning power and its investment decisions. In other words, investors calculate the value of companies based on the capitalised value of their future earnings, and this is not affected by whether firms pay dividends or not and how firms set their dividend policies.

Miller and Modigliani (1961) go further and suggest that, to an investor, all dividend policies are effectively the same since investors can create "homemade" dividends by adjusting their portfolios in a way that matches their preferences. Miller and Modigliani (1961) based their argument upon idealistic assumptions of a perfect capital market and rational investors. The assumptions of a perfect capital market necessary for the dividend irrelevant hypothesis can be summarized as follows: (1) no differences between taxes on dividends and capital gains; (2) no transaction and flotation costs incurred when securities are traded; (3) all market participants have free and equal access to the same information (symmetrical and costless information); (4) no conflicts of interests between managers and security holders (i.e., no agency problem); and (5) all participants in the market are price takers.

2.1.3. Bird in the hand hypothesis

One view about the effect of dividend policy on a firm's value by Graham and Alok (1959) is that dividends increase FV. In a world of uncertainty and imperfect information, dividends are valued differently to RE (or capital gains). Investors prefer the "bird in the hand" of cash dividends rather than the "two in the bush" of future capital gains. Increasing dividend payments, ceteris paribus, may then be associated with increases in FV. As a higher current dividend reduces uncertainty about future cash flows, a high payout ratio will reduce the cost of capital, and hence increase share value. That is, according to the so-called "bird-in-the hand" hypothesis high dividend payout ratios (DPR) maximize a firm's value.

Graham and Alok (1959) argued that a dollar of dividends has, on average, 4 times the impact on stock prices as a dollar of RE. Studies that provide support for the "bird-in-the hand" include Gordon and Shapiro (1956) Gordon (1959, 1963), Lintner (1962), and Walter (1963). Miller and Modigliani (1961) have criticized the "bird-in-the hand" and argued that the firm's risk is determined by the riskiness of its operating cash flows, not by the way it distributes its earnings. Consequently, M and M called

this argument the bird-in-the-hand fallacy. Further, Bhattacharya (1979) suggested that the reasoning underlying the "bird-in-the hand" is fallacious. Moreover, he suggested that the firm's risk affects the level of dividend not the other way around. That is, the riskiness of a firm's cash flow influences its dividend payments, but increases in dividends will not reduce the risk of the firm. The notion that firms facing greater uncertainty of future cash flow (risk) tend to adopt lower payout ratios seems to be theoretically plausible. Empirically, Rozeff (1982) found a negative relationship between dividends and firm risk. That is, as the risk of a firm's operations increases, the dividend payments decreases (Jensen and Warner, 1992).

2.1.4. Tax effect hypothesis

The hypothesis emerges when the perfect capital market by Miller and Modigliani (1961) failed to be maintained. There are some differences of tax tariffs levied by government. Shefrin and Statman (1984) argued that in general dividend policy and capital gain should be substituted each other.

Due to tax tariff on cash dividend is higher than that on capital gain, investor is not willing to receive dividend. The hypothesis argues that lower the DPR, the higher the FV. Farrar and Sewlyn (1967) argued that optimal dividend policy will be chosen when dividend tax tariff is higher. Some researchers has been done based on the tax reform. The results were Table 1.

2.1.5. Clientele effects of dividends hypothesis

Investors who are levied higher tax rates, are strongly biased against dividend taxation. Their rational choices is to buy stocks bearing zero or minimum dividends. On the other hand, shareholders with low tax burden will be attracted to buy and keep shares that provide higher cash dividends. This difference in preferences caused by different taxation rate creates the so called tax clientele. Allen et al. (2000) suggest that clienteles such as institutional investors tend to be attracted to invest in dividend-paying stocks because they have relative tax advantages over individual investors. These institutions are also often subject to restrictions in institutional charters which, to some extent, prevent them from investing in non-paying or low-dividend stocks. Similarly, good quality firms prefer to attract institutional clienteles by paying dividends because institutions are better informed than retail investors and have more ability to monitor or detect firm quality. Since most of the investors are interested in after-tax returns, the different tax treatment of dividends and capital gains might influence their preference for dividends versus capital gains. This is the essence of the tax-induced dividend clientele effect hypothesis.

Table 1: Research results of tax influence on dividend policy

1 0	
Influence	Not influence
Khoury and Smith (1977)	Abrutyn and Turner (1990)
Ben-Horim et al. (1987)	Bloster and Janjigian (1991)
Means et al. (1992)	Smith and Watts (1992)
Adjaoud and Zeghal (1993)	Casey et al. (1999)
Papaioannou and Savarese (1994)	Saadi and Chkir (2008)
Chetty and Saez (2005)	
Pattenden and Twite (2008)	
Brav et al. (2008)	

In addition, some corporate or institutional investors tend to be attracted to high-dividend stocks (Short et al., 2002) On the other hand, investors in relatively high tax brackets might find it advantageous to invest in companies that retain most of their incomes to obtain potential capital gains, all else being equal. Some clienteles, however, are indifferent between dividends and capital gains such as tax exempt and tax deferred entities (Elton and Gruber, 1970).

2.1.6. Dividends signalling hypothesis

According to the signalling hypothesis (Lintner, 1956), investors can infer information about a firm's future earnings through the signal coming from dividend announcements, both in terms of the stability of, and changes in, dividends. However, for this hypothesis to hold, managers should firstly possess private information about a firm's prospects, and have incentives to convey this information to the market. Secondly, a signal should be true; that is, a firm with poor future prospects should not be able to mimic and send false signals to the market by increasing dividend payments. Thus the market must be able to rely on the signal to differentiate among firms. If these conditions are fulfilled, the market should react favourably to the announcements of dividend increase and unfavourably otherwise.

As managers are likely to have more information about the firm's future prospects than outside investors, they may be able to use changes in dividends as a vehicle to communicate information to the financial market about a firm's future earnings and growth. Outside investors may perceive dividend announcements as a reflection of the managers' assessment of a firm's performance and prospects. An increase in dividend payout may be interpreted as the firm having good future profitability (good news), and therefore its share price will react positively.

Similarly, dividend cuts may be considered as a signal that the firm has poor future prospects (bad news), and the share price may then react unfavourably. Accordingly, it would not be surprising to find that managers are reluctant to announce a reduction in dividends. Lintner (1956) argued that firms tend to increase dividends when managers believe that earnings have permanently increased. This suggests that dividend increases imply long-run sustainable earnings. This prediction is also consistent with what is known as the "dividend-smoothing hypothesis". That is, managers will endeavour to smooth dividends over time and not make substantial increases in dividends unless they can maintain the increased dividends in the foreseeable future.

2.1.7. Institutional ownership

Ownership of company's equity consists of insider such as manager, financial institutions, government etc. who have different preferences. Their preferences can be undertaken depend on their ability to influence managers in making dividend policy decision (Gugler and Yurtoglu, 2003; Renneboog and Trojanowski, 2005). Grinstein and Michaely (2005) argued that large ownership is a function of dividend policy. Large ownership has power to influence managers in making financial decision. Ownership structure influences the agency problem.

The agency problem relates between majority and minority ownership. Majority ownership potentially can be detrimental to minority ownership. Majority ownership can expropriate the minority. LaPorta et al. (1999) found that almost all countries in the world except United State of America, company's equity has concentrate ownership.

Burkart et al. (2003) argued that in emerging markets, management and company owners are in the same parties, that is family. Sudarman (2004) argued that approximate a 49% of outstanding shares in IDX is owned by family holding companies.

Lukviarman (2004) argued that large and majority share ownerships and control of companies have a strong relationship with family ownership in IDX. Because of no performance advantage difference between companies that are owned by majority and minority shareholders, there will be expropriation issue done by majority ownership against minority ownership.

2.1.8. Pecking order theory

Managers can finance the company investment from internal and external financing. Internal financing comes from profit which is not distributing to shareholders, RE. RE is residual of firm's profit (Mahapatra and Mahapatra, 2004).

Developing firms tend not to depend on external financing so, they pay dividend less (Rozeff, 1982). Financing from RE has no adverse selection problem. External financing comes from debt and equity through selling additional shares. Both financing have adverse selection problem. Myers (1984) explained the financing of investment has a priority order. RE are a better sources of fund than debt. Debt is better deal than equity financing. Accordingly, the firm will fund all project using RE if possible. The second order is debt and equity is the last order. Franc-Dabroswska (2009) explained that managers tend to limit in distributing cash dividend based on the pecking order theory.

2.1.9. FV

The main objective of the company is to maximize FV or shareholders' wealth. FV is a certain condition achieved by company for a long period of time as a picture of public confidence of the company. Public shows their confidence by purchasing the company shares at the certain price in accordance with their perception and beliefs (Sukini, 2012).

FV is measured by how much price public is willing to pay for company's shares. The high of FV will increase market confidence not only based on the current performance but also on company prospect in the future (Sambora et al., 2014).

2.2. Development of Hypothesis

2.2.1. Cash dividend tax and dividend policy

Tax effect hypothesis based on the assumption tax tariff of dividend is higher than that of capital gain. It is the reason why investor not prefer cash dividend. However, the indonesian revenue tax based on 36 number act of 2008 regulates that dividend revenue will not be treated as tax object if the receiver of the dividend revenue is the domestic institution investor who has ownership a 25% and more

of the company shares that pays dividends. The law also regulates that the company who pays dividends must have positive RE. In other words, the dividend received by the institution investor who has equity ownership of the company that pay dividend a 25% or above, is not levied of tax.

Khoury and Smith (1977), Ben-Horim et al. (1987), Means et al. (1992), Adjaoud and Zeghal (1993), Papaioannou and Savarese (1994), Chetty and Saez (2005), and Pattenden and Twite (2008) show that dividend tax has a postive effect on dividend policy. However, Abrutyn and Turner (1990), Bloster and Vahan (1991), Saadi and Imed (2008), and Brav et al. (2008) show that dividend tax has no effect on dividend policy, based on the description, the hypothesis proposed in the study is:

H₁: Cash dividend tax has an effect on DPR.

2.2.2. Institution ownership and dividend policy

Institution ownership usually has large portion of ownership and tend to invest for long term period. They also have power to monitor and control the managers in making financial decision. LaPorta et al. (1999), Truong and Heaney (2007) show that the institution ownership has a positive effect on dividend policy. Based on the description, the hypothesis porposed in the study is:

H_a: Instituion Ownership has an effect on DPR.

2.2.3. RE and dividend policy

RE is residual of firm's profit (Mahapatra and Mahapatra, 2004). The best financing of investment is come from RE (Myers and Majluf, 1984). The higher pay dividend the less finance investment (Rozeff, 1982). Thanatawee (2011) show that RE has a positive effect on dividen policy. Based on the description, the hypothesis proposed in the study is:

H₃: RE has an effect on DPR.

2.2.4. cash dividend tax, institutional ownership, RE and DPR

After each independent variable individually was evaluated whether it has influenced on DPR, It is worth to evaluate whether all independent variables together have influenced on DPR. Based on the description, the hypothesis proposed in the study is:

H₄: Cash dividend tax, institutional ownership, RE together have effect on DPR.

2.2.5. Cash dividend tax and FV

Decline of tax tariff or incentive cash dividend tax received by investor will motivate them to persuade managers in order to pay cash dividend. From the point of firm view, there is no directly advantage received by the firm because the tax levied to investor himself or herself. However, reaction of share price is taken place when the firm pay dividend (Lintner, 1956). Investors believe the firm who pays dividend is the profitable firm.

Auebach and Hassett (2015) show that cash dividend tax has a positive effect on FV. Faccio and Xu (2014) has different result depending on their tax status. Amromin et al. (2005) show cash dividend tax has no effect on FV. Based on the description, the hypothesis proposed in the study is:

H₅: Cash dividend tax has an effect on FV.

2.2.6. Institution ownership and FV

Ownership by institution investor usually has large portion shares and takes long-term investment. As it has large portion shares, the institution ownership has power to monitor and control the managers. Clay (2002), and Thanatawee (2014) showed that the institution ownership has a positive effect on FV. Based on the description, the hypotheses proposed in the study is:

H₆: Institutional ownership has an effect on FV.

2.2.7. RE and FV

RE is residual of firm's profit (Mahapatra and Mahapatra, 2004). RE has function to pay dividend and/or to finance the investment. The more RE provided the more investment can be financed. Tirmisi and Ahmad (2013), AITroudi and Milhem (2013), show that RE has a positive effect on FV. Based on the description, the hypotheses proposed in the study is:

H₇: RE has an effect on FV.

2.2.8. DPR and FV

In perfect market, Miller and Modigliani (1961) argued that dividend policy is not relevant of FV. However, due to imperfect market, dividend policy is relevant. Some empirical researchers such as Pettit (1972), Rozeff (1982), Lloyd et al. (1985), found that dividend policy has negative and significant infuence on FV. However, some researchers such as Gordon dan Shapiro (1956), Walter (1963), Gordon (1963), Farrelly et al. (1986), Fairchild (2010), Abor dan Bopkin (2010), Salih (2010), AITroudi and Milhem (2013), Malik and Maqsood (2015) argued that dividend policy has positive and significant influence on FV. Based on the description, the hypotheses proposed in the study is: H_c: DPR has an effect on FV.

2.2.9. Cash dividend tax, institutional ownership, RE, DPR and FV

After each independent variable individually was evaluated whether it has influence on FV, it is worth evaluate whether all independent variables together have influenced on FV. Based on the description, the hypotheses proposed in the study is:

H₉: Cash dividend tax, institutional ownership, RE, DPR together have effect on FV.

3. METHODOLOGY

3.1. Model

This paper has 2 (two) models. The first model tries to investigate whether cash dividend tax, institutional ownership and RE as independend variables has influenced on DPR as dependen variable.

$$DPR_{i,t} = \alpha + \beta_0 TAX_{i,t} + \beta_1 INS_{i,t} + \beta_2 RE_{i,t} + + \epsilon_{i,t}$$
 (1)

The second model tries to investigate whether cash dividend tax, institutional ownership, RE and DPR as independend variables have influenced on FV as dependend variable.

$$FV_{i,t} = \alpha + \beta_0 TAX_{i,t} + \beta_1 INS_{i,t} + \beta_2 RE_{i,t} + \beta_3 DPR_{i,t} + \epsilon_{i,t}$$
 (2)

Where, α=Coefficient FV=FV DPR=DPR TAX=Cash dividend tax INS=Institutional ownership RE=RE ε=Error.

3.2. Data and Sample Selection

Data model in this paper is panel data that combination of times series and cross-section data. Sample data of the study is all firms excluding State Owned Enterprises, Banking and Finance firms that listed in the IDX per 2014. The sample firms has a positive profit and distribute cash dividend continually in 2010–2014, Table 2.

3.3. Operational definition

This study involves the independent, intervening, and dependend variables used to test the proposed hypotheses. The independend variables in this research are Cash Dividend Tax, Institutional Ownership, and RE. The intervening variable is DPR dan dependend variable is FV.

3.3.1. FV

FV in the study using Tobins'q proxy ratio (Morck et.al., 1988; McConnel and Servaes, 1990). The formula:

$$FV = \frac{Market price of outstandin shares + Debt}{Total Assets}$$
 (3)

3.3.2. DPR

DPR in the study using the formula (Pattenden and Twite, 2008; Ardestami et.al., 2013):

$$DPR = \frac{Cash dividend declared}{Net income}$$
 (4)

3.3.3. Cash dividend tax (TAX)

Cash dividend tax variable in the study uses variable dummy (Khoury and Smith, 1977; Chkir and Saadi, 2015) with description as follows.

Value	Description
1	Firm that fulfill law tax requirement:
	Firm shares owned by domestic institutional investor
	of 25% or above
	Firm has a positive retained earnings
0	Firm not fulfill law tax requirement

3.3.4. Institutional ownership (INS)

Institutional ownership variable in the study uses formula as follows (Clay, 2002; Truong and Heaney, 2007; Thanatawee, 2014):

Institutional ownership (INS) =
$$\frac{Institutional ownership}{Outstanding shares}$$
 (5)

3.3.5. RE

RE variable in the study uses formula as follows (AITroudi and Milhem, 2013):

RE per share (RE) =
$$\frac{\text{Retained earnings}}{\text{Outstanding shares}}$$
 (6)

4. RESULT AND DISCUSSION

Descriptive statistics used in the study below aims to provide a brief overview of research variables.

Table 3 shows that the average of FV in this study is positive value (2.368855). This reflects that firms that are profitable and pay

Table 2: Process of sample selection

No.	Sample criteria	Total
		sample
1	All firms listed in IDX per 2014	506
2	Firms listed in 2010-2014	(113)
3	State owned enterprises and banking and financial	(52)
	firms	
4	Firms not profit continually in 2010-2014	(109)
5	Firms not pay cash dividend continually in	(159)
	2010-2014	
Resea	arch samples (firms)	73

Table 3: Descriptive statistics

Variable	N	Mean±standard deviation
FV	365	2.368855±2.559037
DPR	365	0.444932±0.439685
TAX	365	0.684932±0.465181
INS	365	0.691335±0.178666
RE	365	2956.207±6840.298

Sourse: Processed secondary data, 2018, FV: Firm value, DPR: Dividend payout ratio, RE: Retained earnings

dividend have positive FV. In addition, the standard deviation of this variable of this variable is 2.559037 which shows the volatility of FV. Variable DPR shows the average value of positive value that is 0.444932 which means that dividend policy made by managers below Rp 1 per share. In addition, the standards deviation of this variable shows volatility with a value of 0.439685. Variable cash dividend tax (TAX) shows the average value is positive value (0.684932). This reflect that firms who fulfill the tax requirement is more than 0.5. In addition, the standard deviation of this variable shows volatility with a value of 0.465181.

Institutional ownership (INS) variable shows the average valus is positive value (0.691335). This reflect that firms who pay cash dividend owned by institutional investor >0.5. In addition, the standards deviation of this variable shows volatility with a value of 0.178666. RE variable shows the average value is positive value (2856.207). This reflect that firms have RE positif and have Rp 2856 per share (2856.207). In addition, the standards deviation of this variable shows volatility with a value of 6640.298.

Multiple regression of model I using random effect of panel data as follows.

Based on the Table 4 above, cash dividend tax (TAX) has negative and insignificant influenced on DPR. Hypothesis (Ha.) is rejected. RE has positive and insignificant influenced on DPR. Hypothesis (Ha₂) is rejected. Institutional Ownership (INS) has postive and significant influenced on DPR. Hypothesis (Ha,) is accepted. Incentive of cash dividend tax given by the Law has no significantly influence on company's dividend policy. Dividend policy decision is not based significantly on the RE. Due to information limitation, I argue that distribution of cash dividend aims to give good signal of the company (signalling

Table 4: Multiple regression of model I					
Dependent variable: DPR					
Method: Panel EGLS (cross-section random effects)					
Date: 08/03/18 Time: 09:31					
Sample: 2010-2014					
Periods included: 5					
Cross-sections included: 73					
Total panel (balanced) observ	vations: 365				
Swamy and arora estimator of	of component variances				
Variable	Coefficient	Std.error	t-Statistic	Prob.	
С	0.171366	0.126340	1.356390	0.1758	
TAX	-0.084475	0.072658	-1.162641	0.2457	
INS	0.456416	0.180234	2.532356	0.0118	
RE	5.56E-06	4.79E-06	1.161224	0 2463	
Effects specification			S.D.	Rho	
Cross-section random			0.231168	0.2889	
Idiosyncratic random			0.362679	0.7111	
Weighted statistics					
R-squared	0.030003	Mean dependent var		0.255551	
Adjusted R-squared	0.021947	S.D. dependent var		0.365385	
S.E. of regression	0.361848	Sum squared resid		47.26715	
F-statistic	3.722669	Durbin-watson stat		2.445358	
Prob (F-statistic)	0.011651				
Un weighted statistics					
R-squared	0.064945	Meandependent var		0.444932	
Sum squared resid	65.79940	Durbin-watson stat		1.756629	

hypothesis, Lintner 1956; Bernheim, 1991). Institutional ownership by investors have chance to monitor and control the manager in making decision. Cash dividend tax, institutional ownership and RE together have significant influence on DPR with adjusted R-squared of 0.021947 or 2.19%. The rest (97.81%) are influenced by other variables that are not included in this study.

Multiple regression of model II using Fixed Effect of panel data as follows.

Based on the Table 5, cash dividend tax (TAX) has positive and significant influenced on FV. Hypothesis (Ha₅) is accepted. RE and institutional ownership (INS) have negative and significant influenced on FV. Hypothesis (Ha₆) and hypothesis (Ha₇) are accepted. DPR has negative and insignificant influenced on FV. Hypothesis (Ha₉) is rejected.

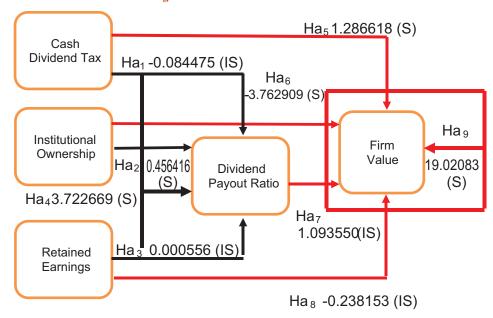
Cash dividend tax, institutional ownership, RE, and DPR together have significant influenced on FV with adjusted R-squared of 0.790030 or 79%. The rest (21%) will be influenced by other

Table 5: Regression of model II

THE TO THE STEED OF THE WAY	14010 07 11051011 01 110401 11				
Dependent variable: FV					
Method: Panel least squares					
Date: 08/03/18 Time: 09:42					
Sample: 2010–2014					
Periods included: 5					
Cross-sections included: 73					
Total panel (balanced) observat	ions: 365				
Variable	Coefficient	Std. error	t-statistic	Prob.	
С	4.632623	0.331669	5.254373	0.0000	
TAX	1.286613	0.551759	2.331349	0.0204	
INS	-3.762909	1.239846	-2.917332	0.0038	
RE	-0.000153	2.56E-05	-5.987557	0.0000	
DPR	-0.233153	0.190188	-1.252193	0.2115	
Effects specification					
Cross-section fixed (dummy variables)					
R-squared	0.333370	Mean dependent var		2.368855	
Adjusted R-squared	0.790030	S.D. dependent var		2.559037	
S.E. of regression	1.172614	Akaike info criterion		3.341328	
Sum squared resid	396.0065	Schwanz criterion		4.164046	
Log likelihood	-532.7924	Hannan-quinn criter.		3.668237	
F-statistic	19.02033	Durbin-watson stat 1.307084			
Prob (F-statistic)	0.000000				

DPR: Dividend payout ratio, RE: Retained earnings

Figure 2: Result of research framework



S = Significant IS= Insignificant variables that are not included in the research. Hypothesis (Ha₉) is accepted. Cash dividend tax incentive will be benefit to institutional investors. Consequently, institutional investors will be increased and in turn the market share price will be increased as well. Business development of the company will be based on the available fund of RE. Due to majority ownership has its own interest that is opposite to minority ownership interest (Lukviarman, 2004), cash flow available in RE will not be used to increase a company performance.

Figure 2 shows that DPR fails as an intervening variable between cash dividend tax, institutional ownership, and RE and FV.

5. CONCLUSION

Aim of the research is to investigate whether cash dividend tax, institution ownership and RE influence on dividend policy and their implications to the FV.

Income tax act of cash dividend incentive for domestic institutional investor did not influence the company's dividend policy. However, the dividend tax incentive has significant influence on FV. Institutional ownership has significant influence on dividend policy. Institutional ownership has access to monitor and control manager in decision making. In other words, the indonesian tax law has positive significant influence on cash dividend.

However, institutional ownership has negative and significant influenced on FV. Institution ownership investor may has its own interest that is opposite to other ownership interests. It will cause a conflict between the majority and minority ownership that makes bad company performance.

Dividend policy was not significantly influenced by the retained earnings. Dividend policy decision could be based on the signalling hypothesis. Due to information limitation, cash dividend announcement aims to give signal that company performance is good.

RE has negative and significant influenced on FV. Due to majority ownership has its own interest that is opposite to minority ownership interest, cash flow available in RE will not be used to increase a company performance.

DPR has negative and insignificant influenced on FV. Dividend distribution decreases RE that can be used to invest.

DPR fails to be an intervening variable cash dividend tax, institutional ownership, and RE on FV.

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