Dividend Policy on IPOs Companies in Indonesia: A Life Cycle Theory Test

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Abstract: - This study intends to assess the accuracy of life cycle theory prediction in explaining the dividend payment policies when a company in Indonesia conducts the Initial Public Offerings. Technically, this study aims to (1) examine the impacts of Retained Earnings to Total Equity (RE/TE), return on assets, firm age, firm size, and growth opportunity toward propensity to pay dividends, and (2) examine the impacts of RE/TE, return on assets, firm age, firm size, and growth opportunity toward dividend pay-out ratio. The population of this study was all companies that conducted the Initial Public Offerings on the Indonesia Stock Exchange from 2000 to 2017. The binary logistic regression model was used to analyze the data for reaching the first purpose while the ordinary least square was applied to answer the second one. The results show that dividend payment policies in the first year of companies conduct the Initial Public Offerings are in line with the life cycle theory prediction. It is proved by the positive and significant impacts of RE/TE, return on assets, firm age, and firm size toward propensity to pay dividends. Besides, it is also proved by the positive and significant impacts of return on assets and firm size toward dividend pay-out ratio; as well as the negative and significant impact of growth opportunity toward dividend pay-out ratio. The study does not acquire that growth opportunity gives a significant impact on the propensity to pay dividends, and RE/TE and firm age significantly impact dividend pay-out ratio.

Key-Words: - life cycle theory; dividend policy; and Initial Public Offerings.

1 Introduction

Why do some companies pay dividends while others do not? More than a decade ago, Denis & Osobov [1] explicitly asked this question and conducted some investigations regarding this matter in the United States, Canada, the United Kingdom, German, France, and Japan. They, then, proved that larger companies, with greater profits as well as higher RE/TE (*Retained Earnings to Book Value of Total Equity*), tend to pay greater dividends. Even recently, Baker & Kilincarslan [2] again questioned the similar question "*why companies do not pay cash dividends*?" and conducted a research in Turkey. They concluded that those which do not pay dividends tend to have smaller sizes, are relatively newer (in the earlier stage of their life cycle), have high growth opportunities and low (even loss) profitability, and have small (even negative) income.

Supports for the existence of the life cycle theory are given by the results of several recent studies. First, the study of Singla & Samanta [3] toward construction companies in India in the period of 2011-2016 documents positive significant impacts of profitability, size, and life cycle (RE/TE) on dividend payments. This result confirms the findings of Labhane & Mahakud [4]; Jabbouri [5]; and Khan & Shamim [6]. Second, Dewasiri et al. [7] through their study in Sri Lanka from 2010 to 2016 report that their findings provide enrichments for several dividend theories, such as signaling, outcome, catering, life cycle, FCF, and pecking order. The support to the life cycle theory is shown by significant positive impacts of company size and profitability on the tendency to pay dividends and significant negative impact of investment opportunities on dividend payments. Third, the study of Ranajee, Pathak, & Saxena [8] on all companies listed on the National Stock Exchange and the Bombay Stock Exchange from April 2001 to March 2016, except for financial, utilities, and government companies, concludes that age and size of company are significant positive factors to determine the dividend rate decisions, which is in line with the life cycle theory.

Those above findings are some of the empirical proofs that tend to support the company's life cycle theory, as one of several dividend policy theories. Baker, Kilincarslan, & Arsal [9] summarize ten of many existing theories about dividend policy, five of which are: Bird-in-the-hand theory [10]; Signaling theory [11]; Tax-preference theory [12]; Tax clientele effect [13]; and Agency cost theory [14]. In principle, the dividend policy study focuses

on two specific questions; whether dividend policy affects company value and what factors determine dividend policy [4]. Dewasiri et al. [7] state that the determinants of dividend policy have been the object of investigation for decades, but there is no consensus on which factors influence the tendency of paying dividend and the amount of the payments.

Regarding the problematic question of why some companies pay the dividends while the others do not, the researchers have observed several companies on the IDX which conducted Initial Public Offerings from 2000 to 2017. The observation results in 338 companies [15]. However, only 319 of them have complete data and information and only 104 pay the dividends. It is identified that the average age of the companies that pay the dividend is 22.52 years old while those which do not is 17.40 years old. The average growth of companies that pay the dividends is 36% while those which do not is 73%. The average profitability of companies that pay the dividends is 10% while those which do not is 5%. These preliminary data show the tendency as described in the company's life cycle theory.

Researches on dividend policy of companies listed on the IDX have often been carried out. Duygun, Guney, & Moin [16] investigate factors influencing the dividend policy of Indonesian non-financial companies listed on the IDX in 2013. This research focuses on agency costs and ownership structures. The research finds that companies with higher manager-shareholder conflicts of interest pay lower dividends. Besides, the conflicts of interest among shareholders who own large and small shares also affect the payments. This study also discovers that family-controlled companies tend to pay lower dividends while the corporations with higher state ownership are often associated with higher dividend payments. Wahjudi [17] examines the variables that affect dividend policy on all manufacturing companies listed on the IDX for the period 2011-2015. He concludes that the dividend policy of manufacturing companies is negatively and significantly influenced by the variable growth of net assets, liquidity, and leverage. Besides, his study finds that the pledged assets and profitability give negative insignificant impact on the dividend policy.

Trihermanto & Nainggolan [18] examine the relationship between corporate social responsibility (CSR) and company's life cycle as well as dividend policy in Indonesia in the period of 2008-2015. The study finds that CSR cost increases as a company enters the maturity stage of its life cycle; the company social donation and charity giving also increase as it gets mature. In addition, the result gives strong evidence which supports the hypothesis that company's CSR cost positively affects the dividend policy. The findings of Trihermanto & Nainggolan [18] imply that there is a positive relationship between the life cycle and dividend policy of companies in Indonesia. Therefore, it is imperative to conduct research on Propensity to Pay Dividends and Dividend Pay-out Ratio to companies which carry out the Initial Public Offerings on the IDX by using company's life cycle as the grand theory. Besides, to our knowledge, this type of research has never been done before.

The above explanation shows that companies' dividend policies still leave a number of unresolved theory gaps as well as research gaps. The initial data about the companies conducting Initial Public Offerings in Indonesia show a phenomenon that leads to the prediction of the firm life cycle theory of dividends. Therefore, research on the determinants of companies' dividend policies when conducting Initial Public Offerings in Indonesia is realistic, interesting, and imperative. Besides, as per our understanding, such research has not yet been done previously. It is hoped that the results of this study will give a significant contribution to the existence of firm cycle theory in explaining companies' background in implementing their dividend policies. Furthermore, investors need to know those companies which pay or are about to pay dividends in their first year of conducting Initial Public Offerings. It is because the decision of paying dividends is an expensive policy; companies need to provide a large amount of money and, therefore, only those with high profitability and bright prospects are able to distribute dividends.

2 Literature Review and Hypothesis Development

2.1 RE/TE and Dividend Policy

The premise underlying the relationship between RE/TE and dividend policy is that younger companies have little or even no sustained equity and depend much on external funding on running the operations [19]. On the other hand, more mature companies with positive net cash flow from operating results and fewer investment opportunities have greater ability to maintain the equity. Therefore, these companies are expected to have larger RE/TE ratio in order to be able to pay higher dividends. The empirical findings of the relationship between the RE/TE ratio and the dividend policy may vary, but most of them lead to a positive and

significant relationship. Hassani & Dizaji [20] on the Tehran Stock Exchange, for example, finds no significant relationship between RE/TE ratio and dividend payments. However, other research results can conclusively prove the significant positive relationship between these two, including Brockman & Unlu [21]; Denis & Osobov [1]; Dewasiri et al. [7]; Labhane & Mahakud [4]; and Singla & Samanta [3]. Thus, the hypotheses that can be proposed are:

$H_{1.1}$: RE/TE is a positive determinant of dividend payments policy.

$H_{1.2}$: RE/TE has a positive impact on the amount of dividend payout ratio.

2.2 Growth and Dividend Policy

The life cycle theory predicts a negative relationship between growth opportunity and dividend payments. Lang, Faccio, & Young [22] report that growth opportunity often depletes company's cash resources which can be used to pay dividends. However, Thirumagal & Vasantha [23] prove that there is a positive relationship between growth opportunity and dividend pay-out ratio. They argue that sometimes companies with high growth pay higher dividends because it can generate opportunities for their future growth. In contrast, Amidu & Abor [24]; Arko, Abor, Adjasi, & Amidu [25]; and Dewasiri et al. [7] find a negative relationship between dividend payments and growth opportunity. The results of their studies show that growing companies tend to pay lower dividends. Meanwhile, grown-up companies will pay higher dividends in their mature stage, as also stated in the life cycle theory [26], [27]. High growth companies are more likely to maintain a large portion of their income to reduce their dependence on expensive external financing [28]. Thus, the hypotheses that can be proposed are:

$H_{2.1}$: Growth is a negative determinant of dividend payments policy.

$H_{2.2}$: Growth has a negative impact on the amount of dividend payout ratio.

2.3 Age and Dividend Policy

The relationship between company age and dividend payments is not always positive, as stated by Afza & Mirza [29]. They prove that companies tend to increase their dividends during the first few years, which, according to their estimation, near the age of 20 years. After that age, most of those companies start to lower their dividend payments. Ihejirika & Nwakanma [30] in Nigeria claim that younger companies tend to pay higher dividends than the older ones. Meanwhile, in line with the life cycle theory, Wang, Ke, Liu, & Huang [31] in Taiwan show that younger companies with high growth opportunities and limited profitability tend to distribute stock dividends rather than cash dividends. In addition, the researches of Thirumagal & Vasantha [23] and Ranajee et al. [8] in India prove that company age has a positive significant impact on dividend policy. Thus, the hypotheses that can be proposed are:

$H_{3.1}$: Company age is a positive determinant of dividend payments policy.

$H_{3.2}$: Company age has a positive impact on the amount of dividend payout ratio.

2.4 Size and Dividend Policy

Company size is one of the important factors that influence company dividend policy, in spite of various findings regarding the nature of its impacts [5]. The life cycle theory predicts a positive relationship between company size and dividend payments because larger companies are also more mature, therefore, pay more dividends than the smaller ones [32], [33]. This theory is supported by Dewasiri et al. [7]; Kuzucu [34]; Patra, Poshakwale, & Ow-Yong [35]; Singla & Samanta [3] and Yusof & Ismail [36] who see the positive relationship between cash dividend and company size. However, Al-Najjar & Hussainey [37] and Bokpin [38] reject this significant effect. Harada & Nguyen [39] even state that size is the negative determinant of company dividend payment policy in Japan. The hypotheses that can be proposed for this study are:

$H_{4.1}$: Company size is a positive determinant of dividend payments policy.

$H_{4.2}$: Company size has a positive impact on the amount of dividend payments ratio.

2.5 Profitability and Dividend Policy

The life cycle theory predicts a positive relationship between profitability and dividend payments. Baker & Kilincarslan [2] claim that companies which are bigger in size, more profitable, and more mature tend to pay cash dividends. However, Kuzucu [34] argues that profitability becomes a negative determinant of dividend pay-out on companies in Turkey, and Al-Kayed [40] also proves a negative impact on dividend yield due to profitability on banks in Saudi Arabia. In addition, Wahjudi [17] reports that profitability does not affect the dividend policy of manufacturing companies in Indonesia.

Nevertheless, in line with the life cycle theory, a number of more numerous studies prove that

profitability is a significant determinant of company dividend policy (e.g. Baker & Jabbouri [41]; Raaballe & Hedensted [42]). Several studies document a positive relationship between dividend payments and income in the same year, especially in developing countries (see: [35], [37], [38], [43]–[47]. Kannadhasan et al. [47]'s research conducted on manufacturing companies in India by using the quantile regression approach concludes that in intermediate quantile, Return on Assets (ROA) has a positive significant impact on dividend payment policy. Thus, the hypotheses that can be proposed are:

$H_{5.1}$: Profitability is a positive determinant of dividend payments policy.

$H_{5.2}$: Profitability has a positive impact on the amount of dividend payments ratio.

3 Research Method

This study used quantitative data gotten from the financial data of companies listed on the Indonesia Stock Exchange from 2000 to 2017 [15]. It was identified that 338 companies conducted Initial Public Offerings on the Indonesia Stock Exchange during those years, and 104 of them paid cash dividends to shareholders. However, of the 338 companies, 19 of them did not have complete data and information. As a consequence, only 319 companies became the sample for the first purpose or Model 1. Furthermore, of the 104 companies that paid dividends, 7 of them had outlier data. Thus, only 97 companies became the sample for the second purpose or Model 2.

Two different analytical models were developed for the dependent variable; Propensity to Pay Dividends (PPD) for model one and Dividend Payout Ratio (DPR) for model two. PPD is a binary variable, the value was determined by giving 1 (one) for companies that pay dividends and 0 (zero) for those who do not. Meanwhile, DPR is a proxy variable for dividend payout which was measured as dividend per share divided by earnings per share. The independent variables for the two models are RE/TE, Growth Opportunity namely Sales Growth (SGO), Company Age (AGE), Company Size (SIZE), and Profitability/Return on Assets (ROA).

To test the effects of independent variables on PPD, the binary logistic regression model was used, the formula is as follows:

$$PPD_{i,t} = \beta_0 + \beta_1 RE/TE_{i,t} + \beta_2 SGO_{i,t} + \beta_3 AGE_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ROA_{i,t} + u_{i,t} \quad (1)$$

The Ordinary Least Squares (OLS) model was used to investigate the effects of independent variables on the DPR, the formula is as follows:

$$DPR_{i,t} = \beta_0 + \beta_1 RE/TE_{i,t} + \beta_2 SGO_{i,t} + \beta_3 AGE_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ROA_{i,t} + u_{i,t} \quad (2)$$

In which:

RE/TE = Retained earnings divided by book value of total equity;
SGO = Total sales in the year of Initial Public Offerings reduced by total sales of the previous year, divided by total sales of the year before;
AGE = The natural logarithm of the number of years the company started to the year of Initial Public Offerings;
SIZE = The logarithm of total assets;
ROA = Earnings before interest and tax divided by total assets.

4 Results and Discussion

4.1 Descriptive Statistics

The descriptive statistic displays the mean, standard deviation, the maximum, and the minimum used to describe the sample and analyze the data of the study. Model 1 includes all samples of companies used, both those that paid dividends and those that did not (n = 319 companies). Model 2 is a part of Model 1, which only includes those companies that paid dividends (n = 97 companies). The logistic regression was applied to test the hypothesis on Model 1 while the OLS was used for Model 2. The closeness of relationships among the variables in Model 1 and Model 2 may vary. Thus, the authors accommodate these relationships by underlining three levels of trust; 90 percent (statistically significant at 10%), 95 percent (statistically significant at 5%), and 99 percent (statistically significant at 1%).

Table 1. Descriptive Statistic

Variable	Dependent Variable PPD (Model 1; n= 319)				Variable	Dependent Variable DPR (Model 2, n= 97)				Average difference test: PPD vs. DPR
	Mean	Std. Dev	Max	Min		Mean	Std. Dev	Max	Min	
PPD	0.326	0.469	1.000	0.000	DPR	22.428	16.119	62.350	0.150	-22.102***
RE/TE	0.209	0.523	4.660	-1.954	RE/TE	0.354	0.539	4.510	-0.210	-0.145**
ROA	0.072	0.101	0.880	-0.360	ROA	0.098	0.074	0.350	-0.180	0.026**
AGE	2.620	0.879	5.320	-1890	AGE	2.812	0.814	5.320	0.090	-0.192*
SIZE	5.987	0.790	8.400	4.000	SIZE	6.147	0.794	8.400	4.520	-0.160*
SGO	0.611	2.026	29.420	-0.970	SGO	0.353	0.508	2.440	-0.470	-0.258
*Notes: *statistically significant at 10%; **statistically significant at 5%; ***statistically significant at 1%.*										

Source: processed IDX [15]

The purpose of Table 1 is to compare the average values of five independent variables in Model 1 and Model 2 so that their tendencies toward the prediction of the life cycle theory of dividend can be discovered. The explanation is as follows: (1) The average value of RE/TE in Model 1 (0.209) is significantly smaller than the average value of RE/TE in Model 2 (0.354). It shows that the companies that paid dividends have greater RE/TE, as predicted by the life cycle theory. (2) The average value of ROA in Model 1 (0.042) is significantly smaller than the average value of ROA in Model 2 (0.098). It shows that the companies that paid dividends have greater ROA, as predicted by the life cycle theory. (3) The average value of AGE in Model 1 (2.620) is significantly smaller than the average value of AGE in Model 2 (2.812). It shows that the companies that paid dividends have greater AGE, as predicted by the life cycle theory. (4) The average value of SIZE in Model 1 (5.987) is significantly smaller than the average value of SIZE in Model 2 (6.147). It shows that the companies that paid dividends have greater SIZE, as predicted by the life cycle theory. (5) The average value of SGO in Model 1 (0.611) is greater than the average value of SGO in Model 2 (0.353); however, this difference is not statistically significant. Therefore, the average value of SGO of the companies that paid dividends is not smaller than those who did not. It can be said that the SGO variable is not in line with the prediction of the life cycle theory.

4.2 The Results of Model 1

The logistic regression analysis used in Model 1 and showed in Table 2 shows adequate goodness of fit. It is proved by the result of Hosmer and Lemeshow's (HL) test which has a statistical value of 11.0498 with a Prob. Chi-Sq (8) 0.1989 (greater than 0.05). Moreover, the result of expectation-prediction evaluation for binary specification shows that Model 1 has a correctly predicted percent value of 19.23% which is statistically considered significant.

Table 2. The Results of Logistic Regression

Variable	Coefficient	Std. Error	Prob.	Odds Ratio
C	-3.890333	1.092264	0.0004***	0.0204
RE_TE	0.731480	0.286042	0.0106**	2.0791
ROA	4.453825	1.464938	0.0024**	86.1973
AGE	0.271350	0.153458	0.0770*	1.3120
SIZE	0.331589	0.168479	0.0491**	1.3935
SGO	-0.176444	0.143807	0.2198	0.8382
Andrews and Hosmer-Lemeshow Tests		Exp.-Prediction Evaluation for Binary Specification		
H-L Statistic	11.0498	Total Gain* Dep=1		19.23
Prob. Chi-Sq (8)	0.1989	Percent Gain** Dep=1		19.23
*Notes: *statistically significant at 10%; **statistically significant at 5%; ***statistically significant at 1%.*				

Table 2 shows that: (1) the estimated value of RE/TE variable coefficients toward PPD is 0.7314, the standard error value is 0.2860, the probability is 0.0106, and the odds ratio is 2.0791. Referring to the 0.05 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 1.1. Thus, companies with greater RE/TE have higher propensity to pay dividends, which is 2.079 times higher than those with smaller RE/TE. It is in accordance with the results of DeAngelo et al. [33], Denis & Osobov [1], and Singla & Samanta [3] which prove that companies

with greater RE/TE have higher propensity to pay dividends; (2) the estimated value of ROA variable coefficients toward PPD is 4.4538, the standard error value is 1.4649, the probability is 0.0024, and the odds ratio is 86.1973. Referring to the 0.05 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 2.1. Thus, companies with greater ROA have higher propensity to pay dividends, which is 86.1973 times higher than those with smaller ROA. It is in accordance with the results of Kannadhasan et al. [47], Thakur & Kannadhasan [48], and Baker & Kilincarslan [2] which prove that companies with greater profitability have higher propensity to pay dividends.

Further, Table 2 also shows that: (3) the estimated value of AGE variable coefficients toward PPD is 0.2713, the standard error value is 0.1535, the probability is 0.0770, and the odds ratio is 1.3120. Referring to the 0.10 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 3.1. Thus, companies with greater AGE have higher propensity to pay dividends, which is 1.3120 times higher than those with smaller AGE. It is in accordance with the result of Ranajee et al. [8] which proves that older companies have higher propensity to pay dividends; (4) the estimated value of SIZE variable coefficients toward PPD is 0.3316, the standard error value is 0.1685, the probability is 0.0491, and the odds ratio is 1.3935. Referring to the 0.05 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 4.1. Thus, companies with bigger SIZE have higher propensity to pay dividends, which is 2.079 higher than those with smaller SIZE. It is in accordance with the results of Kuzucu [34] and Dewasiri et al. [7]; (5) the estimated value of SGO variable coefficients toward PPD is -0.1764, the standard error value is 0.1438, the probability is 0.2198, and the odds ratio is 0.8382. It shows that companies with greater SGO have lower propensity to pay dividends, compared to those with smaller SGO, however, it is not statistically significant. Therefore, hypothesis 5.1 is rejected. This result might show that the empirical evidence about the relationship between growth opportunity and dividend payment policies is mixed.

4.3 The Results of Model 2

The results of OLS regression used in Model 2 have adequate goodness of fit, as shown in Table 3 and Table 4. Table 3 presents the value of Variance Inflation Factor (VIF) which is smaller than 10, it shows that the five independent variables included in the model are not substantially correlated one to another.

Table 3. Variance Inflation Factor

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	162.8373	78.39764	NA
RE_TE	7.289077	1.448137	1.008313
SIZE	3.718926	68.76437	1.117000
AGE	3.906321	16.10997	1.233697
ROA	399.9850	2.893144	1.057666
SGO	9.696790	1.775598	1.193216

Table 3 shows that the Variance Inflation Factor (VIF) value is smaller than 10, which proves that the five independent variables involved in the model are not substantially related to each other. Furthermore,

Meanwhile, Table 4 presents the results of the Jarque-Bera test with the probability value of 0.4984, which means the data are normally distributed. The heteroskedasticity test using the white method shows the Prob. Chi-Square value of 24.6899, which means the model is free from heteroskedasticity. The Breusch-Godfrey Serial Correlation LM test has Prob. Chi-Square value of 0.3087, which means the model is free from autocorrelation. The Adjusted R-squared value is 0.2245, which means that 22.45% of DPR variations can be explained by the five independent variables included in the model.

Table 4. OLS Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-28.83655	12.76972	-2.258198	0.0263**
RE_TE	3.876202	2.698887	1.436223	0.1544
ROA	53.07199	20.09652	2.640855	0.0097**
AGE	-0.853065	1.975860	-0.431743	0.6669
SIZE	7.978236	1.928325	4.137392	0.0001***
ROA	-5.477682	3.111591	-1.760412	0.0817*
R-squared		0.264936	Heteroskedasticity Test: White	
Adjusted R-squared		0.224547	Prob. Chi-Square (20)	24.68998
Jarque-Bera		1.392646	Breusch-Godfrey Serial Correlation LM Test:	
Probability		0.498414	Prob. Chi-Square (2)	0.3087
*Notes: *statistically significant at 10%; **statistically significant at 5%; ***statistically significant at 1%.*				

Table 4 shows that: (1) the estimated value of RE/TE variable coefficients toward DPR is 3.8762, the standard error value is 2.6989, and the probability is 0.1544. Therefore, it can be concluded that hypothesis 1.2 is rejected. This finding is not in accordance with the study of DeAngelo et al. [33] who concludes that when a company grows and becomes profitable, the RE will increase. Besides, the company's dependence on equity also decreases when the investment opportunity decreases. Therefore, older companies with greater RE/TE have a bigger opportunity to pay dividends at a greater ratio; (2) the estimated value of ROA variable coefficients toward DPR is 53.0719, the standard error value is 20.0965, and the probability is 0.0097. Referring to the 0.05 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 2.2. It is in accordance with the results of Thakur & Kannadhasan [48] and dan Baker & Kilincarslan [2]; (3) the estimated value of AGE variable coefficients toward DPR is -0.8531, the standard error value is 1.9759, and the probability is 0.6669. Thus, it can be concluded that hypothesis 3.2 is rejected. This finding is quite similar to the result of Afza & Mirza [29] who conclude that the relationship between a company's age and dividend payment is not always positive. They prove that companies tend to increase dividends during the first few years, and after reaching 20 years of age, they start to reduce their dividend payments.

Further, Table 4 also shows: (4) the estimated value of SIZE variable coefficients toward DPR is 7.9782, the standard error value is 1.9283, and the probability is 0.0001. Referring to the 0.01 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 4.2. The result shows that companies with bigger SIZE tend to be older, have high profitability, and have low or almost stop growing. Thus, those companies have a higher possibility to distribute cash dividends to shareholders. This finding supports the prediction of the life cycle theory and is in accordance with the results of Kuzucu [34], Yusof & Ismail [36], Singla & Samanta [3], and Dewasiri et al. [7]; (5) the estimated value of SGO variable coefficients toward the DPR is -5.4777, the standard error value is 3.1116, and the probability is 0.0817. Referring to the 0.10 significance level, it can be concluded that there is strong empirical evidence to accept hypothesis 5.2. The result shows that companies with higher SGO pay a smaller ratio of dividends, compared to those with smaller SGO. It, then, supports the prediction of the life cycle theory and is in line with the results of Anastacia et al. [25] and Dewasiri et al. [7] who report the significant negative relationship between dividend payment and growth opportunity.

This results give support that the initiators of dividends are the companies which are company gets mature, more growth, older ages, bigger in size, and more profitable to be distributed to shareholders. This is in accordance with the life cycle theory which postulates that the increase in dividends marks the change in a company's life cycle; the company tends to pay higher dividends as the sign of transition from the growing phase to the more mature one.

In line with Fama and French [32]'s findings that dividend policy changes according to various stages of company life cycle. In the early stage of their life cycle, companies tend to have small sizes with more opportunities to invest, but they are not profitable enough to internally generate cash to pay dividends. As a result, in this stage, the companies prefer to fund their investment projects rather than pay dividends. On the other hand, mature companies have fewer opportunities to invest. At this stage, they can internally generate cash and optimally pay more dividends to shareholders.

5 Conclusion

This study intends to assess the accuracy of life cycle theory predictions in explaining the dividend payment policies in the first year a company conducts the Initial Public Offerings. It was done on the Indonesia Stock Exchange for a quite long time, from 2000 to 2017. As per our understanding, research on the accuracy of life cycle theory predictions using companies that conduct Initial Public Offerings as its sample has not been conducted previously, especially in Indonesia. This research applied the binary logistic regression model in analyzing the impacts of RE/TE, return on assets, firm age, and firm size toward propensity to pay dividends (Model 1), and also used the ordinary least squares model in analyzing the impacts of RE/TE, return on assets, firm age, and firm size toward dividend payout ratio (Model 2).

The results show that dividend payment policies on the first year a company conducts Initial Public Offerings are in accordance with the predictions of the life cycle theory. It is proved by: first, there are significant positive impacts of RE/TE, return on assets, firm age, and firm size on the propensity to

pay dividends. The research shows that companies with greater RE/TE, profitability, age, and size have a significantly bigger opportunity to pay dividends, as predicted by the life cycle theory; second, there are significant positive impacts of return on assets and firm size on dividend payout ratio; as well as a significant negative impact of growth opportunity on dividend payout ratio. It shows that companies with greater profitability and older age pay a bigger ratio of dividends, and companies with higher growth opportunity pay a smaller ratio of dividends, as also predicted by the life cycle theory of dividends. However, the analysis does not find any evidence that growth opportunity gives any significant impact on the propensity to pay dividends, and RE/TE and firm age give significant impacts on dividend payout ratio.

These results give a significant contribution to the existence of the life cycle theory of dividends. They also become a direction for investors who intend to invest their shares in companies that just make Initial Public Offerings on the Indonesia Stock Exchange. Information about those companies that pay and potentially pay dividends is very crucial for them. It is because the decision of paying dividends is an expensive policy; companies need to provide a large amount of money and, therefore, only those with high profitability and bright prospects are able to distribute dividends.

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