



Jurnal Keuangan dan Perbankan  
UNIVERSITY OF MERDEKA MALANG

**Article history:**

Received: 2018-11-17

Revised: 2018-12-23

Accepted: 2019-01-15

**Keywords:**

Contributed Capital; Dividends;  
Earnings; Tax

**JEL Classification:** G35, M19, M40

**Kata Kunci:**

Modal Kontribusi; Dividen;  
Laba; Pajak

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## The role of earnings and tax on dividend policy of Indonesian listed firms

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**Abstract**

Prior studies show that profitability is the main financial aspect that determines a firm's dividend policy. To add to the Indonesian' dividends literature, this study examines the role of earnings and tax as dividend policy in Indonesian listed firms. This study argues that besides profitability, Indonesian firms consider other financial performance, namely earnings (contributed capital and prior year earnings) and tax to determine their dividend policy, since earnings reflect firm's real ability to pay dividends, and tax affects the number of dividends should be paid. Using 1688 firm-year observations of Indonesian firms from 2012 to 2016, the panel data regression result shows that prior year's earnings and contributed capital, are the significant determinants of firms sample's dividend policy. However, the insignificant result is found in the corporate tax role. Meanwhile, the robustness test, earnings, and tax are significant and of the expected sign. The result implies that the higher the firms' earnings, the higher the dividend payout ratio that is used as a proxy to the firms' dividend policy. Corporate tax, on the other hand, is a significant negative determinant in some years of the observation. Higher corporate tax hinders managers to increase the dividend payout ratio.

**Abstrak**

*Studi terdahulu menunjukkan bahwa profitabilitas adalah aspek keuangan utama yang menentukan kebijakan dividen perusahaan. Studi ini menambahkan literatur dividen perusahaan di Indonesia dengan mempelajari peranan earnings dan pajak pada penentuan kebijakan dividen perusahaan tercatat di Indonesia. Studi ini menyatakan bahwa selain profitabilitas, earnings (modal kontribusi dan earnings tahun sebelumnya) serta pajak menentukan kebijakan dividen perusahaan, karena earnings menggambarkan kemampuan real perusahaan membayar dividen dan pajak menentukan jumlah dividen yang akan dibayar. Dengan sampel observasi sebanyak 1688 tahun perusahaan pada periode 2012-2016, hasil analisa regresi panel data menunjukkan earnings adalah faktor yang signifikan dalam penentuan kebijakan dividen, tetapi hasil yang lemah ditemukan pada peranan pajak. Uji robustness menggunakan regresi OLS menunjukkan earnings dan pajak perusahaan adalah faktor yang signifikan dengan arah seperti yang diharapkan. Implikasi hasil penelitian adalah semakin tinggi earnings, semakin tinggi rasio dividend payout. Sebaliknya, pajak perusahaan berdampak negatif terhadap kebijakan dividen. Semakin tinggi pajak perusahaan akan menahan manajer membayar dividen lebih banyak, relative terhadap earnings perusahaan.*

**How to Cite:** Hutagaol-Martowidjojo, Y., Joachim, H., & Anggreni, D. (2019). The role of earnings and tax on dividend policy of Indonesian listed firms. *Jurnal Keuangan dan Perbankan*, 23(1), 31-44. <https://doi.org/10.26905/jkdp.v23i1.2581>

## 1. Introduction

De Angelo, De Angelo, & Skinner (2004) provide evidence that during the last two decades, there was a major transformation upon corporate dividend practices. However contrast to Allen & Michaely (1995), they did not find that the dividends were disappearing. Furthermore, they showed that there was a large reduction in low-tier (in relation to firm size) companies that paid dividends and dividends increased in major payers. The findings implied that dividends are still relevant for the investors. This implication is also applied in Indonesia market as dividends are proofed to be positively related to Indonesian firms' market valuation (Hutagaol-Martowidjojo & Valentincic, 2016)

There have been studies investigating firms' dividend policy all over the world (Denis & Osobov, 2008; Bae, Chang, & Kang, 2012). The classic theory is commonly used to explain the dividends payment is a Signaling theory that describes dividend is a good signal to the value of the firms. In a recent article, Dewi, Fitriana, & Setiawan (2018) discuss the development of dividend study in Indonesia. They classify the studies into four classifications; antecedent studies, consequence studies, antecedent & consequence studies, and other studies. Of 35 studies published nationwide during 2012-2017, 12 articles are classified as the antecedent studies that examine the factors affecting dividends of Indonesian firms. The most used factors analyzed are financial ratios, in particular, is the profitability. However, mixed results of profitability as a significant determinant. Beside profitability, other financial ratios explored are leverage, growth, and leverage. This implies that there are still other financial performances that are not explored.

Denis & Osobov (2008) updated the factors affecting firms to pay dividends across countries. Using profitability and cash flow, they conclude that outside the United States, there is insignificant evidence of the factors to influence propensity to pay dividends, except in Japan. Gugler (2000) who use Australian companies, the state-owned enterprises are less likely

to cut dividends payment while family owned are more likely to employ dividends policy that is in favor of the firm, not the shareholders, with banks and foreign enterprises stand in between. Gugler (2000) found that his findings are consistent with the grand theory of information asymmetries and agency costs. It predicts a stable dividend payout throughout the years which was later rejected by De Angelo, De Angelo, & Skinner (2004) and Hutagaol-Martowidjojo & Valentincic (2016).

From emerging markets, Mitton (2004) showed that firms with good corporate governance (GCG) have higher dividend payouts. Additionally, the growth opportunity is also stronger in firms with GCG. The complementary effect between firm level and country level CG is highlighted. Sarwar et al. (2018) found contradictory results. They emphasize that Chinese firms do not use dividends as a control mechanism, while Pakistani firms confirm complement hypothesis between firms and shareholders while highlighting the importance of board composition and financial expertise. On the opposite, Setiawan & Phua (2013) evidenced specifically from Indonesia that low GCG in Indonesia is negatively related to dividend policy. It supports the substitute theory and like Sarwar et al. (2018) finding regarding Chinese firms. Additionally, shareholder composition is proved to be insignificant. Labhane (2017) evidenced that Indian markets support catering theory of dividends, while Attig et al. (2016) find that family ownerships disregard birds in hand theory of dividend, which are more pronounced during Asian financial crisis in 2008–2009.

Using Chinese data, He et al. (2016) showed that firms under financial constraints are more willing to pay dividends and more restrained to reduce dividends later. This supports the pecking order hypothesis. Meanwhile, Cao, Du, & Hansen (2017) found that foreign investments in Chinese companies influence dividend payout. The dividend payment is used to signal that privatization has been successful since the State ultimately controls the majority of Chinese firms. Furthermore, Jacob & Lukose (2018)

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recently found that institutional investors improve firms in India improve firms' propensity to pay dividends, mainly on large size companies. They concluded that investors are more attracted to firms that pay dividends compared to those who not.

Regarding dividend policy, this study focuses on two factors. Firstly, earnings are argued as the direct and main indicators that managers consider since the concentrated capital shows the accumulated of firm's net income (retained earnings) is the main source of dividends and the prior year earnings are the direct forecast of the current year earnings. Both are essential in the decision-making process of dividend policy. Separately, the two variables have been studied in several prior research. De Angelo, De Angelo, & Stulz (2006) is among the first to observe that the decision to pay dividends is highly dependent on the earned over contributed equity (proportion of retained earnings over total equity). They argued that firms with low RE/TE tend to be in "capital injection" stage while firms with high RE/TE tend to be more mature and largely self-financing in nature. This could enforce a firm's propensity to pay dividends significantly as expected by shareholders and investors. While Jabbouri (2016) finds that current profits signal to the probable dividend payout ratio in middle east markets, this study argues that prior year earnings are the main driver of the dividend payment in the current year. To the authors' knowledge, this study is among the first to test the relationship between the prior year earnings and the dividend policy.

We also portray the data as depicted in Figure 1. It could be seen that prior year's earnings per share (EPS) and contributed capital (CC) is following the same trend from 2012-2016. While the dividend payout ratio is relatively constant from 2012-2014 and slightly higher in the last two years of our research period, there is a slight anomaly in 2014 where average CC is higher than prior year EPS. This could presumably explain the effect of new PSAK 24 regarding post-employment benefits in Indonesia in 2014 which has an adjustment to retained earnings and acts retrospectively (re-state two periods of last year earnings).

The second factor that is examined in this study is the corporate tax. Gill, Biger, & Tibrewala (2010) argue that corporate tax matters for managers to decide the dividend policy. Managers need to decide the size and pattern of cash distribution to shareholders. In the study, they find a positive relation between corporate tax and dividend payout ratio in the manufacturing sector of the US capital market but the relation of corporate tax with dividend payout ratio was negative in the service sector, hence the service sector is a more human-intensive sector and do not require huge capital asset and has an after-tax cash flow that is closer to the net income, in comparison to the manufacturing industry. Ahmad, Dewi, & Mardiyati (2016) evidenced using Indonesian data showing that risk positively affects dividend policy. They highlight the trade-off between retention and payment. Market to book ratio and corporate taxes is deemed insignificant in their research.

This study examines the role of earnings in forms of contributed capital and prior year earnings and corporate tax as the determinants of a firm's dividend policy of Indonesian listed firms. This study contributes to the Indonesian firm's dividend literature that mostly discusses profitability and other financial ratios as dividend policy determinants.

## 2. Hypotheses Development

De Angelo, De Angelo, & Stulz (2006) observed that the decision to pay dividends is highly dependent

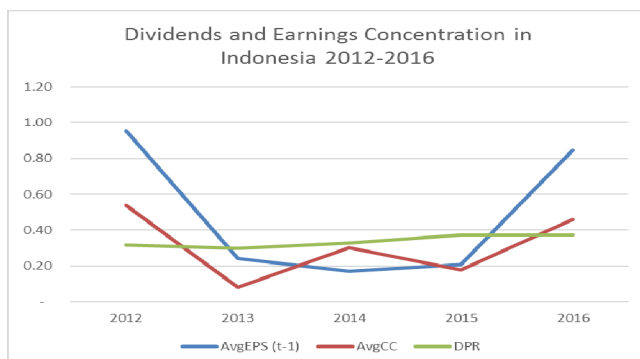


Figure 1. Dividends and Earnings Concentration in Indonesia

on the earned over contributed equity (proportion of retained earnings over total equity). They argued that firms with low RE/TE tend to be in “capital injection” stage while firms with high RE/TE tend to be more mature and largely self-financing in nature. This could enforce a firm’s propensity to pay dividends significantly as expected by shareholders and investors. Their results contradict Allen & Michaely (1995) who extrapolated indifferent dividend policies regardless of investors’ different expectations according to ‘firm stage.’

The authors agree with, Allen & Michaely (1995) and De Angelo, De Angelo, & Stulz (2006)’s findings because a high TE/RE implies ample accumulated profits which could be used for expansion or paying dividend towards shareholder’s expectation. In accordance with signaling theory, a high RE/TE could be utilized to pay dividends which signal the firm’s good prospects. Thus, the first hypothesis is:

H<sub>1</sub>: contributed capital positively influences dividend payout ratio

De Angelo, De Angelo, & Skinner (2004) evidenced that during the last two decades, there was a major transformation upon corporate dividend practices, but it did not indicate that the dividends were disappearing. There was a large reduction in low-tier (in relation to firm size) companies that paid dividends and dividends increased from major payers which reflect the market earnings. This is consistent with Jabbouri (2016) which from MENA markets which stated that current profits are signaling probable dividend payout ratio.

Indonesian firms are preliminarily evidenced to pay if the pre-earnings is good enough. One possible rationale is due to constructing budget using best-estimate. During the construction of the budget framework and to decide the dividend policy, the historical data is mainly used to extrapolate future forecasts. Thus, the second hypothesis is:

H<sub>2</sub>: pre-earnings of the company positively influence dividend payout ratio

Gill, Biger, & Tibrewala (2010) found a positive relationship between corporate tax and dividend payout ratio in the manufacturing sector of US capital market but the relation of corporate tax with dividend payout ratio was negative in the service sector. Authors concluded that in the manufacturing sector the corporate tax is an insignificant determinant of dividend payout ratio, but in the service sector, corporate tax was a significant determinant of dividend payout ratio.

Preference for dividend payment will also increase. Amidu & Abor (2006) in their study of determinants of dividend payout ratio found that corporate tax and dividend payout ratio and positively related. Increasing tax leads to increasing dividends because it is presumed that higher taxes paid to imply higher profits for current year performance, taking into accounts the deferred taxes recognized in the current period. Current year profitability usually signals higher dividend payout ratios. This finding is contradicted by Ahmad, Dewi, & Mardiyanti (2016).

Dividends in Indonesia is taxed at a final rate of 15 percent of the base/ gross amount. It is paid or remitted to the taxation authority at the time of the distribution of cash dividends for shareholders. Thus, the third hypothesis is:

H<sub>3</sub>: corporate tax positively influences dividend payout ratio

Many prior studies find that profitability is positively related to the dividend payout ratio. Firms with larger profits are more likely to pay a dividend, while companies that are facing uncertainty, about future profits, would adopt lower payouts. Corporate aggregate dividend policy will tend to vary directly with current profits, past profits, the rate of amortization recoveries and shifts in anticipation of future earnings and will vary inversely with persistent changes with the level of sales. Using return on asset (ROA) as a proxy for firms’ profitability, we hypothesize as follows:

H<sub>4</sub>: return on asset (ROA) negatively influences dividend payment ratio

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Rozeff (1982) portrayed a negative relationship between dividend and growth opportunity is expected as high growth firms may have lower dividend payouts due to their larger investment requirements and a tendency to retain funds to avoid external financing with its attendant costs.

Sales growth is critical to company growth and dividend payout. Mitton (2004) find that dividends positively affected by growth opportunities. In line with Mitton (2004), using Swedish data, Hellstrom & Inagambaev (2012) show that sale growth has a negative relation with dividend payout. They argue that negative relationship to the sale growth rate inversely proportionate the signaling theory which states that higher growth should contribute to the higher dividend as evidenced by. Higher growth firms need higher financing. It is firms' need to set a good reputation through high dividend payouts for access the high financing. However, empirical investigation shows that sale growth is negatively related to the dividend payouts (John & Muthusamy, 2010).

For Indonesian firms, we argue that higher growth firms are usually found in small growing firms, therefore they tend to retain the profit to fund their growth, there are we are to test the hypothesis as follows:

H<sub>3</sub>: sales growth negatively influences dividend payment ratio

### 3. Method, Data, and Analysis

The approach that we use is a deductive approach; we start with the development of theories and collect the data to test the hypotheses derived from the theoretical background. Our research is explanatory since we are trying to shed light and explain about the dividend policy determinants. We utilize archival or secondary data to be collected from IDX website. We do not use questionnaires. A cross-sectional and time series (pooled sample) is used. We use a sample of quoted Indonesian firms in the period 2012-2016. We collect financial statement data from IDX and market data of public-listed companies.

**Table 1.** Research Variables Measurements

Variable Name	Indicators	Operational Variable
Contributed Capital (CC) Ratio	Contributed Capital (CC) Ratio	$CC = \frac{RE}{TE} \times 100\%$ <p>Where:                      RE = retained earnings at firm-year <math>t</math>                      TE= total book value of equity at firm-year <math>t</math></p>
Prior year-earnings	Profit After Taxes (PAT) at $t-1$	$PAT_{t-1}$
Sales Growth	The growth rate (GRO) of the sales from $t$ to $t+1$	$GRO = \frac{Sales_{t+1} - Sales_t}{Sales_t} \times 100\%$ <p>Where:                      GRO = sales growth</p>
Corporate Taxes	The corporate income taxes (CTAX) for current year including deferred taxes recognized at year $t$	CTAX <sub><math>t</math></sub> in value, not in percentage (%) of earnings before taxes (EBT)
Return on Assets	Return on assets (ROA) at firm-year $t$	$ROA = \frac{NI}{TA} \times 100\%$ <p>where                      NI = net income after taxes at firm-year <math>t</math>                      TA = total assets at firm-year <math>t</math></p>

In our proposed research, we plan to use five predictors. The variables are formed and operationalized as the following:

The dependent variable is dividend policy measured as the dividend payout ratio. It is defined as the ratio of total dividends to retained earnings of the company. Conversely, the equation is as follows:

$$DPR = \frac{\text{Dividends per share}}{\text{Earnings per share}} \quad (1)$$

We use purposive sampling to list all public firms, analyze the current financial statement and the background/news of the firms about the last five years to analyze the dividend payout ratio based on our independent variables.

We listed all public-listed Indonesian firms in the period 2012-2016. We collect financial statement data from IDX and market data on IDX website. We use panel regression and multiple regression (ordinary least squares) method to analyses our data by to explain the relationship between one dependent variable and five independent variables.

The research model / equation is as follows:

$$DPR_{it} = \alpha_0 + \beta_1 CC_{it} + \beta_2 PAT_{t-1 it} + \beta_3 GRO_{it} + \beta_4 TAX_{it} + \beta_5 ROA_{it} + e_{it} \quad (2)$$

#### 4. Results

In our research, we include all industry classifications minus the financial industry in the pooled sample list and financial statements not denominated in Indonesian Rupiah. For one firm-year observation, even if the firm is delisted during the subsequent period, we would still include the data in the period which the company was listed. Hence, the final sample selection is as portrayed in Table 2.

In addition, due to the presence of outliers, this research winsorizes each data points that exceed the value of mean +/- 3\*standard deviation. Winsorizing outliers is conducted instead of deletion because it does not reduce the degree of freedom in the model, which will sustain the approximation to the original model.

**Table 2.** Final Observation Derivation

Initial firms	374
Final sample (firms)	374
Firms observation (2012-2016)	1866
add: net additions	49
exclude: forex financial statements	107
exclude: finance companies (e.g., banks, insurance, financing)	120
Final observation (firm-years)	1688

**Table 3.** Descriptive Statistics

Variable Names	Total Sample	Mean	Standard Deviation	Skewness	Kurtosis
DPR	1688	0.14	0.25	2.56	8.75
CC	1688	0.22	1.1	-1.08	8.69
PAT <sub>t-1</sub>	1688	0.05	0.1	-0.001	4.82
SGRO	1688	0.19	0.94	6.85	57.29
CTAX	1688	0.02	0.04	1.45	28.11
ROA	1688	0.04	0.1	-0.23	4.41

Notes:

DPR: Dividend Payout Ratio; CC: Contributed Capital; PAT<sub>t-1</sub>: Prior year profits; SGRO: Sales Growth; CTAX: Corporate Income Tax; ROA: Return on Assets

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### Descriptive statistics

The following is the descriptive statistics of the 1688 firm-year observations for all firms during 2012-2016. We present the total sample size, mean, standard deviation, skewness, and kurtosis for each variable entered into OLS regression analysis. Table 3 depicting the descriptive statistics and its explanation.

First, the dependent variable DPR's mean is 0.14. It could be preliminarily inferred that the actual dividend distribution of Indonesian firms post-IFRS implementation in 2012 is roughly 14 percent of their accumulated earnings. Kurtosis of 8.75 suggests that the distribution is slightly leptokurtic. A standard deviation of 0.25 is slightly above the mean, suggesting high variability of the observations. It is also noted that only 658 firm-year observations pay dividends which is roughly 38 percent of all firm-year observations.

CC's mean is 0.22, implying that observed firms are low in their accumulated profits in ratio to their total equity. The standard deviation of 1.10 is higher than the mean, suggesting high variability of observed values. It is also noted that CC has a slightly negative skewness of -1.08.

PAT t-1's mean is 0.05. It could imply that the deflated value of PAT t-1 is approximately 5 percent of total assets t-1, with high variability of data because the standard deviation of 0.10 is slightly above the mean. Skewness of only -0.001 suggesting a normal distribution that is almost symmetrically bell-shaped.

The mean of SGRO as representing growth of sales is 0.19. The average sales growth of LQ45 firms post-IFRS implementation from 2012-2016 is 19 percent. Kurtosis of 57.29 suggesting a heavily centered distribution around the mean of 0.19. To explain fur-

**Table 4.** Correlation Matrix

	DPR	CC	PAT <sub>t-1</sub>	SGRO	CTAX	ROA
DPR	1	0.184**	0.345**	-0.034	-0.265**	0.362**
CC	0.184**	1	0.164**	-0.086**	-0.096**	0.199**
PAT <sub>t-1</sub>	0.345**	0.164**	1	-0.053*	-0.394**	0.672**
SGRO	-0.034	-0.086**	-0.053*	1	-0.014	0.093**
CTAX	0.265**	0.096**	0.0394**	0.014	1	0.403**
ROA	0.362**	0.199**	0.672**	0.093**	-0.403**	1

**Notes:** \*sig. at  $\alpha = 0.05$  level (2-tailed); \*\*sig. at  $\alpha = 0.01$  level (2-tailed). DPR is dividend payout ratio that is measured by total dividends declared over total equity. CC is measured by total retained earnings over total equity. PAT<sub>t-1</sub> is measured by previous year's net income. SGRO is measured by firm's net sales growth from year t -1 to t. CTAX is measured by firm's corporate income tax expenses. ROA is measured by firm's net income divided by total assets.

**Table 5.** Panel Regression Analysis Results

Variables	All Data (2012-2016)	
	Coefficient ( $\beta$ )	Sig.(p-value)
CC	0.005	0.013**
PAT <sub>t-1</sub>	0.091	0.036**
SGRO	0.0004	0.804
CTAX	-0.079	0.698
ROA	0.165	0.03**
F stat	2.89	0.01**
R <sup>2</sup>	0.1659*	

**Notes:** \*sig. at  $\alpha = 0.05$  level (2-tailed); \*\*sig. at  $\alpha = 0.01$  level (2-tailed). DPR is dividend payout ratio that is measured by total dividends declared over total equity. CC is measured by total retained earnings over total equity. PAT<sub>t-1</sub> is measured by previous year's net income. SGRO is measured by firm's net sales growth from year t -1 to t. CTAX is measured by firm's corporate income tax expenses. ROA is measured by firm's net income divided by total asset

ther, the skewness of 6.85 displays a tendency to lean towards a positive value which signals positive sales growth post-IFRS implementation in 2012 onwards, despite the downward trend in 2013 of 0.95.

CTAX has a mean of -0.02, implying the deflated value over total assets at year t is 2 percent. It could be inferred that Indonesian firms pay taxes 2 percent of its total assets. Overall standard deviation is 0.04, suggesting the high chance of deferred tax recognition in 2012 which has the highest positive value of 0.06. Additionally, the kurtosis of 28.11 displays a distribution around the mean of -0.02.

Lastly, ROA has a mean of 0.04. The profitability of publicly listed Indonesian firms during 2012–2016 is 4 percent to total assets. There is a slight tendency to lean towards negative values as displayed in the skewness of -0.23.

The overall data distribution is normal with slightly leptokurtic tendencies, which would not deter further data analysis.

### Correlation matrix

The following section describes the correlations among regressed variables. The correlation matrix that we use is Pearson's, assuming normal distribution as depicted and elaborated in descriptive statistics.

From Table 4, the highest correlations occur between PAT t-1 and ROA (0.672, sig. at 0.01 level), PAT t-1 and CTAX (-0.394, sig. at 0.01 level), and CTAX and ROA (-0.403, sig. at 0.01 level). A high correlation is expected between independent variables since all three variables use total assets as the denominator or deflator, albeit a different time/ year of t and t-1. Since none of the independent variables are highly correlated above 0.8 or -0.8 which is significant at 0.01 and/or 0.05 level, it can be concluded that this research is free from multicollinearity. A high correlation between PAT t-1 and DPR is also expected since DPR can be expressed alternatively as dividend per share (in IDR) over earnings per share. It is valued at 0.345 which is significant at 0.01 level

### Panel regression results

We analyze the firm-year observations using panel data for all sample (see Table 5) and yearly OLS regression (see Table 6). The following table shows the results of Panel regression analysis results.

From the panel result, adjusted R-square of 16.6 percent implying that 16.6 percent of changes in dividend payment ratio could be explained by predictors/independent variables of ROA, SGRO, CC, CTAX, and PAT t-1, while 83.4 percent factors are yet to be ex-

**Table 6.** Yearly OLS Regression Results

Variables	2012 (OLS)		2013 (OLS)		2014 (OLS)		2015 (OLS)		2016 (OLS)	
	Coefficient (β)	Sig. (p-value)	Coefficient (β)	Sig. (p-value)	Coefficient (β)	Sig. (p-value)	Coefficient (β)	Sig. (p-value)	Coefficient (β)	Sig. (p-value)
CC	0.189	0.000***	0.133	0.009***	0.027	0.619	0.061	0.234	0.118	0.014**
PAT t-1	0.035	0.618	0.092	0.217**	0.041	0.555	0.253	0.000***	0.235	0.000***
SGRO	-0.067	0.206	-0.118	0.023**	-0.038	0.476	-0.047	0.330	-0.010	0.836
CTAX	-0.001	0.983	-0.238	0.000***	-0.108	0.112	-0.140	0.006***	-0.154	0.002***
ROA	0.388	0.000***	0.170	0.03**	0.164	0.043**	0.177	0.006***	0.173	0.008***
Obs	310		326		344		348		360	
F	8.692	0.000***	19.721	0.000***	5.935	0.000***	20.538	0.000***	22.039	0.000***
R <sup>2</sup>	0.223*		0.224*		0.067*		0.220*		0.227*	

**Notes:** \* sig. at  $\alpha = 0.1$  level \*\*sig. at  $\alpha = 0.05$  level (2-tailed); \*\*\*sig. at  $\alpha = 0.01$  level (2-tailed). DPR is dividend payout ratio that is measured by total dividends declared over total equity. CC is measured by total retained earnings over total equity. PAT t-1 is measured by previous year's net income. SGRO is measured by firm's net sales growth from year t -1 to t. CTAX is measured by firm's corporate income tax expenses. ROA is measured by the firm's net income divided by total assets.



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plained in this research. The robustness of R-square is slightly lower compared to 24.3 percent pseudo-R-square by Atmadja (2016), which has selected panels of Indonesian firms also. However, this result is lower than Jabbouri (2016) which evidenced dividends from MENA (emerging markets), with R-square of 63 percent. In comparison to overseas countries, Gill, Biger, & Tibrewala (2010) from United States capital markets obtained R-square value of around 15 percent. Our panel data regression analysis shows that among five hypotheses developed in this research, three hypotheses are proven and evidenced to be supported by the panel regression result, namely, CC,  $PAT_{t-1}$ , and ROA.

Meanwhile, Table 6 shows that CC,  $PAT_{t-1}$ , and CTAX are almost significant in all years, except in 2014, when only profitability influences the dividend policy of Indonesian firms. This could be explained that in the year 2014, on average, Indonesian firms' EPS linked to the lowest points (see Figure 1). That might affect retained earnings as the major source of dividend payment, as well as, the prior year earnings that were in the decreasing trend.

## 5. Discussions

### Contributed capital

Similar to De Angelo, De Angelo, & Stulz (2006), we find that contributed capital is significant towards the dividend payout ratio. The result, however, contradicts to Allen & Michaely's (1995) findings that conclude the indifference of investor's expectations towards dividends. There is sufficient evidence that even in the most profitable market, firms will pay dividends according to their earned capital. Thus, the dividend policy of Indonesian firms does not confirm the dividend irrelevance.

The fact shows that the Indonesian market depends on higher or ampler retained earnings to proceed with their market capitalization strategy. The well-reputable Indonesian firms accumulate ample profits, and their dividends are distributed from re-

tained earnings. Other equity components may play a major role in this. Prominent examples are the other comprehensive income–asset revaluation surplus for assets-based companies and gain or loss on defined actuarial benefits or deficits for Indonesian firms with a lot of employees (human capital-based). Asset revaluation surplus may or not be taxed, according to company policy, and it further returns the focus to the management, not upon the bottom line. The risk of dividend irrelevance in Indonesian firms is consequently to promote random walk behavior of Indonesian market itself and ultimately upon the UBO's dividend decision.

Post IFRS era in 2012-20116 (Table 6), contributed capital remains to be significant towards dividend payments. However, in 2014 and 2015 there were slight deviations due to the decline in overall markets in Indonesia that Indonesian force firms not to pay current or interim dividends for survival by maintaining healthy equity composition and growth.

### Prior-year earnings

Consistent with findings from De Angelo, De Angelo, & Skinner (2004) and Jabbouri (2016), the post-implementation of IFRS in 2012 has produced a more predictable scenario of dividends. In comparison with Hutagaol-Martowidjojo & Valentincic (2016)'s results, they find that the dividends signal prospects and valuation of the company. We, inversely find that the prior year's earnings influence current year dividend payout ratio. The "birds in hand scenario" is the most appropriate interpretation. It can be assured that the previous year earnings positively influence the dividend payout ratio. One possible explanation is because Indonesia economic climate is more geared towards international "acceptance." Political conditions and regulatory bodies such as the Financial Services Authority (OJK) and IDX have been imposing strict adherence to international standards. Indonesian firms are faced with the reality that they must comply with more financial regulations to establish a well-known reputation.

Interesting findings from our analysis come from the year 2015 and 2016, where pre-earnings of the company become significant for dividends determinants. There is a tendency for firms to pay final dividends to post the decline of the market condition in Indonesia. One possible explanation is due to boost market trust in Indonesian firms. To rebound, firms need to gain and fulfill the market expectation. Meanwhile, from 2012-2014 pre-earnings is deemed insignificant due to adjusting firms' strategy and governance post-IFRS implementation as previously highlighted by Mitton (2004) and Setiawan & Phua (2013). He et al. (2016) findings are supportive of our findings in 2015-2016 because during those periods Indonesian firms are faced with numerous financial constraints, that unexpectedly force them to pay dividends.

Another discussion would be the socialization of IFRS 9 and 15 regarding financial instruments and revenue recognition that will be fully implemented in 2020 in Indonesia. IFRS 9 emphasizes the business model of an asset that is dependent on forward-looking criteria. Despite our adherence to international standards, our results consistently show that historical or prior year results in terms of deciding UBO's decision to pay dividends are still significant. We could not simply reject the philosophy of the 'past' for the sake of predicting future profitability, and consequently future dividend payments. Realistically speaking, the owner, regardless of family-owned or not, will see the track record whether they are profitable enough to pay dividends in the current period. The need to look back upon the previous financial data simply cannot be ignored in substitute for the future of accounting standards. Despite the contradiction, we could infer or predict that the implementation of IFRS 9 and 15 could probably reduce dividend payments due to lower lagged profits (estimated additional provisions of impairment of 20-30 percent worldwide).

### **Corporate tax**

Because we already reject the dividends signaling theory, it also does not support Amidu & Abor

(2006), and Gill, Biger, & Tibrewala (2010)'s results. While they find that corporate taxes positively impact dividends, we simply do not find it to be of significance. Higher taxes do not always imply higher current earnings, which subsequently lead to higher dividend payout ratios, specifically in the case of recognition or amortization of deferred tax assets (DTA). DTA recognized is properly recorded in P&L statement, because all financial statements submitted to BEI is required to be audited. If the amount of amortization is large from the previous balance of DTA in the balance sheet, it will inflate the corporate income taxes which are not the taxes from the current performance. It also does not signal any declaration of dividends to mitigate agency costs of information asymmetry and signaling prospects.

Corporate tax is not the determinant of dividend policy in our research, which supports Ahmad, Dewi, & Mardiyanti (2016). One possible reason is that Indonesian firms are faced with tax implications from the Indonesian Tax Authority, such as the tax amnesty policies since the end of 2016 which recorded as additional paid-in capital rather than tax expenditures. Regardless of voluntary disclosures emphasize, it would not add more significance to earnings unless the company is late in declaring and paying the tax policy amounts. The future of taxation in Indonesia is expected to be growing haphazardly, given the target from the government to raise government income from taxes within 3-5 years from now.

### **Sales growth**

We find that sales growth is insignificant towards dividend payout ratio, except in 2013 where Indonesia's economic growth was at its lowest, only 5.78 percent. Conversely, the average DPR is 0.15, the highest among the five years. It implies Indonesian firms in 2013 were using dividend payouts to signal better growth in the future. We support Amidu & Abor (2006), results while contradicts Fama & French (2001). Overall, there is insufficient evidence that firms in Indonesia utilize dividends to mitigate agency costs.

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High growth firms in Indonesia do not have the tendency to retain funds and avoid external financing channels such as banks and leaseholds. Compared with international results, Hellstrom & Inagambaev (2012), from the Swedish capital market does not align with our results. Higher growth does not necessarily improve dividend payout values for Indonesian firms. In our perspective, sales growth may be used internally as a management review tool for improvement and forecasting, but it does not deter or in favor of dividend payments.

A notion of reasoning derived from this research is that sales growth is reflected more into main performance management rather than the firm's obligatory measurement or furthermore, responsibility towards stakeholders or shareholders. Sales as defined in Wiley (2013), is the resulting operation derived from the company's main operational activities. While we could also see that financing company often generate as much income as sales from administrative, cancellation, and late payment fees. Conversely speaking, derived from opportunity costs of paying dividends, there might be opportunity income arising from this minor and administrative income that become major when aggregated from other sources. Secondly, we must consider the gain in portfolio management from investment companies. During declining markets as of now and the strict international standards, we believe it is not an aggravation to say that ultimately sales growth is

not a determinant of dividend payment.

### Return on asset (ROA)

We offer insight that ROA is constantly significant towards dividend payout ratio, contradicting findings of Huang & Song (2006) and Ebaid (2009), which has a significant negative relationship of profitability index to dividend payout ratio. There is sufficient evidence that Indonesian firms with larger profits to assets are more likely to declare dividends to anticipate and signal future profitability.

As explained in Wiley (2013), ROA could be defined as the firms' ability to generate income from their operating assets. Operating assets logically correlate to firm size, while we consistently display that larger or more profitable firms post IFRS implementation significantly pay more dividends as portrayed by Jacob & Lukose (2018) and to certain extent, Nur & Karnen (2011) because the size of company is not merely determined by the amount of related party transaction occurrences.

### Robustness test

We analyze the firm-year observations using OLS for robustness test to the panel regression in Table 5. The results of OLS regression analysis for all data are shown in Table 7.

**Table 7.** OLS Regression Analysis for All Data

Variables	All data OLS Regression Results (2012-2016)	
	Coefficient ( $\beta$ )	Sig.(p-value)
CC	0.024	0.000**
PAT <sub>t-1</sub>	0.340	0.000**
SGRO	-0.010	0.001**
CTAX	-0.799	0.000**
ROA	0.471	0.000**
F stat	49.93	0.000**
R <sup>2</sup>	0.1742	

Notes: \*Adjusted R-Squared \*\*sig. at 0.05 level (2-tailed); \*\*\*sig. at 0.01 level (2-tailed). DPR is dividend payout ratio that is measured by total dividends declared over total equity. CC is measured by total retained earnings over total equity. PAT<sub>t-1</sub> is measured by previous year's net income. SGRO is measured by firm's net sales growth from year t -1 to t. CTAX is measured by firm's corporate income tax expenses. ROA is measured by firm's net income divided by total assets.

Better than the panel results, the variables CC,  $PAT_{t-1}$ , and ROA are significant at  $\alpha = 0.01$ . Additionally, other variables, SGRO and CTAX are also significant at  $\alpha = 0.01$  level. The results provide support to Gill, Biger, & Tibrewala (2010) in the service sector results of the United States and Ahmad, Dewi, & Mardiyanti (2016) who reported the same findings in terms of corporate taxes that are negatively related towards dividend payout. The robustness results are confirmatory of the agency costs mitigation in Indonesian firms.

In terms of sales growth, our robustness results are in line with Rozeff (1982), John & Muthusamy (2010), and Hellstrom & Inagambaeiev (2012). From emerging markets of Indian paper sector, Sweden large and medium capitalization companies, and other markets, our robustness results confirm that sales growth is negatively significant towards dividend payout. Thus, it supports the external usage of funds rather than retaining it for dividends.

## **6. Conclusion, Limitations, and Suggestions**

### **Conclusion**

Observing 1688 firm years of Indonesian listed firms during 2012-2016 and controlling other variables (profitability, leverage, and sales growth) this study finds that contributed capital and prior year earnings are the significant determinants of dividend policy. Meanwhile mixed results of the role of corporate tax as dividend policy. The result of all samples is insignificant, while yearly analysis shows that corporate tax is a significant determinant of dividend policy in 2013, 2015, and 2016. It implies that on average managers of Indonesian firms depends the main source of dividends (contributed capital) and the forecast of current year earnings (prior year earnings) to make a decision of dividend policy, and corporate tax can be.

This study contributes to the Indonesian firms' dividend literature in explaining that the main driver of Indonesian listed firms. Firstly, it shows that firms earnings as the main source of dividends are strong determinant. Secondly, corporate tax is found to be a negative determinant of dividend policy, although the

results are not found in all years observed. The results of this study are applied to all listed firms, across industries and cycle-life stage of the firms.

To conclude, the significant financial determinants of dividend payout ratios evidenced in this research is prior year/ last year's earnings, contributed capital, and ROA. The bird in hands theory is further supported by our findings, that there is significant assurance of dividend payments towards the majority and minority shareholders derived from last year's performance results of the company. The ultimate beneficial owner's decision to pay dividends is likely to fulfill the obligation towards shareholders, followed by signaling prospects or mitigating agency costs.

The development of Indonesian economic climate towards transparency and heavy-tax impose been evidenced not significant towards dividends in our main analysis using the panel regression analysis. However, the robustness test using OLS regression shows a negative effect of the tax on dividend policy as predicted.

The other results that we find are insignificant in the sales growth in the main analysis. It is argued that, seemingly, Indonesian high growth firms, tend not to care about their dividend policy and use the profit re-invested to finance the growth. However, the robustness test shows that sales growth is negatively related to dividend policy as predicted. Higher growth firms tend to apply lower dividend over their net income.

### **Limitations and suggestions**

The limitation of this study is the sufficiency of data to analyze the impact of IFRS convergence on the dividend policy. Therefore, for further study, we suggest covering the period of pre and post-IFRS convergence. Particularly, the period of post implementation of IFRS 9 & 15 that will significantly reduce pre-earnings of the company which would deter the management's decision to pay dividends. IFRS (in the future) is moving or geared towards conservatism and rule-based principles which would engross the company's profit to hinder possible "window-dressing" and unethical earnings management.

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