THE ROLE OF OWNERSHIP ON BEHAVIOR OF DIVIDEND PAYERS

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ABSTRACT

The objectives of this study are to give empirical evidences about cash cow firms and free cash flow theory. Conducting compare means paired samples t test and logistic regression with samples of 141 firms which listed in Indonesia Stock Exchange for period 2009 to 2014, this study proves dividend payers in Indonesia are not cash cows and ownership has role in determining behavior behind dividend policy. Firms with individuals and/or public ownership both for larger and smaller size shall pay dividends for some other intentions, but firms with institutional and/or state ownership concerns with its size shall pay dividends because : first, they are not at cash cows status or not under circumstance of internal conflict; second, they shall behave like cash cows in order of conflict avoidance

Keywords *: Dividend Payers, Cash Cows, Free Cash Flow Theory, Ownership, Size*

JEL classification : *D82, D84, G02, G35*

1. INTRODUCTION

Dividend has been known as main purpose in investments beside capital gain and also as the wealth symbol for shareholders. Although some shareholders desire for growing dividends but some shareholders seems not have interest in dividends since they more attracted with other interests (Barclay, Holderness, and Sheehan, 2009). Since dividends are the main intentions, then shareholders should make proper portfolio based on better fundamentals to allocate investments in term to maximize their return.

Earnings per share is a familiar fundamental factor that has been known and easy captured by shareholders. Technically, earnings per share has been trusted as the main factor to determine and reflects dividend payment (Dechow, 1994; Ross, Westerfield, and Jaffe, 2008). There are many empirical evidence by academicians and practitioners about relationship between earnings per share and dividends, but the causes behind dividend distribution by firms which reflects in earnings per share are not much disclose in context of firms as cash cows.

In perspective of cash cows, firms are usually distribute their earnings in form of dividends to their shareholders, but since shareholders are also demand for dividends with constraints of manager's behavior in perspective of free cash flow theory, then firms who act as cash cows are not very clear to identify. Notice the concept by Ross, Westerfield, and Jaffe (2008), and work by Brav, Graham, Harvey, and Michaely (2005) then this study purposes to contribute some evidences about cash cow firms includes testing for free cash flow theory.

The structure for this study sets as follows, section 2 reviews relevant literatures and develops the hypothesis based on literatures review, section 3 describe the samples and defines the variables used in this study, section 4 provides the results of analysis and discuss the findings, and section 5 concludes the discussions.

2. LITERATURES REVIEW

2.1. Cash Cow Firm

According to Faulkender and Wang (2006), firms are act as cash cow when they generate great cash, hold larger cash on hand, and do not have many investment opportunities which make them have tendency to distribute cash. These characteristics are similar with firms in mature phase as found by DeAngelo, DeAngelo, and Stulz (2006), and Grullon, Michaely, and Swaminathan (2002). Moreover, beside have high cash balances, cash cow firms also have higher bank debts for financing their investment activities (Myers, 2001; Thakor and Wilson, 1995) and paying dividends equal to their earnings per share (Ross, Westerfield, and Jaffe, 2008). Neale, Milsom, Hills, and Sharples (1998) described the cash cow firms as firms with large business market share, the best at cash generator, and higher for capital expenditure, dividends and debt. Similarly, Shay and Rothaermel (1999) characterized the cash cow firms as the firms with strong market share and become an internal banker to fund new projects by using their retained earnings.

Additionally, Brav, Graham, Harvey, and Michaely (2005) defined cash cow firms as the profitable firms and commit to distribute cash in form of dividends. Also, Brav, Graham, Harvey, and Michaely (2005) pointed that dividend decision in cash cow firms are not influenced by institutional shareholders and this circumstance make these firms are usually focus on growth to their dividend and often to avoid cutting it. In contrast, managers in cash cow firms tend to hold cash balances and choose low payout dividends to their shareholders (Wang, 2011). In this case, conflict is possible because Chang and Wong (2004) explained, cash cow firms usually controlled by major shareholders in term to fulfill their interests and make the firms as collateral to borrow money from banks.

2.2. Free Cash Flow Theory

Refers to Jensen (1988), free cash flow is cash excess that needed for funding all firm's profitable investments, and ideally, in condition when firms have less investments then managers should distribute the excess cash to shareholders. But, since firms have excess cash with less investments then the conflict arise between managers and shareholders to decide whether the cash need to distribute for shareholders or to invest in unprofitable investments and other inefficient expenditures that give benefit for managers (Jensen, 1988). In case to solve conflict between shareholders and managers in context of free cash flow then firms should increase debt in term for financing their investment activities (Aivazian, Ge, and Qiu, 2005) and paying dividends to shareholders as self-impose discipline for managers (Brav, Graham, Harvey, and Michaely, 2005). Less conflicts between shareholders and managers shall reduce level of cash holdings by firm which make lower the agency problem for free cash flows (Kuan, Li, and Liu, 2012).

According to Myers (2001), free cash flow theory generally explain the consequences of high debt ratios in term to increase value beside the threat of financial distress, and that is why this theory is designed for mature firms in condition to overinvest. Basically, free cash flow theory is a theory based on conflict of interests between managers and shareholders where managers in term to benefit themselves lead firm for overinvest by funding unprofitable project with using firm's resources (Aivazian, Ge, and Qiu, 2005; Fairchild, Guney, and Thanatawee, 2014), and to prevent this action the shareholders demand managers for paying dividends (Easterbrook, 1984; Jensen, 1986). Fairchild, Guney, and Thanatawee (2014) found higher debt decreases dividend to shareholders and also reported characteristics of the firms who have tendency to increase dividends which are much larger, more profitable, have higher cash flows and have higher retained earnings ratios.

2.3. Hypothesis Development

The literatures review provides and proposes some factors for this study to develop the hypothesis in term to identify whether firms behave as cash cows, under perspective of free cash flow theory, both of these circumstances, or paying dividends for other purposes. Based on literatures review, the study then clarifies that positive effect by all independent variables shall meet the criteria as cash cow firms and free cash flow theory.

2.3.1. Relationship between Earnings per Share and Dividend

In cash cow firms, cash available will be distributed to shareholders as dividends (Brav, Graham, Harvey, and Michaely, 2005; Faulkender and Wang, 2006; Neale, Milsom, Hills, and Sharples, 1998) and have tendency to increase in the future (Brav, Graham, Harvey, and Michaely, 2005). Notice the concept by Ross, Westerfield, and Jaffe (2008) and the works by Cooper, Jackson III, Patterson (2003), and Dechow (1994), the study suspects if dividend payers are cash cow firms then their current profit will be distributed to shareholders in form of dividends with regards the cash availability and it means the earnings per share will reflect the amount of dividend to be paid.

Ha_1 : Earnings per share and dividend are different in significant.

Ha_2 : Earnings per share has significant effect to dividend.

2.3.2. Relationship between Profitability and Dividend

Since cash cow firms are firms with higher profit (Brav, Graham, Harvey, and Michaely, 2005; Faulkender and Wang, 2006; Neale, Milsom, Hills, and Sharples, 1998; Shay and Rothaermel, 1999), then the study suspects if dividend payers are higher profitable firms and act as cash cows then their dividends to shareholders will increase. This study take return on assets as the proxy for profitability.

Ha_3 : Profitability has significant effect to dividend.

2.3.3.Relationship between Tangibility and Dividend

There is a similarity between cash cow firms and mature firms where the investments in these firms are start to decline (DeAngelo, DeAngelo, and Stulz, 2006; Faulkender and Wang, 2006; Grullon, Michaely, and Swaminathan, 2002) and it means these firms will invest only in profitable projects. Notice the work by Neale, Milsom, Hills, and Sharples (1998) where cash cow firms usually have higher for capital expenditure then the study suspects less

investments for cash cow firms make them have large free cash which is available to distribute as dividends to shareholders and use tangibility as proxy for investments.

Ha_4 : Tangibility has significant effect to dividend

2.3.4. Relationship between Retained Earnings Ratio and Dividend

Notice the findings by Grullon, Michaely, and Swaminathan (2002), and DeAngelo, DeAngelo, and Stulz (2006), this study suspects the cash cow firms are in mature phase and follows Fairchild, Guney, and Thanatawee (2014) where dividend payers who act as cash cow firms shall have higher retained earnings ratio. This study take retained earnings to total assets ratio as the proxy for retained earnings ratio.

Ha_5 : Retained earnings ratio has significant effect to dividend

2.3.5.Relationship between Debt Ratio and Dividend

Since debt can plays the role to self-impose discipline the managers (Brav, Graham, Harvey, and Michaely, 2005), then shareholders can increase debts to reduce use of cash by managers in term for financing investment activities as suggested by Thakor and Wilson (1995), Neale, Milsom, Hills, and Sharples (1998), Myers (2001), Aivazian, Ge, and Qiu (2005), and Fairchild, Guney, and Thanatawee (2014). This study suspects dividend payers who increase their debts possibly have some circumstances which are play as cash cows or to avoid agency conflict or can be both of them.

Ha_6 : Debt ratio has significant effect to dividend

3. RESEARCH METHOD

3.1. Sample

As defines in Table 1, this study uses 141 firms as samples which is listed in Indonesia Stock Exchange (www.idx.co.id) for period of 2009 to 2014. The criteria for samples are : first, the firms have published their audit report in observed period; second, the firms that paying dividends at least for one year in observed period. As the ownership of the firms in Indonesia are vary, this study then distinguishes the data into two clusters which are : first, firms with equal and above 50% of ownership owned by institutional and/or state; second, firms with equal and above 50% of ownership owned by individuals and/or public. Another clusters, based on firm size (measured by natural logarithms of total assets) this study divides the samples into larger firms and smaller firms by applying median value.

Table 1. Population and Samples

Sectors	Samples
Agriculture	8
Mining	14
Basic Industry & Chemicals	31
Miscellaneous Industry	18
Consumer Goods Industry	18
Infrastructure, Utilities, and Transportation	12
Trade, Service, Investment	40
Total	**141**

3.2. Variable Definitions

In term for hypothesis testing, the study conducts compare means paired samples t test between earnings per share in average and dividends in average (hypothesis Ha1) and logistic regression (hypothesis Ha2 until Ha6) at significance 5% includes chi square value to determine whether the model is fit (insignificant) or not fit (significant). In addition, to run logistic regression then this study normalized the variable for profitability (ROA) with natural logarithm in term to get fit model. Since the samples are only dividend payers, then this study distinguishes dependent variable into higher dividend payers and lower dividend payers based on median value. The independent variables are defines in Table 2.

Table 2. Variable Definitions

Variables	Measurement
Dividend - DIV	Average dividends for six years
Earnings per share - EPS	Net profit divided by outstanding shares
Profitability - ROA	Net profit divided by total assets
Tangibility - TANG	Total fixed assets divided by total assets
Retained earnings ratio - RETA	Retained earnings divided by total assets
Leverage - DAR	Total debt divided by total assets

4. EMPIRICAL RESULTS

Table 3 shows the results of analysis by compare means paired samples t test where firms as dividend payers based on controlled characteristics in this study have significant difference mean value (Ha_1 accepted) between average earnings per share and average dividends which indicate that all dividend payers are not cash cows.

Table 3. Compare means paired samples t test

	Mean*	t-value	Significance
Larger firms owned by institutional and/or state	64.25	5.77	0.000
Larger firms owned by individuals and/or public	59.09	2.96	0.005
Smaller firms owned by institutional and/or state	129.61	3.14	0.002
Smaller firms owned by individuals and/or public	115.19	2.80	0.007

*difference between earnings per share in average and dividends in average

This study then continue the analysis by conducting logistic regression to confirm whether dividend payments to their shareholders are just a normal distribution of earnings disregard their status as cash cows or otherwise these firms are signaling an internal conflict.

Larger Firms Owned by Institutional and/or State

Table 4 shows that earnings per share (Ha_2 accepted), profitability (Ha_3 accepted), tangibility (Ha_4 accepted), and debt ratio (Ha_6 accepted) have significant effect for larger firms owned by institutional and/or state to pay higher dividends to their shareholders relative to similar firms with lower dividends. Since cash cow firms normally distributed most of their earnings in form of dividend (Brav, Graham, Harvey, and Michaely, 2005; Faulkender and Wang, 2006; Neale, Milsom, Hills, and Sharples, 1998) and tend to increase their dividends (Brav, Graham, Harvey, and Michaely, 2005), then the significant effect by earnings per share which is similar with concept by Ross, Westerfield, and Jaffe (2008) and the works by Cooper, Jackson III, Patterson (2003) and Dechow (1994) seems contradict the result in Table 3 and gives presumption that these firms are like cash cows.

The presumption of cash cows for these firms seems more supported with significant effect by profitability (Brav, Graham, Harvey, and Michaely, 2005; Faulkender and Wang, 2006; Neale, Milsom, Hills, and Sharples, 1998; Shay and Rothaermel, 1999) and tangibility (DeAngelo, DeAngelo, and Stulz, 2006; Faulkender and Wang, 2006; Grullon, Michaely, and Swaminathan, 2002; Neale, Milsom, Hills, and Sharples, 1998) which have mean these firms have tendency to distribute cash in form of dividends because they are better in generating profit and they will invest only for profitable projects. But, since the result for retained earnings ratio is inconsistent (Ha_5 rejected) with DeAngelo, DeAngelo, and Stulz (2006), Fairchild, Guney, and Thanatawee (2014), and Grullon, Michaely, and Swaminathan (2002) then it eliminates the presumption of cash cows for these firms.

The negative significant effect by debt ratio which is inconsistent with Aivazian, Ge, and Qiu (2005), Fairchild, Guney, and Thanatawee (2014), Myers (2001), Neale, Milsom, Hills, and Sharples (1998), and Thakor and Wilson (1995) implies that addition on debts shall decrease dividends and also indicates that increasing the debt is not in term to control the managers (Brav, Graham, Harvey, and Michaely, 2005) because of existing an internal conflict between shareholders and managers.

There are two facts obtained from arguments in case for higher dividend payments by larger firms owned by institutional and/or state relative to similar firms with lower dividend payments. First, these firms are paying higher dividends to their shareholders not in the context of cash cow firms although some factors are similar with it, such as earnings per share, profitability, and tangibility which have most possibility as a base for determining their dividend policy. Second, these firms are paying higher dividends to their shareholders not in symptom of conflict in perspective of free cash flow theory.

Larger firms owned by individuals and/or public

Table 4 shows that earnings per share (Ha_2 rejected), profitability (Ha_3 rejected), tangibility (Ha_4 rejected), retained earnings ratio (Ha_5 rejected), and debt ratio (Ha_6 rejected) have insignificant effect for larger firms owned by individuals and/or public to pay higher dividends to their shareholders relative to similar firms with lower dividends. The insignificant effect by earnings per share confirming the result on Table 3 and affirm that larger firms owned by individuals and/or public who pay higher dividends relative to similar firms with lower dividends are not cash cow firms. Also, these findings imply that earnings distribution to shareholders by these firms is not triggered by conflict of interest between shareholders and managers.

Smaller firms owned by institutional and/or state

Table 4 shows three factors with positive significant effect which make smaller firms owned by institutional and/or state are paying higher dividends to their shareholders relative to similar firms with lower dividends, which are profitability (Ha_3 accepted), retained earnings ratio (Ha_5 accepted), and debt ratio (Ha_6 accepted). The case for smaller firms owned by institutional and/or state seems very complex in term to identify whether these firms are cash cows or not since the insignificant effect by earnings per share (Ha_2 rejected) contradicts with significant effect by profitability, retained earnings ratio, and debt ratio. The insignificant effect by earnings per share is confirming the result on Table 3 and it implies that smaller firms owned by institutional and/or state cannot be viewed as cash cow firms.

Cash cow firms are normally distributed their earnings to shareholders because they have higher profit (Brav, Graham, Harvey, and Michaely, 2005; Faulkender and Wang, 2006; Neale, Milsom, Hills, and Sharples, 1998; Shay and Rothaermel, 1999). This characteristic

reflected on smaller firms owned by institutional and/or state with higher dividends because the result shows these firms have higher profit and make profitability as a consideration in term for deciding their dividend policy. Furthermore, following DeAngelo, DeAngelo, and Stulz (2006), Fairchild, Guney, and Thanatawee (2014), and Grullon, Michaely, and Swaminathan (2002), the positive significant effect by retained earnings ratio confirms that smaller firms owned by institutional and/or state have plentiful retained earnings over their investments make them have most possibility to pay higher dividends.

The ambiguous status about cash cows for smaller firms owned by institutional and/or state is resolve while debt plays the role as determinant of dividend policy. The positive significant effect by debt which is consistent with Aivazian, Ge, and Qiu (2005), Fairchild, Guney, and Thanatawee (2014), Myers (2001), Neale, Milsom, Hills, and Sharples (1998), and Thakor and Wilson (1995) indicates a conflict of interest and shareholders use debts as an action in order to control the managers in supervising cash and investments. In this case, smaller firms owned by institutional and/or state shall behave like cash cows to avoid the conflict of interest between shareholders and managers while its symptom is exist.

Smaller firms owned by individuals and/or public

Table 4 shows that earnings per share (Ha_2 rejected), profitability (Ha_3 rejected), tangibility (Ha_4 rejected), retained earnings ratio (Ha_5 rejected), and debt ratio (Ha_6 rejected) have insignificant effect which means all independent variables are not the main factors for these firms to decide dividend payments to their shareholders. It is unique to find both for larger and smaller firms owned by individuals and/or public have similar results which mean both of these firms are paying their dividends not because they are cash cows or in term to avoid conflict of interest between shareholders and managers. Although both of these firms have similar results, but some factors based on their coefficients have some differences in term to determine their behavior.

In case of larger firms owned by individuals and/or public, the positive effect of retained earnings ratio gives a signal that these firms are at mature phase (DeAngelo, DeAngelo, and Stulz, 2006; Grullon, Michaely, and Swaminathan, 2002) to make them acting like cash cows as reflects at their earnings per share and profitability. Also, the positive effect of debt ratio indicates the occurrence of internal conflict of interest for these firms. In this case, the behavior by larger firms owned by individuals and/or public have same tendencies as the smaller firms owned by institutional and/or state. Whereas smaller firms owned by individuals and/or public, the opposite effect by retained earnings ratio shows these firms are not at mature phase and not supporting the effect of earnings per share and profitability to make them act like cash cow firms. In perspective of free cash flow theory, the negative effect by debt ratio indicates the conflict of interest for these firms is not exist.

Table 4. Logistic Regression for Higher and Lower Payers

	Dependent : Dividend		
	Coefficient	**Significance**	**Probability**
Larger firms owned by institutional and/or state			
Constant	2.732		
EPS	0.003	0.000	1.003
ROA	0.813	0.000	2.255
Tangibility	2.864	0.000	17.528
RETA	0.607	0.380	1.836
DAR	-2.821	0.005	0.060
Chi-square significance : 0.100 (fit model)			
Larger firms owned by individuals and/or public			
Constant	0.120		
EPS	0.001	0.552	1.001
ROA	0.853	0.131	2.347
Tangibility	-2.110	0.181	0.121
RETA	2.515	0.491	12.368
DAR	3.882	0.157	48.512
Chi-square significance : 0.138 (fit model)			
Smaller firms owned by institutional and/or state			
Constant	-1.210		
EPS	0.000	0.143	1.000
ROA	0.708	0.000	2.030
Tangibility	-0.089	0.896	0.915
RETA	4.418	0.000	82.925
DAR	3.399	0.000	29.922
Chi-square significance : 0.097 (fit model)			
Smaller firms owned by individuals and/or public			
Constant	1.123		
EPS	0.005	0.280	1.005
ROA	0.397	0.623	1.487
Tangibility	-4.041	0.253	0.018
RETA	-0.023	0.876	0.977
DAR	-3.055	0.422	0.047
Chi-square significance : 0.380 (fit model)			

5. CONCLUSIONS

The main cause of behavior by firms to pay higher or lower dividends to their shareholders is not very clear since dividend payers can be viewed as cash cows or under circumstance of internal conflict of interest. By conducting logistic regression with samples of 141 firms which listed in Indonesia Stock Exchange for period 2009 to 2014 with categories as higher and lower dividend payers in clusters of ownership and size then this study suggests earnings per share, profitability, tangibility, retained earnings ratio and debt ratio are not the absolute determinants for dividend policy. Limited to samples, based on result of compare means paired samples t test the study reports that dividend payers in Indonesia are not cash cow firms, but the role of ownership structure and firms size in determining dividend payments makes firms can behave and act in perspective of cash cow firms and under circumstance of free cash flow theory.

The firms with individuals and/or public ownership both for larger and smaller size are constantly controlling their dividend policy to pay in high or low amount for some other intentions rather than to behave as cash cows or in action for conflict avoidance. But, there are two different conditions for firms owned by institutional and/or state with concerns for its size. Relative lower payers in larger size, the higher payers shall pay their dividends not because they are cash cows or under circumstance of internal conflict. While higher payers in smaller size shall behave like cash cows relative to lower payers in order to avoid the internal conflict between shareholders and managers.

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