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SMALL SHAREHOLDERS' INTERVENTION IN THE DETERMINATION OF FIRM'S LEVERAGE

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Abstract

Large shareholders or block holders with concentrated ownership get a lot of recognition of previous studies as a party to influence the decision making of the company. However, not much is discussed about small shareholders with dispersed ownership. This study tries to examine the extent to which dispersed small shareholders, especially in Indonesia, intervened in the decision-making process regarding financing of the company. In this study, the intervention of dispersed small shareholders is seen from the influence of these shareholders in the adjustment process towards the optimal level of leverage. This study concludes that dispersed small shareholders do influence the process of the adjustment towards the optimal level of leverage in the way that they slow the adjustment process towards the optimal level of

leverage. The tendency of dispersed small shareholders to slow adjustment towards the optimal level of leverage is consistent with the concept of suboptimal future investment as proposed by Myers (1977).

Keywords: Small, Shareholders, Intervention, Leverage, Adjustment

INTRODUCTION

Large shareholders or block holders with concentrated ownership get a lot of recognition of previous studies as a party to influence the decision making of the company (Van der Elst and Aslan, 2009) as well as encouraging better monitoring the management (Agrawal and Mandelker, 1990; Demsetz, 1983; Shleifer and Vishny, 1986). However, not much is discussed about small shareholders with dispersed ownership. Shareholders with a significant percentage of shares are individuals, companies or institutions that have at least 5% of shares outstanding (Mehran, 1995:169; Holderness and Sheehan, 1988:320; Holderness, 2003:53). Shareholders with a share ownership below 5% are dispersed small shareholders (Strik, 2011:3).

Discussion on shareholder involvement in the determination of financing decisions usually highlights the effect of large shareholders in the policy making process. Little has highlighted the role of dispersed small shareholders. This study tries to examine the extent to which dispersed small shareholders, especially in Indonesia, intervened in the decision-making process regarding financing of the company. In this study, the intervention of dispersed small shareholders is seen from the influence of these shareholders in the adjustment process towards the optimal level of leverage.

THEORETICAL REVIEW

Intervention by the shareholders in the firm's decision-making process includes asking management to make certain decisions or make changes to the policy and the threat of a takeover or change of directors (Kahn and Winton, 1998:104). Intervention in a broad sense can be done also by minority shareholders or in the finance literature also called shareholder activism.

Intervention performed when shareholders see the things that happen to companies that they do not like or disagree with, then ask the management or the board of directors to perform certain actions. Low (2004:185) defines shareholder activism as a realization of the rights by the minority shareholders with the objective of enhancing shareholder value for the long term. This includes monitoring of the actions, whether conducted by the board of directors or controlling shareholders.

Shareholder activism is an important channel for corporate governance in order to discipline the management that tends to be opportunistic (Levit, 2012:2). In the dictionary of finance, shareholder activism is defined as the way in which shareholders can influence the behavior of companies to realize their rights as owners of the company, ranging from dialogue with management about a problem until the formal proposal that was decided by the general meeting of shareholders (investopedia.com).

Belcher et al. (2012: 2) identified some of the reasons for shareholder activism: (1) to get a refund of capital invested; (2) ensuring that strategies are made to improve performance and profitability; (3) ensuring a change in the composition of the board in accordance with a specific purpose (special interest); and (4) improving the efficiency of the company by selling non-productive assets, or Influencing the result of the takeover of assets.

Shareholder interventions can also be done through an informal communication or soft shareholder activism (Levitt, 2013:2), such as sending a letter to the management, make a contact by phone, or face to face with top management and suggesting various things to encourage the companies perform better.

Meanwhile, the adjustment to the optimal level of leverage in the process of determining the company's capital structure (target adjustment) is a development of the theory of static trade-off. The concept of a target adjustment states that each company has a target of optimal capital structure, and firm dynamically adjusts to the targets based on the conditions of each firm (dynamic trade-off) [Elsas and Florysiak, 2013:8; Alti, 2006:1709; Frank and Goyal, 2007:2; Titman and Tsyplakov, 2007:1-2; Graham and Harvey, 2002:15]. Based on the dynamic trade-off theory, the optimal leverage varies with time.

RESEARCH METHODOLOGY

Hypothesis

To test the possibility that dispersed small shareholders intervened in the determination of the firm's leverage, the hypotheses to be tested are as follows:

Hypothesis-1: The effect of dispersed small shareholders in the adjustment process towards the optimal level of leverage exists.

Hypothesis-2: The dispersed small shareholders strengthen/weaken the effect of determinants of leverage on firm’s leverage.

Research Variables

The variables tested were book leverage (Lev_{book}), market leverage (Lev_{market}), independent lagged variable_book leverage ($Lev_{t-1,book}$), independent lagged variable_market leverage (Lev_{t-}

$_{1,market}$), Profitability (PROF), Firm Size (SIZE), Tangibility (TANG), Market-to-book-assets ratio (MTB), share ownership by dispersed small shareholders (Z), see Table-1.

Table-1: Research Variables

Variables	Indicators
Book Leverage (Lev_{book})	The ratio of total debt to total debt plus total book value of equity.
Market Leverage (Lev_{market})	The ratio of total debt to total debt plus total market value of equity. Market value of equity is the number of the outstanding common shares multipled by the price per share of common stock.
Independent lagged variable-book leverage ($Lev_{t-1,book}$)	Book leverage in period t-1.
Independent lagged variable-market leverage ($Lev_{t-1,market}$)	Market leverage in periode t-1.
Profitability (PROF)	The ratio of earnings before interest, tax, depreciation, and amortization (EBITDA) to total assets.
Firm size (SIZE)	Logarithma value of sales (Log Sales).
Tangibility (TANG)	The ratio of fixed assets to the book value of total assets.
Market-to-book-assets ratio (MTB)	The ratio of the book value of assets minus the book value of equity plus the market value of equity divided by the book value of assets.
Share ownership by dispersed small shareholders (Z)	Percentage of shares owned by dispersed small shareholders.

Sampling Methods and Data Collection

The study covers Indonesian non-bank and non-insurance firms listed in Indonesia Stock Exchange for the year 2008 to 2012, which is registered on the stock exchange in 1979 to 2008. The data on companies in these periods include the elements of the audited financial statements, covering 307 companies which consist of 1,535 observations, formulated in the form of panel data. Four companies were excluded because data on these companies are not obtained. Accordingly, the research data included 303 companies or 1,515 observations.

Method of Testing

Research method uses Random Effects Tobit with Dynamic Panel Data with a Fractional Dependent Variable (DPF) as initiated by Elsas and Florysiak (2013).This methodology uses an econometric model of partial adjustment. The model was developed from empirical testing models on capital structure using a partial adjustment approach by some previous researchers, such as Hovakimian, Opler, and Titman (2001), Nishioka and Baba (2004); Flannery and Rangan (2006); Drobetz and Wanzenried (2006); Kayhan and Titman (2007); Cook and Tang

(2010); Liao, Mukherjee, Wang (2012); Drobetz, Schilling, and Schroeder (2013); Chipeta and Mbululu (2013).

The problems that need to be anticipated in using econometric partial adjustment on empirical testing of the capital structure is that the econometric partial adjustment process by using dynamic panel data (standard dynamic panel process or SDPP) is designed for variables that are not fractional and only for positive speed of adjustment (Iliev and Welch, 2010:2). Meanwhile, the nature of the leverage ratio is fractional, and the coefficient of the speed of adjustment on capital structure theoretically can also be negative. In addition, the company's financial data is usually an unbalanced panel data, and to test the use of partial adjustment, lagged dependent variable should be included as regressors (Elsas and Florysiak, 2013:9-10). Accordingly, the use of econometrics partial adjustment in conducting tests of capital structure by applying the formulation method for the estimator, which is usually done in previous studies, such as OLS (ordinary least squares), GMM (generalized method of moment), Fixed Effects, Long Difference, is biased (Iliev and Welch, 2010:6-9; Elsas and Florysiak 2010; Elsas and Florysiak, 2013:7-8).

To overcome these problems, Iliev and Welch (2010) suggest to using the method of Null Hypothesis, while Elsas and Florysiak (2010; 2013) suggest the use of the method of dynamic data panel with a fractional dependent variable (DPF). DPF is a doubly-censored Tobit regression method which enables observation angle of zero and one with lagged dependent variable and the unobserved heterogeneity (Elsas and Florysiak, 2010; 2013:11). The DPF estimator is unbiased in the presence of fractionality of the lagged dependent variable, unobserved heterogeneity, and unbalanced panel data (Elsas and Florysiak, 2013:29).

Partial Adjustment Models

Partial adjustment for this study is formulated as follows:

Formulation of the Partial Adjustment

$$Lev_{i,t} - Lev_{i,t-1} = \lambda_{i,t}(Lev_{i,t}^{*} - Lev_{i,t-1}) + \varepsilon_{i,t} \quad (1)$$

Where,

$Lev_{i,t}$ = The level of leverage of firm i in period t.

$Lev_{i,t-1}$ = The level of leverage of firm i in period t-1.

$Lev_{i,t}^{*}$ = The optimal level of leverage of firm i in period t.

$\lambda_{i,t}$ = Speed of adjustment of firm i in period t: coeffisien with a value between 0 and 1, where 0 indicates no adjustment and one adjustment occurs entirely.

$\varepsilon_{i,t}$ Random error term.

Formulation of the Optimal Level of Leverage

$Lev_{i,t}^* = \delta DETLEV_{j,i,t-1}$ (2)

$Lev_{i,t}^*$ = The optimal level of leverage of firm i in period t.

$DETLEV_{j,i,t-1}$ = Determinants of leverage j of firm i in periode t-1, where j = 1, 2, 3 …. L.

δ = Vector coefficients of the determinants of leverage.

Formulation of the Factors that Affect the Speed of Adjustment

$\lambda_{i,t} = \beta_0 + \beta_1 Z_{i,t}$ (3)

$\lambda_{i,t}$ = Speed of adjustment of firm i in period t.

$Z_{i,t}$ = Factors that effect speed of adjustment of firm i in period t.

β_0 = Constant/intercept.

β_1 = Vector coefficients of linear equations for the speed of adjustment.

a. Integration of the formula a, b, and c.

$Lev_{i,t} - Lev_{i,t-1} = \lambda_{i,t} (Lev_{i,t}^* - Lev_{i,t-1}) + \varepsilon_{i,t}$ [equation (1)]

$Lev_{i,t} = \lambda_{i,t} (Lev_{i,t}^* - Lev_{i,t-1}) + Lev_{i,t-1} + \varepsilon_{i,t}$

$Lev_{i,t} = \lambda_{i,t} Lev_{i,t}^* - \lambda_{i,t} Lev_{i,t-1} + Lev_{i,t-1} + \varepsilon_{i,t}$

$Lev_{i,t} = (1 - \lambda_{i,t}) Lev_{i,t-1} + \lambda_{i,t} Lev_{i,t}^* + \varepsilon_{i,t}$

Replacing $Lev_{i,t}^*$ with equation (2), i.e. $Lev_{i,t}^* = \delta DETLEV_{j,i,t-1}$, resulted in the equation as follows:

$Lev_{i,t} = (1 - \lambda_{i,t}) Lev_{i,t-1} + \lambda_{i,t} (\delta DETLEV_{j,i,t-1}) + \varepsilon_{i,t}$; or:

$Lev_{i,t} = (1 - \lambda_{i,t}) Lev_{i,t-1} + \lambda_{i,t} \delta DETLEV_{j,i,t-1} + \varepsilon_{i,t}$

Next, replacing $\lambda_{i,t}$ with equation (3), i.e. $\lambda_{i,t} = \beta_0 + \beta_1 Z_{i,t}$, resulted in the equation as follows:

$Lev_{i,t} = [1-(\beta_0+\beta_1 Z_{i,t})] Lev_{i,t-1} + (\beta_0+\beta_1 Z_{i,t}) \delta DETLEV_{j,i,t-1} + \varepsilon_{i,t}$; or:

$Lev_{i,t} = (1- \beta_0) Lev_{i,t-1} – \beta_1 (Z_{i,t} Lev_{i,t-1}) + \beta_0 \delta DETLEV_{j,i,t-1} +$ (4)

$\beta_1 \delta (Z_{i,t} DETLEV_{j,i,t-1}) + c_i + \varepsilon_{i,t}$

Referring to the formulation by Elsas and Florysiak (2013: 8), "c_i" (time invariant unobserved variable or firm fixed effect) added to the equation. A "c_i" is the error term for the specific effects of individual dimension, which varies between individuals, but it is assumed not to vary accros time. Positive coefficient of "β_1"indicates that shareholders influence the company to slow or does not fully adjust to the optimal level of leverage, while a negative coefficient of "β_1" indicates that shareholders accelerate the adjustment towards the optimal level of leverage(Cook and Tang, 2010; Chipeta and Mbululu, 2013).

Implementation of DPF

Cencor against the dependent variable ($Lev_{i,t}$) is carried out by first comparing the dependent variable with the leverage which is latent or unobservable ($Lev_{i,t}^{\#}$). The latent variable $Lev_{i,t}^{\#}$ is determined through the following formula (Elsas and Florysiak, 2013:11-12):

$$Lev_{i,t}^{\#} = \varphi DETLEV_{i,t} + \rho Lev_{i,t-1} + c_i + \mu_{i,t}$$

Where, $c_i = \alpha_0 + \alpha_1 Lev_{i,0} + E(DETLEV_i)\alpha_2 + a_i$; then

$$Lev_{i,t}^{\#} = \varphi DETLEV_{i,t} + \rho Lev_{i,t-1} + \alpha_0 + \alpha_1 Lev_{i,0} + E(DETLEV_i)\alpha_2 + a_i + \mu_{i,t} \quad (5)$$

$Lev_{i,t}^{\#}$ = Unobservable leverage of firm i in period t.

$Lev_{i,0}$ = Leverage level of firm i in the first period of the observed panel data.

$E(DETLEV_i)$ = Time series average of the determinants of leverage.

φ = Vector coefficient of the determinants of leverage.

ρ = Vector coefficient of firm leverage.

$\alpha_0, \alpha_1, \alpha_2$ = Intercept and vector coefficient on the regression of firm fixed effect.

a_i = Random error term on the regression of firm fixed effect.

$\mu_{i,t}$ = Random error term on the regression of unobservable leverage ($Lev_{it}^{\#}$).

Cencor against the dependent variable ($Lev_{i,t}$) is carried out as follows:

$$Lev_{i,t} = \begin{cases} 0 & \text{if } Lev_{i,t}^{\#} \leq 0 \\ Lev_{it}^{\#} & \text{if } 0 < Lev_{i,t}^{\#} < 1 \\ 1 & \text{if } Lev_{i,t}^{\#} \geq 1 \end{cases}$$

Tests on Research Instruments

The Tobit model assumes that the error terms are normally distributed (Elsas and Florysiak, 2013; Jeong and Jeong, 2010; Lee, 1981). The estimates for the Tobit model when the error terms are not normally distributed, as happened to many accounting ratios, can be implemented through the use of specific programs and the development of various estimators (Long, 1997:206; McDonald and Nguyen, 2012:1). The results of previous research on the distribution of accounting ratios indicate that most of the distribution of accounting ratios skewed to the left (positive skew), and some are symmetrical and skewed to the right (negative skew) [Horrigan,

1965; O'Connor, 1973; Bird & McHugh, 1977; Deakin, 1976; Bougen & Drury, 1980; Frecka & Hopwood, 1983; in Trigueiros, 1995:109-110].

The DPF estimator, which is basically a development of Tobit models, is an estimator that can be applied to the condition where the error terms are either normally distributed or not distributed normally. Based on the analysis and testing carried out by Elsas and Florysiak (2013:28), the DPF is fairly robust to the condition of violations in the assumed normality of the error distributions. Furthermore, the test results showed that the DPF estimator is not biased in the presence of fractionality of the (lagged) dependent variable, unobserved heterogeneity, and unbalanced panel data (Elsas and Florysiak, 2013:29). The maximum likelihood estimates for the DPF model can be obtained by running Random Effects Tobit (Elsas and Florysiak, 2013, appendix: 5).

The feasibility of Random Effects Tobit is determined by three things: (1) Wald Chi2 value and significance of its p-value, where the model is considered feasible if the value of Wald Chi2 and p-value is significant; (2) The coefficient “rho”, where the model is considered feasible if rho coefficient is small; and (3) degree of change of the coefficients of random effects tobit after checking by increasing quadrature points, where the model is considered feasible when the coefficients of random effects tobit are not change by more than 0.01% after the change of quadrature points (StataCorp, 1985). Testing of the research instruments, therefore, include (1) test the efficiency of the use of panel data; and (2) test the feasibility of the Random Effects Tobit model. The test results of both types of testing concluded that the research instrument is feasible to be used in the empirical testing of research data.

ANALYSIS AND DISCUSSION

Descriptive Statistics

Descriptive statistics of 303 companies include data for calculating the latent variables ($Lev_{it}^{\#}$)as criteria to censor the dependent variable, presented in Table-2; and the data to test the hypothesis, presented in Table-3.

Table 2: Descriptive statistics to determine $Lev_{it}^{\#}$

Variables	# of Firm	# of Observ	Mean	Std. Dev.	Min	Max
$Lev_{i,t,\ book}$	303	1515	0,5612	0,4767	0,0025	8,2500
$Lev_{i,t,market}$	303	1515	0,4630	0,2679	0,0004	0,9997
$PROF_{i,t}$	303	1515	0,1839	1,8875	1,5143	71,6357
$SIZE_{i,t}$	303	1515	11,8572	0,9829	6,0000	14,2743
$TANG_{i,t}$	303	1515	0,3360	0,2406	0,0000	1,6336
$MTB_{i,t}$	303	1515	1,5525	1,9701	0,1133	25,1315
$EPROF_{i,t}$	303	1515	0,1839	0,8444	0,7603	14,3744

Table 2…

$ESIZE_{i,t}$	303	1515	11,8572	0,9197	8,5660	14,1160
$ETANG_{i,t}$	303	1515	0,3360	0,2223	0,0008	0,9533
$EMTB_{i,t}$	303	1515	1,6619	1,4633	0,2452	12,9441

Table 3: Descriptive statistics to test hypothesis

Variables	# of Firm	# of Observ	Mean	Std. Dev.	Min	Max
$Lev_{i,t,\ book}$	303	1515	0,5612	0,4767	0,0025	8,2500
$Lev_{i,t,market}$	303	1515	0,4630	0,2679	0,0004	0,9997
$PROF_{i,t-1}$	303	1515	0,1344	0,4377	2,6190	14,8696
$SIZE_{i,t-1}$	303	1515	11,8003	0,9719	6,0000	14,2110
$TANG_{i,t-1}$	303	1515	0,3398	0,2416	0,0000	1,6336
$MTB_{i,t-1}$	303	1515	0,6973	2,4708	0,1421	54,0682
Z	303	1515	0,7033	0,1916	0,0516	0,9980

The Test Results of Hypothesis-1

The test results of hypothesis-1 show that the influence of dispersed small shareholders in the process of adjustment towards the optimal level of leverage does exist, indicated by coefficient β_1 of positive 0.0275 significant at below 5% (book leverage) and positive 0.0780 significant at below 1% (see Table-4 and Table-5). The strong influence of dispersed small shareholders indicates a level of intervention in the determination of the financing decisions. These findings support previous research studies that the shareholders have preference in addressing policy regarding leverage levels set by the company (Sulaiman, 2010:3; Liao, Mukherjee, and Wang, 2015:1).

However, the posit if coefficient of β_1 in the adjustment process indicates that dispersed small shareholders slow the adjustment process towards the optimal level of leverage. This means that the higher the portion of ownership of shares by dispersed small shareholders, or when small shareholders have a majority stake, the small shareholders are likely to slow the adjustment process.

The tendency of small shareholders to slow adjustment towards the optimal level of leverage is consistent with the concept of suboptimal future investment as proposed by Myers (1977). Companies that have a too high level of debt (debt overhang) are in a position that is difficult to take investment opportunities in profitable investment but high risk. Such conditions are not favored by dispersed small shareholders who want the company to grow through profitable investment, which would be expected to increase the stock price. As reported by Shleifer dan Vishny (1986:465), small shareholders prefer capital gains, while large shareholders prefer dividend.

Table 4: Test Results of Hypothesis-1 (Book Leverage)

No.	Variables	Coeff	Std Error	P>Izl	β_0	β_1	δ_k
1	$Lev_{i,t-1}$	0.1464***	0.0057	0.0000	0.8536***		
2	$ZLev_{i,t-1}$	0.0275**	0.0130	0.0340		0.0275**	
3	$PROF_{t\_1}$	-0.0853***	0.0093	0.0000			-0.0999***
4	$SIZE_{t\_1}$	0.0192***	0.0025	0.0000			0.0225***
5	$TANG_{t\_1}$	0.0177	0.0132	0.1810			0.0207
6	MTB_{t_1}	0.0022**	0.0009	0.0110			0.0026**
7	$ZPROF_{t\_1}$	0.1462***	0.0185	0.0000			5.3162***
8	$ZSIZE_{t\_1}$	-0.0019	0.0016	0.2130			-0.0704
9	$ZTANG_{t\_1}$	0.0867**	0.0361	0.0160			3.1521**
10	$ZMTB_{t\_1}$	-0.0175***	0.0028	0.0000			-0.6370***
11	Sigma_u	0.1142***	0.0049	0.0000			
12	Sigma_e	0.0314***	0.0006	0.0000			
13	Rho	0.9298	0.0063				
14	# of observations			1515			
15	Wald Chi2			1217.18			
16	Prob>Chi2			0.0000			

***; **; * = significantat below 1%; 5%; 10%.

Table 5: Test Results of Hypothesis-1 (Market Leverage)

No.	Variables	Coeff	Std Error	P>Izl	β_0	B_1	δ_k
1	$Lev_{i,t-1}$	0.4193***	0.0106	0.000	0.5807***		
2	$ZLev_{i,t-1}$	0.0780***	0.0288	0.007		0.0780***	
3	$PROF_{t\_1}$	0.0029	0.0084	0.730			0.0050
4	$SIZE_{t\_1}$	-0.0018	0.0023	0.445			-0.0031
5	$TANG_{t\_1}$	0.0415***	0.0122	0.001			0.0715***
6	MTB_{t_1}	0.0008	0.0008	0.342			0.0013
7	$ZPROF_{t\_1}$	-0.0023	0.0167	0.892			-0.0290
8	$ZSIZE_{t\_1}$	0.0038**	0.0018	0.037			0.0491**
9	$ZTANG_{t\_1}$	-0.0388	0.0335	0.247			-0.4976
10	$ZMTB_{t\_1}$	-0.0056**	0.0024	0.020			-0.0721**
11	Sigma_u	0.1126***	0.0048	0.000			
12	Sigma_e	0.0290***	0.0006	0.000			
13	Rho	0.9376	0.0057				
14	# of observations			1515			
15	Wald Chi2			4598.26			
16	Prob>Chi2			0.0000			

***; **; * = significant at below 1%; 5%; 10%.

The Test Results of Hypothesis-2

The test results of hypothesis-2 show that dispersed small shareholders strengthen, as well as weaken, the effect of determinants of leverage on firm leverage (see Table-4 and Table-5).

Dispersed small shareholders strengthen the effects of profitability, tangibility, and firm size, indicated by coefficient δ_k for $ZPROF_{t\_1}$ of positive 5.3162 significant at below 1%; coefficient δ_k for $ZTANG_{t\_1}$ of positive 3.1521 significant at below 5% (book leverage); and coefficient δ_k for $ZSIZE_{t\_1}$ of positive 0.0491 significant at below 5% (market leverage). Meanwhile, they weaken the effect of market-to-book-assets ratio, indicated by coefficient δ_k for $ZMTB_{t\_1}$ of negative 0.6370 significant at below 1% (book leverage) and negative 0.0721 significant at below 5% (market leverage).

Possible explanations for these findings are as follows. The test result of the effect of profitability on firm leverage (book leverage) shows that profitability has negative effect on leverage. This finding in line with the results of previous study (Titman & Wessels, 1988; Harris & Raviv, 1991;Rajan & Zingales, 1995; Shyam, Sunder & Myers, 1999; Fama & French, 2002; Frank & Goyal, 2003; Frank & Goyal, 2009; Alves & Ferreira, 2011; Flannery & Rangan, 2006; Gaud, et al., 2005; Jong, et al., 2008; Hovakimian & Li, 2011; Baker & Wurgler, 2002; Lemmon, Roberts & Zender, 2008; in Jensen, 2013). The negative relationship between profitability and leverage support the pecking order theory. Internal funds increased as profitability increases, leads to decreasing reliance on debt (Frank and Goyal, 2009; Rajan and Zingales, 1995; Baker and Wurgler, 2002). The strengthening effect of dispersed small shareholders on profitability indicates the preference of dispersed small shareholders on internal fund, as well as to lower debt when profitability increases.

Firm size influences positively on leverage. This finding is consistent with the results of previous study (Titman & Wessels, 1988; Harris & Raviv, 1991;Rajan & Zingales, 1995; Fama & French, 2002; Frank & Goyal, 2003; Frank & Goyal, 2009; Alves & Ferreira, 2011; Flannery & Rangan, 2006; Gaud, et al., 2005; Jong, et al., 2008; Hovakimian & Li, 2011; Baker & Wurgler, 2002; Lemmon, Roberts & Zender, 2008; in Jensen, 2013). The positive relationship between firm size and leverage support the notion that big firms are more resistanceon the risk of defaults (Frank and Goyal, 2009; Rajan and Zingales, 1995; Baker and Wurgler, 2002). The strengthening effect of dispersed small shareholders on firm size indicates the preference of dispersed small shareholders on more debt when the size of the firm increases.

Tangibility influences positively on leverage. This finding is consistent with the results of previous study (Harris & Raviv, 1991;Rajan & Zingales, 1995; Fama & French, 2002; Frank & Goyal, 2003; Frank & Goyal, 2009; Flannery & Rangan, 2006; Gaud, et al., 2005; Jong, et al., 2008; Hovakimian & Li, 2011; Baker & Wurgler, 2002; Lemmon, Roberts & Zender, 2008; in Jensen, 2013). The positive relationship between tangibility and leverage support the notion that tangible assets will reduce cost of financial distress (Frank and Goyal, 2009). Tangible assets are also easy to be used as collateral that would reduce the agency cost of debt (Rajan and

Zingales, 1995; Baker and Wurgler, 2002).The strengthening effect of dispersed small shareholders on tangibility indicates the preference of dispersed small shareholders on more debt when tangible assets increase.

Meanwhile, very minor evidence to suggest that market-to-book-assets ratio influences positively on leverage in the perspective of dispersed small shareholders (coefficient δ_k of 0.0026 and only for book leverage). Moreover, with the weakening effect of dispersed small shareholders on the positive effect of market-to-book-assets ratio indicates that dispersed small shareholders seem to prefer stocks when firms have high growth potential. The reasoning is that growth would encourage increasing the cost of financial distress (Frank and Goyal, 2009; Rajan and Zingales, 1995).

CONCLUSIONS

This paper attempts to answer the prediction that dispersed small shareholders in Indonesia intervened in the determination of financing decisions. The results of the study indicate that the dispersed small shareholders do influence the process of the adjustment towards the optimal level of leverage in the way that they slow the adjustment process towards the optimal level of leverage. The tendency of small shareholders to slow adjustment towards the optimal level of leverage is consistent with the concept of suboptimal future investment as proposed by Myers (1977). Companies that have a too high level of debt (debt overhang) are in a position that is difficult to take investment opportunities in profitable investment but high risk. Such conditions are not favored by dispersed small shareholders who want the company to grow through profitable investment, which would be expected to increase the stock price.

The results of the study also show that dispersed small shareholders strengthen, as well as weaken, the effect of determinants of leverage on firm leverage. Dispersed small shareholders strengthen the effects of profitability, tangibility, firm size, and weaken the effect of market-to-book-assets ratio. The strengthening effect of dispersed small shareholders on profitability indicates their preference on internal fund, as well as to lower debt when profitability increases. The strengthening effect on firm size indicates their preference on more debt when the size of the firm increases. The strengthening effect on tangibility indicates their preference on more debt when tangible assets increase. Meanwhile, the weakening effect on market-to-book-assets ratio indicates that they seem to prefer stocks when firms have high growth potential. The possible reasoning is that growth would encourage increasing the cost of financial distress. Overall, this study supports the notion that dispersed small shareholders have also preferences in addressing policy regarding leverage levels set by the company, and to some extent, do intervene in the determination of financing decisions.

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