CAPITAL STRUCTURE ANALYSIS IN THE APPLICATION OF FISCAL , TRADE-OFF AND PECKING ORDER THEORY

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ABSTRAK

Tujuan yang lebih kongkrit dari penelitian ini adalah untuk menguji relevansi dari teori fiskal, teori trade-off dan teori peking order dalam analisis struktur modal dari perusahaan-perusahaan publik yang ada di Bursa Efek Indonesia. Dengan menguji teori-teori tersebut di atas akan diperoleh informasi empiris tentang penerapan teori-teori tersebut di perusahaan-perusahaan Indonesia. Kemudian, penelitian ini juga menginvestigasi apakah faktor-faktor yang menentukan struktur modal perusahaan dapat mempengaruhi struktur hutangya. Untuk mencapai tujuan yang diinginkan, penelitian ini mengumpulkan data dari perusahaan-perusahaan yang terdaftar di Bursa Efek Indonesia dari tahun 2002 hingga tahun 2006. Dari analisis data ditemukan bahwa tarif pajak efektif, struktur asset dan ukuran perusahaan menyebabkan adanya pengaruh positif dan signifikan terhadap rasio hutang perusahaan. Variabel lainnya seperti non debt tax-shield dan nilai proftabilitas periode yang lalu membuat efek negative terhadap rasio hutang. Bagi tingkat pertumbuhan perusahaan, penelitian tidak menemukan hubungannya dengan rasio hutang. Dan variabel-variabel bebas dapat mempengaruhi rasio hutang secara simultan dan secara simultan.

Kata Kunci : *Fiscal theory, Trade-off Theory, Pecking Order Theory, Capital Structure, and Debt Ratio.*

INTRODUCTION

In corporate finance literature, one of the most puzzling issues is capital structure theory. As we know from the description of its term, it is implied that the strategy of firm to finance their assets is through combination of equity, debt, and hybrid securities. By analyzing the factors coming up, the firms can determine what kind of financial policies issued. For example, a firm that sells twenty billion rupiah in equity and eighty billion rupiah in debts is said to be 20 % equity financed and 80% debt financed. The firm's ratio of debt to total financing, for example 80 %, is referred as the firm's leverage.

Forms of capital structure theory, Modigliani and Miller who were propounded, begun to be the basis of modern thinking on capital structure. Since many important factors can determine the capital structure decision, still this theorem is generally viewed as a purely theoretical result. For instance in their paper, Modigliani and Miller (1958) assume that tax holds big proportions in case dealing with optimizing capital structure, but academicians and professionals consider that this is purely theoretical issue. As leverage increases, the tax advantage of debt eventually will be offset by an increased cost of debt, reflecting the greater likelihood of financial distress. The theorem states that, in a perfect market, how that firm is financed the asset affects the value of the firm. This result becomes the base reasons why capital structure is relevant; the capital structure it employs directly influences the company's value.

Debate about a firm's optimal capital structure in the scope of corporate finance concerns keep ongoing. Specifically, is there a way to separate a firm's capital into debt and equity so as to maximize the value of the firm? From a practical point of view, this question is of utmost importance for corporate financial officers and also academicians, as it has been forcefully dem-

onstrated in the survey results by Graham and Harvey (2001) only recently. Whereas through this subject, many parties can use as manual to get deeper analysis about capital structure as one of the components to create firm's value.

From the Modigliani and Miller perspective, forms the basis of modern thinking on capital structure, it implies the relevance of the different financing theories for explaining capital structure choice in many corporate. The question is what capital structure need to be determined by company's management to apply effectively and efficiently. Just look in debt case, debt values (and therefore yield spreads) cannot be determined without knowing the company's capital structure, which will affect the default potential and bankruptcy. To better observe in reading the problem we can refer to the traditional theory, Modigliani and Miller. According to the M&M theorem, in the absence of taxes, bankruptcy costs, and asymmetric information, and in an efficient (perfect) market, the value of a firm are unaffected by how that firm is financed. Conversely, if capital structure is irrelevant in a perfect market, then imperfections which exist in the real world must be the cause of its relevance. The theories, for instance: trade-off theory, pecking order theory, try to show some of these imperfections by relaxing assumptions made in the M&M model. So that this approaching can then be extended to look at whether there is in fact an 'optimal' capital structure. This can enhance the value of the firm.

Therefore financing decisions in several companies can be explained more briefly for the affection. According to this theorem, capital structure significantly affects the firm's valuation. *Trade off theory*, for example, the purpose is to explain the fact that firms usually are financed partly with debt and partly with equity. It states that there is an advantage to finance with debt, the Tax Benefit of Debt and there is a cost of financing with debt, the costs of financial distress including Bankruptcy Costs of debt and non-Bankruptcy costs. This argument will be in accordance with Hovakimian *et al.* (2001) opinion. They find that more profitable companies will employ debt rather than equity. This is also consistent with firm trading of the risks of bankruptcy with tax benefits of debt. On the other hand, this opinion supports the pecking order theory. Another prediction was issued by Sarkar (2000). He said that in his model, he found among a firm's earnings and optimal leverage ratio occur negative relationship. This assumption is contrary with traditional statement, but the consistency of empirical findings can be kept. We also can find the manual for trade-off theory (also with pecking order theory) in paper provided by Frank and Goyal (2005).

Another theory that simultaneously support Traditional theory, which states capital structure will effectively influence the level of value of firm, is *Pecking Order Theory*. In here we get that company's assets financed by tendency to choose whether the sources of funds based hierarchy of risk (Myers and Majluf, 1984). It states that according to the law of least effort, management of companies prioritizes their sources of financing -from internal financing to equity. Hence, the order of using sources is at the first will internal funds until exhausting, then debt begin to issue, and when it is not sensible to issue any more debt, equity is issued. This theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required. Pecking Order Theory is theory that based on the information assymetry. Information assymetry will affect capital structure of certain firm by the agency of limited access to the external sources from outside. The acceptance of this theory is support by Zoppa and McMahon (2002). They found phenomena as below market financial returns often accepted by SME owners and owner-managers, the alleged finance gap faced by SMEs seeking longer-term development capital. This finding is consistent with the pecking order statement. Another acceptance for the study was also issued by Jong, Verbeek, and Verwijmeren (2005). Their finding is consistent with the predictions of a pecking order model that considers firms' debt capacities: since large financing needs have the potential of exceeding the unused debt capacity of firms. These firms are restricted in the issuing of debt.

In accordance with prior research, Mira (2001), research aim is to get the determinants of debt policy decisions in companies listed in IDX (Indonesia Stock Exchange). The debt policy itself, theoretically, sets comprehensive guidelines for the financing of capital expenditures. It is the objective of the policy that are: (1) The district obtains financing only when advisable. (2) The process for identifying the timing and amount of debt or other financing be efficient. (3) Competitive interest and other costs be obtained, and

Through capital analysis we get some brightening in understanding key issue of firms and developing the debt policy. This understanding will help us to clarify certain firm's options for debt financing, evaluate tolerance for risk of interest rate changes and engage your board of directors with ownership and understanding of the policy (Pladson, 2005).

In order to examine the relevance of differences in financing decisions, in this case is to explain the firm's debt policy, and then we need to know what parameters that we use to get brighter understanding. Leland (1994) said between debt value and capital structure has interlinked variable. His paper results indicate that unprotected debt values and protected debt values behave very much as expected. Unprotected "junk" bonds exhibit quite different behavior. For instance, increasing of debt value is the result of an increase in firm risk, as will a decrease in the coupon. This result implies the content of trade-off theory. It means there is relation between financial structures of certain company and the value of debt being issued. According to Harris and Raviv (1990) the importance of any of these roles for debt in a capital structure theory do not denied, but the informational and disciplining role can be judged as important thing and enables users to address issues, such as liquidation vs. reorganization that were not addressed in the theories just mentioned. The debt information or policy stated by any firms will impact the whole activity of the company itself. Liquidation or any further implication will be consequences whatever financial policy decides.

LITERATURE REVIEW

Many hypotheses issued to consolidate many thinking in order to get ideal theorem about role of capital (financial) structure to influence firm (business) value. The idea presented by Modigliani and Miller (1958) set up the basis for the development of a theoretical body around the firm capital structure issue. Its main proposition establishes that the valuation of a company will be independent from its financial structure. As this conclusion is absolutely true under the assumptions Modigliani and Miller (1958) took into account, the enlargement of the theory onwards has been produced relaxing these fundamental assumptions, also with the aim of approximating the theory to the firm reality.

Despite the unrealistic assumptions, MM's irrelevance result is extremely important. By indicating the conditions under which capital structure is irrelevant, i.e., by what is usually referred to as the company's investment policy. The economic substance of the firm is unaffected whether the liability side of the firm's balance sheet is sliced into more or less debt. To increase the value of the firm, it must invest in additional projects with positive net-present values (Drobetz and Fix, 2003). This perspective provided some clues about what is required for capital structure to be relevant and hence to affect a firm's value.

From that theory then issued many arguments/studies that already reviewed about capital structure; from this point we can get thorough about debt policy decisions (example) in companies because the majority of these studies use capital structure arguments emphasizing the importance of tax shield benefits from debt financing, as the explanation for this phenomenon. To prove the existences of theory, debate about a firm's optimal capital structure in the scope of corporate finance concerns keep ongoing. Specifically, is there a way to separate a firm's capital into debt and equity so as to maximize the value of the firm? From a practical point of view, this question is of utmost importance for corporate financial officers and also academicians, as it has been forcefully demonstrated in the survey results by Graham and Harvey (2001) only recently.

Fiscal Theory

Basically Fiscal Theory is theory used by government to determine what kind policy regulated to finance their activities (economic aspect). This theorem reflects in Fiscal policy, taking place within the scope of budgetary policy, refers to government policy that attempts to influence the direction of the economy through changes in government taxes, or through some expenses (fiscal allowances). The fiscal theory is operating whenever it is possible for fiscal policy to become active. Then a cut in current taxes, financed by sales of nominal government debt, does not generate an expectation that future taxes will rise by at least enough to service the new debt. The tax reduction leaves households feeling wealthier, at initial prices and interest rates, and they perceive they can raise their consumption paths.

Trade-Off Theory

Research following the MM papers has led to a "trade-off theory of leverage," in which firm's trade off benefits of debt financing (favorable corporate tax treatment) against higher interest rates and bankruptcy costs. The tradeoff between debt tax shields and bankcruptcy costs has featured prominently in models predicting optimal leverage ratios. However, existing tradeoff models are silent regarding the optimal mixture of bank and market debt, as well as the optimal priority of the two lender classes. This silence has been interpreted as evidence against the ability of the tradeoff theory to explain debt structure. Hovakimian *et al.* (2001) found that more profitable companies will employ debt rather than equity, also this is consistent with firm trading of the risks of bankruptcy with tax benefits of debt. Leland and Pyle (1977) argue that debt can be valuable as a device for signaling firm value.

Pecking Order Theory

According to the pecking order theory, the firms will prefer for using internal financing. The firms prefers internal to external financing, and debt to equity if the firm issues securities. In the pure pecking order theory, the firms have no well-defined debt-to-value ratio. There is a distinction between internal and external equity. Several authors have been given credit for introducing signaling as an argument in the discussion of debt's explanatory factors. Leland and Pyle (1977) and Myers and Majluf (1984) are often quoted as the seminal articles in this branch of the literature. Together with Zoppa and McMahon (2002), they found phenomena as below market financial returns often accepted by SME owners and owner-managers, the alleged finance gap faced by SMEs seeking longer-term development capital.

From the theories above, this research can be illustrated as a general framework as shown in Figure 1.

The result of Modigliani and Miller (1958) research becomes pioneer of capital structure issue, which then develops to be theoretical body around it. Its main proposition establishes that the valuation of a company will be independent from its financial

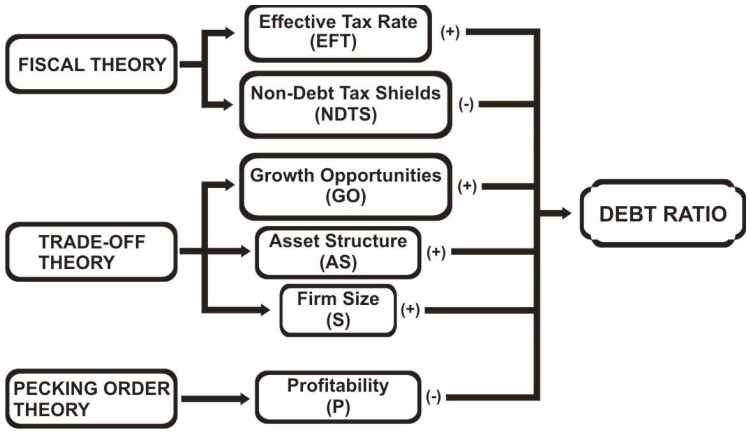

Figure 1
Theoretical Framework Illustration

structure. The result, in this, was triggering other researchers to become more curious in proving the concept of capital structure analysis. For example the existence of traditional theory, such as: trade-off theory (Miller, 1977) and pecking order theory (Myers and Majluf, 1984). This debate still moves on until this era, but none has the best concept.

Through capital analysis we get some brightening in understanding key issue of firms and developing the debt policy. This understanding will help us to clarify certain firm's options for debt financing, evaluate tolerance for risk of interest rate changes and engage your board of directors with ownership and understanding of the policy (Pladson, 2005).

Following the prior study formulated by Mira (2001) and based on what researcher already stated on theoretical review, hypotheses can be further described as follows:

Fiscal Theory (FT)

H_1: "Debt would be positively related to the effective tax rate"

This hypothesis is focus in concept that argued by M&M, the tendency of firms choose to financed by the debt is regarding to tax deductibility of interest payments. Fiscal theory teach that people with less tax will more wealthier.

H_2: "Leverage ought to be negatively related with non – debt tax shields"

Other tax shield, just like: depreciation, research and development expenses, etc, will be the second place after using debt.

Trade-Off Theory (TOT)

H_3: "Firm leverage will have positively relationship with growth opportunities"

Growth opportunities are opportunities to expand that arise from the firm's current operating knowledge, experience, and other resources. When a company decides to conduct an expansion directly or indirectly, it will affect the debt policy. In real circumstance, creditors tend to reduce their supply to company which has underinvestment problem.

H_4: "Asset structure and firm leverage ratio should relate positively"

The existence of debt agency costs will attract the creditors to ask more collateral asset to be requirements of taking loan. Because regarding the money supplier, this type of assets could be sold in market as the compensation of firm's payment.

H_5: "Firm Size and debt level should be positively correlated"

Big companies tend to employ more debt than, so impliedly there is a certain relationship between two components: Size and Debt Ratio. Also larger companies will deal with greater diversification and failure.

Pecking Order Theory (POT)

H_6: "There should be a negative relation between leverage and firm profitability"

Based on Myers and Majluf (1984) opinion, company use their funds based on hierarchy in the financing funds. First is internal capital sources and then external. It imply that companies with higher profit attempt to use their retained earnings rather than employ some debt.

RESEARCH METHOD

Research Sample

The sample of data was derived from purposive sampling method, specifically those data need to follow several criterion. The criteria were: (1) Companies listed on Indonesia Stock Exchange years 2002-2006. (2) Companies which have positive equity resources and also positive net income over the whole period of study. Companies that were not included in a bankruptcy process which means companies have positive EAT (Earning after Tax) in 3 years respectively.

Research Variable

Every empirical hypotheses should have a formulation in order to measure the attributes emerge in this research. Here

we calculated based on what we taken in form of economic or financial account of the firm.

Total Debt Ratio (TDR), The measurement gives an idea to the leverage of the company along with the potential risks the company faces in terms of its debt-load. This will tell us how much the company relies on debt to finance assets. Total debt ratio (TDR) = Total Debt : Total Assets .

Effective Tax Rate (EFT), According to Modigliani and Miller (1963) in Mira (2001) paper, firms prefer debt to financing their business rather than other resources considering reduce the tax of interest payment. Effective Tax Rate (EFT) = Taxes : (EAIBT + Depreciation).

Non-Debt Tax Shields (NDTS), The fiscal role of debt can be replaced by other alternative tax shields such as depreciation, research and development expenses, investment deductions, etc, according to DeAngelo ad Masulis (1980). Non-debt Tax Shields (NDTS) =Depreciation : Total Assets

Growth Opportunities (GO), Myers (1977) research states that for companies with more growth opportunities will face more intense underinvestment problem. In order to mitigate this problem, firms attempt to employ short-term debt. Growth Opportunities (GO) = Intangible Assets : Total Assets.

Asset Structure (AS), Normally, the cause of the existence of debt agency cost, creditor tend to require guarantees for their lending money (could be materialized in collateral assets). These collateral assets will retain value in case of a potential liquidation of the firm, or it also has chance to be sold for the commitment payment. Asset Structure (AS) = Tangible Assets : Total Assets.

Size /firm (S), As Warner (1977), Smith and Warner (1979), Ang et al. (1982) and Pettit and Singer (1985) in Mira's paper (2001) pointed out, larger firms tend to have big capacity to survive and more diversified, so that between size and probability to get collapse will has inversely proxy. Size (S) = Natural logarithm of total assets

Profitability (P), Myers (1984) and Myers and Majluf (1984) assume that, based on Pecking order financing, firms prefer using internal capital sources to external for the next sources. This opinion suggests that higher profitable companies will tend to finance by retaining earnings before debt using.Profitability (P) = ROA= EBIT : Total assets

Technique Data Analysis

Panel data is become the main methodology that used in this empirical research, this is related to best analysis that outcome in the end. The data analysis model can be formulated as follows:

RESEARCH FINDINGS

In EVIEWS 4 we can proceed some analyzing will be better if the data is more complicated. For example: in this analysis, researcher uses several features of analysis which are included in the software (tool). Then researcher found that EVIEWS 4 is better in case of use panel data model to accomplish the analysis. The first result is linear regression analysis with common effect model; the data is formatted shown as follows:

To simplify the regression measurement of the quite big data, this study uses EVIEWS 4 to accomplish the problems

$$DT = \beta_0 + \beta_1.EFT + \beta_2.NDTS + \beta_3.GO + \beta_4.AS + \beta_5.S + \beta_6.P + e$$

Where:

DT = Debt Ratio,
EFT = Effective Tax Rate,
NDTS = Non-debt Tax Shields,
GO = Growth Opportunities,
AS = Asset Structure,
S = Size (*firm size*),
P = Profitability,
$\beta_{1..6}$ = Variable coefficients or coefficients of regression,
β_0 = Constant. e = Random error.

Table 1
Panel Regression result with Common Effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.179392	0.097902	-1.832366	0.0697
EFT	0.026633	0.010242	2.600413	0.0106
NDTS	-0.577371	0.394867	-1.462191	0.1466
GO	-0.181059	0.083213	-2.175844	0.0317
AS	-0.058526	0.081212	-0.720662	0.4727
S	0.150044	0.011524	13.02016	0.0000
P	-0.818589	0.087327	-9.373804	0.0000
Weighted Statistics				
R-squared	0.828963	Mean dependent var.		0.701535
Adjusted R-squared	0.819461	S.D. dependent var.		0.400385
S.E. of regression	0.170123	Sum squared resid.		3.125732
F-statistic	87.24015	Durbin-Watson stat		0.551801
Prob. (F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.329183	Mean dependent var.		0.493438
Adjusted R-squared	0.291915	S.D. dependent var.		0.214197
S.E. of regression	0.180242	Sum squared resid.		3.508605
Durbin-Watson stat	0.499380			

Resourc: EVIEWS 4

(analysis). In here, researcher chooses Fixed Effect model rather than other. The reason is that the result issued in here is much better than in other model. For example Random Effect model, this model can not be used because the number of the variables is bigger than the data time series (2002-2006). According to Judge (1985, in Wimboh, 1996), random effects assumption can produce inefficient estimator when the actual distribution of μ_i evidently is different from the distribution μ_i predicted is known. Judge (1985) also suggested that random effects assumption will be better when the number of N (number of cross-section data) is small. Another reason behind the choice of the Fixed Effect model is from the first researcher assumption that intercept and slope around the companies is not the same (Judge, 1985). The result against Panel Regression Model with fixed effect approaching can be shown in table 2.

To strengthen the decision in using fixed effect model as the main model of statistical analysis, the researcher analyzes between 2 tables. According to 2 results produced by 2 models, the best panel regression model can be viewed from the S.E. of regression. Whereas the smaller Standard Error Regression, the more accurate model can be relied on. S.E Regression of fixed effect model is 0.115667 (see table 2), while the common effect model is 0.180242 (see table 1). Thereby we know that the better model is fixed effect model (shown on table 2).

Interpreting the data shown in table 2, formulation with Fixed Effect as the model can be wrote as follows:

$$Y = (-1.229701 - 1.471005) + 0.008794\ EFT - 0.24161\ NDTS - 0.021984\ GO + 0.009688\ AS + 0.306723\ S - 0.272549\ P + e$$

HYPOTHESIS TESTING

Effective tax rate (EFT) effect to debt ratio (TDR)

From the result of t-test on EFT variable just shown in table 2, we can get probability of 0.0001 the value of which is bellow 0.05 ($p<0.05$). Regression coefficient which has positive value of 0.008794 shows that EFT is proved influencing to debt ratio (TDR) positively. Thereby, H_o is rejected and H_1 stating that debt ratio has positive relationship to effective tax rate is accepted. The conclusion was that EFT significantly and negatively influenced TDR. This outcome also support to Mackie-Mason (1990) finding, they stated that the desirability of debt finance at the margin varies positively with the effective marginal tax rate.

This result accordance with Fiscal theory which states a company with high debt will be able to reduce the taxes. Modigliani and Miller (1963) in their revised

Table 2 :
Panel Regression result with Fixed Effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EFT	0.008794	0.002148	4.094274	0.0001
NDTS	-0.241612	0.101434	-2.381966	0.0194
GO	-0.021984	0.024180	-0.909202	0.3658
AS	0.009688	0.003348	2.893825	0.0048
S	0.306723	0.010075	30.44448	0.0000
P	-0.272549	0.047923	-5.687183	0.0000
Fixed Effects				
BUMI--C	-1.229701			
DAVO--C	-1.334166			
FAFO--C	-1.223805			
STTP--C	-1.356830			
ULTJ--C	-1.495689			
PBRX--C	-1.060812			
BATA--C	-1.260341			
CLPI--C	-1.139600			
LTLS--C	-1.238904			
JPRS--C	-1.306605			
LIMW--C	-1.071510			
ASII--C	-1.725797			
HEXA--C	-1.114931			
TURI--C	-1.194989			
UNTR--C	-1.409206			
MAID--C	-1.515684			
MRAT--C	-1.514576			
BLTA--C	-1.352887			
HITS--C	-1.281252			
ISAT--C	-1.688640			
TLKM--C	-1.725016			
HERO--C	-1.228243			
MPPA--C	-1.471005			
Weighted Statistics				
R-squared	0.996514	Mean dependent var	1.361843	
Adjusted R-squared	0.995378	S.D. dependent var	1.701433	
S.E. of regression	0.115667	Sum squared resid	1.150589	
F-statistic	4916.158	Durbin-Watson stat	1.262977	
Prob(F-statistic)	0.000000			

paper stated that firms would prefer debt to other financing resources due to the tax deductibility of interest payments. This assumption covered the Fiscal Theory partially, and outcome from this study is as same as M&M opinion.

Non-debt tax shields (NDTS) effect to debt ratio (TDR)

From the result of t-test on NDTS variable just shown as table 4.4, we can get probability of 0.0194 which is the value bellow 0.05 ($p<0.05$). Regression coefficient which has negative value of -0.241612 shows that NDTS is proved influencing debt ratio (TDR) negatively. Thereby, H_o is rejected and H_2 stating that debt ratio has positive relationship to non-debt tax shields can be supported. The conclusion was that NDTS significantly and negatively influenced TDR.

This result produces the similar result of Mackie-Mason's Fiscal Theory (1990). Mackie-Mason said that separation proceed of non-debt tax shield (NDTS) in two categories, those like tax loss carry forward, expected to generate a negative relationship with debt financing

Growth opportunities (GO) effect to debt ratio (TDR)

The t-test on growth opportunities (GO) variable that appears on table 4.4 result is probability 0,3658 which p-value is above 0,05. This means that there is no significant growth opportunities effect on debt ratio partially exists. Therefore H_o is not rejected, which means 3th hypothesis (H_3) is

not significant or rejected.

The result on this research is contrary with trade-off theory, which states a company with rapid growth will depend on external fund. Moreover, emission cost for common stocks selling normally will be higher than the expenses to publish bond. As a consequence, rapid growth companies will employ higher debt than a slow-growth company. The insignificant growth opportunities variable was caused by the variable measured by intangible composition against total assets.

Asset structure (AS) effect to debt ratio (TDR)

The t-test on asset structure (AS) variable shown on table 4.4 result produce probability of 0.0048 the value of which is below 0.05. This shows positive regression coefficient of 0.009688, which states that AS has a positively significant impact on debt ratio. Therefore, null hypothesis H_o is rejected and hypothesis H_4 is accepted, which means that if company assets suits with the conditions of loan request, the company will have a tendency to loan more money. Thereby, a company which employs an asset to be the collateral of debt tends to use bigger debt.

Based on static trade-off theory, Assets tangibility will affect leverage positively. Harris and Raviv (1991) assumed a company with low level of Fixed Assets will get more problems on asymmetric information compared to company which has higher level of fixed assets. Reciprocally, a company with high level of fixed asset is a big company. This category of companies will be able to sell their stocks with a fair rate and they will not use loan to finance their investment.

Size (S) effect to debt ratio (TDR)

T-test result on firm size (S) variable that emerge on table 4.4 result probability of 0,0000 the value of which is less than 0.05 ($p<0.05$). This outcome also shows positive regression coefficient of 0.306723 which means firm size has a positive and significant impact on debt ratio. So fifth (H_5) hypothesis is accepted, which means that there is positive correlation among firm size and debt ratio can be proved.

If we look at positive regression coefficient, it shows that the higher firm size, the higher company debt ratio. Normally, this is because big firm will be followed by bigger number of assets. With their assets, a big company will be easier to propose a loan then the smaller companies. Big number of assets will become bond holder's collateral to get great loan. Therefore, debt ratio's company can increase.

Profitability (P) effect to debt ratio (TDR)

The t-test on profitability (P) variable result that appear on table 4.4 produces probability of 0.0000 the value of which is less than 0,05 ($p<0.05$). By negatively regression coefficient, profitability will affect debt ratio (TDR) significantly negative which means that negative relation between profitability and debt ratio exist. Thereby, null hypothesis (H_o) is rejected or sixth (H_6) hypothesis is accepted. It consistent with the Mira (2001) result which assumed more profitable, SMEs tend to use lesser debt when financing their business activity.

It is caused by the bigger profitability of a company, the bigger the company's liquidity. The implication is on long-term debt deduction where internal source of fund is enough to market expansion. The bigger profitability, the bigger retained earnings. Finally, own capital will increase and simultaneously it will decrease debt ratio. It is in accordance with *Pecking Order Theory* and Graham (2006) finding.

CONCLUSSION AND SUGGESTION

Based on the result and latest discussion, the conclusions of this research are:
Based on t-test, the effects of each variable to the dependent variables are: Effective tax rate (EFT) influence debt ratio (TDR) positively and significantly; Non–debt tax shields (NDTS) influence debt ratio (TDR) negatively and it is significant; Growth opportunities (GO) influences debt ratio (TDR) insignificantly, but it has a negative influence which is contradictory to the hypothesis; Asset structure (AS) has positive effect to debt ratio (TDR) and it is significant; Firm size (S) influence debt ratio (TDR) positively and significantly; Profitability (P) has significant and negative influence on debt

ratio (TDR).

Variable Effective tax rate, assets structure and firm size have a positive and significant effect on company debt ratio, partially. It means, the higher company active value, the higher effective tax rate and structure asset of the company in using fund resource from debt. Others, non-debt tax shields and profitability value made a significant effect negatively to debt ratio, it means higher profitability and non-debt tax shields then more decrease the company using fund resource from debt. While for growth opportunities variable didn't made a significant effect to debt ratio.

The researcher gives the following recommendations for the next research:

For the variable in third hypothesis, we found that growth opportunities doesn't have significant influence on debt ratio. In the next study, researcher suggests, the variable ratio should be changed. If in this research the compositions of ratios are intangible assets with total assets, it will be better if this is changed to other variables. For example: sales revenue, or gross profit. Then we can find better result in analyzing the growth opportunities, before change it into another proxy.

It will be better if the periods of research sample are added into longer periods so that information emerging from it can be more supporting, for instance panel regression analysis with random effect model can be used.

Number of the companies sample should be bigger, at least 30 companies. The number ratios of finance will be used in the research sample should be increased so that the result can be more complete.

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