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**The Effect of Related and Unrelated Diversification of Capital Structure Policy:
Empirical Evidence on Indonesian Companies**

Ratna Wardhani
Program Ilmu Akuntansi Fakultas Ekonomi Universitas Indonesia

Ade Sobrina Hasibuan
Fakultas Ekonomi Universitas Indonesia

ABSTRACT

The objective of this research is to analyze the role of related and unrelated diversification of listed firms in Indonesia on capital structure decision, by using 78 Indonesia companies listed in the Indonesia Stock Exchange for 2002-2007 and panel data methodology. The result shows that in general diversification positively affect firms leverage. This result also apply to unrelated diversification strategy, where firms with unrelated diversification strategy inclined to increasing level of *firm leverage*; in other words, unrelated diversification has a positive effect on debt as source of finance. Therefore, capital structure decisions of unrelated diversified firms seem to be strictly aimed at reaching their target optimal debt level and consistent with the static trade off hypothesis. However the relation between related diversification strategy with firm's capital structure cannot be prove in this study due to the possibility that such strategy will require less cost of investment so that the company can still use internal financing.

Keywords: diversification strategy, capital structure, source of finance

1. INTRODUCTION

In general, the company began as a single business and service on a particular market. Along with a company facing growth opportunities, the company will face the choice of an alternative strategy in business development, which is the strategy of diversification. In the process of planning this strategy need financing decision, which should be analyzed carefully about the nature and cost of capital from the funding that will be selected. This is because each source of funding has financial implications that depend on the corporate strategy, which will be implemented or applied in the company. This funding policies will



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depend on the alternative strategy to diversify the business, which are related diversification or unrelated diversification.

In a related diversification company develop business that is still in connection with their core business while in unrelated diversification companies develop business that has no connection with the existing business. Differences between related and unrelated diversification is on the characteristics of resources under the control of an existing business. The availability of specialized assets owned by the company will further facilitate more to related diversification rather than unrelated diversification. For example, many companies have specific assets such as intangible assets, Research and Development and advertising which is difficult to be measured and evaluated. This will cause companies to do a particular business and being specialized. This condition will make companies encounter situations in which a company has an inflexibility where the company must transfer the resources to related business (Chatterjee and Wernerfelt (1988)).

Chatterjee and Wernerfelt (1988) in Kochhart (1998) point out that at the moment a company applies *related diversification* strategy therefore management will more give specific attention on the certain asset. Meanwhile in *unrelated diversification* strategy, company need to increase assets that are not very specific to company. Investment in asset for diversification strategy can be attained from internal financing or external financing such as equity financing or debt financing. From the perspective of creditor, the research declares that investment in *high specificity assets for un related diversified firms give implication to financing provider* whereas they can suffer from a loss of their investments if the firm enters to bankruptcy. It is because the creditors have little ability to block *managerial action due to their little expertise about the asset and the unrelated business* and so they will face greater



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expected loss of value. In the other hand, if firm invest on *lower specificity* assets, the creditor will experience *lower expected loss of value* if firm apply *unrelated diversification* strategy.

The company's capital structure is the subject depending on the characteristics of corporate resources through the implementation of diversification strategies. Related diversification strategy will further facilitate the sharing of activities and transfer of expertise to increase shareholder value. This strategy can provide benefits from economies of scales. Therefore, the operational synergies across the business are important. Conversely, unrelated diversification rely on financial synergy to enhance shareholder value. Economic benefit from unrelated diversification strategy is the increasing of internal capital markets (Jones and Hill (1988) in Kochhart (1998)).

Based on Kochhart and Hitt (1998) both types of diversification strategies, related and unrelated diversification, in the end will affect the sources of funding that will be used and will ultimately affect the company's capital structure. From the results of this study indicate that the equity financing is preferable in related diversification strategy, while debt financing would be better used for companies that apply unrelated diversification strategy.

Research on the impact of diversification strategy on the company's capital structure has not been much done in the context of the companies in Indonesia, where the conglomeration of family business is quite intensive. This study investigates the empirical evidence about the effect of diversification strategy on the company's capital structure. Diversification strategies in this research are classified as total diversification, related diversification, and unrelated diversification strategy.



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This research gives several contributions on literature of strategic accounting. First, Indonesia has unique characteristic of diversification strategy where many conglomeration companies that has not link strategy of diversification and financing strategy. Unfortunately, this area is still unexplored in Indonesian. This research will give empirical finding about behavior of corporate strategies in Indonesia context. Second, for companies this research will give contribution by giving information about choosing financing alternatives when they expand their business through diversification.

This study will be divided into five sections. The first section contains an introduction that will discuss the background of the research, research objectives, and scope. The second part will discuss about theoretical framework and hypothesis development. In part three we will discuss the research methodology related to sample selection, empirical model used, the operationalization of variables, and model testing. While on the fourth section we will discuss the results of this research. Finally, section five will discuss the conclusions, limitations, and potential for future research.

2. THEORITICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

2. 1. Corporate Level Strategy dan Strategi Diversifikasi

Corporate-level strategy mostly deal with two questions which are what business should the company compete on and how is the business managed so that it will create synergy. As expressed by Andrews (1980) in Firmanzah (1998) the company's strategy will determine the core business of an enterprise and how the company allocate the resources to achieve goals by focusing on the business that company invest and how to divide and use



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available resources to create business excellence. For diversified companies, strategy setting could be done at corporate or business unit level.

One alternative of corporate strategy is strategy of diversification. This strategy occurs when a company moves into an area that clearly differs from the existing business. According to Glueck (1980) in Firmanzah (1998) there are several reasons why the company took a strategy of diversification which are: (i) product market is currently approaching the saturation point or a decrease in product life cycle, (ii) the current business produces excess money that will be more profitable if invested elsewhere, (iii) benefit from tax reductions, and (iv) allows for synergy.

There are two alternative approaches in this strategy which are related diversification and unrelated diversification. Related diversification strategy is a corporate strategy that adding a new business or new product / service that is still associated with the products or services that are currently owned by the company or still related to core business of the company. Meanwhile, unrelated diversification strategy is a strategy which the management company add or enter the business or new service /products that are not associated with current business or product and service of companies.

With the implementation of related diversification, the company will seek to enter the market of products by sharing resources and capabilities with existing business units or increase their market power, and here the company can increase value through: improving core competencies, sharing activities, joining negotiating power, and vertical integration. Related diversification allows firms to obtain benefit from achievement of economic scope. Economic scope refers to cost savings of utilizing core competencies or share of resources for related activities within a company.



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Meanwhile, companies that apply unrelated diversification, there will be some resources and capabilities that are similar between the company's business units, but the value that can be created through several means such as restructuring and corporate parenting approach to portfolio analysis. The synergy achieved from related diversification comes from the horizontal linkages between business units, while unrelated diversification comes from the hierarchical relationship between corporate offices and business units.

2.2. Relation of Diversification Strategy with Firm's Capital Structure

Kochhart and Hitt (1998) conducted research on the relationship between diversification strategy and corporate strategic funding which classified as financing type (debt vs. equity) and sources of funding (public vs. private). This study emphasizes the differences between strategy with some resources that are controlled by companies. They argue that the source of funds is more related to the existence of asymmetric information between management and *potential suppliers of finance* which can be private or public funding. The study also mentions that the company with speculative products, poor credit ratings, and higher proportion of intangible assets, will tend to use private funding sources due to lower cost than public funding.

There are a few studies have been done before in studying the relationship between corporate diversification strategy with the capital structure policy. The role of diversification strategy as one of the determinants of capital structure directly has been described primarily through coinsurance effect by Lewellen (1971), Kim and McConnell 1977, Bromiley 1990, Bergh 1997) and transaction cost theory by Williamson (1988), Balakrishnan and Fox (1993),



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Kochhart and Hitt (1998). This relationship is also indirectly related to application of agency theory in the view of financing policy as a consequence of diversification decisions.

Coinsurance effect approach refer to efforts of reducing operational risks that occur when a company does several business, where cash flow of each business does not correlated each other. In this approach diversification strategy is viewed as a strategy to reduce risk, so the company will diversify its business by unrelated diversification strategy. While Williamson (1988) in La Rocca (2006) mentions that the transaction cost approach refer to the contractual relationship of a transaction between the two parties. In order to lower the cost of transaction, the company will diversify its business by related diversification strategy. Hertzels and Smith (1993) in Kochart (1998) suggest that equity financing will be chosen in a related diversification strategy, while unrelated diversification would prefer debt financing. In addition, this study also found that a diversified company through acquisition would prefer to use public funding sources and a diversified company that focuses on internal development of new business would prefer on private funding sources.

While La Rocca (2006) attempted to study the role diversification strategy on company's capital structure. The results of this study showed that related diversification strategy inversely effect firm's leverage, where the related diversification strategy firm will have lower debt ratio. Conversely, unrelated diversification strategy firm will choose to use a higher amount of debt. Under the coinsurance effect and transaction cost hypothesis, unrelated diversification has a higher debt capacity and assume higher debt financing resources.



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Diversification in general will affect on financing decision. In order to expand their business companies may set strategy of diversification that need financing. In choosing the alternatives of financing, companies may face an agency conflict between management and shareholders or between shareholders and debt holders. Companies will choose the most appropriate strategy of financing in order to minimize the agency problem. This decision leads to capital structure decision. Based on this argument we develop following hypothesis:

H1 : Diversification strategy ini general will affect on *firm leverage*.

Most previous studies have noted that companies with related diversification strategy will tend to use equity, or in other words will be inversely related to debt financing (leverage firms). This relation is developed based on coinsurance effect approach, where companies will reduce risk by choosing related diversification strategy. The risk averse firms will tend to use equity financing rather than debt financing because higher debt will lead to higher risk of bankruptcy. Based on this argument we develop following hypothesis:

H2 : Related diversification strategy will negatively affect on *firm leverage*.

In the contrast, companies that establish a strategy that is not related diversify will likely use the debt financing, or unrelated diversification will have a positive relationship to firm's leverage. This relation is developed based on transaction cost approach, where companies could minimize cost of transaction by choosing related diversification strategy. These companies will be beneficial if they use more debt financing which has lower cost of transaction than equity financing. This study has three hypotheses are as follows:

H3 : Unrelated diversification strategy will positively affect on *firm leverage*.



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3. RESEARCH METHOD

3.1. Data and Sample Selection

In this study, we used secondary data from the company's financial statements, ie income statement, balance sheet, capital changes, cash flow statement, segment reporting, etc. The data are taken from Indonesia Stock Exchange and OSIRIS data base. Samples were selected by purposive sampling method from listed company on the Indonesia Stock Exchange (IDX) during the period of 2002-2007 for all industry except for banking companies and other financial institutions. Sample selection criteria are: (i) the company publishes a complete financial report for 6 years from 2002 to 2007, (ii) companies that have more than one line of business, in other words the company sells products or services that are more than one type during 2002 - 2007, (iii) did not show a negative balance of total equity during the years 2002-2007. The total sample of this research is 78 companies. By using balance panel data the total observation of this research is 468 observations.

3.2 Research Model

This study will use a regression method to determine the effect of diversification strategy of the company's capital structure. To investigate the effect of different types of strategy we use three models according to the categories of diversification, ie diversification strategy in general (Total Diversification), related diversification, and unrelated diversification. This study use several control variables for capital structure of company which are profitability, size of company, growth opportunity, and non debt tax shield. The research models are as follow:

Model 1: $Firm\ Leverage_{i,t} = a_0 + a_1DT_{i,t} + a_2ROA_{i,t} + a_3LogTA_{i,t} + a_4Growth_{i,t} + a_5NDTS_{i,t}$

Model 2: $Firm\ Leverage_{i,t} = b_0 + b_1DR_{i,t} + b_2ROA_{i,t} + b_3LogTA_{i,t} + b_4Growth_{i,t} + b_5NDTS_{i,t}$

Model 3: $Firm\ Leverage_{i,t} = c_0 + c_1DU_{i,t} + c_2ROA_{i,t} + c_3LogTA_{i,t} + c_4Growth_{i,t} + c_5NDTS_{i,t}$

Where:

- DT : Total Diversification of firm i in the year of t
- DR : Related Diversification of firm i in the year of t
- DU : Unrelated Diversification of firm i in the year of t
- ROA : Return on Assets of firm i in the year of t
- LogTA : Logaritma natural of Total Aset of firm i in the year of t
- GROWTH : Growth opportunity measured by *market to book ratio* of firm i in the year of t
- NDTS : Non Debt Tax Shield measured by depreciation expenses to total asset of of firm i in the year of t

Variable description and sign expectation in the above model can be seen in Table 1 below.

Table 1. Variable Description and Sign Expectation

Variable	Description	Expected Sign
Capital Structure	Leverage (Debt to total Asset)	
Diversification Strategy	Total Diversification (DT)	+/-
Diversification Strategy	Related Diversification (DR)	-
Diversification Strategy	Unrelated Diversification (DT)	+
Profitability	Return on Asset	-
Firm Size	Log Total Asset	+
Growth	Market to Book Ratio	+



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NDTS	Non Debt Tax Shield (Ratio of Depreciation Expenses to Total Asset)	-
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3.3 Variable Operationalization

Operationalization of variables for the research model are as follow:

- Leverage: Leverage is measured by using the ratio of total debt to total assets. Total debt measure by book value of long-term debt and short-term debt.

- Degree of Diversification

There are several kinds of variations on how to conceptualized and measured diversification because diversification is a multidimensional concept (Ramanuyam Varadarayan (1989) at La Rocca (2005). There are two general approaches that could be used to measure the level of corporate diversification and the degree of relationship between the level of other business which are subjective approach and objective approach. The subjective approach aims to allegations or strategic thinking on the diversification adopted by the company, but this approach has some limitations because it depends on the judgment of researchers in evaluating a large amount of qualitative data. Instead, the objective approach is basically a business calculation method such as the weight of a product or business on the relative size of assets or sales.

In this study, we use subjective approach in terms of determine the industry cut of among segment of the company. This is because companies listed on the Indonesian Stock Exchange generally present the segment report consisting of only two reports, the report segments based on product lines or businesses and report segments by geographic region. Therefore, to determine whether a company included in the category



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of Related Diversification Index (DR) or Unrelated Diversification Index (DU), the authors use the report relating to the business segment or line of business products companies.

First, we identify the company's core business industry using U.S. Primary SIC Code Based on OSIRIS data base. Then we define product diversification by looking at the type of product or the company's line of business. So in making this assessment, the researchers put more emphasis on the researcher's judgement. If the products sold by the company is still associated with the core business of these companies we consider implement strategies as Related Diversification (DR), but if the products sold by companies is unrelated to core of business, the authors consider this company into the category of the Unrelated Diversification strategy companies (DU).

▪ **Total Diversification (DT)**

Total Diversification Index (DT) measure the level of corporate diversification, where the formula used to calculate the index is:

$$DT = \sum P_j * \ln(1/P_j)$$

$$DT = DR + DU$$

Where P is the proportion of sales in total business segment j, while $\ln(1/P_j)$ is the weight for the business segment. Therefore, this indicator considers the entire segment that the company is run primarily for the sale of each segment of the company. Total Diversification is sum of related diversification and unrelated diversification.

▪ **Related Diversification (DR)**

To determine the index of each of these categories, authors use equation used by Kochart (1998) and La Rocca (2006). Formulas used to measure indexes of related diversification is:

$$DR = P_j * \ln(1/P_j)$$

Where P is the proportion of sales in related business segment j which are business segment that are related with the company's core business, while $\ln(1/P_j)$ is the weight for the business segment.

▪ **Unrelated Diversification (DU)**

The Unrelated diversification index is measured using the following formula:

$$DU = P_j * \ln(1/P_j)$$

Where P is the proportion of sales in un related business segment j which are business segments that are not related to the company's core business, while $\ln(1/P_j)$ is the weight for the business segment.

Operationalization of the control variables can be seen in Table 2.

Table 2. Operationalization of the control variables

Nama Variabel	Operasionalisasi Variabel Kontrol
Profitability	In this study the measurement of profitability is ratio of the profit after tax to total assets with the formula as follows: Profitability = EBIT / Total Asset
Firm Size	Company size is measured by the size or amount of assets owned by the company. In this study, measurement of the size of the company based on research Krishnan and Myer (1996), where the size is proxied by logarithm of total assets. Size can be formulated as follows: Size = Log Total Asset
Growth Opportunities	Following La Rocca (2006), we measured Growth Opportunities with market-book-ratio (market value divided by the book value of the company) which will reflect expectation market for the company's growth opportunities. The formula as

	follows: $\text{Market-to-book Ratio} = \text{Market Capitalization} / \text{Book Value of Equity}$
Non Debt Tax Shield (NDTS)	Non Debt Tax Shield is measured as follow: $\text{NDTS} = \text{Depreciation Expenses} / \text{Total Asset}$

4. ANALYSIS OF RESULT

4.1. Descriptive Statistic

This study uses data of 78 manufacturing companies listed in Indonesian Stock Exchange from the 6-year observation period, 2002 – 2007, with total of 468 observations. Descriptive statistics of the sample can be seen in Table 3. Table 3 shows that the average level of leverage is 24.9% out of companies total asset. Variable of diversification strategy shows that the strategy of diversification for firms in Indonesia has on average rate of 55.9% of diversification with a maximum value of 183.9% and the minimum value of 0.80%. For related diversification strategy, the average proportion of sales of related segment is 47.6% with a maximum proportion of sales of 130.6% and a minimum proportion of sales is 0. While companies with unrelated diversification strategy the average proportion of sales of unrelated segment is 8.4% with a maximum of 109.5% and a minimum proportion of sales is 0.

Table 3. Descriptive Statistic

Variabel	Obs	Mean	Standard Deviation	Minimum	Maximum
DT (total diversification)	468	0.559322035	0.299693799	0.008061465	1.83857121
DR (related diversification)	468	0.476036002	0.301458292	0	1.30587521
DU (unrelated diversification)	468	0.084238955	0.166820171	0	1.095292297
Roa	468	0.051749557	0.106405885	-0.796044785	0.54442044
Size	468	8.933274375	0.655751391	7.237784167	10.712907
Growth Opprtunities	468	1.788086124	6.205794616	-3.459795676	130.583191
Non Debt Tax Shield	468	0.030259133	0.028435495	0.000304497	0.32151863
Leverage	468	0.249086326	0.188769565	0	0.84245272



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4.2. Regression Result

This study uses panel data analysis to estimate the model. Based on the Chow test and Hausmann, it can be concluded that for Model 1 will be tested using a fixed effects model, while for Model 2 and 3 will be tested by using a Random Effects Model. The regression results can be seen in Table 4.

Based on the results in Table 4 can be seen that the level of R square for each model was 77.74% for the first model, 77.97% for the second model, and 97.73% for the third model. R square value indicates the explanatory power of each model and from these values we can conclude that the model gives strong explanatory power over the leverage. While the F test for all models indicate that overall independent variables in the model significantly influences the dependent variable. This means that for the overall diversification the independent variables together have a significant effect on leverage.

4.2.1. The Effect of Total Diversification on Capital Structure

Estimation results of Model 1 shows that total diversification is significantly and positively effect corporate leverage. These results indicate that the first hypothesis is accepted. Any increase in the total degree of diversification, the company will increase leverage of 0.04120%. That is, in general, a diversified company that will tend to increase the use of debt.

One argument that could support the results of this research is that to finance expansion the Indonesian companies still tend to rely on tax advantages gained by using a debt management thereby increasing the incentive to use debt financing. Another consideration for increasing the use of debt is that in order to do successful strategy of



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diversification, the management could be motivated to increase performance by using debt financing because usually targeted performance is stated in the debt covenant contract.

Table 4. Regression Result

Model 1	$\beta_0 + \beta_{1.3} DT_{i,t} + \beta_{2.3} ROA_{i,t} + \beta_{3.3} \text{LogTA}_{i,t} + \beta_{4.3} \text{Growth}_{i,t} + \beta_{5.3} \text{NDTS}_{i,t}$						
Model 2	$\beta_0 + \beta_{1.3} DR_{i,t} + \beta_{2.3} ROA_{i,t} + \beta_{3.3} \text{LogTA}_{i,t} + \beta_{4.3} \text{Growth}_{i,t} + \beta_{5.3} \text{NDTS}_{i,t}$						
Model 3	$\beta_0 + \beta_{1.3} DU_{i,t} + \beta_{2.3} ROA_{i,t} + \beta_{3.3} \text{LogTA}_{i,t} + \beta_{4.3} \text{Growth}_{i,t} + \beta_{5.3} \text{NDTS}_{i,t}$						
Variabel	Exp Sign	Model 1		Model 2		Model 3	
		Coeff	Prob	Coeff	Prob	Coeff	Prob
DT	+/-	0.04120**	0.00000				
DR	-			-0.00062	0.97030		
DU	+					0.08193*	0.00280
ROA	-	-0.23449**	0.00000	-0.23207**	0.00000	-0.28873**	0.00000
SIZE	+	0.01923*	0.02480	0.01902*	0.02150	0.04259**	0.00010
GROWTH	-	-0.00135*	0.04700	-0.00134*	0.04630	-0.00062	0.52490
NDTS	-	-0.10370	0.59950	-0.08631	0.65380	-0.55202**	0.00000
F test						0.000000	
R Squared		0.777392		0.779657		0.977340	
DW		2.121471		2.136291		2.267506	
**Level of significance $\alpha = 1\%$							
*Level of significance $\alpha = 5\%$							
Keterangan:							
<i>Leverage</i>	<i>Debt / Total Asset</i>						
<i>DT</i>	<i>DR +DU</i>						
<i>DR</i>	<i>P_j * ln (1/P_j)</i>						
<i>DU</i>	<i>P_j * ln (1/P_j)</i>						
<i>ROA</i>	<i>EBIT/Total Asset</i>						
<i>SIZE</i>	<i>Log Total Asset</i>						
<i>GROWTH</i>	<i>Market cap / Book Value of equity</i>						
<i>NDTS</i>	<i>Depreciation Expense / Total Asset</i>						



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For control variables, Table 4 shows that ROA and growth was negatively related to leverage. For variable ROA, these results suggest that with higher level of profitability, the company will have less debt. These results are consistent with Ozkan (2001) in Rizal (2002), who explains that the more profitable firms would prefer to replace its loans with internal funding. As regards to the growth variable the result shows that the higher growth opportunities the company will use less debt. Companies with high growth opportunities will maintain its financial flexibility with low leverage in order to be able to exercise these opportunities in the subsequent years (Myers, 1997). As for the variable SIZE, can be seen that this variable has a positive relationship with leverage ratios. Harris and Raviv (1991) explains that firms with larger size and complex have less constraints to obtain external funds (debt), because the company has higher assets for collateral and more stable cash flows. So companies with large size have a small risk of bankruptcy compared to the smaller company. The NDTs variable did not shows significant results.

4.2.2. The Effect of Related Diversification on Capital Structure

Estimation results of Model 2 showed a negative relationship between variables related diversification of corporate leverage, but not significant. These results indicate that the second hypothesis can not be accepted. This result indicates related diversification strategy is not affecting company decision on capital structure. Company will tend to use internal funding for this kind of strategy. Moreover, this result might indicate that for related diversification the cost of investment is not large so the company can still use internal financing. This is because they already have relevant resources and using similar asset in expanding the business into related segment.



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Consistent with Model 1, result of Model 2 test also show that the ROA and GROWTH negatively associated with leverage ratios. As for the variable SIZE, can be seen that this variable has a positive relationship with leverage ratios. For related diversification firm, the NDTs variable also did not shows significant results.

4.2.3. The Effect of Unrelated Diversification on Capital Structure

Estimation results of Model 3 showed that the strategy of unrelated diversification is significantly and positively affect corporate leverage. These results indicate that the third hypothesis is accepted. Any increase in the level of unrelated diversification, the company will increase leverage of 0.08193%. This indicates that companies that have unrelated business segments will have a higher leverage ratio and unrelated diversification strategies will tend to increase the use of debt. The increase of the use of debt for unrelated diversify firms may emerge because in investing to business that unrelated to existing segment, company must invest to new type of asset and cannot share resources with existing segment. Therefore they might require large investment. Debt financing provide cheaper funding than equity financing and offer tax shield benefit.

La Rocca (2006) explained that the increase in leverage is associated with the type of assets owned by the company, as companies implement strategies that are not related will tend to have lower asset specificity or a general purpose asset. This condition will cause the company to provide easier access to meet the debt and interest repayment schedule and will have a greater liquidation value if the company went bankrupt. Therefore, the company will also be easier to have access to credit that brings unrelated diversification firms changes



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the leverage ratio relatively faster than the company that set the related diversification strategy.

Referring to the coinsurance effect approach (Lawellen, 1971; Kim and Mc Connell 1971) it is mentions that the coinsurance effect is the reduction of operational risks when a company does business activities unrelated. Therefore, the coinsurance effect will give a positive impact on the use of debt as a risk or volatility of income will also be reduced so that the creditors will be more accurate in predicting future earnings resulting from the company's assets that will increase the capacity of the debt or loan. While referring to the transaction cost theory proposed by Williamson (1988) it is mentions that transaction costs would be lower if the company had low specificity assets. For companies with low specificity assets debt financing is a better alternative, because the assets can be more easily transferred to unrelated business so as to reduce the cost of economic transactions.

Consistent with previous model, Model 3 also show that the negative return on assets related to the leverage ratio. As for the variable SIZE, can be seen that this variable has a positive relationship with leverage ratios. In Model 3 tests we obtained different results with previous tests related variables GROWTH and NDTs. GROWTH variable in this test is not significant. For NDTs variables in this model indicate that NDTs negatively affect the level of corporate leverage.

5. Conclusion

This study proves that in general, a diversified company that will tend to increase the ratio of corporate leverage. However, the results of this study indicate that there is no significant evidence about the influence of related diversification strategies to level of



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leverage. This due to the small cost of investment for this kind of diversification and the company can still use internal financing. This is because they already have relevant resources and using similar asset in expanding the business into related segment. The companies that apply unrelated diversification, the results of this study indicate that there is a significant relationship between un related diversification strategy to the determination of the company's capital structure policy. The results of this study indicate that companies with unrelated diversification will tend to increase the company's leverage ratio. In other words, when the company apply unrelated diversification strategy companies will tend to use debt financing to meet the needs of the company in conducting its business activities. Meanwhile, several other variables such as profitability, firm size, growth opportunities, as well as Non-Debt Tax Shield also proved to have influence on the determination of capital structure policy.

The first limitation of this study is about the data of diversification strategy, where we use a subjective approach in determining whether a company will be classified as a company with related strategy or unrelated strategy by considering the company's line of business or business segments in financial statement segment information and compared to SIC code industry classification. Further research could develop a method that is not subjective in determining whether a company will be classified as a company with a strategy of related or unrelated. A second limitation in this study is the number of observations used in this study, which this study uses only 78 companies in the period 2002-2007. Future research should increase the number of data samples in term of number of companies and years of observation given the limited number of firms and time periods used in this study. Researchers then can also add other variables which are expected to affect the company's



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capital structure, such as the concentration of corporate ownership, quality of corporate governance implementation, and other financial characteristic variables.

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