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# The Effect of Thin Capitalization, Supply Chain and Earnings Management on Economy development: Indonesia Evidence

Amrie Firmansyah\*, Teza Deasvery Falbo

Department of Accounting Polytechnic of State Finance STAN Bintaro Main Street 5th Sector, Bintaro Jaya South Tangerang, Banten, Indonesia, 15222

Abstract- This study aims to examine the effect of thin capitalization, supply chain and earnings management on economy development. The samples used in this study are manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2013-2015. Using purposive sampling, selected samples are 90 companies, so the total sample in this study is 270 observations. The examination method employed is the multiple linear regression analysis of panel data. The result of this study suggests that thin capitalization is positively associated with economy development, which indicates that manufacturing companies listed on IDX tend to use more debt than equity for funding its business to avoid taxes. While transfer pricing, aggressiveness, and supply chain management are associated with economy development. Furthermore, earnings management is positively associated with economy development indicates that earnings management could be conducted simultaneously with economy development

**Keywords:** Earnings Management, Supply chain management, Economy development, Thin Capitalization

# 1. Introduction

Interorganizational relationships both opportunities and risks in supply chain management. Prior research on relationships examines the performance effects of firm power, supply chain membership, and supply chain management competence, where power refers to the ability of one SC partner to influence the actions of another Taxes are an essential part of state revenues because they have an increasingly large proportion of state revenues. The tax function can be as state revenue (a function of budgetary), a tax function is also a tool in regulating or implementing government policies in the social and economic fields [1-3]. In the taxation regulations in Indonesia, it is stipulated that achieving tax revenue targets is essential to ensure the fulfillment of the tax function for the most significant benefit of the people. Within the Indonesia Government Budget, from 2004 up to 2015, nominal tax revenues have increased by more than 400%. Also, the proportion of tax revenues in the APBN increased from 59% for 2004 to 70% for 2015. It suggests that from year to year, the government increasingly relies on tax revenues in funding its budget.

However, the increase in tax revenues turned out to be insufficient to reach the Government of Indonesia's target in tax revenues. Based on the Indonesia Central Government Financial Report from 2002 to 2015, the achievement of the Government's target in revenue from the

taxation sector was only twice, namely, in 2004 and 2008 [2, 4]. Also, the increase in the nominal amount of tax revenues was not accompanied by an increase in the tax ratio. Indonesia's tax ratio remained stagnant at around 12% from 2002 to 2015. Indonesia's tax ratio was also lower than the tax ratio in several countries in Asia [5].

Based on the 2019 Indonesia State Budget, the tax ratio is the ratio of the calculation of the amount of tax revenue to a country's Gross Domestic Product (GDP). This ratio is used to assess the level of compliance with tax payments in a country. Byrnes and Lavelle (2003) stated that economy development caused a decline in tax revenues in the United States, which previously amounted to 4% of GDP in 1965 to only 1.5% of GDP in 2002. Furthermore, [6] found that total losses were due to the existence of tax evasion and economy development for developing countries reached USD 385 billion, which caused a lower tax ratio than they should. In this regard, a low tax ratio in Indonesia can reflect economy development, so that there is still a possibility of enormous tax revenue potential. Also, indications of tax evasion in Indonesia are reinforced by the large number of foreign investment taxpayers who do business in Indonesia that do not meet the provisions of laws and regulations in Indonesia. Although these companies continued to lose, these companies continued to operate and even expand [7].

Economy development is an activity that reduces tax nominal explicitly from pre-tax income [8]. [9] stated that economy development is the use of tax regulations to obtain a separate profit by reducing the amount of tax owed through legal means. Based on these understandings, economy development is an action that is still allowed in the applicable tax rules. Regarding agency theory, economy development could be classified into two categories, namely traditional and contemporary views [10]. The traditional view of defining economy development carried out by managers is a form of wealth security to reduce the tax expenses, while contemporary views regard economy development as a form of rent extraction, namely economy development by managers aimed at personal interests rather than maximizing the interests of company owners.

Economy development could be conducted by holding back profits or diverting profits abroad [11]. Regarding [12], it is known that companies listed on Australian exchanges tend to avoid taxation through international activities. While, in Indonesia, according to the Indonesia Tax Authority, in 2012, there were 436 out of 1,161 Foreign Investment Taxpayers reported losses on Annual Tax Returns with a total transaction of 76.22 trillion rupiahs. In 2013, this number experienced a significant increase to 515

out of 1,284 taxpayers of foreign direct investment who reported losses at the Annual Income Tax Return with a total transaction of 269.33 trillion rupiahs. In fact, in 2015, based on the statement of Chief of Indonesia Tax Authority, as many as 2,000 foreign taxpayers operating in Indonesia did not pay Corporate Income Tax because of continuous losses, even though these companies continued to operate and even did expansion [13].

This condition indicates the existence of economy development by transferring income to companies that have special relations in other countries. It is relevant to Prasetyo (2014), who stated that multinational companies often obtain tax incentives from developing countries. However, they then divert their income to other countries with lower tax rates to avoid taxes. Indications of transfer of income to countries with lower tax rates to avoid taxation are reinforced by a large number of Indonesian companies involved in Panama paper cases [14]. Panama papers are a collection of classified documents made by Panama financial services provider Mossack Fonseca. The company cooperates with the largest financial institutions in the world and helps customers of financial institutions to build complex financial structures so that tax officers and investigators find it difficult to track the flow of money from one place to another [15]. This statement is strengthened by the status of Panama, which is one of the tax havens according to the Organization for Economic Cooperation and Development (OECD) [16].

Tax authorities around the world have realized that the practice of economy development by diverting income abroad contributes to the erosion of a country's tax revenue as evidenced by the decrease in the company's effective tax rates and the increasing number of companies reporting zero tax obligations (ATO, 2010 in Taylor and Richardson). Some economy development practices that could be carried out by companies are through thin capitalization, transfer pricing aggressiveness, income shifting, supply chain management, and tax haven utilization [17]. Whereas according to Richardson and Taylor (2015), variables such as supply chain management, transfer pricing aggressiveness, and thin capitalization are also part of income shifting incentives.

According to [18], thin capitalization is a condition where a company uses more debt than equity as its funding source. It is in line with [19], which stated that thin capitalization is a corporate financing strategy to finance its business operations by prioritizing debt use compared to equity. The practice of thin capitalization can be used as one of the economy development strategies [20]. Economy development can be conducted through the practice of thin capitalization because based on [21] capital structure theory, debt can be used to increase firm value because there are tax incentives that companies receive through the ability to borrow interest to reduce tax shields. Furthermore, according to [22], multinational companies have incentives to finance their subsidiaries abroad with debt, when the tax rates in the subsidiaries are higher than the domestic tax rates at which the company is located. In this case, the subsidiary company can reduce the interest expense in the country with high tariffs, and the interest income received by the parent company will be subject to a lower tax rate.

Another factor that influences economy development is transfer pricing aggressiveness [23]. [24] described transfer

pricing aggressiveness as a tax or financial benefit obtained when companies take advantage of economic, financial, and regulatory differences between different jurisdictions. These benefits can be obtained because transactions between related parties located in various taxation jurisdictions provide a considerable opportunity to carry out economy development. In line with this statement, Taylor and Richardson stated that multinational companies could regulate transfer prices in transactions between related companies in different countries to facilitate economy development practices.

Furthermore, one of the factors that also influence economy development is supply chain management [25]. Multinational companies generally implement efficient tax planning for the entire group of companies, so companies with subsidiaries can earn income from abroad to carry out higher economy development activities. [26] reported that in the United States, foreign-controlled companies do more than double tax non-compliance compared to domestic companies. Furthermore, [27] found that companies that receive international exposure have a more significant opportunity to carry out economy development activities due to differences in tariffs and tax regulations.

The next factor that also influences economy earnings development is management. Earnings management is a management step to increase or decrease accounting profits, either by violating or not violating generally accepted financial accounting principles. Regarding taxes, [28] stated that there is a relationship between tax reporting policies and financial reporting. In that study, it was known that there were trade-offs faced by managers in determining fiscal reporting and accounting reporting policies. [29] supported this statement that some companies are willing to pay more taxes by reporting higher accounting profits. However, other studies suggested that the trade-off between tax reporting and financial reporting is not always the case. [30] found that there was a tendency that companies were able to report higher profits on financial statements and in the same had a lower tax burden. The difference between financial accounting standards and tax rules can provide opportunities for companies to manage higher accounting profits and lower fiscal profit in the same reporting period. In Indonesia, research related to this is done by [31], which proves that there is a positive effect of earnings management on economy development.

This research aims to examine the effect of thin capitalization, transfer pricing aggressiveness, supply chain management, and earnings management on economy development. Economy development is measured using the Abnormal Book-Tax Difference developed by [32]. Thin capitalization is measured using the MAD ratio developed by [33]. Transfer pricing aggressiveness is measured using the sum score of the index proposed by Richardson et al. (2013). Supply chain management is measured by dummy variables based on [34], and in line with [35], value 1 is given if there is at least one subsidiary abroad, and 0 if not. Earnings management is measured using a discretionary accrual proxy by the model developed by Kothari et al. (2005). Also, to eliminate the bias that may arise in the regression model, this study includes control variables namely size, capital intensity, inventory intensity, and return on assets.

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#### II. HYPOTHESIS DEVELOPMENT

[36] proved that thin capitalization has a positive effect on economy development. [36] stated that the practice of thin capitalization tended to be used in conjunction with the use of tax havens to maximize opportunities for economy development by increasing the complexity of transactions involving tax haven countries. [18] proved that companies that do economy development are proven to have a higher level of debt compared to companies that do not do economy development. When companies consider the capital structure to employ more debt or capital, one of them is based on company policies set by the manager. When viewed from the perspective of agency theory, monitoring carried out by shareholders is more stringent than creditors, so managers in companies prefer to use more debt than they should even though the risk of default is a problem for companies in the future which will come.

[13] found that companies with high levels of debt have a low ETR because these companies get a reduction in their tax due to interest charges. According to him, multinational companies get incentives to finance their investments in other countries with debt if the country has a higher tax rate. It is relevant to [8], which stated that the level of debt has a positive effect on economy development. Based on tax regulations, interest expense can be deducted from taxable income (deductible), while dividend distribution is not a deduction from taxable income (non-deductible). Furthermore, in multinational companies, companies will get incentives in the form of tax deductions at higher rates due to interest charges.

On the other hand, interest income will be obtained by a group of companies in the country with lower rates. The existence of information asymmetry between managers and shareholders results in managers being able to determine the company's capital structure policy. Shareholders may only assume that the addition of debt can add to the source of funding, but the policy was used by managers to carry out economy development. Based on the description, the first hypothesis of this study is:

H1: Thin capitalization is positively associated with economy development

When the transfer price is not by the principle of arm's length transaction, there is a profit transfer between companies with a special relationship. The company will get incentives if the profit transfer is conducted from companies in countries with high tax rates to countries with lower tax rates. With the information asymmetry in agency theory, the activities carried out by the company may not be monitored thoroughly and intensively by the shareholders as the owner of the company. Transactions of transfer pricing carried out by certain parties can be a gap for managers in the company to carry out economy development. Based on the description, the next hypothesis is:

H2: Transfer pricing aggressiveness is positively associated with economy development

Multinational companies generally implement efficient tax planning for the entire group of companies, so companies with subsidiaries can earn income from abroad to carry out higher economy development activities. Based on the results of his research, [12] found that supply chain management is a variable that has a positive effect on economy development. [7] reported that foreign-controlled companies more than doubled tax compliance compared to

domestic companies. Furthermore, [3] found that multinational companies tend to have the opportunity and ability to reduce tax payable compared to purely domestic companies. In particular, companies that have overseas operations that produce more profits from abroad have broader incentives and coverage for economy development.

Multinational companies have a higher chance of tax evasion because they operate in various regions of the country with different tax regulations and tax rates. Based on the description, the next hypothesis is:

H3: Supply chain management is positively associated with economy development

Earnings management can affect economy development because earnings management will change taxable income, which later changes the tax expenses paid. Thus, the next hypothesis is:

H4: earnings management has a positive effect on economy development

# III. RESEARCH METHODS

Research Data and Samples

This study employs secondary data obtained from annual reports and financial statements of manufacturing companies listed on the Indonesia Stock Exchange from 2013 to 2015. Data is obtained by downloading annual reports and financial reports from the official website of the Indonesia Stock Exchange (IDX). The manufacturing sector is chosen as the population because the sector is the most dominant sector of all companies listed on the Indonesia Stock Exchange (IDX), which is 144 companies. While companies listed on the IDX are chosen because companies listed on the IDX are required to publish audited financial statements as a form of accountability. The sample selection is conducted by purposive sampling, which is the random selection of samples with specific criteria. Sample selection is made by eliminating the population that has the criteria of companies that have an initial public offering (IPO) after 01 January 2013 or delisted before 01 January 2016, companies that do not have complete data from 2013 up to 2015.

The variables in this study consisted of dependent variables, namely economy development, independent variables namely thin capitalization, transfer pricing aggressiveness, supply chain management, and earnings management, and control variables namely firm size, capital intensity, inventory intensity, and return on assets. The measurement of these variables is as follows:

# 1. Economy development

Economy development, as [6], is defined as an activity that reduces tax nominal explicitly from pre-tax income. Economy development variables in this study were measured using Abnormal Book-Tax Difference (ABTD) proposed by [11], which were later modified by [14] to adjust to conditions in Indonesia. ABTD is obtained from the residual value of the following equation:

Where:

BTDit:Book-tax difference company i in year t, the difference in the value of accounting profit with tax income \( \Delta \text{INVit:Changes} \) in fixed assets and intangible assets of the company i in year t

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ΔREVit:Changes in company revenue i in year t

TLit:Total accounting loss of company i in year t

TLUit:Amount of compensation for loss of company i in year t

 $\Delta EBit:$ Change in value of company employee benefits i in year t

BTDit-1:BTD value in year t-1, to take into account the effect of changes in accounting standards and taxation from year to year on NBTD

# $\varepsilon$ it: error term company i in year t

The advantage of measurement using ABTD is that this model can separate the difference in earnings due to regulations with the opportunistic component that management conducts. In this model, BTD is divided into two types, Normal BTD (NBTD) and Abnormal BTD (ABTD). NBTD is caused by differences between tax regulations and accounting standards. Whereas ABTD, which is the residual value of the regression model to calculate NBTD, is an opportunistic component of management (Tang and Firth, 2011). The higher the ABTD value indicates, the greater the corporate economy development through the opportunistic component carried out by management.

# 2. Thin Capitalization

The definition of thin capitalization in this study refers to Blouin et al. (2013), which stated that thin capitalization is the company's financing strategy to finance its business operations by prioritizing debt use compared to equity. In this study, the measurement of thin capitalization was calculated by MAD ratio. This method is used by Taylor and Richardson (2012), which is conducted in two steps:

Calculate a safe debt amount (SHDA), i.e., the average total assets are reduced by a non-interest bearing liability, then the result is multiplied by 75%. In this study, it is modified by the Government of Indonesia Regulation related to thin capitalization in Indonesia, so the number is not 75% but 80% because the maximum debt to equity ratio limit is 4: 1. Therefore, the formula becomes:

SHDA=(Average Total Assets-nonIBL)×80%

Furthermore, thin capitalization is calculated the maximum allowable debt (MAD) ratio, which is the average total debt divided by SHDA, so the formula is as follows:

MAD ratio=(Average debt)/SHDA

According to Taylor and Richardson (2012), the higher the MAD ratio, the more the company relies on debt for financing, which means it is increasingly towards the practice of thin capitalization.

# 3. Transfer Pricing Aggressiveness

Transfer pricing aggressiveness in this study is the pricing in transactions between a company and related parties when the company transfers goods, services, or intangible assets to related parties (OECD, 2009). Transfer pricing aggressiveness is measured using an index, as has been conducted by Richardson et al. (2013). The index uses a sum-score approach that sums up seven things taken from the company's financial statements and annual reports. The sum-score approach for calculating transfer pricing aggressiveness is conducted according to how to add the following indicators, and the results are divided into seven components:

The existence of debt/receivables without interest to related parties

There is debt / receivables exemption from / to related parties.

There is a decrease in the value of debt/accounts receivable or the provision of bad debts from/to related parties.

There are non-monetary obligations (services / utilization of non-current assets / leases) between related parties.

The absence of formal documents that can support the use of the transfer pricing method used in transactions between related parties.

The release of long-term assets from/to related parties without commercial justification.

There is no justification that can show that transactions between related parties have been carried out fairly.

# 4. Supply chain management

Supply chain management variables describe how companies use subsidiaries in other countries to make transactions that can reduce the amount of tax that should be paid. Supply chain management in this study is measured by dummy variables, 1 if there is at least one subsidiary abroad, and 0 if not. This measurement is by the measurement of supply chain management based on [12]

# 5. Earnings Management

Earnings management is an activity to increase or decrease company profits, whether following or not by applicable accounting principles (Frank et al., 2009). Earnings management in this study is measured using a discretionary accrual proxy according to [5] as follows:

TACC] \_it/ [TA] \_(it-1) = 
$$\beta$$
\_1 (1/ [TA]] \_(it-1) )+ $\beta$ \_2 ( [AREV]] \_it/ [TA]] \_(it-1) )+ $\beta$ \_3 ( [PPE]] \_it/ [TA]] \_(it-1) )+ $\beta$ \_3 ( [ROA]] \_(it-1) )+ $\epsilon$ 

The Earnings Management variable value is obtained from the residual TACC equation above. The following equation obtains the TACC value:

TACC it= NI it- CFO it

Where:

TACCit:Total accruals of the company i in year t

NIit: Net income of company i in period t

CFOit: Cash flow from operating activities in companies i years t

TAit-1:Total assets of the company i at the end of year t-1

ΔREVit:Changes in company profits i in year t

PPEit:Property, plant, and equipment in companies i years t

ROAit-1:Return on assets in companies i years t-1 E:Error term

# 6. Control Variables

This study employs four control variables, namely size, capital intensity, inventory intensity, and return on assets.

a. Firm Size

The higher a company, the company will have business activities and financial transactions that are increasingly large which provide various opportunities to carry out economy development this is due to the existence of low economy development costs that must be spent by large companies because large companies have reached

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economies of scale. In this study, SIZE was measured by natural logarithms (ln) of total assets, follows by [12].

# b. Capital intensity

Capital intensity has a positive effect on economy development because of the acceleration of depreciation based on the useful life of assets (Taylor and Richardson, 2012). In this study, capital intensity is measured by the total value of Plant, Property, Equipment in a year divided by the total assets in the previous year.

# c. Inventory intensity

Inventory intensity can be referred to as a substitution for capital intensity. Therefore inventory intensity is expected to be negatively associated with economy development. In this study, inventory intensity is measured using total inventory in a year divided by the total value of assets in the previous year

# IV. RESULTS AND DISCUSSION

Data Description

The selection of samples in this study using purposive sampling. The criteria used in selecting samples in this study consisted of four criteria. The first criterion is that the company must be included in the manufacturing sector listed on the IDX in 2016. Based on IDX data, as of December 31, 2016, there were 144 manufacturing companies listed on the IDX. The second criterion is that the company must continue to be listed on the IDX within

the period starting from January 1, 2013. December 31, 2015. Therefore, companies conducting IPOs after January 1, 2013, and delisting before December 31, 2015, will be excluded from the sample. Based on these criteria, 13 companies are issued. The third criterion is that the company sampled must use the rupiah currency in its financial statements. That way, companies that report financial statements in USD will be excluded from the sample. Bookkeeping in USD is released from the sample to maintain the accuracy of calculations and unit comparability because there will be differences in values when companies use the translation or premeasurement method in preparing their financial statements. Based on these criteria, 26 companies were excluded from the sample. The last criterion is that the company must have complete data to be used in calculating all variables in this study. Based on the purposive sampling conducted, it was found that 90 companies were sampled in this study. Of the 90 samples selected, company financial statements were taken for three years (2013 to 2015) so that the number of observations in this study was 270 observations (firm-year).

Descriptive statistical analysis is used to analyze data by describing or describing data without intending to conclude. Descriptive statistical analysis in this study is a description of the size of central tendency and data dispersion. An overview of descriptive statistics for all variables is reflected in Table 1.

Table 1 Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std.Dev.
ABTD	(0,00000)	(0,00104)	0,14639	(0,06811)	0,02103
TCAP	0,48177	0,46317	1,57896	0,01907	0,29248
TPRICE	0,34074	0,28571	0,71429	0,00000	0,13989
MULTI	0,27407	0,00000	1,00000	0,00000	0,44688
EM	(0,00000)	(0,01063)	1,66484	(0,54893)	0,14095
CAPINT	0,40548	0,36407	1,47869	0,00050	0,24374
INVINT	0,23352	0,21013	0,72854	0,00000	0,14857
ROA	0,09270	0,05476	1,36882	(0,27821)	0,15973
SIZE	28,14213	27,91381	33,13405	24,41414	1,57170

Hypothesis Testing

In panel data regression testing, three estimation regression models can be used, namely the common effect model or commonly called pooled ordinary least square (pooled OLS), fixed-effect model, and random effect model. The selection of the appropriate model for this study will be made using statistical testing and using other considerations in choosing a regression model from

econometric experts. Statistical tests carried out in the form of the Chow test, Breusch-Pagan Lagrange Multiplier test, and Hausman test. Based on the results of the test, the panel data regression model that is most appropriate to be used in this study is to use the fixed-effect model. Table 2 suggests that the regression result, as follows:

Table 2 Regression Test Result

Variable	Coefficient	t-Statistic	Prob.
TCAP	0.0298	5.6335	0.000
TPRICE	0.0466	1.5383	0.125
MULTI	-0.0070	-6.2237	0.000
EM	0.0151	3.9733	0.000
SIZE	0.0091	4.4938	0.000
CAPINT	0.0005	0.1348	0.892
INVINT	-0.0334	-4.2501	0.000
ROA	0.0608	8.0537	0.000

С	-0.2828	-4.6658	0.000	
Adjusted R-squared	0.898278			
F-stat	25.48920			
Prob (F-stat)	0.000000			

Discussion

1. Effect of thin capitalization on economy development Based on the hypothesis examining, it suggests that thin capitalization is positively associated with economy development. The result of this study is relevant to Taylor and Richardson (2012). The result of this study is also in line with Khomsatun and Martani (2014), which found that thin capitalization has a positive effect on economy development. This study uses a proxy measurement of the thin capitalization variable that is different from Taylor and Richardson (2012) because it has used the MAD ratio that has been modified to comply with the Indonesia Government Regulation. This study also uses a proxy measurement of the thin capitalization variable that is different from Khomsatun & Martani (2014) who still use a dummy variable as a proxy for measuring thin capitalization. Although using objects and proxy measurements that are different from previous studies, this study produces conclusions that are in line with Taylor and Richardson (2012) and Khomsatun & Martani (2014). However, this study suggests different results from the studies of Ismi &d Linda (2016). The study concluded that thin capitalization is not associated with economy development. In that study, thin capitalization is proxied by dummy variables, and economy development still uses the conventional measurement of the book-tax gap. Meanwhile, this research on thin capitalization uses the value of the MAD ratio that has been adjusted to the latest regulations in Indonesia, and economy development is proxied by abnormal book-tax difference (ABTD).

Thin capitalization is used as one of the reasons for companies in Indonesia to carry out economy development. The theory of capital structure can explain this condition from Modigliani and Miller (1963) in Titman et al. (2011). Miller & Modigliani (1963) found that in ideal conditions, there is no difference between companies that have no debt, have little debt, and have much debt to their capital structure. This condition has two main assumptions, namely (1) the cash flow produced by the company is not influenced by how the company is financed, which means it does not consider the existence of taxes and bankruptcy risks, and (2) the money market is in perfect condition, which means there are no transaction costs.

In fact, ideal conditions in the theory of capital structure cannot be fulfilled, because (1) based on Indonesian tax regulations, interest expense can be charged while dividends cannot be charged as a deduction from fiscal income, (2) there is a risk of bankruptcy that can be experienced by companies when they fail debts, and (3) there are transaction costs in the money market. Therefore, in deciding to finance their business, several factors need to be considered. First, interest expense can be used as a deduction from income in calculating income tax. It makes financing through debt cheaper and provides a lower weighted average cost of capital (WACC) than financing through equity. Second, debt provides a risk of costs incurred by financial distress. Payment of debt principal and interest increases the risk of bankruptcy in the company

in the future that will provide losses and decrease the company's cash flow.

Both of these factors indicate a trade-off between positive and negative factors. To a certain extent, the company will benefit from debt because it will increase the value of the company. However, if the company owes too much, it will increase the risk of bankruptcy, which in turn will reduce the value of the company. Related to agency theory, managers as agents should work for the benefit of the owner as to a principal by increasing the value of the company. When managers do thin capitalization, that is, preferring to fund their business with excessive debt rather than equity, then the company's value will decrease. It is not by what is expected by the owner of the company, primarily if the practice of thin capitalization is carried out aimed at avoiding taxes that will increase the risk in the form of sanctions if the tax authority is known to a damaged reputation.

Furthermore, thin capitalization can also be used to carry out cross-border shifting of corporate profits through excessive levels of debt. Conditions in Indonesia, where many large companies are members of groups or affiliates of other companies abroad, can be used to divert their profits abroad with a thin capitalization scheme. It is in line with the statement of [18] which stated that multinational companies have an incentive to finance their subsidiaries abroad with debt when tax rates in countries where subsidiaries are higher than the domestic tax rates at which the company is located. In this case, the subsidiary can reduce the interest expense in the country with high rates and the interest income received by the parent company will be subject to a lower tax rate.

2. Effect of transfer pricing aggressiveness on economy development

Based on the result of hypothesis testing, it suggests that transfer pricing aggressiveness is not associated with economy development. This result is different from the result of [12], who found that transfer pricing aggressiveness is positively associated with economy development. This difference can be caused due to differences in the measurement of variables used, applicable regulations and accounting standards, and conditions in Indonesia. [5] stated that one of the objectives of transfer pricing, namely, to obtain optimal income tax under conditions of companies in Indonesia, is not proven.

Although the proxy for transfer pricing aggressiveness uses the same proxies as Taylor and Richardson (2012), the possible differences in accounting standards in Australia and Indonesia are one of the results of this study. Also, using economy development used by Taylor and Richardson (2012) the proxy of the effective tax rate (ETR) and book-tax gap (BTG) can also influence differences in research results.

Related to this, the accounting standards that apply in Indonesia do not regulate in detail the matters relating to the relationship of related parties, especially those related to transfer pricing aggressiveness. In the Indonesia Statement of Financial Accounting Standards (PSAK) 7 regarding

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Related Party Disclosures only requires disclosures relating to relationships, transactions, and balances of related parties, including commitments with these parties. Regarding the method of disclosure, transaction information, and the method of transactions conducted with related parties is not an obligation to disclose, according to PSAK 7. Therefore, an assessment of transfer pricing aggressiveness can be biased because of differences in the way disclosure between one company and another company. Also, the completeness of information related to disclosure of related party transactions has been the concern of the tax authority in Indonesia as evidenced by the issuance of Indonesia Minister of Finance Decree concerning the Types of Documents and/or Additional Information that must be Stored by Taxpayers who Transact with Para Parties Who Have Special Relationships, and Procedures for Management. However, unfortunately, this information is only available to tax authorities and is not public information that investors can use to assess the company's transfer pricing aggressiveness.

Furthermore, the data used in this study are local companies that rarely conduct transactions with related parties abroad. In companies that do not transact with related parties abroad, the practice of transfer pricing will not provide tax incentives, assuming there are no differences in the rates charged to related parties. The characteristics of companies in Indonesia represented by manufacturing sector companies do not transfer pricing for economy development purposes but rather for performance evaluation. In a business group, the companies within it are related parties transact with each other. The output of one company can be used by another company that is still a related party. Therefore, the transfer price charged is income for the company that sells and costs for the company that buys so that it will affect the performance evaluation of each company which is usually assessed from the amount of profit or to increase return on investment.

# 3. The effect of supply chain management on economy development

Based on the result of hypothesis testing, it suggests that earnings management is positively associated with economy development. The company practices earnings management by utilizing discretionary accruals with the aim of economy development by reducing fiscal profits. On the other hand, when a company carries out earnings management by enlarging net income on financial statements, tax costs arise because the tax burden that must be paid becomes even more significant. This study is supported by the results of Erickson et al. (2004), who examined the relationship between financial and tax reporting by analyzing the book-tax tradeoff. The result of his study concluded that some companies are willing to pay more taxes by reporting higher accounting earnings, which indicates that there is a trade-off between financial reporting and tax.

The result of this study is in line with the result of research, who found that earnings management is positively associated with economy development, which meant the company does not face trade-offs in conducting financial and tax reporting. Economy development can be conducted simultaneously with earnings management because companies can use the gray area where there are differences between tax rules and accounting standards. In the area of conformity (the similarity of tax and accounting rules),

companies will not be able to increase accounting profits while reducing tax returns. However, in the area of nonconformity, the company can increase profits and at the same time, can reduce the tax expenses.

#### V. CONCLUSION

This study examines supply chain power in the context of real earnings management (REM), instances in which executives execute (or forego) operations transactions for the sole purpose of meeting or beating earnings targets. We examine whether powerful major customers in supply chains exploit their positions to engage in REM to a greater degree than less powerful firms. Based on the hypothesis examining, it is known that thin capitalization is positively associated with economy development. It means that the companies tend to use debt more than equity to fund their business with the aim of economy development. The company managers choose actions that have a higher risk that conflicts with the interests of the owner so that it shows the agency conflict. Transfer pricing aggressiveness is not associated with economy development. The differences that occur are thought to be caused by several things, namely (a) the avoidance proxy used in previous studies is still using ordinary ETR and BTD, while in this study has used the Abnormal BTD proxy, (b) there are differences in accounting standards in Indonesia where in PSAK 7 regarding disclosure of related parties is only required to disclose transactions, balances, and commitments with related parties, there is no obligation to disclose more detailed information needed to measure the company's transfer pricing aggressiveness so that measurement could be biased, and (c) company conditions in Indonesia has more domestic transactions and does not conduct transactions with related parties abroad, so there are no incentives related to taxation because there is no difference in tariffs.

Supply chain management is associated with economy development. Multinational companies generally have good prestige and brand image so that economy development measures can risk damaging the company's reputation. Also, multinational companies often get incentives from the government so that multinational companies no longer need to avoid tax evasion because they have received incentives from the government. Earnings management has a positive effect on economy development. It shows that earnings management can be carried out together with economy development.

Based on this research, it is known that thin capitalization and earnings management have a positive effect on economy development. Thus, the tax authority can focus supervision on economy development in companies that tend to fund their business using debt and are indicated to do earnings management. The results of this study can be used by Indonesia Tax Authority to explore the potential and supervision of taxpayers. For law enforcement, the results of this study can be used by tax auditors to compile risk analysis in the selection of taxpayers who will carry out individual risk-based checks because companies that do thin capitalization can be an indication of economy development.

In terms of rules, the tax authorities have paid attention to the practice of thin capitalization with the issuance of some regulations. However, unfortunately, the regulations only limit thin capitalization by using a debt to equity ratio

of a maximum of 4: 1. This study suggests using the MAD ratio in the rules to limit thin capitalization as used in this study because it can be simpler and more accurate in explaining the practice of thin capitalization. Besides, this study recommends that information related to transfer pricing should be reported in conjunction with annual tax returns as attachments so that they can be utilized at any time by all stakeholders.

The financial report compilation institution is expected to consider adding information in the financial statements relating to PSAK 7 related to transactions with related parties so that financial statements are more transparent and provide information that is more useful to stakeholders. Information related to transactions with related parties is essential to assess the transfer pricing aggressiveness of companies that can be utilized by investors in making investment decisions and the tax authorities in supervising taxpayers.

Furthermore, for the next research can expand the sample of selected companies, not only the industrial sector. Future research can also use longer time intervals to avoid noise in the data. Also, further research can use other measurements, for example for economy development can use GAAP ETR, current ETR, ETR cash, long-run cash ETR, differential ETR, DTAX, total BTD, temporary BTD, abnormal total BTD, UTB, tax shelter activity, and marginal tax rate.

The limitations of this study are as follow. First, the research sample is limited in duration, using only 3 (three) years (2013-2015) with the number of companies being sampled as many as 90 companies. Second, the sample used in this study is limited to manufacturing sector companies. Third, multi-nationality in this study uses a dummy variable that is worth one if the company has at least one subsidiary abroad, and a value of 0 for the opposite. Consideration using this dummy variable is due to the limited data revealed in the financial statements so that it cannot use another proxy. Future studies are expected to use proxies with a ratio scale, such as the proportion of income from abroad divided by total income (Taylor and Richardson, 2012). The use of this ratio scale is expected to be more accurate in explaining multi-nationality variables. Future studies are expected to get a complete picture of the types of earnings management besides those used in this study.

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