

Conference Paper

# The Influence of Culture and Legal Origin Toward Earnings Management of Manufacture Firms Listed in NYSE

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## Abstract

This study examines the influence of culture and legal origin toward earnings management practice. Based on a sample of 87 manufacture firms that come from 18 countries listed in the New York Stock Exchange for three years, 2009–2011, the result shows that firms come from countries of civil-law system with low cultural secrecy level having lower earnings management behavior compared to firms coming from countries of common-law system with high cultural secrecy level. This research gives empiric evidence that culture is an important factor that can influence finance report quality.

**Keywords:** cultural secrecy, legal origin, earnings management

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## 1. Introduction

Earnings management is the interesting research topic as manipulating the profit that will be reported is the real temptation faced by all accountant and professional finance. It has appeared a research relates to earnings management practice in various contexts. However, there are only few researches that examine the cultural influence toward earnings management behavior [13].

Geiger and Smith (2010) have examined cultural influence toward individual perception that concerns with earnings management. The culture meant in their research relates to cultural secrecy in revealing relevant information to the public. Their research result shows that person lives in country having low cultural secrecy cannot receive the existence of earnings management compared to person lives in country having high cultural secrecy.

Besides, Geiger and Smith (2010) also examine the influence of institutional factor, namely, the country orientation whether orientation toward shareholders or stakeholder toward earnings management. Their research result shows that person lives

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in country having stakeholders orientation cannot receive the existence of earnings management compared to person lives in country having shareholders orientation. The result of their research give evidence about the different perception between country concerns with earnings management.

This research intends to examine research result of Geiger and Smith (2010) by connecting cultural secrecy and legal origin toward earnings management phenomenon happened in company. Legal origin variable involved into this research since in Geiger and Smith's research (2010), the country division becoming country orientation to shareholder and stakeholder based on the law system prevailed in the country and result gained is not consistent with the previous research.

The aforementioned explanation stimulates researchers to do research about the influence of cultural and legal origin toward earnings management in the manufacture firms listed in New York Stock Exchange (NYSE). NYSE is interesting to be examined as firms listed in this stock market must fulfill finance standard and strict operation. Besides, NYSE also has protection system toward powerful investor, thus it is so interesting to be examined whether the earnings management done by firms listed in NYSE can be influenced by culture and law system prevailed in origin country.

## 2. Literature Review and Hypothesis

### 2.1. Culture influence toward earnings management

Douppnik and Tsakumis (2004) stated that culture is the most powerful environment factor in influencing accountancy system development in a country, included influencing individual perception and accountancy information user. This matter proven by Geiger and Smith (2010) who examined the influence of cultural secrecy toward individual perception concerns with earnings management. Their research result showed that a person lives in a country having low cultural secrecy cannot accept the existence of earnings management compared to a person lives in a country having high cultural secrecy.

Along with that, related to company contexts, firms come from high cultural secrecy tend to do more earnings management than firms come from low cultural secrecy. It is caused by company chance to do earnings management in the countries having high cultural secrecy is bigger than firms in countries having low cultural secrecy since cultural company in the countries having high cultural secrecy tend to hide or not completely revealing relevant finance information and also has lack of transparency.

This statement supported by Hope et al. (2008) who had examined the influence of cultural secrecy toward company choice in choosing external auditor. His research result showed that company in a country having high cultural secrecy tends to choose non-Big 4-audit company compared to company in a country having low cultural secrecy. That matter can come up because of the big tendency of firms in a country having high cultural secrecy to do earnings management.

Based on the aforementioned previous researches, the first hypothesis in this research is as follows.

H1: Cultural secrecy having positive effect toward earnings management.

## 2.2. Legal origin influence toward earnings management

Country adheres common-law system has more powerful law protection toward investor compared to country adheres civil-law system because shareholders' needs toward revealing of finance report in the stock market which orients to common-law system is very big. Thus, it can be the best solution to solve information asymmetric problem between manager and finance report user [2, 11]. Strong law protection for the investor of this common-law stock market oriented is able to limit the insider ability to do some activities that can add their private advantages, included decreasing incentive to cover the real company quality [12]. It happens because in the strong investor protection environment there is client reporting mistake tendency that easily to be detected.

Therefore, earnings management of firms in the country adheres common-law system tends to be lower because the insider has small chance to do earnings management without being detected. This statement is consistent with the research of Leuz et al. (2003) who examined the investor protection influence toward earnings management. Their research result proves that strong investor protection environment contained in common-law country oriented can decrease earnings management behavior. Chin et al. (2009) who examined the company internationalization influence toward earnings management also stated that earnings management behavior in the international diversification firms tends to be low when the company operated at the big proportion in the country adheres common-law system.

Based on the aforementioned previous researches, the second hypothesis of this research is as follows.

H<sub>2</sub>: Company comes from country adheres common-law system has lower earnings management than company comes from country adheres civil-law system.

### 2.3. Company size, leverage, and earnings management

This research uses company size and leverage as control variable. The use of control variable purposed to find out whether research observation variable, namely cultural secrecy and legal origin, significantly can influence earnings management behavior.

Siregar and Utama (2006) stated that company size has negative influence toward earnings management. However, Halim et al. (2005) and Chin et al. (2009) stated that a big company has more chance to do earnings management. Related to the leverage control variable, Widyaningdyah (2001), Budiasih (2009), and Han et al. (2010) stated that leverage has positive influence toward earnings management.

## 3. Research Method

### 3.1. Population and sample

The research population is all firms listed in NYSE, meanwhile research sample chosen using purposive sampling method. Sample criterion used in this research is as follows.

1. The firms listed in NYSE come from India, Australia, Canada, Ireland, United Kingdom, United States (countries adhere common-law system) and also Japan, South Korea, Taiwan, France, Germany, Greek, Italy, Netherlands, Switzerland, Brazil, Chili, Mexico (countries adhere civil-law system).
2. Kind of company is manufacture by observation period for three years, from 2009 to 2011.
3. Company has complete data and information related to research will be done.

### 3.2. Types and data sources

This research uses type of secondary data. Data for counting earnings management gained from company finance report downloaded through NYSE website, meanwhile data for counting cultural secrecy gained from research of Hofstede (2001) and data about legal origin gained from research of La Porta et al. (1998).

### 3.3. Operational definition and variable measurement

The following is the operational definition and variable measurement used in the research.

1. Cultural secrecy is a culture related to the company view that tends to hide or not completely reporting relevant finance information. This variable measured using ordinal scale. According to Geiger and Smith (2010), cultural secrecy can be counted using cultural dimension scores as stated by Hofstede (2001). Cultural secrecy value can be gained by adding power distance of cultural dimension scores and uncertainty avoidance reduced by individualism. Then the cultural secrecy value arranged from low too high to find out which the most not secrecy country until the most secrecy country.
2. Legal origin is the law system prevailed in the origin country. This variable measured using nominal scale, that is 0 for countries adhere common-law system and 1 for countries adhere civil-law system. This measurement is based on the research of La Porta et al. (1998).
3. Earnings management is the form of intervention done by manager in the finance report process through accountancy policy choice to gain certain purpose. This variable measured by counting accruals discretionary value based on the research of Dechow et al. (1995) which has modified and completed Jones Model to count earnings management. Steps of counting earnings management based on the Jones Model are as follows.

(a) Counting total accruals value

$$TACC_{it} = NI_{it} - CFO_{it}$$

Then total accruals value estimated using regression equation as follows.

$$\frac{TACC_{it}}{TA_{i,t-1}} = \alpha_1 \frac{1}{TA_{i,t-1}} + \alpha_2 \frac{(\Delta REV_{it} - \Delta REC_{it})}{TA_{i,t-1}} + \alpha_3 \frac{PPE_{it}}{TA_{i,t-1}} + \epsilon$$

(b) Counting nondiscretionary accruals value

Nondiscretionary accruals value, by using regression coefficient on the aforementioned equation, can be counted by formula as follows.

$$NDACC_{it} = \alpha_1 \frac{1}{TA_{i,t-1}} + \alpha_2 \frac{(\Delta REV_{it} - \Delta REC_{it})}{TA_{i,t-1}} + \alpha_3 \frac{PPE_{it}}{TA_{i,t-1}}$$

(c) Counting discretionary accruals value

$$DACC_{it} = \left( \frac{TACC_{it}}{TA_{i,t-1}} \right) - NDACC_{it}$$

Explanation:

$DACC_{it}$  = Discretionary accruals company  $i$  by year  $t$

$TACC_{it}$  = Total accruals company  $i$  by year  $t$

$NDACC_{it}$  = Nondiscretionary accruals company  $i$  by year  $t$

$NI_{it}$  = Net margin company  $i$  by year  $t$

$CFO_{it}$  = Cash current of operation company  $i$  by year  $t$

$TA_{i,t-1}$  = Total asset company  $i$  by year  $t - 1$

$\Delta REV_{it}$  = Income changing company  $i$  by year  $t$

$\Delta REC_{it}$  = Accounts receivable changing company  $i$  by year  $t$

$PPE_{it}$  = Fixed Asset company  $i$  by year  $t$

Discretionary accruals value gained by those equations will be absolute as the purpose of this research is seeing quantity from earnings management happened without paying attention to the negative and positive way of earnings management.

#### 4. Control variable

Company size measured by counting natural logarithm of total asset value in the end of the year, meanwhile leverage measured by dividing total payable toward total asset.

### 3.4. Data Analysis Technique

Data analysis technique used in this research is classic assumption test and hypothesis test.

#### 1. Classic Assumption Test

Regression test presupposes the satiable classic assumption test. The test is a test toward important assumption that must be fulfilled as the requirement for using regression model. There are four important assumptions that must be fulfilled first, they are normality, non-heteroscedasticity, autocorrelation, and multicollinearity. If the classic assumption can be fulfilled, so the estimation of the regression becomes BLUE (Best Linear Unbiased Estimator), which indicated the unbiased regression model.

## 2. Hypothesis Test

Hypothesis test in this research uses multiple regressions. The formula is as follows.

$$DA = \alpha + \beta_1 \text{ SECRECY} + \beta_2 \text{ LAW} + \beta_3 \text{ SIZE} + \beta_4 \text{ LEV} + e$$

Explanation:

DA = Discretionary accruals value

LAW = Origin law system, 0 for the country adheres common-law system and 1 for the country adheres civil-law system

SECRECY = Cultural secrecy value of a country (UA + PD – IND)

SIZE = Company size

LEV = Leverage

e = Standard error

The influence of independent variable toward dependent variable can be seen from the result of *t*-test. Independent variable can be said as significant in influencing dependent variable if it has *t*-value which is higher than *t*-table.

## 4. Result and Discussion

### 4.1. Classic assumption test

The test using regression model presupposes the fulfillment of the classic assumption test first. The research shows that residual in the regression model is normal, non-heteroscedasticities, autocorrelation, and multicollinearity.

### 4.2. The first hypothesis test (H<sub>1</sub>)

The first hypothesis test purposed for answering the question research whether culture can influence earnings management behavior done by manufacture firms listed in NYSE or not. The result research shows that cultural secrecy variable has positive regression coefficient 0.092 with the significance value  $0.000 < 0.05$ , it means that cultural secrecy has the positive and significant influence toward earnings management. Firms come from high cultural secrecy level tends to do higher earnings management than firms come from low cultural secrecy level. This result proves that the first hypothesis test can be supported.

The result supports research of Geiger and Smith (2010) who said that the earnings management behavior cannot be accepted by individual lives in low cultural secrecy so that the implication is the low tendency toward firms come from this country for doing earnings management than firms come from high cultural secrecy.

The result also justifies the research done by Hope et al. (2008) who examined influence of cultural secrecy toward company choice in choosing external auditor. Company places in a country with high cultural secrecy level tends to choose the non-Big 4 audit company since there is big tendency for the company in doing earnings management than company places in a country with low cultural secrecy level.

### 4.3. The second hypothesis test (H<sub>2</sub>)

Second hypothesis test purposed to answer the research question whether legal origin can influence earnings management behavior done by manufacture firms listed in NYSE or not. The research result shows that legal origin variable has negative regression coefficient 0.635 with significance value  $0.005 < 0.05$ , it means that legal origin has negative and significant influence toward earnings management. This research result in contrast to the research hypothesis so that the second hypothesis cannot be supported.

Based on the test result, firms come from country adheres civil-law system proven that it has lower earnings management than firms come from country adheres common-law system. This result is not consistent with the research of Leuz et al. (2003) who stated that earnings management level of the firms come from country that adheres common-law system is lower than the firms come from country that adheres civil-law system. This research result is also inconsistent with the research of Chin et al. (2009) who stated that earnings management behavior of the firms that internationally diversified tends to be low when the company operated in big proportion in the countries that adhere common-law system.

This research result cannot support this research hypothesis caused by the differences in the scope of the capital market used in research. The previous researches examine the influence of legal origin toward capital market of each country, meanwhile this research examines the influence of legal origin toward earnings management in the countries listed in NYSE capital market, not the capital market of each country.



#### 4.4. Control variable test

Company measurement variable has negative regression coefficient 0.080 with significance value  $0.056 < 0.1$ , it means that measurement company has negative and significance influence toward earnings management. A big company has lower earnings management behavior level than a small company.

This result is consistent with the previous research, that is the research of Siregar and Utama (2006) who stated that the company measurement has negative influence toward earnings management. The bigger company measurement, the easier market participant to access information and the more information can be used for the decision-making so that it causes appreciation of the market participant toward big company stock tends to be high. Therefore, the big company has less encouragement to do earnings management than the small company as the big company regarded to be more critical by outsider.

Furthermore, other control variable, namely the leverage variable, has positive regression coefficient 0.543 with significance value  $0.022 < 0.05$ , it means that leverage has positive and significant influence toward earnings management. When the leverage increases, so the earnings management will increase and the contrary when the leverage decreases, so the earnings management behavior will decrease.

This research is consistent with the previous researches of Widyaningdyah (2001), Budiasih (2009), and Han et al. (2010). Company with high leverage level motivated to do earnings management in order to avoid breaking the debt agreement. Besides, too high leverage level can cause a company difficult to gain additional fund. It is because the creditors refuse to lend more money as they also need guarantee for the fund they lend. Thus, a company in this condition tends to do earnings management.

### 5. Conclusion

This research done by purpose for testing influence of culture and legal origin toward practice of earnings management. The testing toward 87 manufacture firms listed in New York Stock Exchange for three years succeeds answering the research question that culture and legal origin are able to influence earnings management behavior of the manufacture firms listed in NYSE also succeed supporting question asked by Geiger and Smith (2010).

The result research shows that there is lower earnings management behavior for the firms come from country adheres civil-law system by low cultural secrecy level

than firms come from country adheres common-law system by high cultural secrecy level. That matter can happens as too secrecy of the company culture can give many opportunities for a company to do earnings management and civil-law system that pays attention to the stakeholders' needs and look into earnings management practice will give impact toward whole parts in stakeholders group.

## 6. Limitation

This research has some limitations as described as follows.

1. Research uses cultural dimension score and legal origin from research of Hofstede (2001) and La Porta et al. (1998) because there is no new research concern with that matter. Besides, countries that can be taken as research sample are limited to the countries having cultural dimension value based on the research of Hofstede (2001). Countries having other unique culture as China excluded from the research analysis because it does not involved in the research of Hofstede (2001) so that it can be known for its cultural dimension. That matter can limit the generalization of research result.
2. The research area is quite large, country, so that there is possibility in getting other factor that can influence earnings management behavior of company, but it is not examined in this research.

## 7. Suggestion

Some suggestions given by researcher for this research are as follows.

1. The next research should use the newest cultural dimension and legal origin score.
2. The next research should add other independent variable which perhaps can influence earnings management behavior of a company, as corporate governance and accountancy standard differences.

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