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Dear Sir/Madam

NOTIFICATION OF ACCEPTANCE

We have the pleasure to inform you that your paper entitled **Earnings Management: Evidence From Investment Opportunity Set, Debt, Political Cost, and Market Share In developing Market** (jointly written with Zaenal Fanani, SE., M.S.A., AK and Drs. H. Basuki, M.Com (Hons.,) Ph.D. A.K) has been accepted for presentation at the Accounting Studies International Conference 2007 (ASIC'07) on 30 – 31 October 2007 at Hotel Crown Princess Kuala Lumpur, Malaysia.

In order to qualify for publication in the proceedings, at least one of the authors should register and present the paper. Please remit the completed registration form along with the payment of registration fee before 29 October 2007.

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Thank you and look forward to seeing you.

' ILMU BUDI BAKTI '

Yours sincerely

DR. MOHAMAD HISYAM SELAMAT
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EARNINGS MANAGEMENT: EVIDENCE FROM INVESTMENT OPPORTUNITY SET, DEBT, POLITICAL COST, AND MARKET SHARE IN DEVELOPING MARKET

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ABSTRACT

The aim of this study is to prove whether manager cope its earnings for the purpose of informative or target opportunistic. Research also investigate whether investment opportunity set influences the choice of manager to report as opportunistic to hide performance, or to report earning more informative concerning with debt, political cost, market share, and earning.

Sample of this research were chosen by using purposive sampling of 350 manufacturing business listed in the Jakarta Stock Exchange, started from 1997 up to 2002. Structural Equation Modeling (SEM) by using program of Analysis of Moment Structures (AMOS) is considered as the appropriate statistical technique to examine pattern relation of formed model

The results show that earning management, political cost, market share, and earning have a significant effect to share price, whereas investment opportunity set does not have a significant effect to share price. Among variables which influence earning management, the debt haves a significant effect while other variable (i.e., investment opportunity set, political cost, and market share) do not show significant outcomes. Variable that significantly influencing earning are only debt and market share, while other variable, investment opportunity set and political cost, do not show significant influence.

This study indicates that earning management conducted by manager in Developing Market such as Indonesia represent informative earning management which means all investors have more own belief in earning reporting, but this research cannot prove that company owning high investment opportunity set tend to conduct informative earning management.

Key Words: Earning Management, Investment Opportunity Set, Debt, Political Cost, and Market Share

1. INTRODUCTION

1.1. Background

Financial statements as source of information are used to assess financial position and performance of the company. It contains balance sheet, income statement, and statement of equity that made relies on accrual bases, and statement of cash flow made on cash bases. Therefore, accrual base of financial statements give a chance for manager to modify financial statement in order to produce expected earning. Generally Accepted Accounting Principle (GAAP) provides a manager to freely select accounting methods to be used in preparing financial statement (Veronica, 2003:328). Managerial selection motivates managerial acts into informative earning management or opportunistic earning management. Managerial selection on earning management ensures that Investment Opportunity Set (IOS) affects contractual event, then influences managerial selection on accounting method to be used (Watts and Zimmerman, 1986; Zimmer, 1986).

Despite the impossibility of clear ex-post difference between these two motivations, in long-term perspective, rational investors compare earning reporting with actual performance and screen management's interpretation of earning reporting. In one hand, if managers of a certain company specially concern with an interest of giving information to investors, then future performance of the company remains similar to the flow of earning reporting and, thus, investors feel more confident with earning reporting. On the other hand, if managers of the company seem motivated to hide information from investors, then future performance of the company differs from earning reporting flow resulting in lack of investors' trust to earning reporting. These also mean there are different motivations among managers. The company where the investors establish discretionary accrual positively appears having more opportunistic earning management. In other word, motivational difference in the opportunistic earning management causes different economic impact measured by investors' response to more efficient capital market.

DeAngelo (1988) determines that managers use accrual opportunistically to conceal performance, but it results in negative market reaction. However, Dechow (1994) impresses that accrual based earning produces a privileged measure toward company performance rather than cash flow. Suramanyam (1996) shows that, in average, discretionary and non-discretionary market values remain as part of accrual. These literatures, however, do not explain whether the companies with different characteristic display different opportunistic and informative earning managements. Moreover, researcher investigates company growth, called Investment Opportunity Set, in relative with the behavior of informative and opportunistic earning managements based on research findings of Gul et al., (2003), Riahi-Belkoui (2003), and Nuswantara (2004) throughout Indonesian companies.

Researcher considers the following premises: firstly, it retests earning management theory by investigating it from investment opportunity set, debt, political cost and market concentration at developing market, especially Indonesian capital market. Research follows previous studies, such as Cahan, 1992; Rajgopal, 1999; Gu, 2002; Gu, et al. 2003; Riahi-Belkoui, 2003 conducted at developing countries. Meanwhile, Nuswantara (2004) examines Indonesian market (developing market), but it confines only to the effect of market concentration and debt on earning management, and the results consistence with other researchers although it was conducted in different research objects within Indonesia. This research, however, has been classified into extended replication, particularly replicating research by Gul et al., (2003) with some additional new variables obtained from Nuswantara's research findings (2004), and political cost hypothesis from Cahan (1992). Secondly, researcher would like to understand the effect of investment opportunity set on earning management by relating investment opportunity set with political cost, and using market concentration as main determinant of investment opportunity set and earning management. Thirdly, measuring investment opportunity set in this research extends the research scope wider than Gul et al., (2003) and Riahi-Belkoui (2003). Lastly, this research examines the effect of each of independent variables against dependent variables simultaneously by conducting Analysis Moment Structure (AMOS) 4.0.

1.2. Problem Statements

Investigated problems in this research include: (a) are investment opportunity set based on share, investment, and variant contribute to investment opportunity set?, (b) do earning management, investment opportunity set, debt, political cost, market concentration, and earning affect share price?, (c) do they (investment opportunity set, debt, political cost, and market concentration) influence earning management?, (d) do investment opportunity set, debt, political cost, and market concentration give impact on earning?, (e) how does the effect of investment opportunity set on debt?, (f) how does the effect of debt on market concentration?

1.3. Research Benefits

This research is expected to give the following benefits:

(1) Theoretical benefit. Research gives empirical evidence related to contracting theory of Watts and Zimmerman (1986) confirming that IOS affects contractual events and then influences manager's selection on accounting method to be used. Other empirical evidences related to the relationship between earning management and investment opportunity set from Gul et al. (2003) and Riahi-Belkoui (2003) asserting that higher IOS companies managing earning more as a tool to transfer valuable relevant private information rather than to hide opportunistically bad performance.

(2) Practical benefit. The practical benefit in this research involves the following: (a) to investors and capital market analysts, it provides a guide for decision making to capital market actors (investors, brokers, and security analysts), and investor candidates in the future, especially when they come to make investment decision; (b) to Indonesian Institute of Accountants (IAI), research provides a way for IAI to become standard setter through the Financial Accounting Standards Board (DSAK) in narrowing the space for management to avoid from unexpected

opportunistic earning management against company and interested parties in the company (stakeholders).

2. HYPOTHESIS DETERMINATION

2.1. Contribution of Investment Opportunity Set, Investment, and Variant to Investment Opportunity Set

Baker (1993) stipulates that proxies need to be developed and improved because every proxy, especially individually used proxy, carries measurement error (Smith and Watts, 1992; Gaver and Gaver, 1993). Bartholomew (1987) opinion quoted by Mahfud (2004) insists that any considerations find necessary to simplify the data through integration of observed variables into composite variables. Observed variables integration into composite variables facilitates the understanding of observed phenomenon and these seem used as description or used in further analysis as regression variables. The proposed hypothesis submits is:

H_1 = *Investment Opportunity Set based on share, investment, and variant, contributes to Investment Opportunity Set.*

2.2. The Effect of Earning Management, Investment Opportunity Set, Debt, Political Cost, and Market Concentration, Earning on Share Price

The effect of earning management on share price has been proved in research by Fudenberg and Tirole (1995); Hartono (1998 and 2000); Gul et al., (2003); Ardiati (2003). Earning management smoothes managerial action to communicate private information and, therefore, improves earning capability to reflect company's economic value. Regarding to empirical evidences and argument previously given, the proposed hypothesis pertains is:

H_2 = *Earning management affects share price.*

The effect of investment opportunity set (IOS) on share price has been connected to Smith and Watts (1992), Riahi-Belkoui (2001) and Gul et al., (2003) studies. Their findings underline positive relationship between IOS and share price. Smith and Watts (1992) concluded that managers in company with relatively higher ISO produce a wise decision-making because they have better information on investment opportunity set than company's shareholder. This supports following hypothesis:

H_3 = *Investment opportunity set positively affects share price.*

Through debt hypothesis, company with higher debt forces manager to select an accounting policy shifting future earning toward current earning (Watts and Zimmerman, 1986:216). Gul et al., moreover, (2003:15) clarify that debt negatively affects share price because higher debt rate gives more incentives to opportunistic earning management in meeting debt covenant requirement. This argument estimates that higher company debt means lower share price. The following formulated hypothesis is:

H_4 = *Higher company debt adversely affects share price.*

Size hypothesis explains that in larger companies, manager considers an accounting policy retaining current earning to have future earning (Watts and Zimmerman, 1986: 235). Company's size positively affects earning quality, and it seems higher earning quality in larger companies than in smaller one (Gul et al., 2003:15). Diamond and Verrecchia (1991) cited by Komalasari (2000) declared that larger company with greater risk to investors receives the greatest earning per share (increased share value). This background urges the following hypothesis:

H_5 = *Political cost positively affects share price.*

Nuswantara (2004) conducted a research testing the effect of market concentration on share price. Market concentration positively relates to share price because the company within higher industrial concentration tends to select accounting policy that declines in the future (Nuswantara, 2004:3). If market share of larger company facilitates a strong position in competition, company signals a better condition in the future to make investors positively reacting toward the company. Therefore, research proposed the following hypothesis:

H_6 = *Market strength reflected from market concentration positively affects share price.*

Studies on the relationship between earning and share price have been related to Ball and Brown (1968), Ali (1994), Asyik (1999), Harries (1999), Gunawan (1999), and Candrarin and Tearney (2000). The results indicate a significant positive relationship between earning and share price. Regarding to empirical evidences and argument previously given, the proposed hypothesis determines that:

H_7 = *Higher company earning positively affects share price.*

2.3. The Effect of Investment Opportunity Set, Debt, Political Cost, and Market Concentration on Earning Management

Skinner (1993), Gul et al., (2003), Riahi-Belkoui (2003), and Nuswantara (2004), have studied the effect of investment opportunity set (IOS) on earning management. Some evidences from previous literature, likes Skinner (1993), proved that company with higher investment opportunity exhibits greater earning management. According to Gul et al., (2003:14) manager of company with higher growth inclines to the use of earning management to mark their information about company investment opportunity in the future. Therefore, the following hypothesis emerges to be tested:

H_8 = *Investment opportunity set positively affects earning management rate.*

Results of Nuswantara (2004) and Riahi-Belkoui (2003) researches pointed out the negative effect between debt and earning management. This occurs due to too loose creditor monitoring. Slackened monitoring motivates earning management, or in other words, monitoring mechanism does not prevent the company from conducting earning management. However, researches from Defond and Jiambalvo (1994), Chau and Lee (1999), DeAngelo et al. (1994), and Gul et al. (2003), find that company debt positively relates to earning management. Debt rate of company results in improving earning management aimed at maintaining good performance in auditor view. Therefore, significant affect occurs between debt and earning management.

H_9 = *Higher debt of company affects earning management rate.*

Larger company has more complete disclosure that seems accessible to auditor examination than smaller one. This causes more conservative reporting of accounting and earning manipulation (Cahan, 1992; Gul et al. 2003:14;

Nuswantara, 2004:175). Research's results of Rajgopal (1999), Gu (2002), Gul et al. (2003), and Nuswantara (2004) confirmed that asset relates negatively to earning management. This argument expects negative relationship between political cost and earning management rate.

H_{10} = Political cost relates negatively to earning management rate.

Shleifer & Vishny (1997) quoted in Nuswantara (2004:3) explain that product market competition reduces company profitability. If the company seems inefficient, it reduces company earning. Therefore, a manager of a company with lower profitability manipulates company's earning such that investors still involve their capital within company. If market share of company remains small, company has a weak position in competition and, thus, manipulates company's earning to a better appearance. This argument expects a negative relationship between market concentration and earning management rate.

H_{11} = Negative impact of market concentration emerges as reflected from market concentration against earning management practice.

The company with greater market strength has a chance to conduct earning management. Greater market strength means greater earning management practice, especially if external monitoring condition seems rarely (lower debt). The following hypothesis estimates that:

H_{12} = Positive impact of debt on market strength emerges as reflected from market concentration.

2.4. The Effect of Investment Opportunity Set, Debt, Political Cost, and Market Concentration on Earning Rate Relevancy

Manager uses earning management through IOS to communicate private information credibly to the investors. This makes earning statement more informative on the future of company, and improves relevancy of earning rate. Therefore, positive impact occurs from investment opportunity set on earning.

H_{13} = Higher investment opportunity set positively affects earning.

Previous research findings, by Watts and Zimmerman (1978); Zimmerman (1983); and Warfield et al., (1995), clarified that debt negatively affect earning because higher rate of debt gives more incentives to opportunistic earning management in meeting debt covenant requirement. The hypothesis the researcher proposes seems that:

H_{14} = Higher debt rate negatively affects earning.

Larger company has more information than the smaller one. Therefore, new innovation has a great impact on earning of smaller company rather than larger company. Chaney and Jeter (1991) showed in their finding that company size significantly and positively correlates with earning. Therefore, the hypothesis proposed as:

H_{15} = Political cost positively affects earning.

Greater marker share means greater earning the company obtains. This argument forecasts the positive effect of market concentration on earning management rate.

H_{16} = Market concentration positively affects earning.

2.5. The Effect of Investment Opportunity Set on Debt

According to Myers's (1977) argument, company with higher book value ratio appears more optimized if its debt ratio also increases. Myers (1977) emphasized an optimum profit that investors possibly obtain if they face higher bankruptcy risk. Company with higher book value ratio wants higher profit in the future such that the company enjoys optimum profit through tax profit. Result of Chen (2005) research proves that company growth positively relates to company debt. Research hypothesis proposed is:

H_{17} = Positive impact develops from company with higher investment opportunity set on debt rate.

3. RESEARCH METHOD

3.1. Research Type

Related to the problem characteristic examined, research may be classified as a comparative causal research (Indriantoro and Supomo, 1999:29).

3.2. Definition and Variable Measurement

Operational definition and variable measurement have been shown at Table 2.

3.3. Data Analysis Technique

Exogenous variables in this path coefficient include IOS and KP, while endogenous variables involve DEBT, KSP, DA, EARN and AR, and the structural equation remains as the following:

$\text{DEBT} = \beta_{13}\,\text{IOS} + \varepsilon_{13}$

$\text{KSP} = \beta_{14}\,\text{DEBT} + \varepsilon_{14}$

$\text{DA} = \beta_{15}\,\text{IOS} + \beta_{16}\,\text{DEBT} + \beta_{17}\,\text{KP} + \beta_{18}\,\text{KSP} + \varepsilon_{15}$

$\text{EARN} = \beta_{19}\,\text{IOS} + \beta_{20}\,\text{DEBT} + \beta_{21}\,\text{KP} + \beta_{22}\,\text{KSP} + \varepsilon_{16}$

$\text{AR} = \beta_{23}\text{DA} + \beta_{24}\text{IOS} + \beta_{25}\text{KP} + \beta_{26}\,\text{DEBT} + \beta_{27}\text{KSP} + \beta_{28}\,\text{EARN} + \varepsilon_{17}$

Where:

DEBT = Debt

IOS = Investment Opportunity Set

KSP = Market Concentration

KP = Political Cost

DA = Discretionary Accruals

EARN = Earning

AR = Return Abnormal Accumulation

β_{13}-β_{28} = Loading Factor (Standardized Regression Coefficient)

ε_{13}-ε_{17} = Error Term

Uni-dimensional of the model should be tested through Structural Equation Modeling (SEM), and its path diagram may be shown at Figure 1.

4. RESULTS OF RESEARCH AND DISCUSSION

Exogenous variables of this path coefficient entail investment opportunity set (IOS) and Political Cost (KP), while endogenous variables comprise to debt

(DEBT), market concentration (KSP), earning management (DA), earning (EARN), and abnormal return (AR). Relying on Table 7, the structural equation takes a following form:

$\text{DEBT} = 0.330\ \text{IOS} + \varepsilon_{13}$

$\text{KSP} = 0.056\ \text{DEBT} + \varepsilon_{14}$

$\text{DA} = -0.095\ \text{IOS} + 0.148\ \text{DEBT} - 0.123\ \text{KP} + 0.080\ \text{KSP} + \varepsilon_{15}$

$\text{EARN} = -0.033\ \text{IOS} - 0.409\ \text{DEBT} - 0.066\ \text{KP} + 0.209\ \text{KSP} + \varepsilon_{16}$

$\text{AR} = 0.086\ \text{DA} + 0.539\ \text{IOS} - 0.543\ \text{KP} - 0.024\ \text{DEBT} + 0.299\ \text{KSP} + 0.177\ \text{EARN}\ \varepsilon_{17}$

IOS proxy measures company growth's potential. Myers (1977) proposed that investment decision on asset combination to be owned in the future influences company value. Further development of this theory emanates from Chung and Charoenwong (1991), Smith and Watts (1992), Skinner (1993), Gaver and Gaver (1993), Cahan and Hossain (1995), Collins and Kothari (1989), Hartono (1999), Kallapur and Trombley (1999), Sami, et al. (1999), Gul, A. Ferdinand (1999), Fijrianti (2000), Prasetyo (2000), Adam, et al. (2000 & 2003), Subekti and Kusuma (1999 and 2001), Al Najjar and Belkaoui (2001), Abbott, J. Lawrence (2001), Jones, et al. (2001), Subekti and Kusuma (2001), and Mira et al. (2002). All of them examine company growth potential.

Previous researches, however, never attest statistically that each indicator contributes to Price-based Investment Opportunity Set (IOSp) and Investment-based Investment Opportunity Set (IOSi). The contribution is also developed Price-based Investment Opportunity Set (IOSp), Investment-based Investment Opportunity Set (IOSi), and Variant-based Investment Opportunity Set (IOSv). Research also concerns with confirmatory factor analysis (CFA) proving that Book to Market Value of Assets (MBVA), Tobin's Q (TOBIQ), Price Earning ratios (PER), Ratio of Depreciation to Firm Value (DFV), and Firm Value to Book Value of PPE (VPPE), contributed to Price-based Investment Opportunity Set (IOSp). Ratio of Capital Expenditure to Book Value of Assets (CEBVA), Ratio of Capital Expenditure to Market of Assets (CEMVA), and Investment to Net Sales Ratio (INS) contributed to Investment-based Investment Opportunity Set (IOSp). Results of research also showed that Price-based Investment Opportunity Set (IOSp), Investment-based Investment Opportunity Set (IOSi), and Variant-based Investment Opportunity Set (IOSv) contributed to Investment Opportunity Set (IOS) through beyond critical value for all dimensions.

Previous findings showed that earning management negatively influenced share price (Fudenberg and Tirole, 1995; Hartono, 1998 and 2000; Gul et al., 2003; and Ardiati, 2003); investment opportunity set (IOS) positively affect share price (Smith and Watts, 1992; Riahi-Belkoui, 2001; and Gul et al., 2003); debt negatively affects share price (Gul et al., 2003); political cost positively affects share price (Marwata, 1999; Diamond and Verrecchia, 1991, cited by Komalasari, 2000, and Gul et al., 2003); market strength reflected from market concentration positively affects share price. Positive impact of investment opportunity set (IOS) variable on earning management has been found from Skinner (1993), Subramanian (1996), Riahi-Belkoui (2003), Gul (2003), and Nuswantara (2004).

Other findings indicate that debt positively affects earning management (Sweeney, 1994; DeFond and Jiambalvo, 1994; Watts and Zimmerman, 1986,1990; Nuswantara, 2004); political cost negatively affects earning management (Nuswantara, 2004, Riahi Belkeoui, 2003, Gul et al., 2003, Rajgopal, 1999, Gu, 2002); and market strength reflected by market concentration negatively affects earning management (Nuswantara, 2004). Smith and Watts (1992) and Gul, et.al (2003) found positive effect of investment opportunity set (IOS) variable on earning, while other researches ascertain that debt negatively affects earning (Dhaliwal et.al, 1991; Barclay and Smith, 1995; Gul, et.al, 2003), political cost positively affects earning (Reinganu, 1992; Chaney and Jeter, 1992; and Warfield et.al., 1995), market strength reflected by market concentration positively affects earning (Nuswantara, 2004).

In addition to retesting previous research variables, results of this research confirm that earning management (DA), political cost (KP), market concentration (KSP), and earning (EARN) have significant effect on share price (AR), meanwhile investment opportunity set (IOS) does not have significant effect on share price (AR). Among variables affecting earning management (DA), only debt (DEBT) has a significant effect, while other variables (Investment Opportunity Set (IOS), Political Cost (KP), Market concentration (KSP) seem have no significant outcome. Among variables, only debt (DEBT) and market concentration (KSP) appear significantly affect earning (EARN), while others including Investment Opportunity Set (IOS) and Political Cost (KP) does not have significant effect.

Results of research clarify that SEM analysis with 350 observations (5 years in 70 companies) at manufacture companies listing at Jakarta Stock Exchange confers the following result. *First*, the negative impact occurs from investment opportunity set (IOS) against earning management. It means that managerial behavior to have earning management does not follow with fast company growth.

Second, earning management positively affects share price (AR). This evidence describes investor's positive reaction to earning management. It also indicates that earning management conducted by Indonesian managers represents informative earning management. It may be investors seeming more confident to earning reporting though research cannot give evidence that the company with investment opportunity set (IOS) may choose informative earning management. The result does not comply with estimation that company with higher investment opportunity set (IOS) manages its earning as a tool of private information with value relevant rather than hides opportunistically bad performance.

Third, research fails to support earning management theory. Healy (1985) and DeAngelo (1988) determine that managers consider opportunistically accrual to conceal any performances causing negative reaction of the market. Despite managerial opportunistically use of accrual, market still reacts it positively because market considers this managerial behavior as informative management.

Fourth, research does not agree with Gul et al.,(2003) and Riahi-Belkoui (2003) findings that higher IOS companies tend to use earning as a tool of expressing value relevant private information rather than concealing opportunistic bad performance. Results of this research prove that when investment opportunity set grows higher, informative earning management becomes relatively more evident than opportunistic earning management.

5. CONCLUSION AND SUGGESTION

5.1. Conclusion

Research concludes that (a) investment opportunity set based on share, investment, and variant, contributes to investment opportunity set. This result agrees with Bartholomew (1987) quoted in Mahfud (2004) that data simplification comes into consideration by combining observed variables into composite variables; (b) earning management, political cost, market concentration, and earning, provide significant effect on share price, while investment opportunity set does not significantly affect share price; (c) debt does not significantly affect earning management, while other variables (investment opportunity set, political cost, market concentration) seem without significant result; (d) debt and market concentration significantly affect earning, while other variables involving investment opportunity set and political cost do not have significant influence; (e) debt do not have significant effect on market concentration, and (f) investment opportunity set has significantly positive effect on debt.

5.2. Suggestion

Further consideration leads this research to suggests that (a) combination model of investment opportunity set still has a chance to add other investment opportunity set proxies, such as ratio of R&D expense to total assets (Smith and Watts, 1992; Gaver and Gaver, 1993; Kallapur and Trombley, 1999; and Hartono, 1999), ratio of R&D expense to sales (Skinner, 1993; and Kallapur and Trombley, 1999), ratio of capital additions to firm value (Smith and Watts, 1992; Kallapur and Trombley, 1999; and Jones and Sharma, 2001), Ratio of capital addition to assets book value (Subekti and Kusuma, 2001; Skinner, 1993; Kallapur and Trombley, 1999), Investment to earning ratio (Hartono, 1999), and Ratio of R&D expense to firm value (Skinner, 1993; Kallapur and Trombley, 1999), and (b) model used in this research may be developed through using interaction of investment opportunity set, debt, political cost, and market concentration, and earning management after considering moderating effect of earning management on share price.

5.3. Research Limit

Research seems far from perfect for many aspects. Some limitations in research comprise to: (a) research criteria requiring respondent company to have positive equity, but causing many companies fail to comply, (b) research does not consider market risk as investment opportunity set (IOS) indicator. The limit also reduces predictability to classify company growth, (c) model selection to estimate earning management in following after Jones modified model. It means that preliminary test does not come into consideration to assess which model has been correct and robust for Indonesian perspective.

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Table 1. Sample Selection Process

Information	Number of Company
Go public manufactured companies until December 31^{st}, 1997	147
Not go public manufactured companies in succession for five years (1997 to 2002)	17
Companies with negative equity	42
Incomplete Financial Statement	18
Public Companies in sampling	70

Source: Processed secondary data

Table 2. Variable Measurement And Researcher Using It

No	Indicator IOS	Measurement	Researcher
1	Market to book value of equity (MBVE)	MBVE = [Circulated Share x Share Closing Price]: Equity Total	Chung and Charoenwong (1991), Smith and Watts (1992), Skinner (1993), Gaver and Gaver (1993), Cahan and Hossain (1995), Kallapur and Trombley (1999), Sami, Heibatollah, S.M. Simon Ho, and C.K. Kevin Lam (1999), Gul, A. Ferdinand (1999), Adam, Tim & Vidhan, K. Goyal (2000 & 2003), Subekti and kusuma (1999), Subekti (2001), Al Najjar and Belkaoui (2001), Abbott, J. Lawrence (2001), Jones, Stewart & Rohit Sarma (2001), Mira, Chee, and Yew (2002), Collins and Kothari (1989), Hartono (1999), Fijrianti (2000), and Prasetyo (2000)
2	Book to market value of assets (MBVA)	MBVA = [Assets Total – Equity Total + Circulated Share x Share Closing Price] divided by Assets Total	Chung and Charoenwong (1991), Smith and Watts. (1992), Skinner (1993), Gaver and Gaver (1993), Cahan and Hossain (1995), Kallapur and Trombley (1999), Sami, Heibatollah, S.M. Simon Ho, and C.K. Kevin Lam (1999), Gul, A. Ferdinand (1999), Adam, Tim & Vidhan, K. Goyal (2000 & 2003), Abbott, J. Lawrence (2001), Jones, Stewart & Rohit Sarma (2001), Subekti and kusuma (1999), Subekti(2001), AlNajjar and Belkaoui (2001), Mira, Chee, and Yew (2002), Fijrianti (2000), and Mahfud (2004)
3	Tobin's Q (TOBIQ)	Tobin's Q = {[Circulated Share x Share Closing Price] + Debt Total + Supply – Current Asset} divided by Assets Total	Skinner (1993), Chung, and Charoenwong (1998), Kallapur and Trombley (1999), and Mahfud (2004)
4	Earnings to price ratios (PER)	PER = [Share Closing Price per Sheet]: Net Earning per Sheet	Chung and Charoenwong (1991), Smith and Watts (1992), Skinner (1993), Gaver and Gaver (1993), Cahan and Hossain (1995), Kallapur and Trombley (1999), Sami, Heibatollah, S.M. Simon Ho, and C.K. Kevin Lam (1999), Gul, A. Ferdinand (1999), Adam, Tim & Vidhan, K. Goyal (2000 & 2003), Jones, Stewart & Rohit Sarma (2001), Subekti and Kusuma (1999), Subekti (2001), AlNajjar and Belkaoui (2001), Prasetyo (2000), Hartono (1999), Fijrianti (2000), and Mahfud (2004)
5	Ratio of property, plant, and equipment to firm value of the assets (PPEFVA)	EPS = [Assets Total-Equity Total + Circulated Share*Share Closing Price] divided by net fixed asset	Skinner (1993), Kallapur and Trombley (1999), Sami, Heibatollah, S.M. Simon Ho, and C.K. Kevin Lam (1999), Adam, Tim & Vidhan, K. Goyal (2003), Jones, Stewart & Rohit Sarma (2001), and Mahfud (2004)
6	Ratio of depreciation to firm value (DFV)	DFV = Assets Total – Equity Total + [Circulated Share x Share Closing Price] divided by Depreciation Cost	Smith and Watts, (1992), Kallapur and Trombley (1999), Sami, Heibatollah, S.M. Simon Ho, and C.K. Kevin Lam (1999), Jones, Stewart & Rohit Sarma (2001), and Mahfud (2004)

Tabel 2 (continued)

No	Indicator IOS	Measurement	Researcher
7	Ratio of capital expenditure to book value of assets (CEBVA)	CEBVA = [Fixed Asset Book Value t – Fixed Asset Book Value t_{-1}]: [Assets Total]	Fijrianti (2000) and Jones and Sharma (2001)
8	Ratio of capital expenditure to market of assets (CEMVA)	CEMVA = (Fixed Asset Book Value t – Fixed Asset Book Value t_{-1}): [Assets Total – Equity Total + (Circulated Share*Share Closing Price)]	Fijrianti (2000), Prasetyo (2000), Subekti and Kusuma (1999), Jones and Sharma (2001), and Subekti (2001)
9	Ratio of Investment to Net Sales (INS)	INS = Investment / Net Sales	Kallapur and Trombley (1999), and Hartono (1999)
10	Systematic Risk (RS)	Fowler & Rorke (1983) Beta Correction	Hartono (1998), Prasetyo (2000)
11	Company size (SIZE)	Total Value Logarithm of company	Mira, Chee and Yew (2002), Gul et al. (2003)
12	Market Concentration (KSP)	KSP = (Company Sale / Industrial Sale) x 100 %	Mira, Chee and Yew (2002), Nuswantara (2004)
13	Debt (DEBT)	Debt = (Debt Total of company i at period t): (Assets Total of company i at period t)	Suciwati and Mas'ud (2001), Mira, Chee and Yew (2002), Gul et al. (2003), Nuswantara (2004), Pakaryaningsih (2004)
14	Earning	Annual net earning before extraordinary items	Bowen, et al. (1987), Ali (1994), Finger (1994), Parawiyati and Baridwan (1998)
15	Discretionary Accruals (DA)	Jones (1991) modified model	Healy (1985), DeAngelo (1986), Jones, (1991), Dechow et al, (1995), Cahan (1992), Healy and Wahlen (1998), Bartov, 2000, AlNajjar and Belkaoui (2001), Gul et al. (2003), Nuswantara (2004),
16	Abnormal Return	Market adjusted model $AR_{i,t} = R_{i,t} - E(R_{i,t})$ $CAR = \sum_{t=1}^{t=n} AR_{it}$	Ali (1994), Asyik (1999), Harries (1999), Gunawan (1999), Gul et al. (2003), and Jogiyanto (2003)

Tabel 3. Goodness Of Fit Indices Evaluation For Investment Opportunity Set Variable

Goodness of fit index	Cut-off Value	Result *)	Description
χ^2 – Chi-square	Expected is Small	13.752	Good
Sign.Probability	≥ 0.05	0.999	Good
CMIN/DF	≤ 2.00	0.404	Good
GFI	≥ 0.90	0.992	Good
AGFI	≥ 0.90	0.987	Good
TLI	≥ 0.95	1.010	Good
CFI	≥ 0.95	1.000	Good
RMSEA	≤ 0.08	0.000	Good

Source: Processed secondary data

Tabel 4 Measurement of Investment Opportunity Set Variable

Construct	Loading Factor	CR	Tabel t (α=5%)	Sign	Discription
IOSp ← IOS	-0.150	-3.461	1.98	0.000	Significant
IOSi ← IOS	0.035	Fix	1.98		Significant
IOSv ← IOS	0.518	Fix	1.98		Significant

Source: Processed secondary data

Tabel 5. Goodness Of Fit Indices Evaluation For Model Overall in Final Stage

Goodness of fit index	Cut-off Value	Result	Discription
χ^2 – Chi-square	Expected is Small	54.139	Good
Sign. Probability	≥ 0.05	0.952	Good
CMIN/DF	≤ 2.00	0.742	Good
GFI	≥ 0.90	0.982	Good
AGFI	≥ 0.90	0.966	Good
TLI	≥ 0.94	1.009	Good
CFI	≥ 0.94	1.000	Good
RMSEA	≤ 0.08	0.000	Good

Source: Processed secondary data

Tabel 7. Test of causality effect on investment opportunity set (IOS), Debt (DEBT), political cost (KP), and market concentration (KSP) toward earnings management (DA), earning (EARN) and stock price (AR)

H	Construct			Loading Factor	Efect			CR	Sign	Description
					Direct	Indirect	Total			
H2	AR	<--	DA	0.086	0.086	0.000	0.086	1.648***	0.099	Significant
H3	AR	<--	IOS	0.539	0.539	-0.035	0.504	Fix		Significant
H4	AR	<--	DEBT	-0.024	-0.024	-0.041	-0.064	-0.313	0.754	Not Significant
H5	AR	<--	KP	-0.543	-0.543	-0.022	-0.565	-4.954*	0.000	Significant
H6	AR	<--	KSP	0.299	0.299	0.044	0.343	2.929*	0.003	Significant
H7	AR	<--	EARN	0.177	0.177	0.000	0.177	3.078*	0.002	Significant
H8	DA	<--	IOS	-0.095	-0.095	0.050	-0.045	-1.007	0.314	Not Significant
H9	DA	<--	DEBT	0.148	0.148	0.004	0.152	2.616*	0.009	Significant
H10	DA	<--	KP	-0.123	-0.123	0.000	-0.123	-1.076	0.282	Not Significant
H11	DA	<--	KSP	0.080	0.080	0.000	0.080	0.870	0.384	Not Significant
H12	KSP	<--	DEBT	0.056	0.056	0.000	0.056	1.110	0.267	Not Significant
H13	EARN	<--	IOS	-0.033	-0.033	-0.131	-0.164	-0.351	0.726	Not Significant
H14	EARN	<--	DEBT	-0.409	-0.409	0.012	-0.397	-7.984*	0.000	Significant
H15	EARN	<--	KP	-0.066	-0.066	0.000	-0.066	-0.592	0.554	Not Significant
H16	EARN	<--	KSP	0.209	0.209	0.000	0.209	2.318**	0.020	Significant
H17	DEBT	<--	IOS	0.330	0.330	0.000	0.330	3.288*	0.001	Significant

*Significant at level 10%, Value table t at level 1% = 2.57

** Significant at level 10%, Value table t at level 5% = 1.98

*** Significant at level 10%, Value table t at level 10% = 1.64

Picture 1 : Structural Equation Analysis at Measurement Model of Conceptual Model Line Diagram on effect investment opportunity set (IOS), Debt (DEBT), political cost (KP), and market concentration (KSP) toward earnings management (DA), earning (EARN) and stock price (AR)