

# **EARNINGS MANAGEMENT: DETERMINANT FACTORS AND STOCK PRICE IN DEVELOPING MARKET**

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**Abstract:** *The aim of this study was to prove whether manager coped its earnings for the purpose of informative or target opportunistic. Research also investigated whether investment opportunity set influenced 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 was 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) was considered as the appropriate statistical technique to examine pattern relation of formed model. The results showed that earning management conducted by manager in Developing Market such as Indonesia represented informative earning management which meant all investors had more own belief in earning reporting, but this research could not prove that company owning high investment opportunity set tended to conduct informative earning management.*

**Key words:** *earning management, investment opportunity set, debt, political cost, market share*

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 & Bachtiar, 2003). Managerial selection motivates managerial acts into informative earning management or opportunistic earning management (Siregar & Utama, 2008; and Jiraporn

*et al., 2008*). Managerial selection on earning management ensures that Investment Opportunity Set (IOS) affects contractual event, then influences managerial selection on accounting method to be used (Chen *et al.*, 2008).

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

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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. Subramanyam (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), Nuswantara (2004), and Chen *et al.*, (2008) 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, and Chen *et al.*, 2008 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) and Chen *et al.*, 2008 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), Riahi-Belkoui (2003) and Chen *et al.*, 2008. Lastly, this research examines the effect of each of independent variables against dependent variables simultaneously by conducting Analysis Moment Structure (AMOS) 4.0.

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?

This research is expected to give the following benefits: (1) Theoretical *benefit*. Research gives empirical evidence related to contracting theory of Watts & 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*).

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### CONTRIBUTION OF IOS, INVESTMENT, AND VARIANT TO IOS

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Baker (1993) stipulates that proxies need to be developed and improved because every proxy, especially individually used proxy, carries measurement *error* (Smith & Watts, 1992; Gaver & 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.

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### THE EFFECT OF EARNING MANAGEMENT, IOS, DEBT, POLITICAL COST, AND MARKET CONCENTRATION, EARNING ON SHARE PRICE

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The effect of earning management on share price has been proved in research by 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. The effect of investment opportunity set (IOS) on share price has been connected to Smith & Watts (1992), Riahi-Belkoui (2001) and Gul *et al.*, (2003) studies. Their findings underline positive relationship between IOS and share price. Smith & 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.

Through debt hypothesis, company with higher debt forces manager to select an accounting policy shifting future earning toward current earning (Watts & Zimmerman, 1986). Gul *et al.*, (2003) 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.

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

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). 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.

Studies on the relationship between earning and share price have been related to Ali (1994), Asyik (1999), Harries (1999), Gunawan (1999), and Candrarin & Tearney (2000). The results indicate a significant positive relationship between earning and share price.

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### **THE EFFECT OF IOS, DEBT, POLITICAL COST, AND MARKET CONCENTRATION ON EARNING MANAGEMENT**

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Skinner (1993), Gul *et al.*, (2003), Riahi-Belkoui (2003), Nuswantara (2004), and Chen, *et al.*, (2008) 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) manager of company with higher *growth* inclines to the use of earning management to mark their information about company investment opportunity in the future.

Results of Nuswantara (2004), Riahi-Belkoui (2003), and Perez & Hemmen (2009) 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 Chau & Lee (1999), 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.

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; Nuswantara, 2004). 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.

Shleifer & Vishny (1997) quoted in Nuswantara (2004) 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.

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).

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### **THE EFFECT OF IOS, DEBT, POLITICAL COST, AND MARKET CONCENTRATION ON EARNING RATE RELEVANCY**

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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.

Previous research findings, by Watts & Zimmerman (1978) and 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.

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 & Jeter (1991) showed in their finding that company size significantly and positively correlates with earning.

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

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### THE EFFECT OF IOS ON DEBT

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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.

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### HYPOTHESIS

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- H<sub>1</sub> : Investment Opportunity Set based on share, investment, and variant, contributes to Investment Opportunity Set.
- H<sub>2</sub> : Earning management affects share price.

- H<sub>3</sub> : Investment opportunity set positively affects share price.
- H<sub>4</sub> : Higher company debt adversely affects share price.
- H<sub>5</sub> : Political cost positively affects share price.
- H<sub>6</sub> : Market strength reflected from market concentration positively affects share price.
- H<sub>7</sub> : Higher company earning positively affects share price.
- H<sub>8</sub> : Investment opportunity set positively affects earning management.
- H<sub>9</sub> : Higher debt of company affects earning management.
- H<sub>10</sub> : Political cost relates negatively to earning management.
- H<sub>11</sub> : Negative impact of market concentration emerges as reflected from market concentration against earning management practice.
- H<sub>12</sub> : Positive impact of debt on market strength emerges as reflected from market concentration.
- H<sub>13</sub> : Higher investment opportunity set positively affects earning.
- H<sub>14</sub> : Higher debt rate negatively affects earning.  
H<sub>15</sub> = Political cost positively affects earning.
- H<sub>15</sub> : Political cost positively affects earning.
- H<sub>16</sub> : Market concentration positively affects earning.
- H<sub>17</sub> : Positive impact develops from company with higher investment opportunity set on debt rate.

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### METHOD

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Related to the problem characteristic examined, research may be classified as a comparative causal research (Indriantoro & Supomo, 1999). Operational definition and variable measurement have been shown at Table 1.



**Table 1. Variable Measurement**

| No | Indicator IOS  | Measurement   |
|----|--|---|
| 1  | Market to book value of equity (MBVE)  | MBVE = [Circulated Share x Share Closing Price]: Equity Total   |
| 2  | Book to market value of assets (MBVA)  | MBVA = [Assets Total – Equity Total + Circulated Share x Share Closing Price] divided by Assets Total   |
| 3  | Tobin's Q (TOBIQ)  | Tobin's Q = {[Circulated Share x Share Closing Price] + Debt Total + Supply – Current Asset} divided by Assets Total.                               |
| 4  | Earnings to price ratios (PER)   | PER = [Share Closing Price per Sheet]: Net Earning per Sheet  |
| 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.  |
| 6  | Ratio of depreciation to firm value (DFV)                                    | DFV = Assets Total – Equity Total + [Circulated Share x Share Closing Price] divided by Depreciation Cost.  |
| 7  | Ratio of capital expenditure to book value of assets (CEBVA)                 | CEBVA = [Fixed Asset Book Value t – Fixed Asset Book Value t <sub>1</sub> ]: [Assets Total]   |
| 8  | Ratio of capital expenditure to market of assets (CEMVA)                     | CEMVA = (Fixed Asset Book Value t – Fixed Asset Book Value t <sub>1</sub> ): [Assets Total – Equity Total + (Circulated Share*Share Closing Price)] |
| 9  | Ratio of Investment to Net Sales (INS)                                       | INS = Investment / Net Sales  |
| 10 | Systematic Risk (RS)   | Fowler & Rorke (1983) Beta Correction   |
| 11 | Company size (SIZE)  | Total Value Logarithm of company  |
| 12 | Market Concentration (KSP)   | KSP = (Company Sale / Industrial Sale) x 100 %  |
| 13 | Debt (DEBT)  | Debt = (Debt Total of company i at period t): (Assets Total of company i at period t)   |
| 14 | Earning  | Annual net earning before extraordinary items   |
| 15 | Discretionary Accruals (DA)  | Jones (1991) modified model   |
| 16 | Abnormal Return  | Market adjusted model<br>AR <sub>it</sub> = R <sub>it</sub> – E (R <sub>it</sub> )  |

$$CAR = \sum_{t=1}^{t=n} AR_{it}$$

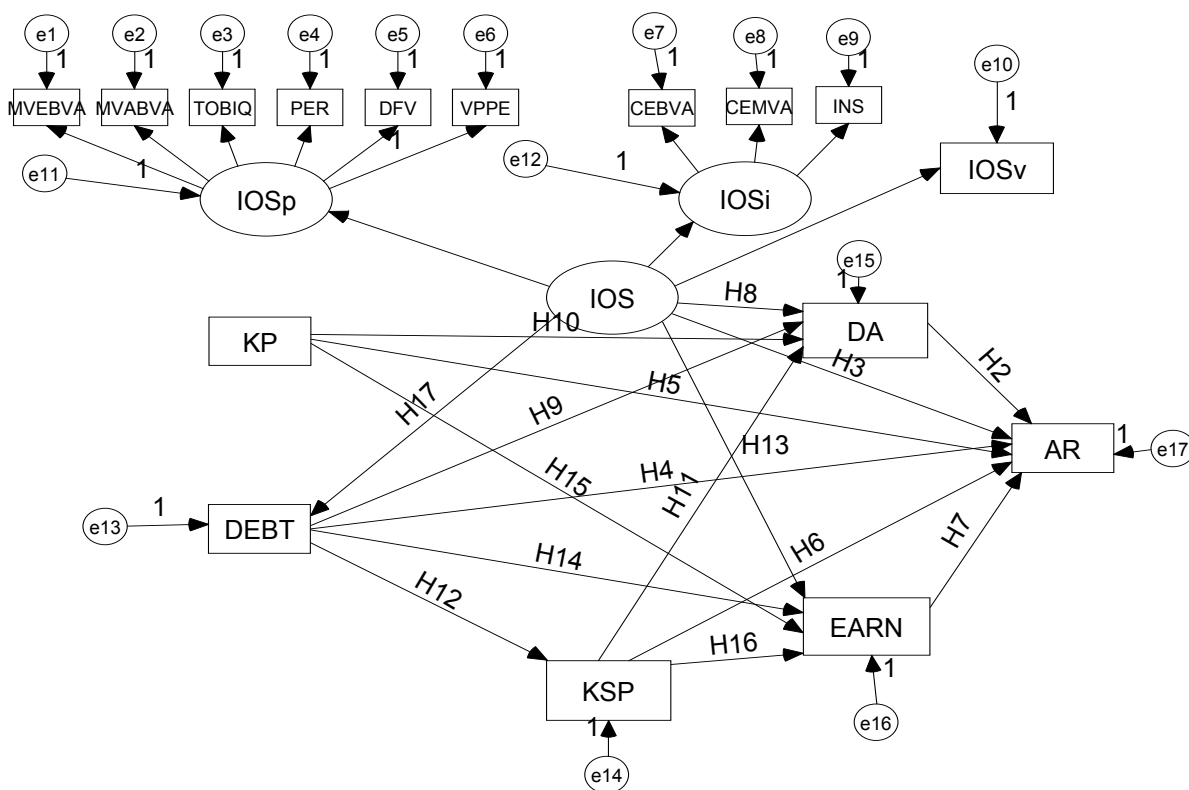
Exogenous variables in this path coefficient include IOS and KP, while endogenous variables involve DEBT, KSP, DA, EARN and AR, and the structural equation remains as the following:

$$\begin{aligned}
 DEBT &= \beta_{13} IOS + \beta_{13} \\
 KSP &= \beta_{14} DEBT + \beta_{14} \\
 DA &= \beta_{15} IOS + \beta_{16} DEBT + \beta_{17} KP + \beta_{18} KSP + \beta_{15} \\
 EARN &= \beta_{19} IOS + \beta_{20} DEBT + \beta_{21} KP + \beta_{22} KSP + \beta_{16} \\
 AR &= \beta_{23} DA + \beta_{24} IOS + \beta_{25} KP + \beta_{26} DEBT + \beta_{27} KSP + \beta_{28} EARN + \beta_{17}
 \end{aligned}$$

Where:

- DEBT = Debt
- IOS = Investment Opportunity Set
- KSP = Market Concentration
- KP = Political Cost
- DA = Discretionary Accruals
- EARN = Earning
- AR = Return Abnormal Accumulation
- $\beta_{13}-\beta_{28}$  = Loading Factor (Standardized Regression Coefficient)
- $\beta_{13}-\beta_{17}$  = 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.



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)

**EMPIRICAL RESULTS**

The detail result of confirmatory factorial analysis is shown in Table 2. The result of factorial analysis for the three Investment Opportunity Set proxies shows that all indicators give contribution to Investment Opportunity Set variable with probability lower than 0.05 (5%) and fix model.

**Tabel 2. Measurement of Investment Opportunity Set Variable**

| Construct  | Load-ing Factor | CR     | Tabel t (α=5%) | Sign  | Descrip-tion |
|------------|-----------------|--------|----------------|-------|--------------|
| IOSp ← IOS | -0.150          | -3.461 | 1.98           | 0.000 | Significant  |
| IOSi ← IOS | 0.035           | Fix    | 1.98           |       | Significant  |

| Construct  | Load-ing Factor | CR  | Tabel t (α=5%) | Sign | Descrip-tion |
|------------|-----------------|-----|----------------|------|--------------|
| IOSv ← IOS | 0.518           | Fix | 1.98           |      | Significant  |

Source: Processed secondary data

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 3, the structural equation takes a following form:

$$\begin{aligned}
 DEBT &= 0.330 \text{ IOS} + \varepsilon_{13} \\
 KSP &= 0.056 \text{ DEBT} + \varepsilon_{14} \\
 DA &= -0.095 \text{ IOS} + 0.148 \text{ DEBT} - 0.123 \text{ KP} \\
 &\quad + 0.080 \text{ KSP} + \varepsilon_{15}
 \end{aligned}$$

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

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

**Tabel 3. Test of Causality Effect IOS, Debt, Political Cost, and Market Concentration toward Earnings Management, Earning and Stock Price**

| H   | Construct     | Loading Factor | Effect |          |        | 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

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 has 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.

## DISCUSSION

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 Smith & Watts (1992), Skinner (1993), Gaver & Gaver (1993), Cahan & Hossain (1995), (1999), Kallapur & Trombley (1999), Gul, (1999), Subekti & Kusuma (1999 and 2001), Fijrianti (2000), Prasetyo (2000), Adam, *et al.* (2000 & 2003), Al Najjar & Belkaoui (2001), Abbott (2001), Jones, *et al.* (2001), Subekti & 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 (Hartono, 1998 and 2000; Gul *et al.*, 2003; and Ardiati, 2003); investment opportunity set (IOS) positively affect share price (Smith & 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 & 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), Nuswantara (2004), and Chen, *et al.*, (2008). Other findings indicate that debt positively affects earning management (Watts & Zimmerman, 1986,1990; Nuswantara, 2004); political cost negatively affects earning management

(Rajgopal, 1999; Gu, 2002; Riahi Belkeoui, 2003, Gul, *et al.*, 2003; Nuswantara, 2004); and market strength reflected by market concentration negatively affects earning management (Nuswantara, 2004). Smith & 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 (Barclay & Smith, 1995; Gul, *et al.*, 2003), political cost positively affects earning (Chaney & 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), Riahi-Belkoui (2003) and Jiraporn *et al.*, (2008) 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.

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## CONCLUSION AND SUGGESTION

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### 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.

### 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 & Watts, 1992; Gaver & Gaver, 1993; Kallapur & Trombley, 1999; and Hartono, 1998), ratio of R&D expense to sales (Skinner, 1993; and Kallapur & Trombley, 1999), ratio of capital additions to firm value (Smith & Watts, 1992; Kallapur & Trombley, 1999; and Jones & Sharma, 2001), Ratio of capital addition to assets book value (Subekti & Kusuma, 2001; Skinner, 1993; Kallapur & Trombley, 1999), Investment to earning ratio (Hartono, 1998), and Ratio of R&D expense to firm value (Skinner, 1993; Kallapur & 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.

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## REFERENCES

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- Adam, T., & Goyal, V.K. 2003. *The Investment Opportunity Set and its Proxy and Variables: Theory and Evidence*. Department Of Finance. Hong Kong: University of Science & Technology.



- AlNajjar, F.K. & Riahi-Belkaoui, A. 2001. Empirical Validation of A General Model of *Growth Opportunities*. *Managerial Finance*, Vol.27, No.3. ABI/INFORM Global.
- Ardiati, A.Y. 2003. Pengaruh Manajemen Laba terhadap *Return Saham* dengan Kualitas Audit sebagai Variabel Pemoderasi. *Makalah Simposium Nasional Akuntansi VI*. Surabaya.
- Asyik, N.F. 1999. Tambahan Kandungan Informasi Rasio Arus Kas. *Jurnal Riset Akuntansi Indonesia*, Vol.2. No. 2. (Juli), hal.230 -250.
- Baker, G.P. 1993. *Growth*, Corporate Policies, and the Investment Opportunity Set. *Journal of Accounting and Economics*, Vol.16. pp.161-165.
- Barclay, M.I., Smith, C.W., & Watts, R. 1995. The Determinants of Corporate Leverage and Dividend Policies. *Journal of Applied Corporate Finance*, Vol.7, No.4, pp.4 - 19.
- Cahan, S.F. 1992. The Effect of Antitrust Investigations on Discretionary Accruals: A Refined Test of The Political-Cost Hypothesis. *The Accounting Review*, Vol.67, No.1.
- \_\_\_\_\_. & Hossain, M. 1996. The Investment Opportunity Set and Disclosure Policy: Some Malaysian Evidence. *Asia Pacific Journal of Management*, Vol.13, No.1, pp.65-85.
- Candrarin, G. & Tearney, M.G. 2000. The Effect of Reporting of Exchange Rate Losses on The Stock Market Reaction. *Jurnal Riset Akuntansi Indonesia*, Vol.3, No.1 (Januari).
- Chaney, P.K. & Jeter, D.C. 1992. The Effect of Size on the Magnitude of Long-Window Earnings Response Coefficients, Contemporary. *Accounting Research*, Vol.8. pp.540-560.
- Chau, D. & Lee, C.J. 1999. Earning Shaving, Big Bath and Dress up in Chapter 11 reorganization. *Working paper*. Tulane University. New Orleans. LA
- Chen, L. & Zhao, X. 2005. *On the Relation Between the Market-to-Book Ratio, Growth Opportunity, and Leverage Ratio*. Department of Finance. Michigan State University.
- Chen, K.Y., Elder, R.J., & Hung, S. 2008. The Investment Opportunity Set and Earnings Management: Evidence from the Role of Controlling Shareholders. *Working Paper*. www.ssrn.com.
- DeAngelo, L. 1988. Managerial Competition, Information Costs, and Corporate Governance: The Use of Accounting Performance Measures in Proxy Contests. *Journal of Accounting and Economics*. (January), pp.3-36.
- Dechow, P. 1994. Accounting Earnings and Cash Flows as Measures of Firm Performance: The Role of Accounting Accruals. *Journal of Accounting and Economics*, Vol.17, pp.3-42.
- Gaver, J.J. & Gaver, K.M. 1993. Additional Evidence on The Association Between The Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policies. *Journal of Accounting and Economics*, Vol.16, pp.125-160.
- Gu, Z., Lee, C.W.J., & Rosett, J.G. 2002. Information Environment and Accrual Volatility. *JEL*. Classification M41;C21.
- Gul, F.A. 1999. Capital Structure and Dividend Policies in Japan. *Journal of Corporate Finance*, 5, (Spring), pp.141-168.
- \_\_\_\_\_. Leung, S., & Srinidhi, B. 2003. Informative and Opportunistic Earnings Management and The Value Relevance of Earnings: Some Evidence on The Role of IOS. *Working Paper*. City University of Hong Kong. Departement of Accountancy.
- Gunawan. 1999. Analisis Kandungan Informasi Laporan Arus Kas. *Makalah Simposium Nasional Akuntansi III*. Jakarta.

- Harries, H. & Manao, H. 1999. Asosiasi Laba Tahunan Emiten dengan Harga Saham ditinjau dari Ukuran dan Debt-Equity Ratio Perusahaan. *Simposium Nasional Akuntansi III*. Jakarta.
- Hartono, J. 1999. *Teori Portofolio dan Analisis Investasi*, Yogyakarta: BPFE.
- \_\_\_\_\_. 2000. *Teori Portofolio dan Analisis Investasi*, Edisi 2. Yogyakarta: BPFE.
- Healy, P. 1985. The Impact of Bonus Schemes on The Selection of Accounting Principles. *Journal of Accounting and Economics*, Vol.7, pp.85-107.
- Jiraporn, P., Miller, G.A., Yoon, S.S., & Kim, Y.S. 2008. Is Earnings Management Opportunistic or Beneficial? An Agency Theory Perspective. *International Review of Financial Analysis*, Vol.17, pp.622-634.
- Jones, J.J. 1991. Earnings Management During Import Relief Investigation. *Journal of Accounting Research*, Vol.29, pp.193-228.
- Jones, S. & Sharma, R. 2001. The Association between The Investment Opportunity Set and Corporate Financing and Dividen Decision: Some Austalian Evidence. *Managerial Finance*, Vol.27, No.3, pp.48, ABI/INFORM Global.
- Kallapur, S. & Trombley, M.A. 1999. The Association between Invesment Opportunity Set Proxies and Realized Growth. *Journal of Business & Accounting*, Vol.26 (April/May), pp.505-519.
- \_\_\_\_\_. 2001. The Investment Opportunity Set: Determinants, Consequences and Measurement. *Managerial Finance*, Vol.27, No. 3.
- Komalasari, P.P. 2000. Asimetri dan Cost of Equity Capital. *Tesis*. Yogyakarta: Universitas Gadjah Mada.
- Mahfud, N. 2004. Interdependensi antara Kebijakan Perusahaan. Struktur Pasar Dan Profitabilitas Dengan Potensi Pertumbuhan Perusahaan Go Publik di Indonesia. *Disertasi*. Universitas Brawijaya Malang.
- Marwata. 2000. Hubungan antara Karakteristik Perusahaan dan Kualitas Pengungkapan Sukarela dalam Laporan Tahunan Perusahaan di Indonesia, *Tesis*. Yogyakarta: Universitas Gadjah Mada.
- Midiastuty, P.P. & Mas'ud, M. 2003. Analisis Hubungan Mekanisme Corporate Governance dan Indikasi Manajemen Laba. *Seminar Nasional Akuntansi VI*, hal.176-199. Surabaya.
- Mira, T., Yap, C.M., & Ho, Y.K. 2002. The Impact of Firm Size. Concentration and Financial Leverage on The Effectiveness of R&D Invesment in Generating Growth Opportunities for Firm. *Working Paper*. Singapore: Faculty of Business Administration.
- Myers, S. 1977. Determinants of Corporate Borrowing. *Journal of Financial Economics*, 5, pp. 147-175.
- Nuswantara, D.A. 2004. The Effect of Market Share and Leverage Interaction Toward Earnings Management Practices. *Simposium Nasional Akuntansi VII*, hal.170 – 185. Bali.
- Pakaryaningsih, E. 2004. Tax Position. Investment Opportunity Set (IOS) and Signaling Effect as A Determinant of Leverage and Dividend Policy Simultanity : An Empirical Study on Jakarta Stock Exchange. *Simposium Nasional Akuntansi VII*. Bali.
- Pérez, G.R. & Hemmen, S.V. 2009. Debt, Diversification and Earnings Management. *Journal Accounting Public Policy*.
- Rajgopal, S., Venkatachalam, M., & Jiambalvo, J. 1999. Is Institutional Ownership Associated with Earning Management and the extent to which Stock Prices Reflect Future Earning? *Working Paper*. Departement of Accounting University of Washington Seattle.



- Riahi-Belkaoui, A. 2003. Anticipatory Income Smoothing and The Investment Opportunity Set: An empirical Test of The Fudenberg and Tirole (1995) Model. *Review of Accounting & Finance*. 2. 2; ABI/INFORM Global.
- Saputro, J.A. & Setiawati, L. 2004. Kesempatan Bertumbuh dan Manajemen Laba: Uji Hipotesis Political Cost. *Simposium Nasional Akuntansi VI*. Bali.
- Siregar, S.V. & Utama, S. 2008. Type of Earnings Management and The Effect of Ownership Structure, Firm Size, and Corporate Governance Practices: Evidence from Indonesia. *The International Journal of Accounting*, Vol.43, pp.1-27.
- Skinner, D.J. 1993. The Investment Opportunity Set and Accounting Procedure Choice: Preliminary Evidence. *Journal of Accounting and Economics*, Vol.16 (October), pp.407-455.
- Smith, Jr., Clifford, W., & Watts, R.L. 1992. The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies. *Journal of Financial Economics*, Vol.32, pp.263-292.
- \_\_\_\_\_. 2001. Bukti Tambahan atas Asosiasi antara The Investment Opportunity Set dengan Kebijakan Pendanaan dan Dividen Perusahaan pada Pasar Sedang Berkembang, *TEMA II*, No.1. (Maret).
- Subekti, I. & Kusuma, I.W. 1999. Asosiasi antara Set Kesempatan Investasi dengan Kebijakan Pendanaan dan Dividen Perusahaan serta Implikasinya pada Perubahan Harga Saham. *Simposium Nasional Akuntansi III*. hal.820-845.
- Subramanyam, K.R. 1996. The Pricing of Discretionary Accruals. *Journal of Accounting and Economics*, Vol.22 (August-December), pp.249-282.
- Veronica, S. & Bachtiar, Y. 2003. Hubungan Manajemen Laba dengan Tingkat Pengungkapan Laporan Keuangan. *Simposium Nasional Akuntansi VI*. Surabaya.
- Warfield, T.D., Wild, L.J., & Wild, K.L. 1995. Managerial Ownership, Accounting Choices, and Informativeness of Earnings. *Journal of Accounting and Economics*, Vol.20 (July), pp.61-92.
- Watts, R.L. & Zimmerman, J.L. 1978. Towards A Positive Theory of The Determination of Accounting Standards. *The Accounting Review*, Vol.53 (January). pp.112-134.
- \_\_\_\_\_. 1986. *Positive Accounting Theory*. Prentice-Hall. Englewood Cliffs.
- Zimmerman, J.L. 1983. Taxes and Firm Size. *Journal of Accounting and Economics*. 5 (August). pp.119-149.