

# EFFECTS OF AUDIT QUALITY, CULTURE VALUE, AND FIRM' SIZE ON EARNINGS REPORTING QUALITY

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## *Abstract*

This study investigates the association between audit quality, culture value, size of firm and earnings reporting quality, using a sample of 328 transportation firms for the period of 2004-2009 in seven Asian countries. This study fails to confirm that Big 4 auditors function as a constraint on earnings management practices. However, the empirical evidence reveals that firms in the countries scoring high on uncertainty avoidance tend to have lower levels of earnings management and thus higher quality of reported earnings. This study results also strongly support the political costs hypothesis which argues that larger firms are subject to more public scrutiny and political actions therein exhibiting less aggressive earnings management behavior.

**Keywords:** Audit quality, Culture, Size of firm, Earnings reporting quality, Transportation firms.

## **Abstrak**

*Penelitian ini menguji hubungan antara kualitas audit, nilai budaya, ukuran perusahaan dan kualitas laba yang dilaporkan, dengan menggunakan 328 perusahaan transportasi sebagai sampel untuk periode 2004-2009 pada tujuh negara di Asia. Penelitian ini gagal menunjukkan bahwa auditor dalam grup "The Big 4" berfungsi sebagai penghambat praktik manajemen laba. Akan tetapi, bukti empiris menunjukkan bahwa perusahaan-perusahaan di negara-negara yang memiliki skor budaya "penghindaran ketidakpastian" yang tinggi cenderung memiliki tingkat manajemen laba yang rendah dan oleh karena itu laba yang dilaporkan memiliki kualitas yang tinggi. Hasil penelitian ini juga sangat mendukung hipotesis biaya politik yang berpendapat bahwa perusahaan-perusahaan yang lebih besar lebih menjadi perhatian publik dan aksi politik yang ada di dalamnya menunjukkan perilaku manajemen laba yang tidak begitu agresif.*

**Kata Kunci:** *Kualitas audit, Budaya, Ukuran perusahaan, Kualitas pelaporan laba, Perusahaan transportasi.*

## **INTRODUCTION**

This study investigates the relationship between culture value, audit quality, and size of firms and earnings reporting quality in 328 listed transportation firms of seven key Asian countries (China, Hong Kong, India, Japan, Korea, Malaysia and Singapore). These countries represent well the Asian work ethic in that they offer a mixed sample of economic vibrancy, impact of the Global Financial Crisis (GFC), size, cultural and business ethos. Evidence on corporate management behavior in managing reported earnings has been reported

extensively in subsequent earnings management research. However, there are fewer insights within Asia and no known studies examining earnings management, and thus quality of earnings, in the transportation industry.

Transportation is a high profile industry in that it affects all aspects of business and government (Gong, Firth and Cullinane 2006). Transportation services are inextricably linked with the world economy and technological development. The significance of the transportation industry has been acknowledged since the 18th century, Adam Smith (1776) noted that shipping is one of the major catalysts of

economic development. Transportation is also a highly capital-intensive industry (Rodrigue 2010). The large sums of money involved in investment and infrastructure need careful investment decisions thus the financial performance of transportation companies is of major importance particularly to investors and financial analysts (Gong *et al.* 2006).

In recent times the transportation industry has faced two significant problems: the energy and global economic crises. There have been tremendous variances in global oil prices both up and down, since the fourth quarter of 2007 with prices skyrocketing by mid-2008. These events clearly had a major impact on their business performance specifically operation costs as transportation firms are large consumers of energy, especially oil. Approximately 25% of world's energy demands and more than 55% of all the global oil consumption each year is attributed to transportation activities (Rodrigue and Comtois 2009). In addition, the global economic crisis that began in July 2007 reduced demand for transportation services resulting in a substantial decrease in revenues. The combination of these two crises has had a complex but negative effect on the transportation firms. These negative impacts on transportation firm's financial performance placed substantial pressure on managers to manage their firm's reported earnings (Gramlich 1992).

Earnings management is an issue of ongoing international importance to investors, policy makers, market analysts and public at large. In recent years, this topic has spawned many academic studies (e.g., Arya, Glover and Sunder 2003; Imhoff 2003) due to the rising number of high profile accounting scandals (e.g., Enron, Parmalat, HIH Insurance, Informatics group). These unanticipated scandals erode investors' confidence in financial reporting quality and arguably impede the efficient flow of capital in financial markets

(Jackson and Pitma 2001). The inherent discretion in accounting standards allows corporate management to exercise judgment in preparing their financial reports. This judgment permits management to select or change accounting methods exercising their judgment in order to increase, decrease or smooth earnings figures, creating opportunities for earnings management (Atik 2009).

This study generates new insights on three main fronts. Firstly, this study, using data from several different country settings provides further evidence on the incentives of company managers to manage their reported earnings. Previous studies (e.g., Burgstahler and Dichev 1997; Degeorge, Patel and Zeckhauser 1999; Burgstahler and Eames 2006; Daske, Gebhardt and McLeay 2006; Gore, Pope and Singh 2007) generally limit their sample to U.S. or European firms. Using data from the Asian region generates broader insights and builds a better international profile of the earnings management behavior in an area of vastly increasing international economic importance. Secondly, Asian countries are characterized as possessing relatively weaker corporate governance systems and facing lower litigation risks than the U.S. or European countries (Shleifer and Vishny 1997; Leuz, Nanda and Wysocki 2003; Jaggi and Leung 2007). These differences in corporate governance structures and litigation risks are expected to influence the level of earnings management in unique ways. Thirdly, this study improves the focus and limits exogenous issues by focusing solely upon the transportation industry. Recent energy and global economic crises have had a marked negative impact on both cost of operation and revenue of transportation firms, which in turn increases pressure on their financial performance (Jaggi and Lee 2002; Steven 2002; Agarwal, Chomsisengphet, Liu and Rhee 2007; Charitou, Lambertides and Trigeorgis 2007). Such circumstances encourage corporate management to 'creatively' manage the firm's reported earnings (Gramlich 1992).

The remainder of this paper is organized as follows. The next section establishes the theoretical framework underlying the beha-

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<sup>1</sup> The spiking of oil prices has major economic consequences for the transportation companies and the wider economy. An oil price spike, in fact, creates a snowball effect driving up both wholesale and consumer prices as a result of increased transportation costs.

viator of earnings management. Section 3 describes the research design. Primary results including descriptive statistics, correlations and regression analysis are presented in Section 4. Key results of the study and implications for future research are discussed in Section 5.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This study, in response to both the growing concern for earnings quality and calls for more empirical research in academic literature, investigates the effects of culture value, audit quality and size of firm on the quality of financial reporting. Consistent with previous research (e.g., Francis, LaFond, Olsson and Shipper 2004; Velury and Jenkins 2006; Ball and Shivakumar 2008; Tong and Miao 2011), the current study employs earnings management as proxies for quality of financial reporting. Earnings management occurs when management take deliberate steps within the constraints of GAAP (Generally Accepted Accounting Principles) to bring about a desired level of reported earnings (Tseng and Lai 2007). Numerous studies have investigated whether managers manage reported earnings opportunistically under the flexibility of accounting rules.

The first group of literature explores management incentives to manage reported earnings around corporate events. Related topics include initial public offerings (e.g., Rangan 1998; Teoh, Welch and Wong 1998a; Teoh, Wong and Rao 1998; Teoh, Welch and Wong 1998b; Shivakumar 2000; Bergstresser, Desai and Rauh 2006) and firm's acquisitions (e.g., Perry and Williams 1994; Erickson and Wang 1999; Louis 2004; Bergstresser *et al.* 2006).

A second group of literature looks at managerial motivation to manage accounting earnings in response to their performance incentive schemes. These studies included, for example, bonus schemes (Healy 1985), stock-based incentives (e.g., Coles, Hertzfel and Kalpathy 2003; Bergstresser and Philippon 2006; Burns and Kedia 2006), and dividend payments (Kasanen, Kinnunen and Niskanen 1996; Daniel, Denis and Naveen 2008).

A third classification of earnings management literature considers whether corporate management manages reported earnings to meet certain earnings benchmarks. Burgstahler and Dichev (1997) propose that firms appear to manage earnings upwards to avoid reporting losses and reporting earnings decreases. They state that an unusually low frequency of firms have small negative and small declines in earnings and an unusually high incidence of firms report small positive and small increases in earnings. Additionally, DeGeorge *et al.* (1999) argue that management face strong incentives to manage reported accounting earnings to: (1) report zero or positive earnings, (2) sustain recent financial performance, and (3) meet analysts' earnings forecasts. This position is supported by Burgstahler and Eames (2006) who found that U.S. firms' managers are more likely to report earnings that meet or beat analyst estimates.

This study adds to the second strand of literature and explores the impact of the culture value, auditor quality, and firm size on the earnings reporting quality of the sample companies.

### Role of the Auditor?

Watts and Zimmerman (1986) and DeAngelo (1981) argue that auditor quality depends on the relevance of the auditor's report in examining contractual relationships and reporting breaches. In other words, Bartov *et al.* (2000) suggest that higher quality auditors prefer to report errors and irregularities and are unwilling to accept questionable accounting practices. Therefore, it is posited that high quality auditors are expected to be more likely to detect the practice of earnings management (Becker, DeFond, Jiambalvo and Subramanyam 1998). It is felt that Big 4 audit firms may provide higher quality than those non-Big 4 (DeAngelo 1981; Watts and Zimmerman 1986; Becker *et al.* 1998; Caneghem 2004). The Big 4 auditors have strong incentives to provide or maintain a high audit quality level due to the fact that they have: (1) a greater number of clients, (2) more opportunity to deploy significant resources to auditing (recruitment, training and technology),

and (3) more to lose, for example termination of other clients, loss of reputation, when they do not report a discovered breach (Caneghem 2004; Chung, Firth and Kim 2005).

Findings reported in numerous studies clearly support that the Big 4 auditors serve as an earnings management constraint. Using U.S. data, Becker *et al.* (1998) show that clients of Big 4 auditors report discretionary accruals relatively smaller than the discretionary accruals reported by clients of non-Big 4. Krishnan (2003) documents that Big 4 auditors are able to constrain aggressive and opportunistic reporting of discretionary accruals by their clients compared to non-Big 4 auditors. Francis *et al.* (1999) argue that even though clients of Big 4 firms report higher level of total accruals, they have lower amounts of discretionary accruals. Based on U.K. sample, Gore, Pope and Singh (2001) suggest that cases of high levels of non-audit services Big 4 firms are more able to constrain earnings management than their counterparts. Chen, Lin and Zhou (2005) note that Big 4 auditors associate with less earnings management for Taiwan IPO firms. However, using a sample of Belgian publicly listed firms, Bauwhede *et al.* (2003) report that the superior performance of Big 4 over non-Big 4 auditors is only in the case of income-increasing earnings management.

Taken together, the evidence presented from these studies strongly indicates that Big 4 auditors have more incentives to detect and constrain earnings management behavior than non-Big 4 auditors. Thus, the first hypothesis is: H<sub>1</sub>: Big 4 auditors have more incentive to constrain earnings management behavior in the transportation firms in the Asia region.

### **Role of the Culture Value?**

Accounting theorists (Gray 1988) links cultural values to accounting values and practices, while Hofstede (1983) quantifies his cultural dimensions among countries. Based on data from more than 116,000 questionnaires answered by employees of a large multinational corporation in 72 countries, Hofstede's (1983) classifies four factors underlying differences

in nations' cultural values; these are individualism, power distance, uncertainty avoidance, and masculinity. These factors provide information about cultural differences across nations. Hofstede (1991) also notes the role of a fifth dimension of culture, long-term versus short term orientation in life. However, there are difficulties to test the effect of accounting values on earnings management due to measurement of accounting values and their relationship to cultural values. Therefore, to infer indirectly that accounting values affect earnings management, this study examines whether a meaningful and significant relationship between Hofstede's cultural values and earnings management exist.

This study proposes that accounting values affect the choices of earnings management as different accounting practices result in different choices of accounting accruals. Among the most Hofstede's (1983) classification of the cultural values on earnings management, only Uncertainty Avoidance (UA) has a straightforward relationship with earnings management. By definition, when a nation avoids risk and creates security by emphasizing technology and buildings, laws and rules, and religion, it is considered high in UA. A weak UA society maintains a more relaxed atmosphere in which practice counts more than principles and deviance is more easily tolerated. In line with Guan and Pourjalali (2010), this study expects that company managers in high UA nations are less likely to manage their reported accounting earnings.

Therefore, this research examines the hypotheses in relation to the cultural values suggested by Hofstede (1983), as follow:

H<sub>2</sub>: Higher degree of Uncertainty Avoidance in a nation has less incentive to practice earnings management.

### **Does Size matter?**

Some scholars suggest that firm size may influence earnings management behavior. Specifically, they argue that large firms are subject to more public scrutiny (Moses 1987) and are more politically sensitive (Watts and Zimmerman 1986) than small firms. Thus, it is ex-

pected that larger firms tend to manage income relative to smaller firms. Previous studies (e.g., Lilien and Pastena 1982; Sutton 1988) find that large firms are more likely to engage in income-decreasing accounting practices to avoid political actions of regulators. However, Wong (1988), Moyer (1990) and Scott (1991) report inconsistent results with the firm size hypothesis. In addition, Ashari, Koh, Tan and Wong (1994) advance an opposing view arguing that larger firms are more closely scrutinized by analysts and investors, therefore, more information is made available regarding those firms. Consequently, smoothed income signals from larger firms add little value to the firms; in other words, large firms have less incentive to smooth income figures. Based on mixed results to date, this study proposes a non-directional third hypothesis is:

H<sub>3</sub>: Client firm size influences earnings management behavior of the transportation firms in the Asia region.

### RESEARCH METHODOLOGY

This study examines transportation companies in China, Hong Kong, India, Japan, Korea, Malaysia, and Singapore for fiscal years ending 2004 to 2009. All financial data is gathered from One Source database. The initial population comprised the entire population of all 395 firms or 2,370 firm year observations that are grouped into five transportation classifications (airlines, railroads, trucking, water and miscellaneous transportation). Full financial statements could not be collected for every year or every firm. This left a final useable sample of 328 companies or 1,640 firm-year observations for the statistical analysis.

The number of firm-year observations used in the tests was reduced to 1,094 because one extra year data is needed to compute discretionary accruals (a proxy for earnings management). Table 1 presents an overview of the number of firm-year observations and transportation firm classifications per each of the seven countries.

This study employs unexpected or discretionary accruals as a proxy for earnings management. Consistent with contemporary studies in earnings management, this study focuses on the absolute (unsigned or non-directional) value rather than the actual sign of discretionary accruals as a proxy for earnings management. The magnitude of unsigned discretionary accruals is the best measure to indicate the opportunistic behavior of management without any concern as to whether they manage earnings numbers upwards or downwards (Francis *et al.* 1999; Ferguson, Seow and Young 2004; Walker 2004). Prior to estimating discretionary accruals, total accruals (TAC) are calculated as:

$$TAC_{jt} = (\Delta CA_{jt} - \Delta Cash_{jt}) - (\Delta CL_{jt} - \Delta LTD_{jt} - \Delta ITP_{jt}) - DPA_{jt} \quad (1)$$

Where:

$TAC_{jt}$  = total accruals for firm  $j$  in time period  $t$ ;  $\Delta CA_{jt}$  = change current assets for firm  $j$  from time period  $t-1$  to  $t$ ;  $\Delta Cash_{jt}$  = change cash balance for firm  $j$  from time period  $t-1$  to  $t$ ;  $\Delta CL_{jt}$  = change current liabilities for firm  $j$  from time period  $t-1$  to  $t$ ;  $\Delta LTD_{jt}$  = change long-term debt included in current liabilities for firm  $j$  from time period  $t-1$  to  $t$ ;  $\Delta ITP_{jt}$  = change income tax payable for firm  $j$  from time period  $t-1$  to  $t$ ; and  $DPA_{jt}$  = depreciation and amortization expense for firm  $j$  from time period to  $t$ .

**Table 1:** Data set: Number of firm-year observations and transportation firm classifications per country

Country	Firm-year observations					Transportation firm classifications					
	2006	2007	2008	2009	Total	Airlines	Railroads	Trucking	Water	Miscellaneous	Total
China	62	65	69	1	197	18	11	0	46	122	197
Hong Kong	12	19	25	4	60	5	0	0	15	40	60
India	15	13	15	11	54	7	2	1	38	6	54
Japan	127	127	130	121	505	24	48	144	119	170	505
Korea	34	34	34	0	102	6	3	30	45	18	102
Malaysia	27	28	27	4	86	18	0	10	23	35	86
Singapore	24	25	28	13	90	10	0	13	38	29	90
Total	301	311	328	154	1,094	88	64	198	324	420	1,094

TAC is then decomposed into normal accruals (NAC) and discretionary accruals (DAC) using the cross-sectional *modified* Jones (1991) model defined formally as:

$$TAC_{jk,t} / TA_{jk,t-1} = \alpha_{jt} [1/ TA_{jk,t-1}] + \beta_{jt} [(\Delta REV_{jk,t} - \Delta REC_{jk,t}) / TA_{jk,t-1}] + \gamma_{jt} [PPE_{jk,t} / TA_{jk,t-1}] + \varepsilon_{jk,t} \quad (2)$$

Where:

TAC<sub>jk,t</sub> = total accruals for firm *j* in industry *k* in year *t*; TA<sub>jk,t-1</sub> = are total assets for firm *j* in industry *k* at the end of year *t-1*; ΔREV<sub>jk,t</sub> = change net sales for firm *j* in industry *k* between years *t-1* and *t*; ΔREC<sub>jk,t</sub> = change in receivables for firm *j* in industry *k* between years *t-1* and *t*; PPE<sub>jk,t</sub> = gross property, plant and equipment for firm *j* in industry *k* in the year *t*; α<sub>j</sub>, β<sub>j</sub>, γ<sub>j</sub> = industry specific estimated coefficients; and ε<sub>j</sub> = error term.

NAC is defined as the fitted values from Equation 2 whilst DAC is the residual (TAC minus NAC).

To control compounding influences of cross-sectional factors, this study incorporates control variables in the regression analysis. This study includes absolute value of total accruals (*ABSTAccruals*) to control for a firm's 'accrual-generating potential' (Becker *et al.* 1998). Firms with higher absolute values of total accruals are likely to have greater discretionary accruals (Krishnan 2003). Thus, the current study expects a significant positive coefficient on the *ABSTAccruals* variable. *Leverage* is included as prior studies show that firms have a propensity to smooth reported earnings to avoid violating debt covenants and to decrease the cost of debt (Carlson and Bathala 1997). In addition, some scholars (e.g., Healy and Palepu 1990; DeFond and Jiambalvo 1994; Sweeney 1994) posit that firms with a higher likelihood of violating debt agreements are more likely to have an incentive to increase earnings. This study argues that firms with a higher level of debt have more incentive to manage reported earnings. The proxy variable for level of debt is the ratio of total debt to total equity of the previous year. Pre-

vious studies (e.g., Dechow, Sloan and Sweeney 1995; Kothari, Leone and Wasley 2002) report discretionary accruals is dependent on a firm's financial performance. This is because financial performance may affect corporate management's opportunistically to manage earnings figures. Furthermore, financial performance may influence a firm's audit risk (e.g., Gul, Chen and Tsui 2003; Krishnan 2003). Thus, return on assets (*ROA*) is used to control for the possible compounding influences of a firm's financial performance. Tseng and Lai (2007) state that more profitable firms are associated with less earnings management. Thus, this study expects that the coefficient of this variable is significantly negative associated with the level of earnings management. *ROA* is defined as the ratio of earnings before extraordinary items to total assets of prior year. Furthermore, this study includes a variable of *Invest* measured by the level of investment in tangible fixed assets in current year scaled by total assets of previous year. This variable can result in smaller total accruals due to the associated increase in depreciation expense. This current study predicts a significant and negative coefficient on this variable. Becker *et al.* (1998) and Reynolds and Francis (2001), amongst others, report cash flow from operations influence corporate management actions in managing earnings. Thus, this study includes *CFO* to control for discretionary accruals dependence on cash flow from operations and predict a negative association between *CFO* and the level of earnings management. Finally, this study includes a variable of legal origin as another variable that is considered will influence the practices of earnings management. Proxy measures for the dependent, independent and control variables are defined in Table 2.

To test the hypotheses on audit quality, culture value and size of firm, this study develops the following multivariate model:

$$AbsDAC_i = a_i + \alpha_{i1} Auditquality_i + \alpha_{i2} Culture_i + \alpha_{i3} Size_i + \alpha_{i4} Leverage_i + \alpha_{i5} ROA_i + \alpha_{i6} AbsTAC_i + \alpha_{i7} Invest_i + \alpha_{i8} CFO_i + \alpha_{i9} Legal_i + \varepsilon_i$$

**Table 2:** Variables’ definition and description

Variable	Definition	Prediction
<i>Dependent variable</i> AbsDAC	Discretionary accruals of firm <i>i</i> for year <i>t</i> measured by Modified Jones (1991) model	-
<i>Independent variables</i> AuditQuality	Indicator variable with firm <i>i</i> scored 1 if their auditor in fiscal year <i>t</i> is a Big-4; zero otherwise	-
Culture	Cultural values for each country are obtained from Hofstede and Bond (1988).	?
Size	Natural logarithm of total assets of firm <i>i</i> for their fiscal year <i>t</i>	+
<i>Control variables</i> AbsTAC	Absolute value of total accruals for firm <i>i</i> divided by total assets for firm <i>i</i> for year <i>t-1</i>	+
Leverage	Ratio of book value total debt of firm <i>i</i> for year <i>t</i> to book value total equity of firm <i>i</i> for year <i>t-1</i>	-
ROA	Ratio of earnings before extraordinary items of firm <i>i</i> for year <i>t</i> to book value total assets of firm <i>i</i> for year <i>t-1</i>	-
Invest	The amount of the increase or decrease in tangible fixed assets for firm <i>i</i> from year <i>t-1</i> to year <i>t</i> , scaled by last year’s total assets	-
CFO	Cash flow from operations for firm <i>i</i> during the year <i>t</i> deflated by total assets as at end of year <i>t-1</i> .	-
Legal	Indicator variable with firm <i>i</i> scored 1 if Common Law country; zero otherwise	?

**RESULTS AND DISCUSSION**

Table 3 provides the descriptive statistics for the dependent, independent and control variables. Panel A shows the descriptive statis-

tics for the continuous variables in the regression model. Panel B exhibits details for the categorical variables.

**Table 3:** Descriptive statistics dependent, independent and control variables

<i>Panel A – Continuous variables</i>					
	Mean	Median	Std. Dev.	Minimum	Maximum
<i>AbsDAC</i>	0.0846	0.0488	0.1131	0.0001	0.7475
<i>Culture</i>	64.65	85.00	30.37	8.00	92.00
<i>ROA</i>	0.0076	0.0024	0.1000	-0.5932	0.7784
<i>Leverage</i>	1.2020	0.6700	2.2418	-34.8400	28.7300
<i>AbsTAC</i>	0.0841	0.0464	0.1163	0.0000	0.7728
<i>Invest</i>	0.0889	0.0476	0.1959	-1.1413	0.9070
<i>CFO</i>	-0.0613	-0.0499	0.2510	-3.9701	3.3908
<i>FSize (in th USD)</i>	2,982,587	500,721	7,979,247	2,733	102,499,038
<i>Panel B – Categorical variables</i>					
	Frequency	Percentage (%)			
<i>Audit quality:</i>					
<i>Non Big 4</i>	521	47.62			
<i>Big 4</i>	573	52.38			
<i>Legal:</i>					
<i>Non Common law</i>	804	73.49			
<i>Common law</i>	290	26.51			

**Legend:** See Table 2 for full definitions and descriptions for the study’s dependent, independent and control variables.

Table 3 shows that the mean and median absolute values of total accruals (*AbsDAC*) are 8.46% and 4.88% of total assets at the beginning of the year. The data reveals that number of firms that have positive and negative discretionary accruals is 537 and 557 firms respectively. This implies that more companies engage in income-decreasing compared to income-increasing earnings management. In regard to the uncertainty avoidance cultural dimension, on average, the index score is 64.65 ranging from the lowest 8 (Singapore) and the highest 92 (Japan). Return on assets (ROA) averages 0.76% ranging from -59.32% to 77.84%. Consistent with the low ROA, those firms generate, on average, negative amounts (-6.13% of the beginning total assets) of cash flow from operations. Ratio total debt to total equity (Leverage) has a mean of 120%. The average absolute value of total accruals (*AbsTAC*) is 8.41% of total assets at the beginning of the year. On average, amount of the increase in tangible fixed assets for scaled by last year's total assets is 8.89%. The sample firms have a mean total assets of USD2,982,587 thousand. Finally, around 52% of the sample firms use the services of Big 4 audit firms and 27% of the sample firms are from common law countries.

Table 4 depicts a correlation matrix between the dependent, experimental and control variables. The upper half of each panel reports Pearson pairwise correlation coefficients ( $cr_p$ ), the lower half shows Spearman correlation coefficients ( $cr_s$ ). The correlation results do not provide comprehensive support for the study's hypotheses. *AbsDAC* is negatively and significantly (at  $p < 0.01$ ) correlated with *Culture* and *Size* both for Pearson and Spearman correlations. This infers that countries with higher uncertainty avoidance scores and large size firms are less likely involved in earnings management practices. In addition, Table 4 shows a positive but insignificant correlation between *Audit Quality* and *AbsDAC*. This evidence is not consistent with the hypothesis and previous studies that Big 4 auditors appear to constrain manager's discretions in adopting earnings management practices.

Table 4: Pearson correlation matrix

	<i>AbsDAC</i>	Audit quality	<i>Culture</i>	<i>Size</i>	<i>AbsTAC</i>	Leverage	ROA	Invest	CFO	Legal
<i>AbsDAC</i>										
Audit quality	0.001									
<i>Culture</i>	-0.300*	0.180*								
<i>Size</i>	-0.152*	0.225*	0.092*							
<i>AbsTAC</i>	0.669*	-0.007	-0.407*	-0.094*						
Leverage	-0.028	0.052	0.265*	0.270*	-0.001					
ROA	0.130*	-0.036	-0.189*	-0.011	0.112*	-0.124*				
Invest	0.192*	0.071*	-0.253*	0.039	0.227*	0.027	0.130*			
CFO	-0.070*	-0.033	0.338*	-0.044	-0.241*	0.158*	-0.235*	-0.287*		
Legal	0.208*	0.249*	-0.774*	-0.139*	0.261**	-0.175*	0.089*	0.134*	-0.175*	

Legend: \* and \*\* indicate significance at  $p < 0.01$  and  $p < 0.05$  (based on two-tailed tests). See Table 2 for full definitions and descriptions for the dependent, independent and control variables.

Findings also show a significant correlation (both  $cr_p$  and  $cr_s$ ) amongst independent variables. The highest correlation is between *Audit Quality* and *Size*, with a coefficient of 0.235 and 0.225 ( $p < 0.01$  both  $cr_p$  and  $cr_s$ ). In respect to correlations between independent and control variables, and amongst control variables themselves, the highest correlations are between *Culture* and *Legal*, with a coefficient of 0.774 at  $p < 0.01$ . This value is below the crit-



ical limit of 0.80. Variance inflation factors calculated for all regressions reported in Table 5 for all independent and control variables provide further indications that multicollinearity is not a problem in the model estimations (Hair, Anderson, Tatham and Black, 1995; Greene 1999; Cooper and Schindler, 2003).

The main results for testing the hypotheses are reported in Table 5. Regression model estimates reported in Table 5 is statistically significant (F-statistic  $p < 0.01$ ). The coefficient on *Audit quality* is positive but insignificantly associated with *AbsDAC*. Therefore,  $H_1$  is not supported. Findings reported in numerous studies clearly support that the view Big 4 auditors serve as a barometer of higher levels of audit quality. Several studies have supported this surrogate measure (e.g., Dopuch and Simunic 1982; Becker *et al.* 1998;

Francis *et al.* 1999; Gore *et al.* 2001; Bauwhede *et al.* 2003; Krishnan 2003; Chen *et al.* 2005; Kanagaretnem, Lim and Lobo 2010). This study fails to confirm that in Asia, Big 4 auditors function as a constraint on earnings management practices.

A consistent finding is that *Culture* is negatively and significantly at p-value of 0.001 associated with *AbsDAC* thus  $H_2$  is supported. This result infers that firms in the countries scoring high on uncertainty avoidance (AU) tend to have lower levels of earnings management and therefore higher quality of reported earnings. Further analysis (see Table 6) reveals that countries with higher score of UA have significantly lower levels of earnings management compared with their counterpart. This finding is consistent with Guan and Pourjalali (2010).

**Table 5:** Multiple regression results

	Prediction	Beta	t-statistic	p-value
(Constant)			7.207	0.000
<i>Independent Variables:</i>				
Audit quality	-	0.005	0.923	0.356
Culture	-	0.001	-3.483	0.001
Size	?	-0.008	-4.808	0.000
<i>Control Variables:</i>				
AbsTAC	+	0.382	20.962	0.000
Leverage	+	0.001	1.148	0.251
ROA	-	-0.030	-1.622	0.105
Invest	-	-0.015	-2.424	0.016
CFO	-	-0.086	-7.745	0.000
Legal	?	0.007	0.673	0.501
<b>Model Summary</b>				
R-Squared			0.420	
Adj. R-Squared			0.415	
F-Statistic			87.205*	
Sample Size			1,094	

**Legend:** \*, \*\*, and \*\*\* indicate significance at  $p < 0.01$ ,  $p < 0.05$  and  $p < 0.10$  respectively (based on two-tailed tests). See Table 2 for full definitions and descriptions for the dependent, independent and control variables.

**Table 6:** Uncertainty avoidance sub-samples<sup>2</sup>

	N	Earnings Management			
		Mean	SD	t-value	Sig
<i>Low</i>	487	0.1245	0.1489	10.130	0.000
<i>High</i>	607	0.0525	0.0546		
	<b>1,094</b>				

<sup>2</sup> Firm *i* is defined as *High* score if it has above the mean value of uncertainty avoidance; otherwise defined as *Low* score.

**Table 7:** Size of firm sub-samples<sup>3</sup>

	N	Earnings Management			
		Mean	SD	t-value	Sig
<i>Small</i>	877	0.0899	0.1175	3.713	0.000
<i>Large</i>	217	0.0628	0.0902		
	<b>1,094</b>				

Finally, the finding of this study confirms that large size firms exhibit less aggressive earnings management behavior. Specifically, the coefficient on *Size* is negative and significant (at p-value of 0.000) associated with earnings management measure. Additional analysis (see Table 7) shows that large sample firms have significantly lower (0.0628 versus 0.0899) levels of earnings management than those small firms.

Apart from the independent variables, the coefficient of absolute value of total accruals (*ABSTAccruals*) is positively and significantly (p-value of 0.000) associated with the absolute value of discretionary accruals. This finding is consistent with prior works (e.g., Frankel, Johnson and Nelson 2002; Ashbaugh, LaFond and Mayhew 2003; Balsam, Krishnan and Yang 2003). Coefficient on *ROA* is negative but only significant at the bottom line level. This result confirms the argument that behavior in earnings management is adversely associated with company performance: the better the company's financial performance the lesser the tendency to manage reported earnings (Firth 1997; Frankel *et al* 2002; Ashbaugh *et al* 2003; Ferguson *et al* 2004). In addition coefficients on *Invest* and *CFO* are all negative and significant (at p-values of 0.016 and 0.000 respectively) meaning that firms with a greater level of investment in fixed assets and larger cash flows from operations are less likely to manage income figures. These results directly conflict with several previous non-Asian studies (Dechow *et al.* 1995; Kaszni 1999; Bauwhede *et al.* 2003; Butler, Leone and Willenborg 2004) that document that firms with high perfor-

mance and growth are more likely to relate to the amount of managed earnings.

## CONCLUSION

The purpose of this study is to identify factors that may impact earnings management, thus quality of reported earnings. Based on the literature review, this study infers three factors: audit quality, culture and the size of firms. This study does not find evidence that Big 4 auditors work as a constraint for earnings management practices by corporate managers. Hunt and Lulseged (2007) suggest that one possible explanation is that the Big 4 audit market has dramatically decreased, especially after the global influence of the *Sarbanes-Oxley Act of 2002*, as substantial numbers of audit clients of Big 4 auditors are switching to non-Big 4 audit firms. This phenomenon results in a smaller Big 4 audit market and thus larger economic dependence of the Big 4 auditors on their remaining audit clients. Another possibility that might explain the decline of Big 4 auditors' quality is that this study utilizes a dataset from the countries in which external auditors face lower litigation risks compared to countries like U.S. or U.K. The Big 4 auditors may have very little incentive to report conservatively due to the lack of auditor litigation in many Asian countries.

The multivariate regression analyses reveal that culture and firm's size influence earnings reporting quality corporate management. Countries with high score of uncertainty avoidance are more likely to have lower levels of earnings management and therefore higher quality of reported earnings. In addition, the result of this study strongly supports the political costs hypothesis which argues that in comparison to smaller firms, larger firms are subject to more public scrutiny and political actions (Watts and Zimmerman 1986; Moses

<sup>3</sup> This study partitions the full sample into small and large firm sub-samples using the mean of total assets (USD\$2,982,587 thousands) as a basis for partitioning cut-off.

1987). In particular, larger firms have incentives to choose the accounting procedures that result in reducing reported earnings. Several previous studies provide confirmatory evidence. For example, Lilien and Pastena (1982) and Sutton (1988) report that large firms are more likely to engage in income-decreasing accounting practices to avoid political actions of regulators. Key (1997) notes downward earnings management in the U.S. cable television industry, while Han and Wang (1998) show similar behavior by U.S. oil companies due to high political costs. In addition, Boynton, Dobbins and Plesko (1992) find empirical evidence that U.S. firms directly affected by the enforcement of a tax change try to avoid its effects by implementing conservative accounting procedures. Another possible explanation why larger firms are not involved in earnings management is they may have more sophisticated internal control systems and more competent internal auditors than smaller firms. The result is a reduction in the likelihood of manipulating earnings by corporate management.

Like any other empirical investigation, this study is not without certain caveats. Complete earnings management is unobservable thus this study relies on proxy measures that, whilst previously used in the research literature, are not free from criticism. For instance, discretionary accrual models measure discretionary accruals with error (see Bernard and Skinner 1996, for a deeper discussion). These problems, however, are endemic to the earnings management literature and this study is using the best currently available models and proxies.

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# **PENGARUH INTELLECTUAL CAPITAL DAN CORPORATE GOVERNANCE TERHADAP BUSINESS PERFORMANCE: PENDEKATAN PERSAMAAN STRUKTURAL**

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## ***Abstract***

*This study aims to analyze the effect of intellectual capital and corporate governance on the business performance and the influence of the financial performance on the market performance. This study extends the previous studies by adding indicators for each variable. The samples in this study were 36 companies from financial industries listed on the Indonesia Stock Exchange for the period from 2007 to 2011. Using partial least square (PLS) to process the data analysis. The findings show that intellectual capital significantly affected the financial performance, and corporate governance significantly influenced both financial performance and market performance. The Financial performance also had significant effect on the market performance. Those results and their implications of the study were also discussed on the last part of the paper.*

**Keywords:** *Intellectual Capital, Corporate Governance, Business Performance*

## **Abstrak**

Penelitian ini bertujuan untuk menganalisis pengaruh *intellectual capital* dan *corporate governance* terhadap *business performance* dan pengaruh *financial performance* terhadap *market performance*. Penelitian ini merupakan pengembangan penelitian sebelumnya dengan menambahkan indikator disetiap variabel. Sampel penelitian ini adalah 36 perusahaan dari industri keuangan yang terdaftar di Bursa Efek Indonesia untuk periode 2007 sampai 2011. *Partial Least Square* (PLS) digunakan untuk menganalisis data. Temuan menunjukkan bahwa *intellectual capital* berpengaruh signifikan terhadap *financial performance*, dan *corporate governance* berpengaruh signifikan terhadap *financial performance* dan *market performance*. *Financial performance* berpengaruh signifikan terhadap *market performance*. Hasil dan implikasi penelitian ini didiskusikan di bagian akhir penelitian ini.

**Kata Kunci:** *Intellectual Capital, Corporate Governance, Business Performance*

## **PENDAHULUAN**

Bidang *intellectual capital* awalnya mulai muncul dalam pers populer pada awal 1990-an. Di Indonesia, fenomena *intellectual capital* mulai berkembang terutama setelah munculnya Pernyataan Standar Akuntansi Keuangan (PSAK) No.19 (revisi 2000) tentang aktiva tidak berwujud. Meskipun tidak dinyatakan secara eksplisit sebagai *intellectual capital*, namun lebih kurang *intellectual capi-*

*tal* telah mendapat perhatian. Menurut PSAK No. 19, aktiva tidak berwujud adalah aktiva non-moneter yang dapat diidentifikasi dan tidak mempunyai wujud fisik serta dimiliki untuk digunakan dalam menghasilkan atau menyerahkan barang atau jasa, disewakan kepada pihak lainnya, atau untuk tujuan administratif (Ikatan Akuntan Indonesia 2002).

Penelitian mengenai hubungan *intellectual capital* terhadap *business performance*



di luar negeri maupun di Indonesia telah dibuktikan secara empiris. Firer dan Williams (2003), Belkaoui (2003), Astuti (2005), Tan *et al.* (2007), Ulum *et al.* (2008), dan Solikhah *et al.* (2010) berhasil membuktikan *intellectual capital* berpengaruh positif pada kinerja keuangan perusahaan. Akan tetapi, salah satu area yang menarik perhatian akademisi maupun praktisi adalah terkait dengan kegunaan *intellectual capital* sebagai salah satu alat untuk menentukan nilai perusahaan (Edvinsson dan Malone 1997). Nilai pasar dari beberapa perusahaan dapat beberapa kali lebih besar dari nilai buku aset perusahaannya. Adanya “hidden value” yang tergambar dari persentasi nilai pasar mengindikasikan bahwa perusahaan memiliki *intellectual capital*. Banyak perusahaan yang memiliki aktiva berwujud yang tidak signifikan dalam laporan keuangan namun penghargaan pasar atau nilai perusahaan tersebut sangat tinggi (Mahmud 2013; Nandaria 2013).

Jaafari (2013) meneliti hubungan jangka panjang *intellectual capital* dengan nilai pasar dan kinerja keuangan perusahaan yang terdaftar di Bursa Saham Iran. Komponen *intellectual capital* (*human capital*, *struktur capital*, dan *customer capital*) diukur dengan metode Pulic (VAIC<sup>TM</sup>) dan kinerja perusahaan diukur dengan *market to book value*, Return on Asset (ROA), Return on equity (ROE), dan *growth in revenue* (GR). Hasilnya menunjukkan adanya hubungan yang signifikan positif antara *intellectual capital*, nilai pasar, dan kinerja keuangan. Penelitian Chen *et al.* (2005) dengan menggunakan kinerja perusahaan yang berupa *market-to-book value*, ROE, ROA, *growth in revenue* dan *employee productivity* menunjukkan bahwa *intellectual capital* berpengaruh terhadap nilai pasar dan kinerja keuangan.

Namun demikian, hasil penelitian yang dilakukan Jaafari (2013) dan Chen *et al.* (2005) berbeda dengan hasil penelitian yang dilakukan oleh Gan dan Saleh (2008) pada perusahaan *Technology-Intensive* di Malaysia yang menemukan bahwa *intellectual capital* berpengaruh positif terhadap kinerja keuangan (ROA, Asset turn over, ATO) tetapi tidak

terdapat hubungan antara *intellectual capital* dengan nilai pasar yang diprosikan dengan *market to book value*. Hasil ini dikarenakan periode pengamatan yang terlalu pendek (tahun 2007s/d 2008), sehingga belum mampu menunjukkan pengaruh yang signifikan terhadap kinerja pasar perusahaan di Malaysia.

Terkait dengan penelitian tentang *intellectual capital*, *corporate governance*, dan kinerja perusahaan, Ningrum (2012) berhasil menunjukkan bahwa *intellectual capital* berpengaruh positif terhadap kinerja keuangan (ROA) perusahaan namun untuk *corporate governance* yang hanya diprosikan dengan kepemilikan manajerial, kepemilikan institusional, dan proporsi komisaris independen, masih tidak terbukti dapat meningkatkan kinerja keuangan pada perusahaan keuangan yang terdaftar di Bursa Efek Indonesia periode pengamatan 2009-2011.

Penelitian-penelitian tersebut masih menunjukkan hasil yang berbeda. Hal ini dikarenakan adanya perbedaan proksi yang digunakan untuk mengukur masing-masing variabel, dan periode pengamatan yang dilakukan (Mahmud, 2013; Nandaria, 2013). Melihat penelitian Gan dan Saleh (2008) dan Ningrum (2012), peneliti mengkaji keterkaitan *intellectual capital*, *corporate governance*, dan kinerja perusahaan, khususnya perusahaan keuangan yang terdaftar di Bursa Efek Indonesia. Menyempurnakan penelitian-penelitian sebelumnya, proksi pengukuran variabel ditambahkan. Komponen *intellectual capital* (*struktur capital*, *human capital*, dan *customer capital*) diukur dengan metode Pulic (VAIC<sup>TM</sup>) yang mengacu pada penelitian Jaafari (2013) dan Chen *et al.* (2005). Untuk menilai *corporate governance*, peneliti menambahkan proksi jumlah anggota komite audit dan ukuran dewan komisaris. Untuk penilaian terhadap kinerja keuangan perusahaan, peneliti menggunakan proksi ROA, ROE, ATO, dan GR, sedangkan untuk menilai kinerja pasar perusahaan peneliti menggabungkan proksi-proksi penelitian terdahulu yaitu MBV, PER, harga pasar saham per lembar, dan Tobin’s Q. Dalam penelitian ini juga digunakan variabel kontrol untuk

mengendalikan agar hubungan yang terjadi pada variabel dependen tersebut murni dipengaruhi oleh variabel independen bukan oleh faktor-faktor lain, yaitu ukuran perusahaan dan *leverage*.

## TINJAUAN PUSTAKA DAN PERUMUSAN HIPOTESIS

### Teori dasar

Lima teori yang digunakan dalam penelitian ini. Teori-teori tersebut adalah *Stakeholder Theory*, *Resource Based Theory* (RBT), *Market Based Theory*, *Agency Theory* dan *Signaling Theory*. Teori *stakeholder* mempertimbangkan posisi para *stakeholder* yang dianggap *powerfull*. Kelompok *stakeholder* inilah yang menjadi pertimbangan utama bagi perusahaan dalam mengungkapkan dan/atau tidak mengungkapkan suatu informasi di dalam laporan keuangan. Dalam pandangan teori ini, perusahaan memiliki *stakeholders*, bukan hanya sekedar *shareholder*. Perusahaan memandang bahwa *stakeholders* terdiri dari pemegang saham, kreditur, pemerintah, karyawan, pelanggan, pemasok, dan publik (Belkaoui 2003).

Tujuan utama dari teori ini adalah untuk membantu manajemen perusahaan dalam meningkatkan penciptaan nilai sebagai dampak dari aktivitas-aktivitas yang mereka lakukan dan meminimalkan kerugian yang mungkin muncul bagi *stakeholder* mereka. Sebenarnya, teori ini menjelaskan hubungan antara manajemen perusahaan dengan para *stakeholder*-nya. Para *stakeholder* memiliki hak untuk diperlakukan secara adil oleh organisasi, dan manajemen harus mengelola organisasi untuk keuntungan seluruh *stakeholder*. Dalam upaya penciptaan nilai bagi perusahaan, manajemen perusahaan harus dapat mengelola seluruh sumberdaya yang dimiliki perusahaan, baik karyawan (*human capital*), aset fisik (*physical capital*) maupun *structural capital*.

*Resource based theory* dipelopori oleh Penrose (1959), yang mengemukakan bahwa sumberdaya yang dimiliki perusahaan bersifat heterogen dan memiliki karakteristik khusus

dan unik di setiap perusahaan. *Resource based theory* adalah suatu pemikiran yang berkembang dalam teori manajemen strategik dan keunggulan kompetitif perusahaan yang meyakini bahwa perusahaan akan mencapai keunggulan apabila memiliki sumberdaya yang unggul. Sumberdaya yang unggul adalah sumberdaya yang langka, susah untuk ditiru oleh pesaing, dan tidak tergantikan.

Menurut Susanto (2007), agar dapat bersaing organisasi membutuhkan dua hal utama. Pertama, memiliki keunggulan dalam sumberdaya yang dimilikinya, baik berupa aset yang berwujud (*tangible assets*) maupun yang tidak berwujud (*intangible assets*). Kedua, kemampuan dalam mengelola sumberdaya yang dimiliki secara efektif dan efisien. Kombinasi yang apik dari keduanya akan menciptakan kompetensi yang khas dari sebuah perusahaan, sehingga mampu memiliki keunggulan kompetitif di banding para pesaingnya. Karenanya, berdasarkan pendekatan *resource based theory* dapat disimpulkan bahwa sumberdaya yang dimiliki perusahaan berpengaruh terhadap kinerja perusahaan yang pada akhirnya akan meningkatkan nilai pasar perusahaan (Penrose, 1959).

*Market Based Theory* (MBT) memandang bahwa kinerja perusahaan tidak hanya ditentukan oleh faktor-faktor internal tetapi juga oleh faktor-faktor eksternal. Menurut Susanto (2007), konsep MBT ini didasarkan atas konsep *competitive force model*. Model ini menjelaskan lima faktor pendorong eksternal yang harus diperhatikan oleh sebuah organisasi agar mampu memperoleh keunggulan kompetitif dalam lingkungan bisnis, yaitu: (1) Ancaman pemain baru dalam bisnis (2) Persaingan diantara perusahaan-perusahaan yang berbeda dalam industri (3) Ancaman adanya produk atau layanan pengganti (4) Kekuatan pemasok (5) Kekuatan pembeli.

Kekuatan kolektif dari kelima faktor pendorong ini akan menentukan potensi keuntungan secara keseluruhan dalam sebuah industri. Setiap industri memiliki seperangkat karakteristik ekonomi dan teknis yang menentukan kekuatan masing-masing faktor pendorong ini. Berdasarkan *market based*

*theory*, faktor-faktor eksternal ini merupakan faktor pendorong bagi perusahaan untuk menentukan dan memiliki sumberdaya strategis yang mampu menjadi sumber keunggulan kompetitif dalam lingkungan bisnis dengan tingkat persaingan yang tinggi.

Teori keagenan (*Agency Theory*) mengemukakan hubungan antara *principal* (pemilik) dan *agent* (manajer) dalam hal pengelolaan perusahaan, dimana *principal* merupakan suatu entitas yang mendelegasikan wewenang untuk mengelola perusahaan kepada pihak *agent* (manajemen). Perbedaan peran di antara keduanya menyebabkan suatu ketimpangan informasi (Jensen dan Meckling 1976). Eisenhardt (1989) menyatakan bahwa teori agensi menggunakan tiga asumsi sifat manusia: (1) Manusia pada umumnya mementingkan diri sendiri (*self interest*) (2) Manusia mempunyai daya pikir terbatas mengenai persepsi masa mendatang (*bounded rationality*) (3) Manusia selalu menghindari risiko (*risk averse*).

*Corporate governance* merupakan konsep yang didasarkan pada teori keagenan yang sangat berkaitan dengan bagaimana membuat para investor yakin bahwa manajer akan memberikan keuntungan bagi mereka, yakin bahwa manajer tidak akan menggelapkan atau menginvestasikan ke dalam proyek-proyek yang tidak menguntungkan berkaitan dengan modal yang telah ditanamkan oleh investor, dan juga berkaitan dengan bagaimana para investor mengontrol para manajer (Jensen dan Meckling 1976). Dengan kata lain *corporate governance* diharapkan akan dapat berfungsi untuk menekan atau menurunkan biaya keagenan.

Teori sinyal (*Signaling Theory*) menyatakan bahwa terdapat dorongan perusahaan untuk memberikan informasi laporan keuangan tahunan kepada pihak eksternal yang dapat menjadi sinyal bagi investor dan pihak potensial lainnya dalam mengambil keputusan ekonomi (Ujiyantho dan Pramuka 2007; Brigham dan Houston 2011). Suatu pengungkapan dikatakan mengandung informasi apabila dapat memicu reaksi pasar, yaitu dapat berupa perubahan harga saham atau *abnormal return*.

Apabila pengungkapan tersebut memberikan dampak positif berupa kenaikan harga saham, maka pengungkapan tersebut merupakan sinyal positif. Begitupun sebaliknya.

Seorang manajer memiliki motivasi untuk mengungkapkan *private information* (informasi keuangan dan non-keuangan) secara sukarela karena perusahaan berharap informasi tersebut dapat diinterpretasikan sebagai sinyal positif mengenai kinerja perusahaan dan mampu mengurangi asimetri informasi. Pengungkapan *intellectual capital* dan *corporate governance* memungkinkan bagi investor dan *stakeholder* lainnya untuk lebih baik dalam menilai kemampuan perusahaan di masa depan, melakukan penilaian yang tepat terhadap perusahaan, dan mengurangi persepsi risiko (Williams 2001). Berdasarkan teori ini maka suatu pengungkapan laporan tahunan perusahaan merupakan informasi yang penting dan dapat mempengaruhi investor dalam proses pengambilan keputusan.

### **Pengaruh Intellectual Capital terhadap Financial dan Market Performance**

Menurut teori *stakeholder*, manajemen perusahaan diharapkan mampu melakukan aktivitas yang diharapkan oleh *stakeholder* mereka dan para *stakeholder* dapat mengendalikan manajemen dalam mengelola sumberdaya yang dimiliki perusahaan. Sejalan dengan teori RBT, perusahaan yang mampu menggunakan dan mengelola sumberdaya yang dimilikinya baik berupa aset berwujud maupun aset yang tidak berwujud secara efektif dan efisien maka hal tersebut dapat menciptakan *value added* dan keunggulan kompetitif dibanding para pesaingnya. Dalam artikelnya, Stewart (1991) mendefinisikan *intellectual capital* sebagai sesuatu keunggulan kompetitif berupa intelektual pengetahuan, informasi, kekayaan intelektual dan pengalaman yang dapat membuat kekayaan.

Jadi dapat disimpulkan bahwa *intellectual capital* merupakan sumberdaya perusahaan yang berbasis pengetahuan dan berupa aset tidak berwujud sehingga dapat dijadikan nilai tambah bagi perusahaan dengan mem-

perhatikan *human capital*, *structural capital* dan *customer capital* yang dimiliki perusahaan. *Intellectual capital* ini mampu digunakan perusahaan untuk menciptakan inovasi dan persaingan bisnis yang kompetitif.

IFAC (1998) dalam Ulum (2009) mengklasifikasikan *intellectual capital* dalam tiga kategori, yaitu *organizational capital*, *relational capital*, dan *human capital*. *Organizational capital* meliputi *intellectual property* dan *infrastructure assets*. Peneliti terdahulu (Sveiby 1997; Edvinsson dan Malone 1997; Chen *et al.* 2005; Jaafari 2013) pada umumnya menyatakan bahwa *intellectual capital* terdiri dari tiga komponen utama, yaitu human, structural dan customer capital.

*Human capital* merupakan *lifeblood* dalam *intellectual capital*. Pada *human capital* inilah terdapat sumber *innovation* dan *improvement* berupa pengetahuan, keterampilan, dan kompetensi yang dimiliki oleh karyawan perusahaan. Akan tetapi *human capital* merupakan komponen yang sulit diukur (Sawarjuwono dan Kadir 2003). Oleh karena itu, *human capital* merupakan sumberdaya kunci yang dapat menciptakan keunggulan kompetitif perusahaan sehingga perusahaan mampu bersaing dan bertahan di lingkungan bisnis yang dinamis. Dengan memiliki karyawan yang berkeahlian dan berketerampilan khusus, maka dapat meningkatkan kinerja perusahaan dan menjamin keberlangsungan perusahaan tersebut. Meningkatnya kinerja perusahaan juga akan meningkatkan persepsi pasar.

*Structural capital* merupakan kemampuan organisasi atau perusahaan dalam memenuhi proses rutinitas perusahaan dan strukturnya yang mendukung usaha karyawan untuk menghasilkan kinerja intelektual yang optimal serta kinerja bisnis secara keseluruhan (Sawarjuwono dan Kadir 2003). *Structural capital* adalah sarana dan prasarana yang mendukung karyawan untuk menciptakan kinerja yang optimum, meliputi kemampuan organisasi menjangkau pasar, *hardware*, *software*, *database*, struktur organisasi, *patent*, *trademark*, dan segala kemampuan organisasi untuk mendukung produktivitas karyawan. Konsep adanya modal struktural memungkin-

kan terciptanya *intellectual capital* dan menjadi penghubung atau pemroses sumberdaya manusia menjadi *intellectual capital*.

Konsep penting *customer capital* adalah pengetahuan yang dibentuk dalam *marketing channels* bahwa organisasi berkembang dengan menjalankan bisnis. Sebagai contoh adalah *image*, loyalitas konsumen, kepuasan konsumen, hubungan dengan *supplier*, kekuatan komersial, kapasitas negosiasi dengan entitas keuangan dan lingkungan aktivitas (Sawarjuwono dan Kadir 2003).

Penelitian mengenai hubungan *intellectual capital* terhadap kinerja keuangan perusahaan di luar negeri maupun di Indonesia telah dibuktikan secara empiris. Firer dan Williams (2003) dari Afrika Selatan melakukan penelitian dengan metode Pulic VAIC<sup>TM</sup> dan regresi linier dengan hasil *intellectual capital* (IC) berhubungan positif dengan kinerja keuangan perusahaan (ROA, ATO). Hasil tersebut sejalan dengan penelitian Belkaoui (2003) dari USA yang menggunakan metode regresi dan laporan tahunan, bahwa *intellectual capital* secara signifikan meningkatkan dengan kinerja perusahaan multinasional di USA. Selanjutnya, Tan *et al.* (2007) dari Singapore melakukan penelitian dengan metode Pulic (VAIC<sup>TM</sup>) dan PLS dengan hasil IC berpengaruh positif terhadap kinerja keuangan perusahaan, baik masa kini maupun masa mendatang; rata-rata pertumbuhan IC berhubungan positif dengan kinerja keuangan perusahaan di masa mendatang; kontribusi IC terhadap kinerja perusahaan berbeda berdasarkan jenis industrinya.

Ulum (2008) meneliti hubungan *intellectual capital* terhadap kinerja perusahaan perbankan Indonesia. Kinerja perusahaan yang digunakan adalah ROA, ATO, dan GR. Hasil penelitian ini menunjukkan bahwa IC berpengaruh signifikan positif terhadap kinerja keuangan perusahaan sekarang dan masa depan. Diperkuat dengan penelitian Ningrum (2012) yang juga berhasil menunjukkan bahwa *intellectual capital* yang diukur dengan metode Pulic (VAIC<sup>TM</sup>) berpengaruh positif terhadap kinerja keuangan (ROA). Karenanya berdasarkan teori-teori yang telah dikemuka-

kan disertai dengan penelitian-penelitian terdahulu terkait pengaruh *intellectual capital* dan kinerja keuangan, maka dirumuskan hipotesis sebagai berikut:

H<sub>1</sub>: *Intellectual capital* berpengaruh positif terhadap *financial performance* perusahaan

Teori stakeholder juga menyatakan bahwa perusahaan bukanlah entitas yang hanya beroperasi untuk kepentingannya sendiri namun harus memberikan manfaat bagi stakeholdernya (Ghozali dan Chariri 2007 dalam Rani 2012). Sejalan dengan teori *signaling* yang mengemukakan bahwa adanya dorongan perusahaan untuk memberikan informasi pelaporan keuangan tahunan kepada pihak eksternal, menjadi sinyal bagi investor dan pihak potensial lainnya dalam mengambil keputusan ekonomi. Suatu pengungkapan dikatakan mengandung informasi apabila dapat memicu reaksi pasar, yaitu dapat berupa perubahan harga saham atau *abnormal return*. Apabila pengungkapan tersebut memberikan dampak positif berupa kenaikan harga saham, maka pengungkapan tersebut merupakan sinyal positif. Sebaliknya apabila pengungkapan memberikan dampak negatif berupa *abnormal return* mengindikasikan adanya sinyal negatif terhadap kinerja pasar perusahaan.

*Intellectual capital* diyakini memegang peran penting dalam meningkatkan nilai perusahaan di mata pasar. *Intellectual capital* mampu menciptakan inovasi dan persaingan bisnis yang kompetitif. Untuk dapat menarik perhatian pasar, perusahaan harus mampu meningkatkan pengelolaan kinerjanya. Hal tersebut dapat memperlihatkan bahwa perusahaan mempunyai nilai tambah dibandingkan dengan perusahaan lain, sehingga investor akan menempatkan nilai yang lebih tinggi untuk perusahaan yang memiliki *intellectual capital* yang besar. Semakin tinggi *intellectual capital* dalam suatu perusahaan, maka nilai perusahaan akan meningkat dan sahamnya akan banyak diminati oleh investor sehingga harga saham cenderung menjadi naik.

Penelitian terkait adanya hubungan positif antara *intellectual capital* dengan kinerja pasar perusahaan juga telah dilakukan secara empiris oleh Chen *et al.* (2005) dan Jaafari (2013). Jaafari (2013) meneliti hubungan jangka panjang *intellectual capital* dengan nilai pasar dan kinerja keuangan perusahaan yang terdaftar di Bursa Saham Iran. Komponen *intellectual capital* (*human capital*, *struktur capital*, dan *customer capital*) diukur dengan metode Pulic (VAIC<sup>TM</sup>) dan kinerja perusahaan diukur dengan *market to book value*, ROA, ROE, dan *growth in revenue*. Hasil penelitian Jaafari (2013) menunjukkan adanya hubungan yang signifikan positif antara *intellectual capital*, nilai pasar, dan kinerja keuangan. Penelitian Chen *et al.* (2005) juga menguji pengaruh *intellectual capital* terhadap nilai pasar dan kinerja keuangan perusahaan. Chen *et al.* (2005) juga menggunakan model Pulic (VAIC<sup>TM</sup>) dengan sampel perusahaan publik di Taiwan. Kinerja perusahaan diukur dengan *market-to-book value*, ROE, ROA, *growth in revenue* dan *employee productivity*. Hasil penelitian Chen *et al.* (2005) menunjukkan bahwa *intellectual capital* berpengaruh terhadap nilai pasar dan kinerja keuangan; R<sub>dan</sub>D berpengaruh terhadap kinerja perusahaan. Oleh karena itu, hipotesis yang diajukan dalam penelitian ini adalah:

H<sub>2</sub>: *Intellectual capital* berpengaruh positif terhadap *market performance*

### **Pengaruh Corporate Governance terhadap Financial dan Market Performance**

*Corporate governance* merupakan seperangkat sistem yang mengatur dan mengendalikan perusahaan untuk menciptakan nilai tambah (*value added*) bagi para pemangku kepentingan. Sedangkan menurut *Cadbury Committee* (1992), *corporate governance* yang baik adalah prinsip yang mengarahkan dan mengendalikan perusahaan agar mencapai keseimbangan antara kekuatan serta kewenangan perusahaan dalam memberikan pertanggungjawabannya kepada para *shareholders* khususnya, dan *stakeholders* pada umumnya. OECD (1999) menggambarkan

bahwa *corporate governance* merupakan suatu elemen kunci dalam meningkatkan efisiensi ekonomis, yang meliputi serangkaian hubungan antara manajemen perusahaan, dewan direksi dan komisaris, para pemegang saham dan stakeholders lainnya.

Inti dari *corporate governance* adalah adanya pemisahan antara kepemilikan dengan pengendalian perusahaan, yaitu untuk mengatasi masalah yang timbul dari hubungan antara pemilik modal dengan manajer. Permasalahan tersebut adalah keterbatasan pemilik dalam memastikan bahwa modal yang ditanamkannya tidak diambil alih atau diinvestasikan pada proyek yang tidak menguntungkan. *Corporate governance* terdiri dari lima prinsip yaitu: *transparency* (transparansi), *accountability* (akuntabilitas), *responsibility* (pertanggungjawaban), *independency* (independensi), *fairness* (keadilan dan kewajaran) (Ningrum 2012). Mekanisme *corporate governance* meliputi kepemilikan institusional, kepemilikan manajerial, ukuran dewan komisaris, proporsi komisaris independen, dan keberadaan komite audit. Dengan adanya mekanisme *corporate governance* tersebut diharapkan dapat menjadi alat untuk mengawasi perusahaan agar kinerja perusahaan menjadi semakin baik.

Dengan adanya tata kelola perusahaan yang baik dan terkendali, keselarasan tujuan antara seluruh pihak yang berkepentingan terhadap perusahaan dapat terwujud sehingga seluruh elemen-elemen yang terkait dapat bekerja sama dalam menjalankan kegiatan bisnis secara maksimal. Kinerja keuangan perusahaan pun akan mengalami peningkatan seiring dengan peningkatan pengelolaan perusahaan dalam mencapai tujuannya. Keberhasilan mekanisme *corporate governance* suatu perusahaan tercermin dalam *corporate performance*. *Corporate governance* dapat diukur berdasarkan *economic value added* (Susanto 2003). Berdasarkan uraian tersebut maka keberhasilan mekanisme *corporate governance* tercermin dalam *corporate performance*, dimana *corporate performance* dapat diukur dari *return on capital (ROC)*,

*return on equity (ROE)* dan *economic value added (EVA)*.

Jensen dan Meckling (1976) mengemukakan bahwa perusahaan dengan *governance* yang baik akan memiliki kinerja keuangan yang lebih efisien. Sejalan dengan penelitian yang dilakukan Klapper dan Love (2002) yang berhasil menemukan adanya hubungan positif antara *corporate governance* dengan kinerja keuangan yang diukur dengan ROA. *Corporate governance* merupakan pedoman bagi manajer untuk mengelola perusahaan secara *best practice*. Manajer bekerja secara efektif dan efisien sehingga dapat menurunkan biaya modal dan mampu meminimalkan risiko. Hal ini dapat terlihat pada harapan aliran kas masa depan yang tinggi sehingga profitabilitas yang diharapkan juga akan semakin meningkat. Hipotesis alternatif yang diajukan dalam penelitian ini adalah:

H<sub>3</sub>: *Corporate Governance* berpengaruh positif terhadap *financial performance*

Seperti diuraikan sebelumnya, teori *signaling* berkaitan dengan dorongan perusahaan untuk memberikan informasi laporan keuangan tahunan kepada pihak eksternal untuk mengurangi informasi yang dimiliki, baik informasi keuangan maupun non keuangan, dan sebagai sinyal positif mengenai kinerja perusahaan (Susanto 2007). Salah satu informasi yang wajib untuk diungkapkan oleh perusahaan adalah informasi tentang *corporate governance*. Pelaksanaan *corporate governance* yang baik secara konsisten dan konsekuen di setiap kegiatan bisnis serta menjadikannya sebagai budaya kerja yang berlaku di perusahaan, dapat mendukung tujuan perusahaan baik pertumbuhan usaha, profitabilitas, meningkatkan nilai pemegang saham dan pemangku kepentingan lainnya, serta meningkatkan kemampuan agar keberlangsungan usaha jangka panjang dapat dicapai. Investor akan merasa aman atas investasinya, cenderung memperoleh *return* sesuai dengan harapannya dan bersedia membayar premium kepada perusahaan yang menerapkan *good corporate governance* (Jensen dan Meckling 1976).

Ada dua alasan umum bahwa *corporate governance* meningkatkan nilai perusahaan. Pertama, *corporate governance* meningkatkan kepercayaan investor. Investor beranggapan bahwa perusahaan yang dikelola dengan baik maka risikonya kecil dan menunjukkan *expected rate of return* yang rendah sehingga menyebabkan tingginya penilaian perusahaan. Kedua, untuk menunjukkan bahwa *corporate governance* merupakan faktor yang penting dalam menentukan nilai perusahaan (Jensen dan Meckling 1976). Berdasarkan atas argumen di atas dan ulasan teoritis, maka hipotesis kedua yang dirumuskan dalam bentuk alternatif adalah:

H<sub>4</sub>: *Corporate Governance* berpengaruh positif terhadap *market performance*

### **Pengaruh Financial Performance terhadap Business Performance**

Kinerja (*Performance*) merupakan efektifitas operasional perusahaan yang ditetapkan berdasarkan tujuan yang ingin dicapai oleh perusahaan. Kinerja perusahaan merupakan prestasi yang dicapai oleh suatu perusahaan dalam suatu periode tertentu yang mencerminkan tingkat kesehatan perusahaan. Kinerja perusahaan dibedakan menjadi dua, yaitu kinerja keuangan dan kinerja pasar perusahaan. *Financial Performance* merupakan penentuan ukuran-ukuran tertentu yang dapat mengukur keberhasilan suatu perusahaan dalam menghasilkan laba. Prestasi perusahaan ditunjukkan dalam laporan keuangan sebagai tampilan keadaan suatu perusahaan selama periode tertentu disebut dengan kinerja keuangan perusahaan. Pengukuran kinerja keuangan sangat diperlukan dalam relasi dengan kepuasan konsumen proses internal, dan aktivitas yang berhubungan dengan perbaikan dan inovasi dalam organisasi yang membawa pada *future financial return*. Kinerja perusahaan dapat diukur melalui rasio keuangan seperti *Return on Asset (ROA)*, *Return on Equity (ROE)*, *Assets Turnover (ATO)*, dan *Growth in Revenue (GR)* (Chen *et al* 2005).

*Market Performance* (Kinerja Pasar) menggambarkan kinerja perusahaan yang

menunjukkan keefektifan, presentasi atau keatraktifan pasar suatu produk perusahaan. Pertumbuhan perusahaan yang terus meningkat pun diharapkan meningkat apabila kinerja perusahaan baik. Pada penelitian ini, untuk mengukur kinerja pasar perusahaan peneliti menggabungkan proksi-proksi dari beberapa penelitian sebelumnya. Kinerja pasar pada penelitian ini diukur dengan *market to book value* (Chen *et al.* 2005; Imaningati 2007; Jaafari 2013), *price to book value (PBV)* (Husnan *et al.* 2006; Rani 2012), *price earning ratio (PER)* (Wijaya dan Wibawa 2010), dan Tobin's Q (Klapper dan Love 2002). Ratio ini mengukur nilai yang diberikan pasar keuangan kepada manajemen dan organisasi sebagai perusahaan yang terus tumbuh. Dipilih sebagai ukuran kinerja karena menggambarkan besarnya premi yang diberikan pasar atas *intellectual capital* dan *corporate governance* yang dimiliki perusahaan.

Menurut teori *stakeholder*, para stakeholder mungkin lebih menyenangi perusahaan yang bisa menciptakan nilai bagi kepentingannya. Jika stakeholdernya berupa calon investor maka mereka memiliki kepentingannya terhadap perusahaan yang kinerjanya baik. Para investor tersebut berharap mendapatkan keuntungan dari modal yang ditanamkan di perusahaan tersebut (Mahmud 2013; Nandaria 2013). Dengan demikian perusahaan yang kinerjanya baik maka akan mampu memenuhi kepentingan stakeholder sehingga saham perusahaan tersebut mungkin banyak diminati dan akhirnya harga sahamnya akan meningkat (Belkaoui 2003). Selanjutnya menurut teori sinyal. Kinerja keuangan perusahaan yang benar-benar baik memberikan signal kepada pihak eksternal (Susanto 2007). Contohnya dalam pemberian deviden, pemberian deviden merupakan signal dari perusahaan bahwa perusahaannya dalam kondisi baik atau laba. Semakin tinggi kinerja keuangan suatu perusahaan maka kinerja pasar suatu perusahaan juga akan meningkat karena kinerja keuangan selalu berhubungan dengan kinerja pasar. Hipotesis yang diajukan dalam penelitian ini adalah:

H<sub>5</sub>: *Financial performance* berpengaruh positif terhadap *market performance*

penelitian ini adalah dengan menggunakan metode *purposive sampling*. Adapun jumlah sampel yang memenuhi kriteria tampak pada tabel 1.

## METODA PENELITIAN

### Populasi dan Sampel Penelitian

Populasi dalam penelitian ini adalah semua perusahaan atau industri keuangan yang terdaftar di Bursa Efek Indonesia (BEI). Periode pengamatan dalam penelitian ini adalah tahun 2008-2012. Teknik pengambilan sampel dalam

### Variabel Penelitian

Definisi dan indikator pengukurann dari setiap variabel beserta rujukannya seperti yang tersaji pada tabel 2 di bawah ini.

**Tabel 1:** Distribusi Sampel

No.	Keterangan	Jumlah Perusahaan
1.	Perusahaan keuangan yang terdapat di Bursa Efek Indonesia (BEI) tahun 2007, 2008, 2009, 2010, dan 2011	63
2.	Perusahaan yang tidak menyajikan data laporan keuangan selama tahun pengamatan	0
3.	Perusahaan yang memperoleh ekuitas negatif selama periode pengamatan	25
4.	Perusahaan yang memperoleh laba negatif selama periode pengamatan	4
	Jumlah Sampel	36
	Jumlah Sampel Pengamatan selama 5 tahun	180

**Tabel 2:** Variabel penelitian

Variabel	Referensi
<b><i>Intellectual capital (Value Added Intellectual Coefficient, VAIC)</i></b>	
Value Added Capital Employed (VACA)	Ulum (2008); Ningrum (2012)
Value Added Human Capital (VAHU)	Ulum (2008); Ningrum (2012)
Structural Capital Value Added (STVA)	Ulum (2008); Ningrum (2012)
<b><i>Coporate Governance</i></b>	
Persentase Kepemilikan Institusional (KPI)	Eng dan Mak (2003)
Persentase Kepemilikan Manajerial (KPM)	Sembiring (2005)
Proporsi Komisaris Independen (PKI)	Dewi (2011) dan Ningrum (2012)
Jumlah Dewan komisaris (UDK)	Sembiring (2005)
Jumlah Komite Audit (KA)	Dewi (2011) dan Ningrum (2012)
<b><i>Financial Performance</i></b>	
Return on Equity (ROE)	Chen <i>et al</i> (2005)
Return on Assets (ROA)	Chen <i>et al</i> (2005)
Growth Revenue (GR)	Chen et.al (2005)
Assets Turn Over (ATO)	Firer dan William (2003)
<b><i>Market Performance</i></b>	
Market to Book Value (MVB)	Chen <i>et al</i> (2005) dan Jaafari (2013)
Harga Per lembar saham	Jaafari (2013)
Price Earning Ratio (PER)	Wijaya dan Wibawa (2010)
Tobin's Q	Klapper dan Love (2002)
<b><i>Control Variable</i></b>	
Log asset	Pamungkas (2013)
Leverage	Husnan dan Pudjiastuti (2006)



**Model Penelitian**

Pengujian hipotesis dilakukan dengan menggunakan persamaan 1 sampai dengan 5. Persamaan tersebut menggambarkan persamaan structural.

$$\begin{aligned}
 FP &= \beta_1 IC + \beta_5 Ctrl + Z_1 \dots\dots\dots(1) \\
 MP &= \beta_2 IC + \beta_6 Ctrl + Z_2 \dots\dots\dots(2) \\
 FP &= \beta_3 CG + \beta_5 Ctrl + Z_1 \dots\dots\dots(3) \\
 MP &= \beta_4 CG + \beta_6 Ctrl + Z_2 \dots\dots\dots(4) \\
 MP &= \beta_5 FP + Z_3 \dots\dots\dots(5)
 \end{aligned}$$

Dimana:

- FP = *Financial Performance*
- MP = *Market Performance*
- IC = *Intellectual Capital*
- CG = *Corporate Governance*
- $\beta$  = Konstanta
- Ctrl = Variabel Kontrol
- Z = *Error*

Uji validitas persamaan structural tersebut menggunakan *discriminant validity* dan *average variance extracted*. Dengan menggunakan *discriminant validity* menunjukkan bahwa indikator GR, PER dan STVA dikeluarkan dari model penelitian karena datanya tidak valid. Indikator-indikator tersebut secara statistik tidak signifikan. Hasil yang sama diberikan bila uji validitas menggunakan *average variance extracted*. Nilai AVE untuk variabel *Financial performance*, *market performance*, *intellectual capital*, *corporate governance*, dan variabel kontrol lebih besar daripada 0,50. Hasil ini menunjukkan bahwa variabel *Financial performance*, *market performance*, *intellectual capital*, dan *corporate governance* adalah valid. Sementara itu uji reliabilitas menggunakan nilai *composite reliability*. Nilai *composite reliability* dari semua variabel *financial performance*, *market performance*, *intellectual capital*, dan variabel kontrol melebihi 0,70. Dengan demikian dapat disimpulkan bahwa variabel-variabel tersebut reliabel atau dapat dipercaya.

**HASIL DAN PEMBAHASAN**

**Statistik Deskriptif**

Statistik deskriptif digunakan untuk memberikan gambaran atau deskripsi atas variabel-variabel penelitian. Pengukuran yang digunakan dalam penelitian ini adalah nilai maksimum, nilai minimum, mean, dan standar deviasi untuk setiap indikator variabel. Tabel 3 menunjukkan statistik deskriptif 180 observasi untuk semua variabel dan indikator-indikatornya.

**Pengujian Hipotesis**

*Inner model* adalah modal struktural yang menghubungkan antar variabel laten, yaitu variabel *intellectual capital*, *corporate governance*, *financial performance*, dan *market performance*. Pengujian *inner model* atau model struktural dilakukan untuk melihat hubungan antar konstruk, nilai signifikansi dan R-square dari model penelitian.

Tabel 4 menunjukkan bahwa nilai *R-square* perusahaan keuangan periode 2007-2011 adalah 0,342, artinya variabel *Intellectual capital* dan *corporate governance* dengan dikendalikan oleh variabel kontrol mampu menjelaskan variabel *Financial Performance* sebesar 34,2 persen, sisanya dijelaskan oleh variabel lain yang tidak diteliti dalam penelitian ini. Begitu juga dengan *R-square Market* yaitu sebesar 0,344, berarti bahwa variabel *Intellectual Capital* dan *corporate governance* dengan dikendalikan oleh variabel kontrol mampu menjelaskan variabel *market performance* sebesar 34,4 persen. Semakin besar angka R-square menunjukkan semakin besar variabel independen tersebut dapat menjelaskan variabel dependen, sehingga semakin baik persamaan struktural.

Tabel 5 menunjukkan hasil pengujian hipotesis. Arah pengujian di interpretasikan dengan melihat koefisien *original sample estimate* pada *results for inner weight* yang menunjukkan hubungan antara variabel yang dihipotesiskan. Signifikansi hubungan antar variabel ditunjukkan oleh besarnya P-value koefisien variabel. Hasil pengujian dan pembahasan berikut.

**Tabel 3: Statistik Deskriptif**

<b>Intellectual Capital (VAIC™)</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
VACA	180	-.501	1.552	.31307	.216502
VAHU	180	-1.811	23.860	3.4844	3.320627
STVA	180	-.228	1.552	.58080	.227753
VAIC	180	-.760	24.932	4.3783	3.433289
<b>Corporate Governance</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
UDK	180	2	8	4.37	1.753
PKI	180	.000	1.000	.47778	.163728
KA	180	0	8	3.45	1.220
KPM	180	.000	.721	.06090	.130957
KPI	180	.001	.999	.65334	.241602
<b>Financial Performance</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	180	.001	.284	.04066	.042417
ROE	180	.008	.947	.15475	.105709
GR	180	-.595	1.857	.22476	.307524
ATO	180	.052	.977	.25824	.232371
<b>Market Performance</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
PER	180	.744	254.167	15.5302	22.939882
HS	180	41	12700	1431.77	2271.990
MBV	180	.124	6.319	1.74019	1.272473
Tobin	180	.110	3.159	1.02492	.390512
<b>Variabel Kontrol</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
SIZE	180	10.695	14.742	12.70622	1.019045
DER	180	.350	17.492	5.28336	4.364416

**Tabel 4: Nilai R-Square**

Variabel	R-square
Financial	0.342
Market	0.344

**Tabel 5: Hasil Pengujian Hipotesis**

Koefisien Variabel	original sample estimate	Standard deviation	T-Statistic	P-value
IC → Financial	0.281	0.080	3.499	0.000
CG → Financial	0.332	0.077	4.328	0.000
Control → Financial	-0.607	0.094	6.446	0.000
Financial → Market	0.425	0.111	3.840	0.000
IC → Market	-0.106	0.073	1.443	0.075
CG → Market	0.269	0.068	3.966	0.000
Control → Market	0.364	0.080	4.568	0.000

## Intellectual Capital terhadap Financial Performance

Tabel 5 menunjukkan bahwa variabel *intellectual capital* memiliki pengaruh positif signifikan terhadap *financial performance* dengan nilai koefisien *original sample estimate* sebesar 0,281 dan signifikansi pada alpha 1%. Dengan demikian hipotesis pertama didukung data. Temuan tersebut memberikan makna bahwa semakin tinggi nilai *intellectual capital* yang dimiliki oleh perusahaan keuangan, maka *financial performance* perusahaan tersebut juga akan semakin meningkat. Artinya perusahaan yang mengelola sumberdaya intelektualnya secara maksimal mampu menciptakan *value added* dan *competitive advantage* yang akan bermuara terhadap peningkatan *financial performance* perusahaan.

Hasil ini memberikan kontribusi yang kuat pada teori *stakeholder* yang menekankan pada laba akuntansi dan keakuratan *value added* dalam menentukan return. Hasil pengujian ini juga mendukung *resource-based theory* yang menjelaskan bahwa perusahaan dapat mempertahankan produktivitas dengan keunggulan kompetitif yang dimiliki perusahaan dengan cara mengimplementasikan strategi untuk menciptakan *value added* dalam hal ini *intellectual capital* yang tidak mudah ditiru oleh pesaing perusahaan.

Hasil penelitian yang menemukan adanya pengaruh positif *intellectual capital* terhadap *financial performance* perusahaan sejalan dengan temuan empiris Belkaoui (2003), Astuti dan Sabeni (2005), Tan *et al.* (2007), Ulum *et al.* (2008), Solikhah *et al.* (2010), dan Ningrum (2012).

Dalam penelitian ini hanya indikator VAHU dan STVA yang membentuk konstruk VAIC<sup>TM</sup>, sedangkan VACA tidak. Dan dari ketiga komponen VAIC<sup>TM</sup>, indikator VAHU yang memiliki nilai rata-rata tertinggi daripada indikator lainnya. Rasionalisasi yang mampu menjelaskan hal tersebut adalah bahwa penelitian ini mengambil sampel perusahaan keuangan yang masih menitikberatkan kepada penggunaan tenaga manusia untuk menghasilkan produk dan jasa serta sumberdaya struktural seperti infrastruktur, jaringan, sistem

informasi, maupun teknologi yang berkontribusi besar terhadap penciptaan *value added* bagi suatu perusahaan. Hasil ini sesuai dengan teori *human capital* yang menyatakan bahwa *human capital* yang produktif dengan tingkat keahlian, pengetahuan dan pengalaman serta tingkat kesehatan yang tinggi dapat menguntungkan perusahaan dan menjadi unsur potensial dalam peningkatan produktivitas dan profitabilitas. Sedangkan sumberdaya fisik (VACA), perusahaan keuangan belum menitikberatkan kepada penggunaan mesin dan peralatan untuk produksi barang dan jasa. *Physical asset* pada perusahaan *knowledge based* bukan merupakan asset utama yang dapat meningkatkan kinerja perusahaan.

Perusahaan sektor keuangan di Indonesia periode 2007-2011 mulai menyadari pentingnya pengelolaan *Intellectual capital* dengan memanfaatkan keahlian karyawan, prosedur, efisiensi, dan sistem data perusahaan yang mempermudah dalam mengakses informasi yang relevan serta dengan adanya dukungan dalam pengembangan ide dan produk baru, maka perusahaan keuangan mampu untuk menilai, memprediksi, dan meningkatkan kinerja keuangan perusahaan.

## Intellectual Capital terhadap Market Performance

Pengaruh *intellectual capital* terhadap *market performance* tidak didukung oleh data yang ada. Terlihat dari koefisien *original sample estimate* bernilai negatif (-0,106) dan tidak signifikan pada alpha 5%. Hasil ini membuktikan bahwa *intellectual capital* berpengaruh negatif tidak signifikan terhadap *market performance* perusahaan keuangan periode 2007-2011. Hipotesis kedua tidak didukung data. Hasil penelitian ini mungkin menunjukkan bahwa penghargaan pasar terhadap suatu perusahaan bukan didasarkan pada sumberdaya manusia dan struktural. Investor masih lebih banyak terfokus dengan kepentingan jangka pendek, yaitu meningkatkan *return* keuangan. Investor kurang mempertimbangkan aspek sumberdaya manusia yang diakui sebagai sumber komparatif

perusahaan ketika mengambil keputusan investasinya di perusahaan sampel.

Hasil ini juga dapat diinterpretasi bahwa semakin tinggi nilai *intellectual capital* perusahaan semakin rendah *market performance* pada perusahaan yang menjadi sampel. Hasil penelitian ini tidak selaras dengan penelitian Jaafari (2013) dan Chen *et al.* (2005) yang menyatakan bahwa investor akan memberikan penilaian lebih terhadap perusahaan yang memiliki sumberdaya intelektual yang tinggi dan *Intellectual capital* diyakini memegang peran penting dalam meningkatkan nilai perusahaan di mata pasar. Untuk konteks perusahaan keuangan di Indonesia periode 2007-2011, *intellectual capital* tidak mempengaruhi *market performance*. Karena adanya kemungkinan bahwa pengaruh *intellectual capital* terhadap *market performance* tidak dalam selisih 1 tahun, tetapi dua tahun atau tiga tahun berikutnya. Karenanya penelitian ini belum bisa menunjukkan bahwa *intellectual capital* yang tinggi juga akan meningkatkan *market performance* pada perusahaan keuangan dan sahamnya akan banyak diminati oleh investor sehingga harga saham cenderung menjadi naik. Temuan ini sejalan dengan penelitian Gan dan Saleh (2008).

### **Corporate Governance terhadap Financial Performance**

Koefisien *original sample estimate corporate governance* terhadap *financial performance* adalah sebesar 0,332 dan signifikan pada alpha 1%. Hasil ini menunjukkan bahwa *corporate governance* berpengaruh positif dan signifikan terhadap *financial performance* perusahaan. Hipotesis ketiga didukung data. Hasil ini mengindikasikan bahwa dengan adanya tata kelola perusahaan yang baik dan terkendali, keselarasan tujuan antara seluruh pihak yang berkepentingan terhadap perusahaan dapat terwujud sehingga seluruh elemen-elemen yang terkait dapat bekerja sama dalam menjalankan kegiatan bisnis secara maksimal. Kinerja keuangan perusahaan pun akan mengalami peningkatan seiring dengan peningkatan pengelolaan perusahaan dalam mencapai tujuannya.

Sejalan dengan Jensen dan Meckling (1976) mengemukakan bahwa perusahaan dengan *governance* yang baik akan memiliki kinerja keuangan yang lebih efisien. Sama halnya juga dengan penelitian yang dilakukan Klapper dan Love (2002) yang berhasil menemukan adanya hubungan positif antara *corporate governance* dengan kinerja keuangan.

Perusahaan keuangan yang terdaftar di BEI periode 2007-2011 menunjukkan bahwa pentingnya seperangkat sistem yang mengatur dan mengendalikan perusahaan untuk menciptakan nilai tambah bagi perusahaan dan para pemangku kepentingan. *Corporate governance* mengendalikan dan mengarahkan perusahaan agar mencapai keseimbangan antara kekuatan serta kewenangan perusahaan dalam memberikan pertanggungjawabannya kepada para *shareholders* khususnya, dan *stakeholder* pada umumnya. Oleh karenanya hasil ini menunjukkan perusahaan memiliki kesadaran yang tinggi untuk menerapkan *good corporate governance* sebagai suatu kebutuhan, bukan hanya sekedar kepatuhan terhadap regulasi yang telah ada. Manajemen perusahaan tertarik dengan manfaat jangka panjang dari penerapan *good corporate governance* tersebut.

### **Corporate Governance terhadap Market Performance**

Variabel *corporate governance* didukung oleh data yang ada dalam membuktikan adanya pengaruh positif terhadap *market performance* perusahaan dengan koefisien *original sample estimate* 0,269 dan t-statistik 3,96 tersebut signifikan pada alpha 1%. Artinya *corporate governance* berpengaruh positif dan signifikan terhadap *market performance* pada perusahaan keuangan. Hipotesis keempat didukung data.

Secara teoritis, *corporate governance* berhubungan positif dengan nilai perusahaan (Labelle 2002). Pernyataan ini didukung oleh Kinsey (2001) yang menyatakan bahwa investor bersedia membayar premium yang lebih tinggi untuk perusahaan yang menerapkan *corporate governance* yang baik. Penelitian membuktikan bahwa *corporate gover-*

nance memiliki dampak positif terhadap *market performance*, menunjukkan bahwa pelaksanaan *corporate governance* yang baik secara konsisten dan konsekuen di setiap kegiatan bisnis serta menjadikannya sebagai budaya kerja yang berlaku di perusahaan, dapat mendukung tujuan perusahaan baik pertumbuhan usaha, profitabilitas, meningkatkan nilai pemegang saham dan pemangku kepentingan lainnya, serta meningkatkan kemampuan agar keberlangsungan usaha jangka panjang dapat dicapai. Investor akan merasa aman atas investasinya, cenderung memperoleh return sesuai dengan harapannya dan bersedia membayar premium kepada perusahaan yang menerapkan *good corporate governance*. *Corporate governance* mengindikasikan dapat memberikan keyakinan kepada investor bahwa mereka akan menerima *return* atas dana yang diinvestasikan. Aspek-aspek *corporate governance* dipandang sebagai mekanisme kontrol yang tepat untuk mengurangi konflik keagenan.

Penelitian ini menunjukkan bahwa pengungkapan *corporate governance* yang diprosikan dengan ukuran dewan komisaris, komite audit, kepemilikan manajerial, dan kepemilikan institusional berpengaruh positif terhadap *market performance*. Hasil penelitian ini mendukung hasil penelitian Black *et al.* (2003), Klapper dan Love (2002) dan Kinsey (2001).

### **Financial Performance terhadap Market Performance**

Hipotesis ke 5 mengenai pengaruh *financial performance* terhadap *market performance* didukung oleh data yang ada. Nilai koefisien original sample estimate 0,425 dan signifikan pada alpha 1%. Dengan demikian semakin baik suatu perusahaan dalam mengelola aset dan kekayaan perusahaan melalui kinerja keuangan yang baik sehingga kinerja pasar perusahaan yang memberikan persepsi pasar tentang nilai perusahaan semakin meningkat. Hasil penelitian ini sejalan dengan penelitian Yuniasih dan Wirakusuma (2007).

Hasil penelitian tersebut juga mengindikasikan bahwa manajemen menyadari

pentingnya penerapan kinerja keuangan yang baik sebagai suatu investasi yang bermanfaat bagi perusahaan dalam jangka waktu panjang. Manajemen juga menyadari bahwa kinerja keuangan bukan hanya internal perusahaan tetapi juga untuk pemangku kepentingan lainnya. Sesuai dengan teori signaling bahwa informasi yang disajikan perusahaan tertuang dalam Laporan keuangan sebagai laporan yang menunjukkan bagaimana kinerja keuangan perusahaan selama kurun waktu tertentu telah direspon baik oleh investor.

Para stakeholder lebih menyenangi perusahaan yang bisa menciptakan nilai bagi kepentingannya. Jika stakeholdernya calon investor maka kepentingannya terhadap perusahaan adalah perusahaan kinerjanya baik sehingga perusahaan laba dan investor juga mendapat keuntungan dari modal yang ditanamkan di perusahaan tersebut. Sehingga perusahaan yang kinerjanya baik maka akan mampu memenuhi kepentingan stakeholder sehingga sahamnya banyak diminati dan harga sahamnya menjadi naik.

Kinerja keuangan perusahaan yang benar-benar baik maka perusahaan harus memberi signal kepada pihak eksternal dengan melakukan tindakan atau kebijakan yang tidak bisa dilakukan oleh perusahaan lain yang tidak memiliki kinerja yang sama. Hal ini dijelaskan dalam teori signaling. Contohnya dalam pemberian deviden, pemberian deviden merupakan signal dari perusahaan bahwa perusahaannya dalam kondisi baik atau laba, karena perusahaan yang dalam kondisi merugi tidak akan mampu memberikan deviden, kalau pun ingin memberikan deviden itu akan menjadikan biaya yang besar bagi perusahaan tersebut. Perusahaan telah mengkomunikasikan pesan kinerja keuangan secara tepat sehingga makna dari pengungkapan kinerja keuangan dapat diterima dengan baik oleh para investor.

### **SIMPULAN**

Berdasarkan hasil pengujian dan pembahasan sebagaimana telah disajikan sebelumnya, maka dapat ditarik kesimpulan bahwa *intellectual capital* dan *corporate governance* berpengaruh positif signifikan terhadap *financial*

*performance* perusahaan keuangan yang terdaftar di Bursa Efek Indonesia periode 2007-2011. Akan tetapi, *intellectual capital* tidak berpengaruh terhadap *market performance*. Hasil lain juga menunjukkan bahwa *corporate governance* dan *financial performance* berpengaruh positif signifikan terhadap *market performance* perusahaan keuangan yang terdaftar di Bursa Efek Indonesia.

Hasil ini berimplikasi serius bagi pihak perusahaan. *Intellectual capital* yang terdapat di dalam perusahaan harus dapat dikelola oleh pihak manajer karena *Intellectual capital* efektif untuk menciptakan dan mengembangkan nilai bagi perusahaan (*firm's value creation*). Investasi dalam *human capital* merupakan suatu investasi yang penting dan memiliki nilai ekonomi bagi perusahaan karena dapat meningkatkan produktivitas. *Human capital* yang produktif dengan tingkat keahlian, pengetahuan dan pengalaman serta tingkat kesehatan yang tinggi dapat menguntungkan perusahaan dan menjadi unsur potensial dalam peningkatan produktivitas. *Human capital* akan meningkat jika perusahaan mampu menggunakan pengetahuan yang dimiliki oleh karyawannya. Hasil tersebut juga mengindikasikan bahwa dalam industri yang berbasis pengetahuan, *human capital* menjadi sumberdaya yang paling penting, karena sumberdaya ini merupakan biaya yang utama dalam proses produksi perusahaan. *Human capital* dapat mendukung terciptanya modal struktural dan modal pelanggan yang menjadi inti dari hak kekayaan intelektual.

Keberadaan *corporate governance* juga sangat penting bagi perusahaan. Hasil penelitian ini mengimplikasikan bahwa penerapan *corporate governance* yang baik dan menjadikannya sebagai budaya kerja yang berlaku di perusahaan, dapat mendukung tujuan perusahaan baik pertumbuhan usaha, profitabilitas, meningkatkan nilai pemegang saham dan pemangku kepentingan lainnya, serta meningkatkan kemampuan agar keberlangsungan usaha jangka panjang dapat dicapai. Dengan demikian para investor akan merasa aman dalam berinvestasi dan mungkin akan memperoleh *return* sesuai dengan

harapannya dan bersedia membayar premium kepada perusahaan yang menerapkan *good corporate governance*.

Sebagaimana lazimnya suatu penelitian empiris, hasil penelitian ini juga mengandung keterbatasan. Sampel yang digunakan dalam penelitian ini hanya terbatas pada perusahaan keuangan yang terdaftar di Bursa Efek Indonesia (BEI) periode 2007-2011 (5 Tahun) sehingga generalisasi ini hanya terbatas pada perusahaan yang ada. Penelitian selanjutnya disarankan untuk meneliti sektor lainnya seperti sektor manufaktur, sektor konstruksi, transportasi, dan lain-lain dengan menggunakan tahun yang lebih baru dan periode yang lebih lama untuk mendapatkan hasil yang lebih baik. Di samping itu penelitian ini terbatas pada proksi yang digunakan untuk mengukur *financial performance* yaitu ATO, ROA, ROE, dan GR, mengukur *market performance* proksi yang digunakan MBV, PER, PBV, dan Tobin, dan *corporate governance* hanya ukuran dewan komisaris, proposrsi komisaris independen, komite audit, kepemilikan manajerial, dan kepemilikan institusional. Penelitian selanjutnya agar dapat mempertimbangkan proksi *corporate governance* lainnya seperti komposisi dewan direksi dan kualitas audit, dan untuk proksi *market performance* lain seperti Annual Stock Return (ASR), *market capitalization*, dan *earning per share (EPS)*, dan proksi *financial performance* lainnya seperti *employee productivity*.

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# RETHINKING THE DIGITAL DIVIDE: MEDIATION ROLE OF COMPUTER SELF-EFFICACY

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## **Abstract**

The main purpose of this research is to develop an understanding of the mediating role of computer self-efficacy in the relationship between access to information and communication technology (ICT) and e-government usage. To achieve its objectives, this research applied a quantitative survey and analyse the results using PLS-based structural equation approach. The survey was involving 237 e-government users in Indonesia. The findings confirm that computer self-efficacy has a partial mediating role on the relationship between access to ICT and e-government use. The study provides evidence on the importance of computer self-efficacy in improving e-government use. Discussions on the implications for practice as well as theory are presented.

**Keywords:** e-government, self-efficacy, access, digital divide, mediation

## **Abstrak**

*Tujuan utama dari penelitian ini adalah untuk mengembangkan pemahaman tentang peran mediasi self-efficacy komputer dalam hubungan antara akses ke teknologi informasi dan komunikasi (ICT) dan penggunaan e-government. Untuk mencapai tujuannya, penelitian ini diterapkan survei kuantitatif dan menganalisis hasil menggunakan PLS berbasis pendekatan persamaan struktural. Survei ini melibatkan 237 pengguna e-government di Indonesia. Temuan mengkonfirmasi bahwa self-efficacy komputer memiliki peran mediasi parsial pada hubungan antara akses ICT dan penggunaan e-government. Studi ini memberikan bukti tentang pentingnya self-efficacy komputer dalam meningkatkan penggunaan e-government. Diskusi tentang implikasi untuk praktek serta teori disajikan.*

**Kata kunci:** e-government, efikasi diri, akses, kesenjangan digital, mediasi

## **INTRODUCTION**

Information and communication technology (ICT) is important for reducing discrimination based on lack of access to information and timely response to the matters influencing individuals' personal and community welfare (Coco and Jolly 2003). Therefore government agencies across the world are facilitating the uptake of ICT for disadvantaged people. An interesting vignette is presented by Warschauer (2003) in describing such facility. The government of New Delhi in 2000 provided computer access in slum areas for city's street children. A project, known as Hole-in-the-Wall, allowed the street children to have 24-hour access to computer and internet. Beside the internet connection through dial up access, the computers

were also equipped with some essential programs, such as Microsoft Office and Paint. Without any instructor whatsoever, the children may learn how to use computer and internet at their own pace and speed.

However, the result indicated that the access to internet was so seldom and majority of the children used the computer to draw with paint programs or playing games. The failure of the project caused by no special education had been made available for those children. Some parents expressed their concern that the absence of instruction took away the project's value. Some other even raised negative feelings about the project, complaining that the computers distracted their children from their homework and schoolwork.

The story above represents the nature of incomplete policies by many governments to overcome digital divide based on underlying understanding that the main problem is inequality of access, especially physical access to ICT. Thus, scholars such as Dewan, Ganley, and Kraemer (2005); Wei et al. (2010); Hsieh, Rai, and Keil (2009) suggest broader and more comprehensive understanding of the problem of digital divide.

The main aim of this study is to examine the mediation effect of computer self-efficacy on the impact of access to ICT on e-government use. In doing so, this study compares the *t*-values in PLS-graph between models, with and without the trust in e-government as a mediator, and the Sobel test. The research was conducted in Indonesia, involving 237 respondents of e-government users.

The structure of this paper is divided into six sections, in following manner: introduction and research objective; theoretical background and model development; research method and findings; and discussion, which is written in integration with implications and conclusion.

**LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

**Social Cognitive Theory**

This research relies on Social Cognitive Theory (Bandura 1977, 2001) as the underlying theoretical foundation. The theory suggests that individuals possess a self-belief system that allows them to take control over their cognitive process. The key of the systems is self-efficacy, which refers to “the belief in one’s capability to organize and execute the courses of action required managing prospective situations” (Bandura 1977, p. 2). The

theory operates within a causal model of triadic reciprocity, where (a) *personal factors* in the form of cognition, affect, and biological events, (b) *environmental factors*, and (c) *behavior* interact one another (Bandura 2001). Contextualized in this research, personal factor is represented by computer self-efficacy, while the environmental factor by access to ICT and behavior factor include the use of ICT. Thus the central aim of this study is that the access to ICT influences behavior in using ICT directly as well as through the mediating role of computer self-efficacy (Figure 1). Behavior in using ICT is represented by e-government use in this study.

**Access to ICT**

There is a sizeable difference in internet access and home-computer ownership across and within countries. As reported by UN (2010), more than 50% residents in developed countries have internet access and own a personal computer. On the other hand, in some LDCs (least developing countries), the number is far below 5%. In terms of region, Europe is the most connected region whereas Africa is the least.

Previous studies concluded that the access to ICT was a substantial factor of ICT use (eg. Dewan, Ganley, and Kraemer 2005; Wei et al. 2010; Ynalvez and Shrum 2006; Hsieh, Rai, and Keil 2009). Even access divide is the focus of the most digital divide research (Rahman and Quaddus 2012). On the other hand, studies by Wei et al. (2010) and Dewan and Riggins (2005) found that access to ICT is a significant determinant for computer self-efficacy. In this study, the dimensions of access to ICT are presented in Table 1 below.

**Table 1:** Dimensions of access to ICT

Item	Dimensions	Reference
ACC1	Computer availability at home	(Wei et al. 2010)
ACC2	Internet connection at home	(Agarwal, Animesh, and Prasad 2009)
ACC3	Easiness to access ICT	(Ynalvez and Shrum 2006)
ACC4	Comfortable to access ICT	

### Computer Self-Efficacy

Self-efficacy can be defined as a belief of the individuals in their capability to execute a particular task. Self-efficacy may not reflect actual competence. Scholars in some fields including information systems have applied the concept widely, although originally Bandura (1977) developed the theory of self-efficacy for treating severely phobic. In information systems, computer self-efficacy has been investigated (eg. Marakas, Yi, and Johnson 1998; Compeau, Higgins, and Huff 1999; Wei et al. 2010). The results concluded that self-efficacy was a significant predictor of attitudes and behavior. The dimensions of computer self-efficacy in this research are described in Table 2.

### E-Government Use

This research intends to investigate relationship among access to ICT, computer self-efficacy and the use of ICT in e-government context, based on the reason that this issue is fundamental for the government in order to develop e-government systems, which focus on citizen. The understanding of the digital divide might also the first step to improve e-government readiness in Indonesia.

E-Government can be defined as ICT use to improve the access to government services and enhance the delivery of government services and operations. The main objective of e-government systems are for the advantage of business, citizens, and other stakeholders

(Srivastava and Teo 2007). Because of its importance, UN encourages all countries to develop e-government systems. However, developing and applying e-government system is not just simply transferring the system from one country to another. In other words, implementing e-government system needs some additional efforts (Schuppan 2009). Government needs to adjust with the needs of its citizens, since they are the substantial stakeholder for government (Davison, Wagner, and Ma 2005). e-Government use by its citizens is substantial indicator for the success of e-government systems. Table 3 presents the dimensions of e-government use.

Based on the discussion above, the following hypothesis is proposed:

H1: Computer self-efficacy has a mediating role between access to ICT and e-government use.

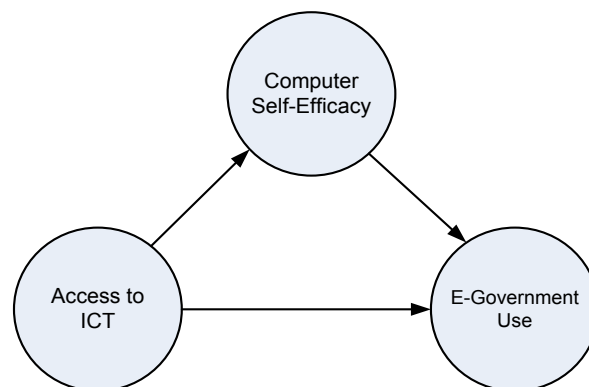


Figure 1: Research model

Table 2: Dimensions of computer self-efficacy

Item	Dimensions	Reference
CSE1	Confidence in using ICT	(Wei et al. 2010; Hsieh, Rai, and Keil 2009)
CSE2	Difficulty in using ICT	(Wei et al. 2010)
CSE3	Comfortable in using ICT	(Wei et al. 2010; Hsieh, Rai, and Keil 2009)
CSE4	Sure be able to use ICT	(Wei et al. 2010)
CSE5	Able to operate, even if no one tells	(Wei et al. 2010; Hsieh, Rai, and Keil 2009)

Table 3: Dimensions of e-government use

Item	Dimensions	Reference
USE1	Number of use	
USE2	Number of transactions completed	(DeLone and McLean 2003)
USE3	Using e-government system is a good idea	(Taylor and Todd 1995)

**RESEARCH METHODOLOGY**

To verify the research model (Figure 1) and hypothesis presented above, data was collected via a survey. In order to draw up adequate survey questions, the researcher carried out literature review and constructed the dimensions listed in Table 1-3. Each question was measured based on 6-point scale.

In conducting the empirical analysis, 354 copies of questionnaires were directly distributed targeting subjects who had used e-government systems provided by local governments. As a result, 251 questionnaires were retrieved. To find out any errors in the form of invalid data, such as incomplete responses or missing values, a review was carried out. As a result, 14 questionnaires were found to be incomplete or, 237 questionnaires were usable in this research. Table 4 presents the demographic profile of the respondents.

To perform data analysis, the Partial Least Square (PLS) approach to Structural Equation Modeling (SEM) was used. PLS is a po-

werful tool of analysis because of the minimum requirements on measurement scales, sample size and residual distributions (Wold 2006).

**RESULTS AND DISCUSSION**

**Measurement Assessment**

Composite reliability (CR) analysis was conducted to verify convergent validity and discriminant validity. Values greater than 0.70 in CR imply that the construct retains both its internal consistency and convergent validity (Hair, Ringle, and Sarstedt 2011). The factor loading and Average Variance Extracted (AVE) were also examined to determine the convergent validity. The criteria for the acceptable level of convergent validity is individual item factor loading greater than 0.60 and an AVE greater than 0.50 (Gefen, Straub, and Boudreau 2000). Table 6 and 7 summarize the factor loadings, CR and AVE of the group. All factor loading, CR and AVE in this measurement model turned out to be acceptable.

**Table 4:** Demographic profile of the respondents

Profile	Gender		Age group		Residential place		Education	
	Male	Female	< 40	> 40	City area	Remote	< UG	> UG
Percentage	78%	22%	69%	31%	71%	29%	23%	77%
Frequency	184	53	164	68	168	69	55	182

**Table 5:** Cross loading matrix

	USE	ACCES	CSE
USE_1	<b>0.91</b>	0.63	0.59
USE_2	<b>0.79</b>	0.48	0.48
USE_3	<b>0.81</b>	0.58	0.61
ACCE_1	0.22	<b>0.75</b>	0.53
ACCE_2	0.34	<b>0.82</b>	0.64
ACCE_3	0.75	<b>0.91</b>	0.81
ACCE_4	0.76	<b>0.93</b>	0.84
CSE_1	0.54	0.73	<b>0.88</b>
CSE_2	0.63	0.81	<b>0.93</b>
CSE_3	0.64	0.71	<b>0.92</b>
CSE_4	0.66	0.84	<b>0.93</b>
CSE_5	0.66	0.83	<b>0.93</b>

**Table 6:** Discriminant validity

	CSE	USE	ACCE
CSE	<b>0.862</b>		
USE	0.667	<b>0.703</b>	
ACCE	0.651	0.675	<b>0.731</b>

Research Model Assessment – Testing the Mediation Role of Computer Self-Efficacy

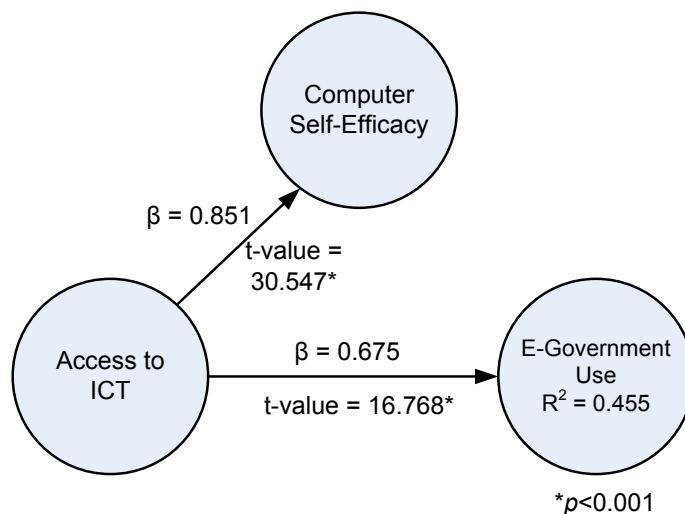


Figure 2: Data analysis result of a model without a mediator

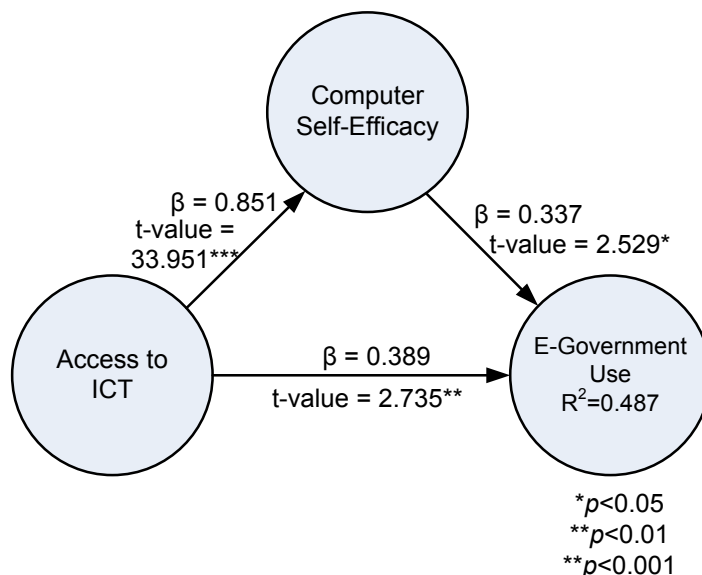


Figure 3: Data analysis result of a model with a mediator

Table 7: Comparison of *t*-value

<i>t</i> -value		<i>M</i> → <i>Y</i>	<i>X</i> → <i>M</i>	Mediation effect
<i>X</i> → <i>Y</i>				
Without <i>M</i>	With <i>M</i>			
16.768***	2.735**	2.529*	33.951***	Partial mediation

\* *p* < 0.05; \*\* *p* < 0.01; \*\*\* *p* < 0.001

In this research, mediation hypotheses were tested using a statistical technique suggested by Baron and Kenny (1986). Baron and Kenny (1986) suggested that a given variable might function as a mediator (*M*), if the following conditions held: (1) a significant rela-

tionship existed between the independent variable (*X*) and the dependent variable (*Y*); (2) a significant relationship existed between *X* and *M*; and (3) in the presence of a significant relationship between *M* and *Y*, the previous relationship between *X* and *Y* was no longer

significant or the strength of the relationship was significantly decreased. From Table 7 we can learn that the *t*-value for the relationship of access to ICT (X) and e-government use (Y) with the mediation effect of computer self-efficacy (M) drops to 2.735 from 16.768 without mediation effect. The result indicates that computer self-efficacy has a partial mediation role in the relationship between access to ICT and e-government use.

The assessment of the significance of the reduction of the relationship between the independent and dependent variables cannot be assessed from the coefficient. Rather it has to be mathematically proven. The Sobel test (Sobel 1982) has been a traditional method of testing the significance of mediation effects. The Sobel test was used in this research because it was the most widely employed. The significance was measured by the following formula:

$$z\text{-value} = a*b/\text{SQRT}(b^2*s_a+a^2*s_b^2)$$

The formula required the unstandardized regression coefficient (*a*) and the standard error (*s<sub>a</sub>*) of the relationship between the independent variable and mediating variable, and the unstandardized regression coefficient (*b*) and standard error (*s<sub>b</sub>*) of the path from the mediating to the dependent variable. Table 8 below describes the data and result of Sobel test. The *z*-value is 2.367 (significant in *p*<0.05).

**CONCLUSION**

The findings of this study show that meaningful access to ICT comprises more than merely providing computers and internet access. Access to ICT rather embedded in a complex array of factors not just physical resources, but also human and social resources. Literacy and capability must also be taken into account if meaningful access to new technologies is to be provided. In other words, overcoming the

problem of digital divide is not only by providing physical access to computers and connectivity but also by access to the additional resources that allow people to use technology well. Warschauer (2003) states that the understanding of digital divide as a binary divide between those who have access to ICT and have-not is inaccurate because it fails to value the social resources that diverse groups bring to the table.

Overall, this research yields two theoretical as well as practical contributions. *First*, this research underlines the importance of CSE, which acts as a partial mediator. In addition to provide the access to e-government systems, it is also important to improve capability to utilize ICT by the citizens. The government should provide and facilitate education for its citizens in using the ICT in general and particularly e-government systems.

*Second*, this research is significant in the sense that it provides understanding on digital divide. The results provide a foundation to understand the relationships between the access to ICT and CSE, and their impact on e-government use as proposed in the research model. Government may use the findings as the foundation to establish a more comprehensive policy in resolving the issue of digital divide as well as the policy to enhance e-government readiness. More attention should be paid to females, citizens in the remote area, people in age groups of 40 and above, and those who have low educational attainment in opening the access as well as educating to use e-government systems. The e-Government Readiness Survey by United Nations showed that implementation of e-government systems in Indonesia was in status quo. Therefore, comprehensive and strategic policies to improve e-government system are needed by the government Indonesia.

**Table 8:** Sobel test

	X → M		M → Y		z-value
	A	s <sub>a</sub>	b	s <sub>b</sub>	
Access – CSE - Use	0.851	0.025	0.337	0.142	2.367*

\**p*<0.05

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# MODEL KEPATUHAN PERPAJAKAN SUKARELA: PERAN DENDA, KEADILAN PROSEDURAL, DAN KEPERCAYAAN TERHADAP OTORITAS PAJAK

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## *Abstract*

*The objective of this research is to develop voluntary tax compliance model for individual taxpayers. Based on slippery slope theory, this study argues that severe sanctions (more than mild ones) can communicate that sanctioned behavior is morally unacceptable, this study argues that particularly authorities who enact the sanction procedures in a fair manner stimulate compliance with their decisions. This study examines the moderating role of procedural fairness of the tax office in the positive effect of sanction on voluntary compliance with tax authorities. This interactive effect of sanction size and procedural fairness on compliance should thus be mediated by trust of the authority. A field survey from 204 individual taxpayers in Semarang city revealed no empirical support for these hypotheses. This study concludes that trust in authorities forms an important mediating variable to the effectiveness of sanction and procedural fairness as tools to enhance tax compliance.*

**Keywords:** *voluntary tax compliance, sanctions, procedural fairness, trust in authorities.*

## **Abstrak**

Penelitian ini bertujuan untuk mengembangkan model kepatuhan sukarela bagi wajib pajak. Berdasarkan pada teori *slippery slope*, penelitian ini menghipotesiskan bahwa sanksi/denda pajak yang berat (dibandingkan yang ringan) dapat mengkomunikasikan bahwa perilaku yang dikenakan sanksi tersebut secara moral tidak dapat diterima. Penelitian ini berargumen bahwa otoritas yang memberikan sanksi dengan prosedur yang adil dapat mendorong kepatuhan. Penelitian ini menguji peran moderasi keadilan prosedural dalam pengaruh positif denda pajak pada kepatuhan pajak sukarela. Penelitian ini mengumpulkan data dengan melakukan survei kuesioner dengan responden 204 wajib pajak di Kota Semarang untuk menganalisis peran variabel tingkat denda pajak, keadilan prosedural, dan kepercayaan terhadap otoritas perpajakan dalam meningkatkan kepatuhan pajak sukarela. Hasil analisis data menunjukkan hipotesis yang menyatakan bahwa keadilan prosedural sebagai pemoderasi hubungan antara tingkat denda pajak dan kepatuhan sukarela wajib pajak tidak dapat didukung. Penelitian ini menyimpulkan bahwa kepercayaan pada otoritas merupakan sebuah variabel mediasi penting pada efektifitas denda dan keadilan prosedural sebagai sarana meningkatkan kepatuhan pajak.

**Kata kunci:** kepatuhan pajak sukarela, sanksi pajak, keadilan prosedural, kepercayaan pada otoritas.

## **PENDAHULUAN**

Penerimaan negara dari sektor perpajakan merupakan pilar utama pendapatan dalam APBN yang digunakan untuk memenuhi kebutuhan belanja pemerintah dalam rangka pembangunan nasional. Meskipun demikian,

penerimaan perpajakan masih rendah ditunjukkan dengan *tax ratio* Indonesia lebih rendah jika dibandingkan dengan negara-negara di kawasan Asia Tenggara, apalagi dengan Australia, seperti nampak dalam Tabel 1 berikut:

**Tabel 1:** Perbandingan *Tax Ratio* Indonesia dengan Negara-negara Asia Tenggara dan Australia (dalam persen)

Negara	Tahun			
	2008	2009	2010	2011
Indonesia	13,00	11,40	10,90	11,90
Malaysia	14,70	14,90	13,80	n.a.
Filipina	13,60	12,20	12,10	12,30
Thailand	16,40	15,20	16,00	17,60
Singapura	15,00	14,70	13,50	14,10
Australia	24,30	22,20	20,70	20,60

Sumber: [www.data.worldbank.org](http://www.data.worldbank.org)

Keterangan: *tax ratio* merupakan rasio penerimaan pajak terhadap Produk Domestik Bruto (PDB); n.a. = data belum tersedia)

Rendahnya *tax ratio* Indonesia sangat mengkhawatirkan karena kebutuhan belanja pemerintah justru semakin meningkat apalagi dengan ancaman krisis global. Oleh karena itu, Direktorat Jenderal Pajak perlu melakukan optimalisasi kebijakan peningkatan penerimaan pajak. Pendapatan pajak merupakan tulang punggung (*backbone*) anggaran Indonesia sehingga pemerintah harus mengembangkan inovasi kebijakan peningkatan penerimaan pajak. Inovasi kebijakan tersebut antara lain melalui peningkatan kapasitas Direktorat Jenderal (Ditjen) Pajak, menambah pegawai pajak, dan memperkuat infrastruktur perpajakan.

Selain itu, Ditjen Pajak, sebagai otoritas yang berwenang, akan meningkatkan pemeriksaan secara masif terhadap wajib pajak yang diduga melanggar ketentuan perpajakan (*tax evaders*) dan meningkatkan denda pajak. Namun, kebijakan ini bertentangan dengan literatur dan hasil penelitian yang menunjukkan bahwa variabel *economic dett rence* (pemeriksaan dan denda pajak) hanya akan meningkatkan kepatuhan pajak yang dipaksakan (*enforced tax compliance*). Dalam jangka panjang, kebijakan dengan menggunakan pemeriksaan dan denda pajak ini akan kurang efektif karena *tax ratio* yang tinggi hanya dapat tercapai jika telah ada kepatuhan pajak sukarela (Kogler *et al.* 2013; Kirchler *et al.* 2008). Oleh karena itu, otoritas pajak seharusnya juga mempertimbangkan variabel psikologi-sosial yang cenderung dapat meningkatkan kepatuhan pajak sukarela (*voluntary tax compliance*).

Hasil penelitian terdahulu menunjukkan bahwa kepatuhan wajib pajak pribadi di Indonesia masih berupa *enforced tax compliance* dengan denda pajak menjadi determinan utama (Cahyonowati *et al.* 2011; 2012). Namun, seperti diuraikan di atas, kebijakan peningkatan denda pajak akan kurang efektif dalam meningkatkan kepatuhan pajak sukarela (Kogler *et al.* 2013; Kirchler *et al.* 2008). Oleh karena itu, penelitian ini akan mengembangkan model kepatuhan pajak sukarela dengan mengkombinasikan denda pajak dengan variabel psikologi-sosial seperti keadilan prosedural dan kepercayaan terhadap otoritas pajak.

Masih rendahnya *tax ratio* Indonesia dapat menjadi masalah serius karena pemerintah tidak cukup mempunyai dana untuk belanja kegiatan pembangunan pada periode mendatang. Masalah ini diperparah dengan maraknya berbagai kasus korupsi pajak yang justru banyak dilakukan otoritas pajak sendiri sehingga bisa menyebabkan masyarakat enggan membayar pajak. Pemerintah telah mencoba melakukan inovasi kebijakan namun belum didukung studi empiris apakah kebijakan tersebut efektif meningkatkan kepatuhan pajak sukarela. Peneliti telah melakukan studi pendahuluan yang menunjukkan kepatuhan wajib pajak di Indonesia masih bersifat paksaan (*enforced tax compliance*) karena ancaman denda dan pemeriksaan.

Oleh karena itu tujuan khusus dari penelitian ini yaitu; (1) Untuk menganalisis peran variabel tingkat denda pajak, keadilan prosedural, dan kepercayaan terhadap otoritas

perpajakan dalam meningkatkan kepatuhan pajak sukarela (*voluntary tax compliance*). (2) Untuk mengembangkan model kepatuhan sukarela bagi wajib pajak. Model yang dikembangkan selanjutnya diharapkan dapat menjadi acuan bagi penyusunan kebijakan yang inovatif untuk meningkatkan penerimaan sektor perpajakan.

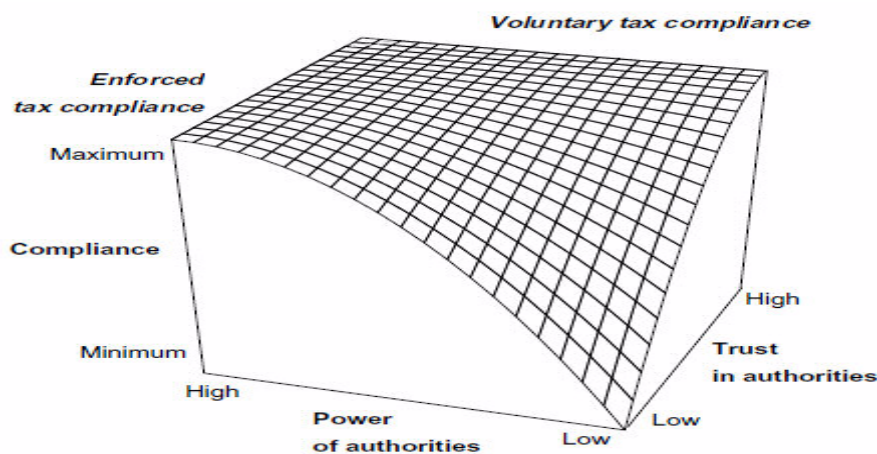
## TINJAUAN PUSTAKA DAN PERUMUSAN HIPOTESIS

### Teori *Slippery Slope*

Salah satu ciri masyarakat modern adalah mempunyai tingkat kepatuhan sukarela (*voluntary compliance*) yang tinggi pada regulasi pajak (van Dijke dan Verboon 2010). Bagaimana upaya meningkatkan kepatuhan pajak sukarela ini telah menjadi ketertarikan penelitian dari berbagai multidisiplin ilmu seperti ilmu ekonomi, psikologi, dan sosiologi selama 50 tahun terakhir (Kirchler *et al.* 2008; van Dijke dan Verboon 2010). Paradigma penelitian kepatuhan pajak pada saat ini cenderung memfokuskan pada peran variabel-variabel psikologi-sosial (Wenzel 2004; van Dijke dan Verboon 2010). Hal ini karena kesadaran bahwa analisis penelitian dengan menggunakan variabel-variabel *deterrence* saja (seperti pemeriksaan pajak, tarif pajak, dan denda pajak) tidak cukup dapat menjelaskan tingkat kepatuhan pajak. Meskipun pendekatan berbasis *deterrence* telah mendominasi analisis kepatuhan pajak dari perspektif ekonomika (Allingham dan Sandmo 1972;

Andreoni *et al.* 1998), namun hasil penelitian-penelitian menunjukkan bahwa hanya sedikit kemampuan variabel-variabel tersebut dalam menjelaskan tingkat kepatuhan pajak.

Perkembangan teori dalam bidang kepatuhan pajak pada saat ini karenanya memandang variabel-variabel psikologi-sosial sama pentingnya dengan variabel-variabel *deterrence* (Kirchler *et al.* 2008). Salah satu teori terkini tentang kepatuhan pajak adalah *slippery slope model* dari Kirchler *et al.* (2008). Teori ini menyatakan bahwa variabel-variabel psikologi sosial dan *deterrence* berpengaruh positif terhadap kepatuhan pajak. Variabel psikologi-sosial cenderung mempengaruhi kepatuhan pajak sukarela (*voluntary tax compliance*) sedangkan variabel *deterrence* cenderung mempengaruhi kepatuhan pajak berdasar ketakutan akan konsekuensi negatif (kepatuhan pajak yang dipaksakan/*enforced tax compliance*). Teori *slippery slope* dapat dijelaskan seperti pada Gambar 1. Kebijakan untuk meningkatkan kepatuhan pajak sukarela tergantung pada tingkat kepercayaan masyarakat pada otoritas pajak (*trust in authorities*). Kebijakan seperti pemeriksaan dan denda pajak cenderung akan meningkatkan persepsi terhadap kekuatan otoritas pajak (*power of authorities*) yang akan mempengaruhi *enforced tax compliance*. Berdasar teori *slippery slope* ini maka kebijakan peningkatan kepercayaan masyarakat pada otoritas pajak harus diutamakan dalam rangka meningkatkan kepatuhan pajak sukarela.



Gambar 1: Teori *Slippery Slope*

### Perkembangan Penelitian Denda Pajak

Salah satu cara pemerintah dalam meningkatkan pendapatan dari pajak adalah dengan memberikan sanksi secara formal berupa denda pajak untuk menghukum ketidakpatuhan. Meskipun demikian, hasil penelitian menunjukkan bukti empiris yang bertentangan tentang pengaruh pemberian sanksi terhadap tingkat kepatuhan. Terdapat beberapa penelitian yang menunjukkan bahwa pemberian sanksi dapat meningkatkan kepatuhan (misalnya; Eek, Loukopoulos, Fujii, dan Gärling 2002; McCusker dan Carnevale 1995). Namun terdapat penelitian lain yang menunjukkan pemberian sanksi denda pajak justru menurunkan kepatuhan (misalnya; Gneezy dan Rustichini 2000; Mulder, Van Dijk, De Cremer, dan Wilke 2006; van Prooijen, Gallucci, dan Toeset 2008).

Penelitian tentang tingkat denda pajak juga penting dari perspektif teoritis karena hasil penelitian menunjukkan bukti empiris yang bertentangan. Pertanyaan mengapa tingkat denda pajak yang tinggi dapat meningkatkan kepatuhan masih menjadi isu penelitian yang penting (Verboon dan van Dijke, 2011). Terdapat dua perspektif dalam literatur keperilaku pajak mengapa sanksi denda dapat mempengaruhi kepatuhan. Perspektif instrumental menyatakan bahwa terkadang menguntungkan untuk tidak patuh pada peraturan jika sanksi yang diberikan atas pelanggaran tersebut lebih kecil daripada keuntungan yang diperoleh dari melakukan pelanggaran. Oleh karena itu, perspektif instrumental menekankan bahwa tingkat sanksi harus lebih besar daripada keuntungan yang diperoleh dari melakukan pelanggaran (Allingham dan Sad mo 1972; Carroll 1978). Perspektif kedua disebut sebagai perspektif relasional yang menyatakan bahwa variabel *deterrence* saja (seperti denda dan pemeriksaan pajak) tidak cukup untuk menjelaskan sistem sanksi. Perspektif lebih mendasarkan pada konsep seperti keadilan prosedural (*procedural fairness*), kepercayaan (*trust*), dan evaluasi terhadap moral otoritas pajak untuk menjelaskan mengapa denda pajak dapat meningkatkan kepatuhan. Salah satu hipotesis penting dari

perspektif ini adalah tingkat sanksi (denda pajak) yang lebih tinggi dapat meningkatkan kepatuhan hanya jika prosedur pemberian sanksi oleh otoritas dipandang wajar dan adil (*fair*). Dengan kata lain, keadilan prosedural memoderasi hubungan antara tingkat denda pajak dan kepatuhan pajak.

### Perkembangan Penelitian Keadilan Prosedural dan Kepatuhan Pajak

Keadilan prosedural menunjukkan keadilan persepsian tentang prosedur yang digunakan untuk membuat keputusan alokasi (Tyler 1997). Prosedur dipersepsikan lebih *fair* misalnya jika: (1) masyarakat diberikan kesempatan untuk menyuarakan pendapatnya dalam pengambilan keputusan otoritas (Thibaut dan Walker 1975), dan (2) ketika otoritas mengambil keputusan secara akurat tanpa mempertimbangkan kepentingan diri sendiri (de Cremer 2004; Leventhal 1980). Beberapa hasil penelitian menunjukkan bahwa ketika otoritas pajak mengikuti kedua aturan keadilan prosedural tersebut, maka masyarakat memandang keputusan otoritas tersebut lebih adil (misalnya; Magner, Johnson, Sobery, dan Welker 2000; Stalans dan Lind 1997).

Penelitian terdahulu tentang peran keadilan prosedural dalam kepatuhan pajak juga menunjukkan temuan yang tidak konsisten. Beberapa penelitian menunjukkan bahwa keadilan prosedural berpengaruh positif terhadap kepatuhan pajak (misalnya; Alm, Jackson, dan McKee 1993; Murphy 2004; Murphy dan Tyler 2008; Wenzel 2004). Namun beberapa penelitian lain menunjukkan keadilan prosedural tidak berpengaruh terhadap kepatuhan pajak (Porcano 1988; Worsham 1996).

### Pengaruh Denda Pajak terhadap Kepatuhan Sukarela dengan Keadilan Prosedural sebagai Variabel Pemoderasi

Penilaian moral tentang perilaku yang pantas dihukum merupakan faktor kunci dalam memahami hubungan antara pemberian sanksi oleh otoritas pajak dan kepatuhan (Mulder 2009). Apakah ketidakpatuhan pajak dipan-

dang tidak bermoral atau bermoral tergantung pada bagaimana sanksi dipersepsikan: (1) sebagai *compensatory* yaitu menunjukkan sebuah transaksi ekonomi, atau (2) *retributive* menunjukkan bahwa pelanggaran norma memang layak dihukum. Sanksi yang bersifat *retributive* cenderung dapat meningkatkan kepatuhan dibandingkan sanksi *compensatory* karena menunjukkan ketidaksetujuan secara moral terhadap pelanggaran norma (Verboon and van Dijke 2011). Sanksi *compensatory* tidak menunjukkan pertimbangan moral karena lebih bersifat transaksi ekonomi.

Mulder (2009) menyatakan bahwa pemberian sanksi yang lebih berat cenderung dipersepsikan bersifat *retributive* dibandingkan sanksi ringan. Hal ini karena sanksi berat merupakan sinyal bahwa keputusan otoritas tersebut telah merepresentasikan ketidaksetujuan moral masyarakat terhadap pelanggaran pajak. Sanksi yang berat cenderung efektif dalam meningkatkan kepatuhan karena merupakan sinyal ketidaksetujuan moral terhadap pelanggaran pajak. Sanksi berupa denda pajak yang terlalu rendah dapat dipersepsikan sebagai indikator bahwa otoritas pajak lemah sehingga menurunkan kepercayaan pembayar pajak yang jujur (Kirchler *et al.* 2008).

Meskipun demikian, selain hasil penelitian Mulder (2009), penelitian lainnya menunjukkan bukti empiris yang bertentangan tentang pengaruh tingkat sanksi terhadap kepatuhan (Kirchler *et al.* 2008). Sebagai contoh, Tenbrunsel and Messick (1999) menemukan bahwa pengaruh tingkat sanksi terhadap kepatuhan tergantung (dimoderasi) oleh probabilitas persepsian bahwa pelaku akan tertangkap melakukan pelanggaran oleh otoritas. Mulder (2009) menemukan tingkat sanksi dapat meningkatkan *moral concerns* tentang perilaku yang tidak etis jika otoritas diperspsikan dapat dipercaya. Wenzel (2004) menemukan bahwa tingkat sanksi berpengaruh terhadap kepatuhan untuk masyarakat yang percaya bahwa membayar pajak merupakan sebuah perilaku etis. Verboon dan van Dijke (2011) menemukan bahwa tingkat sanksi yang lebih berat dapat meningkatkan kepatuhan hanya jika prosedur pemberian sanksi ter-

sebut dipandang *fair* oleh masyarakat. Dengan kata lain, pemberian sanksi yang berat melalui prosedur yang adil dapat meningkatkan kepatuhan perpajakan.

Ketidak konsistenan hasil penelitian di atas menunjukkan bahwa pengaruh tingkat denda pajak terhadap kepatuhan tergantung pada (dimoderasi oleh) variabel-variabel lain. Tyler (2006) menyatakan bahwa pengaruh sanksi yang berat dalam meningkatkan kepatuhan pajak tergantung pada apakah otoritas pajak dipersepsikan mempunyai legitimasi dengan telah melakukan prosedur yang tepat, benar, dan adil (Tyler 2006). Kirchler *et al.* (2008) menyatakan pendapat serupa yaitu bahwa pemberian denda pajak yang tidak tepat misalnya dalam kasus seorang pembayar pajak secara tidak sengaja membuat kesalahan karena tidak jelasnya peraturan pajak dapat menurunkan keadilan persepsian masyarakat.

Sejalan dengan pendapat di atas, Verboon dan van Dijke (2011) menyatakan bahwa tingkat sanksi pajak yang tinggi dapat meningkatkan kepatuhan hanya jika prosedur pemberian sanksi tersebut dipandang wajar (*fair*) dan adil. Dalam hal ini tingkat keadilan prosedural memoderasi pengaruh sanksi terhadap kepatuhan pajak. Keadilan prosedural merupakan sebuah faktor penting dalam mempengaruhi hubungan otoritas pajak dan masyarakat (van Dijke dan Verboon 2010). Keadilan prosedural menunjukkan seberapa besar persepsi masyarakat terhadap tingkat kewajaran dan keadilan prosedur yang dilakukan otoritas dalam pengambilan keputusan (Leventhal 1980; Thibaut dan Walker, 1975). Contoh keadilan prosedural adalah otoritas yang secara konsisten memperlakukan semua anggota masyarakat secara sama dan tidak mendahulukan kepentingan diri sendiri (*self-interest*) dalam pengambilan keputusan.

Tingkat keadilan prosedural merupakan salah sumber penting bagi masyarakat dalam mengevaluasi tingkat moral otoritas pajak. Hasil penelitian menunjukkan temuan yang konsisten bahwa masyarakat mempersepsikan otoritas yang memberikan sanksi dengan prosedur yang tidak *fair* sebagai otoritas yang tidak mempunyai legitimasi (Murphy

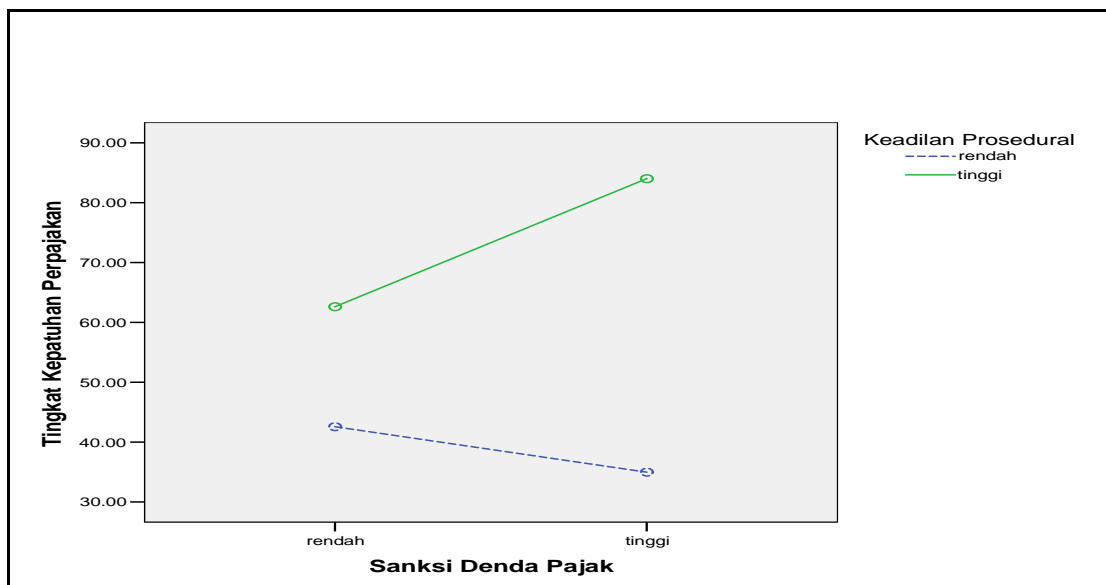
2004; Tyler 1997, 2006). Selain itu, hasil penelitian van Prooijen *et al.* (2008) menunjukkan bahwa sistem sanksi hanya efektif dalam meningkatkan kepatuhan jika prosedur pemberian sanksi tersebut dinilai adil. Persepsi terhadap ketidakadilan prosedural tersebut dapat menyebabkan kepercayaan (*trust*) terhadap otoritas menjadi menurun. Ketika otoritas pajak telah membuat prosedur secara *fair*, termasuk dalam pemberian sanksi denda pajak yang tinggi, masyarakat akan cenderung taat pada keputusan otoritas tersebut (Cropanzano, Rupp, Mohler, dan Schminke 2001; de Cremer and Tyler 2005; Tyler 2006).

Berdasar argumentasi di atas dapat dinyatakan bahwa pengaruh tingkat denda pajak terhadap kepatuhan wajib pajak tergantung pada tingkat keadilan prosedural seperti Gambar 2. Pada gambar tersebut ditunjukkan bahwa pemberian denda pajak yang tinggi belum tentu dapat meningkatkan kepatuhan perpajakan. Namun pengaruhnya tergantung pada tingkat keadilan prosedural otoritas pajak dalam pemberian sanksi tersebut. Semakin tinggi keadilan prosedural maka pemberian denda pajak yang tinggi akan dapat meningkatkan kepatuhan perpajakan. Secara formal argumen tersebut dinyatakan dalam hipotesis pertama (H1).

H1: Semakin tinggi denda pajak dan semakin besar keadilan prosedural otoritas pajak maka semakin besar tingkat kepatuhan sukarela wajib pajak.

**Pengaruh Interaksi antara Denda Pajak dan Keadilan Prosedural terhadap Kepatuhan Sukarela: Kepercayaan terhadap Otoritas Pajak sebagai Variabel Pemoderasi**

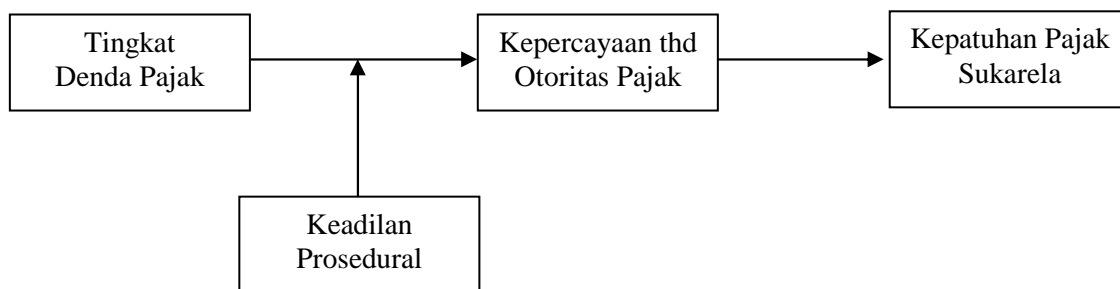
Kepercayaan (*trust*) terhadap otoritas pajak mempunyai sebuah peran penting mengapa keadilan prosedural mendorong kepatuhan sukarela masyarakat dalam membayar pajak. Argumen ini mengacu pada konsep dilema sosial fundamental (Lind, 2001) yaitu anggota masyarakat menghadapi sebuah dilema ketika akan memutuskan tingkat investasi (keterlibatan) mereka dalam kolektivitas/keanggotaan sosial. Hal ini karena keanggotaan tersebut memberikan kesempatan untuk meningkatkan pendapatan mereka dan meningkatkan perasaan memiliki (*sense of belongingness*) suatu negara. Namun pada saat yang sama, keanggotaan tersebut memungkinkan terjadinya eksploitasi dari otoritas yang menyalahgunakan kekuasannya (misalnya penyelewengan pajak yang dibayarkan warga negara oleh aparat pajak).



**Gambar 2:** Hipotesis Keadilan Prosedural sebagai Pemoderasi

Hubungan antara keadilan prosedural dan kepercayaan terhadap otoritas pajak juga dapat dijelaskan oleh teori *fairness heuristic* (Lind 2001). Teori ini menyatakan bahwa masyarakat sering tidak yakin apakah otoritas dapat dipercaya tidak menyalahgunakan kekuasaannya. Dalam situasi tersebut, masyarakat menggunakan *judgment* mereka tentang keadilan prosedural sebagai sebuah panduan sederhana (*heuristic guide*) untuk menilai apakah otoritas akan menyalahgunakan wewenangnya dan selanjutnya memutuskan tingkat investasi personal dalam kolektivitas sosial (seperti keputusan berapa besar pajak yang akan mereka bayarkan). Oleh karena itu, keadilan prosedural, termasuk dalam pemberian denda pajak, dapat meningkatkan kepercayaan terhadap otoritas pajak (Konovsky dan Cropanzano 1991; Korsgaard, Schweiger, dan Sapienza 1995). Khusus dalam topik kepatuhan pajak, hasil penelitian Murphy (2004) menunjukkan bahwa kepercayaan terhadap otoritas pajak juga memediasi pengaruh keadilan prosedural pada kepatuhan pajak. Kirchler *et al.* (2008) menyatakan bahwa kepercayaan (*trust*) terhadap otoritas pajak merupakan variabel determinan penting untuk kepatuhan pajak sukarela. Mereka juga menyatakan bahwa keadilan prosedural merupakan anteseden bagi kepercayaan terhadap otoritas pajak. Berdasar argumen di atas dan hasil penelitian sebelumnya maka dinyatakan hipotesis berikut:

H2: Tingkat kepercayaan terhadap otoritas pajak memediasi pengaruh interaksi positif antara denda pajak dan keadilan prosedural terhadap tingkat kepatuhan sukarela wajib pajak.



Gambar 3: Model Penelitian

## METODA PENELITIAN

### Sampel Penelitian

Sampel responden dalam penelitian ini adalah Wajib Pajak (WP) Orang Pribadi di Kota Semarang. Untuk metode survei kuesioner, sampel akan dipilih dengan teknik *convenience sampling* berdasarkan *database* WP Orang Pribadi yang diperoleh dari beberapa Kantor Pelayanan Pajak (KPP) di Kota Semarang.

### Pengukuran Variabel dan Instrumen Penelitian

Pengukuran variabel-variabel penelitian ini menggunakan instrumen kuesioner yang telah digunakan oleh penelitian-penelitian sebelumnya dan telah teruji validitas dan reliabilitasnya. Secara terperinci, instrumen kuesioner yang akan digunakan sebagai berikut:

- Variabel tingkat kepatuhan pajak sukarela akan diukur dengan instrumen dari Wenzel (2004) dengan skala 5 poin. Item pertanyaannya antara lain: (1) Apakah anda pernah melaporkan pendapatan lebih rendah daripada sebenarnya kepada kantor pajak, (2) Apakah anda pernah menghitung pengurangan pajak daripada seharusnya, (3) Apakah anda pernah melaporkan harta kekayaan lebih rendah daripada sebenarnya kepada kantor pajak.
- Variabel denda pajak akan diukur dengan instrumen dari Verboon dan van Dijke (2011) dengan skala 5 poin. Item pertanyaannya antara lain: (1) Menurut pendapat anda, apakah denda yang dikenakan terhadap pelanggaran pajak pada saat ini cukup berat, (2) Menurut pendapat anda, apakah kantor pajak telah menghukum berat para pelanggar pajak.



- c. Variabel keadilan prosedural akan diukur dengan instrumen dari Tyler (1997); Verboon dan van Dijke (2011) dengan item pertanyaan: (1) Apakah anda setuju bahwa kantor pajak telah menggunakan semua informasi yang valid dalam pengambilan keputusan, (2) Apakah anda setuju bahwa kantor pajak telah memperlakukan semua wajib pajak secara sama dan setara, (3) Apakah anda setuju bahwa kantor pajak telah bertindak secara tepat, (4) Wajib pajak yang tidak setuju dengan keputusan kantor pajak dapat memberikan pendapatnya.
- d. Variabel kepercayaan terhadap otoritas pajak akan diukur instrumen dari Mulder *et al.* (2009) dengan item antara lain: (1) Secara umum, saya percaya dengan keputusan otoritas pajak, (2) Secara umum, saya mempunyai respek yang tinggi terhadap kejujuran otoritas pajak, (3) Otoritas pajak tahu hal yang terbaik bagi masyarakat.

**Alat Analisis Statistika**

Analisis terhadap data yang diperoleh dari survei kuesioner akan menggunakan *Structural Equation Modeling* (SEM) karena model teoritis penelitian ini menggunakan variabel-variabel yang tidak bisa diukur secara langsung (*unobserved variables*) atau disebut konstruk. SEM mempunyai kelebihan karena memperhitungkan adanya kesalahan pengukuran (*measurement error*) untuk variabel-variabel yang tidak bisa diukur secara langsung (Hair *et al.* 2000). Selain itu, SEM mempunyai kelebihan untuk menilai kesesuaian model (*model fit*) antara model teoritis pada Gambar 1 dengan data empiris.

Pada perkembangannya, SEM dibagi dalam dua jenis yaitu *covariance-based SEM* (CB-SEM) dan *variance-based SEM* atau *partial least squares* (SEM-PLS). Penelitian ini memilih menggunakan jenis SEM-PLS karena beberapa alasan. Pertama, dalam situasi di mana teori belum berkembang (*less developed*), peneliti seharusnya mempertimbangkan menggunakan SEM-PLS sebagai alternatif untuk CB-SEM. Hal ini terutama jika tujuan utama penelitian adalah mengaplikasikan SEM untuk

memprediksi atau menjelaskan konstruk atau variabel laten yang menjadi target. Teori *slippery slope* masih relatif baru sehingga pengujiannya lebih tepat menggunakan SEM-PLS. Selain itu, tujuan utama penelitian ini adalah menjelaskan dan memprediksi variansi kepatuhan pajak sukarela.

Kedua, SEM-PLS dapat bekerja secara efisien dengan ukuran sampel yang kecil dan model yang kompleks. Selain itu, asumsi distribusi data dalam SEM-PLS relatif lebih longgar dibandingkan CB-SEM. SEM-PLS juga dapat menganalisis model pengukuran reflektif dan formatif serta variabel laten dengan satu indikator tanpa menimbulkan masalah identifikasi. Dalam kasus tertentu, seperti masih terbatasnya teori tentang hubungan struktural antarvariabel dan tujuan penelitian lebih pada eksploratoris daripada konfirmatoris, SEM-PLS merupakan alternatif yang tepat untuk CB-SEM. Selain itu, ketika asumsi-asumsi CB-SEM tidak terpenuhi maka SEM-PLS dapat menjadi metode yang tepat untuk pengujian teori. Berdasarkan argumentasi di atas maka penelitian ini memilih menggunakan pendekatan SEM-PLS. Penelitian ini menggunakan software WarpPLS 3.0 dalam pengujian model SEM PLS.

**HASIL DAN PEMBAHASAN**

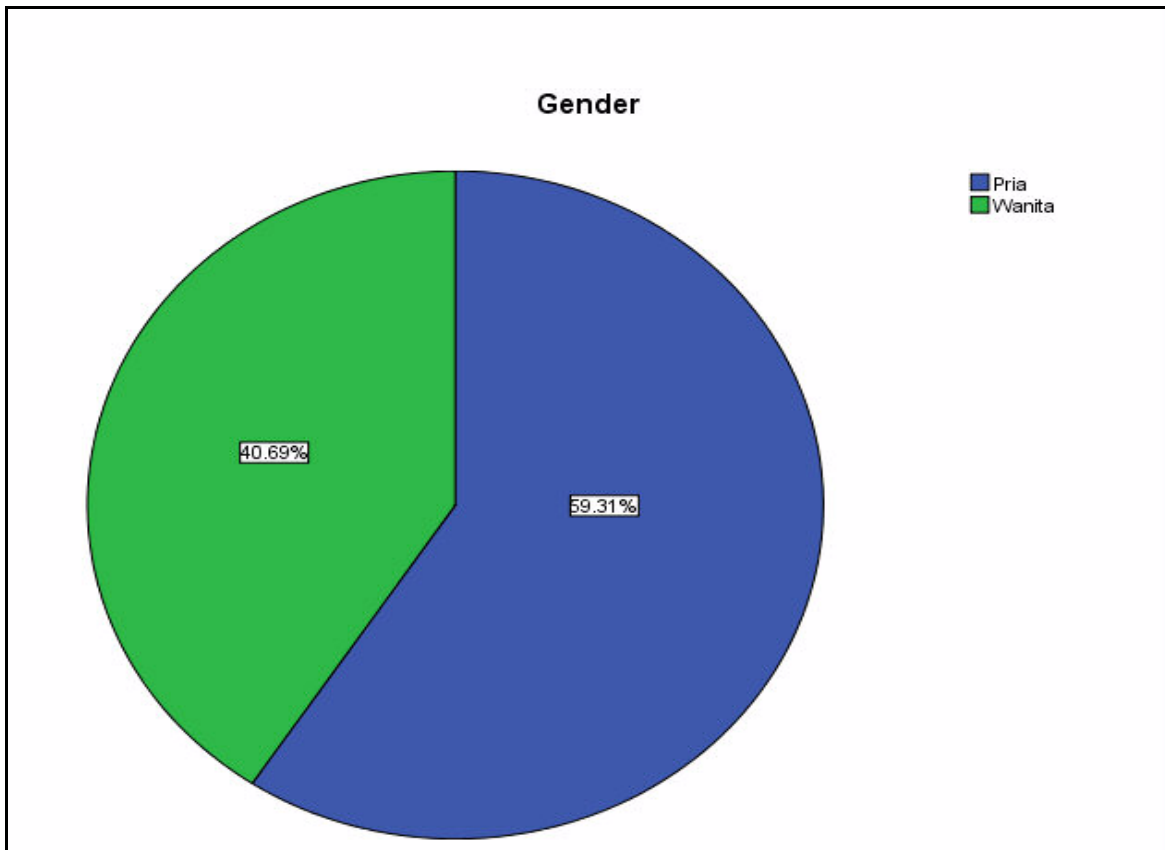
**Profil Responden Penelitian**

Sampel akhir penelitian ini terdiri atas 204 orang wajib pajak (WP) pribadi di kota Semarang. Pada bagian ini akan diuraikan profil responden yang meliputi jenis kelamin, usia, dan tingkat pendidikan. Tabel 2 menyajikan profil responden menurut jenis kelamin. Responden berjenis kelamin pria sebanyak 121 orang (59,30%) dan wanita 83 orang (40,70%).

**Tabel 2:** Statistik Deskriptif Jenis Kelamin Responden

	Jumlah	Persentase
Pria	121	59,30
Wanita	83	40,70
Total	204	100,0

Profil responden pada Gambar 4 menunjukkan bahwa sebagian besar responden berjenis kelamin pria.



**Gambar 4:** Profil Responden menurut Gender

**Tabel 3:** Statistik Deskriptif Usia Responden (dalam Tahun)

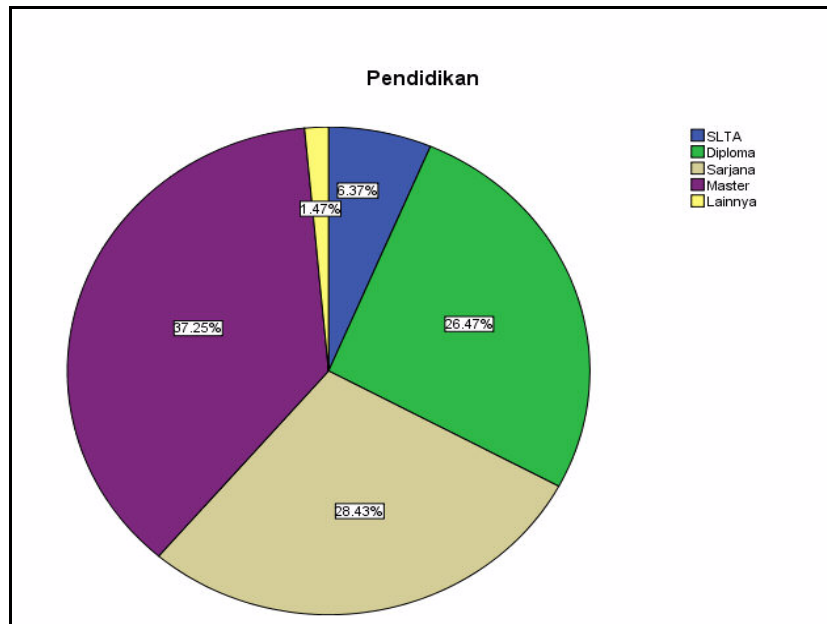
	N	Minimum	Maksimum	Rata-rata	Deviasi Standar
Usia	204	22,00	60,00	37,10	9,96

**Tabel 4:** Statistik Deskriptif Tingkat Pendidikan Responden

	Jumlah	Persentase
SLTA	13	6,40
Diploma	54	26,50
Sarjana	58	28,40
Master	76	37,30
Lainnya	3	1,50
Total	204	100,00

Tabel 3 menyajikan statistik deskriptif usia responden. Rata-rata usia responden adalah 37,10 tahun dengan usia termuda 22 tahun dan tertua 60 tahun. Statistik deskriptif ini menunjukkan bahwa sebagian besar responden berusia relatif muda. Tabel 4 menyajikan profil responden menurut tingkat pendidikan. Jumlah responden sebagian besar

berpendidikan strata dua atau master yaitu sebanyak 76 orang atau 37,30% dari keseluruhan responden. Responden yang berpendidikan diploma dan sarjana hampir berimbang yaitu 26,50% dan 28,40%. Gambar 5 menyajikan secara grafis dengan diagram lingkaran profil responden menurut tingkat pendidikan.



**Gambar 5:** Profil Responden menurut Tingkat Pendidikan

Hasil analisis statistik deskriptif di atas menunjukkan bahwa profil sebagian besar responden adalah berusia muda dan berpendidikan tinggi. Dalam rangka memperoleh validitas internal penelitian yang baik maka pada pengujian hipotesis dengan model *structural equation modeling-partial least squares* (SEM-PLS) dikendalikan variabel-variabel demografi (usia, gender, dan tingkat pendidikan responden). Caranya adalah dengan memasukkan usia, gender, dan tingkat pendidikan responden sebagai variabel kontrol.

**Hasil Pengujian Validitas dan Reliabilitas Instrumen**

Analisis data dengan pendekatan SEM-PLS terdiri atas dua tahap yaitu; (1) Melakukan konfirmasi model pengukuran (*measurement model*). Tujuan dari tahap ini adalah mengevaluasi validitas dan reliabilitas setiap konstruk penelitian atau variabel laten. Sebelum melangkah ke tahap kedua, kriteria validitas dan reliabilitas harus terpenuhi. (2) Mengevaluasi model struktural (*structural model*). Dalam tahap ini akan diperoleh hasil estimasi koefisien jalur dan tingkat signifikansi yang berguna dalam pengambilan kesimpulan atas hasil pengujian hipotesis. Selain itu, diperoleh

juga indikator-indikator *goodness of fit* untuk mengevaluasi model secara keseluruhan.

Sesuai dengan tahapan di atas, maka pada bagian ini akan diuraikan hasil pengujian validitas dan reliabilitas konstruk. Pengujian validitas konstruk meliputi validitas konvergen dan validitas diskriminan. Terdapat dua kriteria untuk menilai apakah model telah memenuhi syarat validitas konvergen untuk konstruk reflektif yaitu: (1) *loading* harus di atas 0,70, dan (2) nilai p signifikan (<0,05) (Hair *et al.* 2013; Kock 2013).

Hasil pengujian validitas konvergen disajikan pada Tabel 5. Dengan syarat tersebut maka pengukuran variabel penelitian ini telah memenuhi syarat validitas konvergen. Kedua indikator variabel denda yaitu (denda1 dan denda2) mempunyai *loading* 0,809 dan signifikan. Indikator variabel kepercayaan terhadap otoritas pajak (*trust*) yaitu (trust1, trust2, dan trust 3) mempunyai *loading* di atas 0,70 dan signifikan. Demikian juga ketiga indikator keadilan prosedural (disingkat prosedu) telah memenuhi syarat validitas konvergen dengan *loading* paling kecil 0,801. Kepatuhan pajak diukur dengan satu indikator sehingga mempunyai *loading* 1. Validitas konvergen juga ditunjukkan dengan *loading* indikator ke konstruk lain (*cross-loadings*) bernilai lebih rendah daripada *loading* ke konstruk tersebut.

**Tabel 5:** Hasil Pengujian Validitas Konvergen

	<b>Denda</b>	<b>Trust</b>	<b>Prosedur</b>	<b>Patuh</b>	<b>Detek</b>	<b>P value</b>
denda1	<b>0.809</b>	-0.201	-0.131	0.013	0.051	<0.001
denda2	<b>0.809</b>	0.201	0.131	-0.013	-0.051	<0.001
trust1	0.096	<b>0.765</b>	0.234	0.156	-0.074	<0.001
trust2	-0.012	<b>0.834</b>	-0.176	-0.145	0.036	<0.001
trust3	-0.077	<b>0.823</b>	-0.040	0.002	0.032	<0.001
pf3	-0.052	0.112	<b>0.824</b>	-0.018	0.028	<0.001
pf4	-0.006	-0.238	<b>0.853</b>	0.089	0.140	<0.001
pf5	0.061	0.138	<b>0.801</b>	-0.076	-0.178	<0.001
patuh1	0.000	-0.000	0.000	<b>1.000</b>	-0.000	<0.001
detek1	0.020	-0.027	-0.007	-0.004	<b>0.858</b>	<0.001
detek2	-0.020	0.027	0.007	0.004	<b>0.858</b>	<0.001

**Keterangan:**

denda: denda pajak dengan indikator denda1 dan denda2; *Trust*: kepercayaan terhadap otoritas pajak dengan indikator trust1, trust2, dan trust3; prosedur (*procedural fairness*): keadilan prosedural dengan indikator pf3, pf4, dan pf5. patuh: kepatuhan pajak sukarela dengan indikator patuh1. detek: probabilitas terdeteksi (sebagai variabel kontrol) dengan indikator detek1 dan detek2.

**Tabel 6:** Hasil Pengujian Validitas Diskriminan

	<b>Denda</b>	<b>Trust</b>	<b>Prosedur</b>	<b>Patuh</b>	<b>Detek</b>
Denda	<b>0.809</b>	0.339	0.175	0.033	0.181
Trust	0.339	<b>0.808</b>	0.494	0.160	0.292
Prosedur	0.175	0.494	<b>0.826</b>	0.096	0.034
Patuh	0.033	0.160	0.096	<b>1.000</b>	-0.082
Detek	0.181	0.292	0.034	-0.082	<b>0.858</b>

**Tabel 7:** Hasil Pengujian Reliabilitas Konstruk dan AVE

<b>WarpPLS 3.0 - Latent variable coefficients</b>					
	<b>Denda</b>	<b>Trust</b>	<b>Prosedur</b>	<b>Patuh</b>	<b>Detek</b>
R-squared		0.167		0.154	
Composite reliab.	0.791	0.849	0.866	1.000	0.849
Cronbach's alpha	0.473	0.733	0.767	1.000	0.643
Avg. var. extrac.	0.655	0.653	0.683	1.000	0.737
Full collin. VIF	1.172	1.678	1.386	1.066	1.239
Q-squared		0.174		0.153	

Tabel 6 melaporkan evaluasi validitas diskriminan instrumen penelitian. Kriteria yang digunakan adalah akar kuadrat (*square roots*) *average variance extracted (AVE)*; yaitu kolom diagonal dan diberi tanda kurung; harus lebih tinggi dari korelasi antarvariabel laten pada kolom yang sama (di atas atau di bawahnya). Sebagai contoh, validitas diskriminan konstruk denda telah terpenuhi karena akar AVE sebesar 0,809 lebih besar daripada koefisien korelasi denda dengan variabel laten lainnya yang ada di kolom di bawahnya. Secara keseluruhan, Tabel 6 menunjukkan

akar AVE pada kolom diagonal lebih tinggi daripada korelasi antarvariabel laten pada kolom selain diagonal (*off-diagonal*). Hal ini menunjukkan validitas diskriminan telah terpenuhi.

Tabel 7 menyajikan hasil pengujian dua ukuran reliabilitas instrumen penelitian yaitu *composite reliability* dengan kriteria harus bernilai di atas 0,70 sebagai syarat reliabilitas (Kock 2013). Output di atas menunjukkan reliabilitas instrumen telah terpenuhi karena nilai *composite reliability* untuk semua konstruk di atas 0,70. *Average variance*

*extracted* (AVE) juga digunakan untuk evaluasi validitas konvergen. Kriterianya harus di atas 0,50 (Fornell dan Lacker, 1981). Output menunjukkan kriteria tersebut telah terpenuhi.

*Full collinearity VIF* merupakan hasil pengujian kolinearitas penuh yang meliputi multikolinearitas vertikal dan lateral. Hasil pengujian *full collinearity* disajikan untuk setiap variabel laten. Kolinearitas yang kita kenal selama ini disebut vertikal atau klasik yaitu kolinearitas antarvariabel prediktor dalam blok yang sama. Namun terdapat konsep baru yaitu kolinearitas lateral yaitu kolinearitas antara variabel laten prediktor dengan kriteria. Kolinearitas lateral sering diabaikan padahal dapat menyebabkan hasil penelitian menjadi bias. Kolinearitas lateral juga digunakan untuk menguji *common method bias*. Kriteria untuk *full collinearity test* adalah nilainya harus lebih rendah dari 3,3 (Kock 2013). Output di atas menunjukkan nilai *full collinearity VIF* kurang dari 3,3 sehingga model bebas dari masalah kolinearitas vertikal, lateral, dan *common method bias*. Secara keseluruhan, hasil pengujian terhadap model pengukuran penelitian ini menunjukkan bahwa semua kriteria validitas, reliabilitas, dan asumsi multikolinearitas telah terpenuhi. Oleh karena itu, analisis data dapat dilanjutkan pada model struktural.

**Statistik Deskriptif Variabel Penelitian**

Tabel 8 melaporkan statistik deskriptif variabel penelitian. Rata-rata persepsi responden tentang keadilan prosedural otoritas pajak adalah 3,083. Dengan skala 5 poin, rata-rata sebesar 3,083 berada pada nilai tengah (*mid point*) sehingga hal ini menunjukkan bahwa wajib pajak mempersepsikan prosedur yang dilakukan otoritas pajak cukup adil. Rata-rata

variabel denda sebesar 2,912 juga menunjukkan skor aktual pada nilai tengah sehingga menunjukkan tingkat denda pajak dipersepsikan responden pada tingkat sedang. Kepercayaan responden pada otoritas pajak juga pada tingkat sedang ditunjukkan dengan rata-rata variabel kepercayaan sebesar 3,098. Responden merasa bahwa mereka telah mempunyai kepatuhan pajak yang relatif tinggi ditunjukkan dengan rata-rata sebesar 3,681.

**Hasil Pengujian Hipotesis**

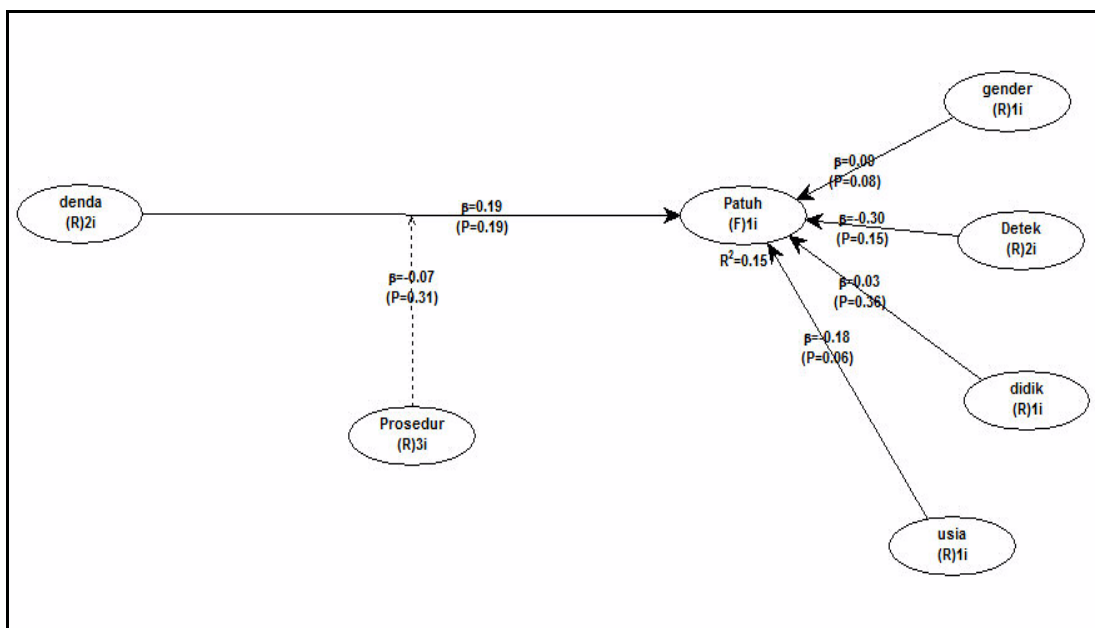
Pada bagian berikut diuraikan hasil pengujian hipotesis dengan menggunakan model struktural SEM-PLS. Hipotesis 1 menyatakan bahwa “semakin tinggi denda pajak dan semakin besar keadilan prosedural otoritas pajak maka semakin besar tingkat kepatuhan sukarela wajib pajak”. Dengan kata lain, hipotesis 1 menyatakan keadilan prosedural sebagai pemoderasi hubungan antara tingkat denda pajak dan kepatuhan sukarela wajib pajak. Hasil pengujian hipotesis 1 ditunjukkan dalam Gambar 6.

Output pengujian dengan program WarpPLS 3.0 pada Gambar 6 menunjukkan bahwa pengaruh moderasi keadilan prosedural (disingkat prosedur) adalah tidak signifikan dengan nilai p sebesar 0,31 (di atas 0,05). Dengan demikian hipotesis 1 yang keadilan prosedural sebagai pemoderasi hubungan antara tingkat denda pajak dan kepatuhan sukarela wajib pajak tidak dapat didukung. Hasil ini setelah variabel-variabel lain yang kemungkinan mempengaruhi kepatuhan pajak sukarela seperti gender, probabilitas terdeteksi (detek), tingkat pendidikan (didik), dan usia responden dimasukkan ke dalam model sebagai variabel kontrol.

**Tabel 8:** Statistik Deskriptif Variabel Penelitian

	<b>Prosedural (PF)</b>	<b>Denda</b>	<b>Kepercayaan (Trust)</b>	<b>Patuh</b>
Rata-rata	3,083	2,912	3,098	3,681
Deviasi Standar	0,975	1,005	1,102	0,998

**Keterangan:** denda: denda pajak dengan indikator denda1 dan denda2; *Trust*: kepercayaan terhadap otoritas pajak dengan indikator trust1, trust2, dan trust3; PF (*procedural fairness*): keadilan prosedural dengan indikator pf3, pf4, dan pf5. patuh: kepatuhan pajak sukarela dengan indikator patuh1.



**Gambar 6:** Hasil Pengujian Hipotesis Pertama

**Tabel 9:** Goodness of Fit Model Pengujian Hipotesis Pertama

Model fit indices and P values
APC=0.143, P<0.001
ARS=0.155, P=0.834
AVIF=1.230, Good if < 5

Tabel 9 melaporkan hasil penilaian kesesuaian model menurut teori dengan data empiris (*model fit indices and P value*). Tabel 9 menampilkan hasil tiga indikator fit yaitu *average path coefficient (APC)*, *average R-squared (ARS)*, dan *average variance inflation factor (AVIF)*. Nilai p diberikan untuk indikator APC dan ARS yang dihitung dengan estimasi *resampling* dan *Bonferroni like corrections*. Hal ini diperlukan karena keduanya dihitung sebagai rata-rata parameter. Evaluasi apakah model fit (sesuai atau didukung) oleh data adalah sebagai berikut. Nilai p untuk APC dan ARS harus lebih kecil dari 0,05 atau berarti signifikan. Selain itu, AVIF sebagai indikator multikolinearitas harus lebih kecil dari 5. Hasil output menunjukkan kriteria *goodness of fit* model telah terpenuhi untuk APC yaitu sebesar 0,475 serta bernilai signifikan dengan nilai p kurang dari 0,001. Nilai

AVIF sebesar 1,230 juga telah memenuhi kriteria yaitu di bawah batasan 5. Namun nilai ARS tidak memenuhi syarat karena nilai p sebesar 0,834 di atas 0,05 sehingga tidak signifikan. Secara keseluruhan, hasil model fit menunjukkan bukti tambahan bahwa hipotesis 1 tidak didukung.

Hipotesis 2 menyatakan bahwa tingkat kepercayaan terhadap otoritas pajak memediasi pengaruh interaksi positif antara denda pajak dan keadilan prosedural terhadap tingkat kepatuhan sukarela wajib pajak. Gambar 7 menyajikan output WarpPLS 3.0 untuk hasil pengujian hipotesis 2. Hasilnya menunjukkan bahwa keadilan prosedural (disingkat prosedur) tidak signifikan sebagai pemoderasi hubungan antara denda dan kepercayaan terhadap otoritas pajak (disingkat *trust*) dengan nilai p sebesar 0,20. Sementara itu, kepercayaan terhadap otoritas pajak (disingkat *trust*) berpengaruh positif signifikan terhadap kepatuhan pajak (disingkat patuh) dengan koefisien 0,22 dan nilai p kurang dari 0,01. Hasil ini menunjukkan bahwa hipotesis dua tidak didukung. Namun, signifikannya pengaruh denda terhadap *trust* (koefisien 0,34 dan nilai p <0,01) dan *trust* berpengaruh signifikan terhadap kepatuhan pajak mengindikasikan kemungkinan *trust* sebagai pemediasi denda dan kepatuhan.

Tabel 10 melaporkan hasil penilaian model fit untuk pengujian hipotesis kedua. Hasil output menunjukkan kriteria *goodness of fit* model telah terpenuhi untuk APC yaitu sebesar 0,191 serta bernilai signifikan dengan nilai p kurang dari 0,001. Nilai AVIF sebesar 1,190 juga telah memenuhi kriteria yaitu di bawah batasan 5. Namun nilai ARS tidak memenuhi syarat karena nilai p sebesar 0,197 di atas 0,05 sehingga tidak signifikan. Secara keseluruhan, hasil model fit menunjukkan bukti tambahan bahwa hipotesis kedua tidak didukung.

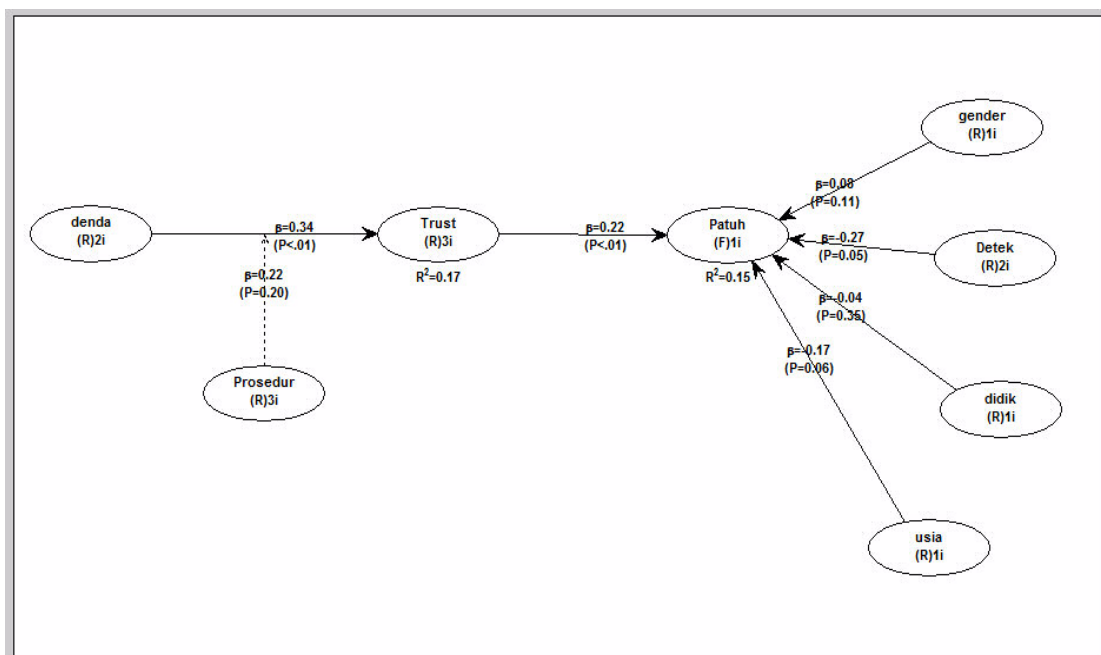
**Tabel 10: Goodness of Fit Model Pengujian Hipotesis Kedua**

Model fit indices and P values
APC=0.191, P<0.001
ARS=0.161, P=0.197
AVIF=1.190, Good if < 5

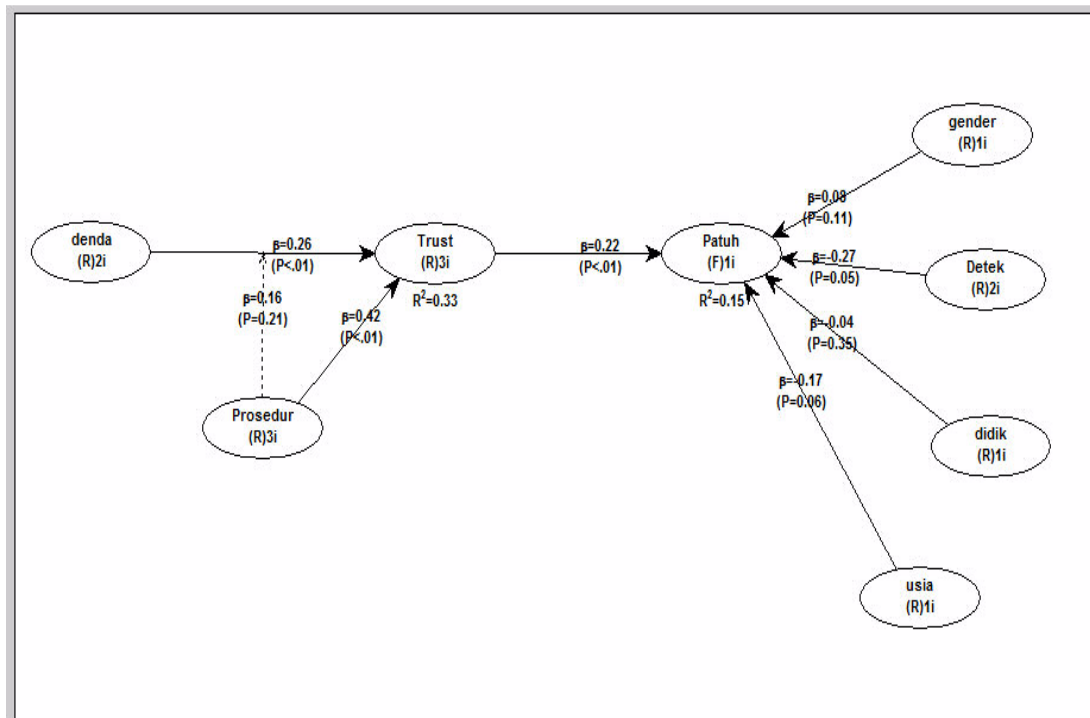
Hasil pengujian menunjukkan tidak didukungnya hipotesis 1 dan 2. Demikian juga hasil penilaian *goodness of fit* menunjukkan

belum terpenuhinya kriteria model SEM-PLS. Namun terdapat indikasi peran variabel *trust* sebagai pemediasi denda dan kepatuhan pajak sukarela. Hair et al. (2011) menyatakan peneliti dapat melakukan formulasi ulang atau respesifikasi model untuk memperoleh model terbaik dengan syarat harus berdasarkan teori. Oleh karena itu, penelitian ini menggunakan beberapa tahapan respesifikasi untuk memperoleh model terbaik yang dapat menjelaskan fenomena kepatuhan pajak.

Respesifikasi pertama dilakukan dengan menambahkan peran keadilan prosedural sebagai variabel prediktor *trust*. Hal ini sesuai argumen teori *slippery slope* bahwa keadilan prosedural dapat meningkatkan kepercayaan terhadap otoritas pajak yang selanjutnya dapat meningkatkan kepatuhan sukarela wajib pajak. Hasil pengujian respesifikasi model tahap 1 ditampilkan pada Gambar 8. Nampak bahwa variabel prosedur cenderung berperan sebagai variabel prediktor untuk *trust* dengan koefisien 0,42 dan signifikan. Peran variabel prosedur sebagai pemoderasi tidak signifikan dengan nilai p 0,21.



**Gambar 7: Hasil Pengujian Hipotesis Kedua**



**Gambar 8:** Hasil Pengujian Hipotesis-Respesifikasi 1

**Tabel 11:** Goodness of Fit Model Respesifikasi 1

Model fit indices and P values
APC=0.202, P<0.001
ARS=0.244, P=0.003
AVIF=1.182, Good if < 5

Tabel 11 melaporkan hasil penilaian model fit untuk model respesifikasi 1. Hasil output menunjukkan semua kriteria *goodness of fit* model telah terpenuhi untuk APC yaitu sebesar 0,202 serta bernilai signifikan dengan nilai p kurang dari 0,001. Demikian juga ARS yaitu sebesar 0,244 serta bernilai signifikan dengan nilai p 0,003. Nilai AVIF sebesar 1,182 juga telah memenuhi kriteria yaitu di bawah batasan 5. Secara keseluruhan, hasil model fit menunjukkan bahwa model respesifikasi 1 (pada gambar 8 lebih baik dibandingkan model pada Gambar 7).

Hasil pengujian pada Gambar 9 menunjukkan bahwa prosedur sebagai variabel prediktor/independen *trust* bukan sebagai pemoderasi hubungan denda dan *trust*. Oleh karena itu, respesifikasi tahap 2 dilakukan

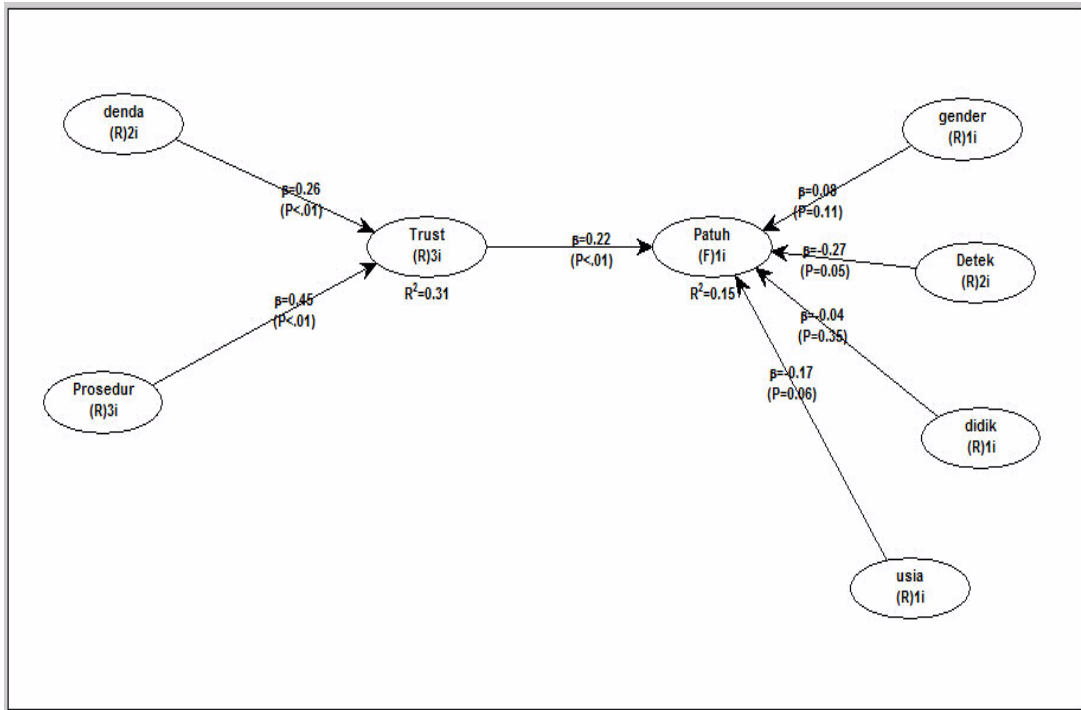
dengan menghilangkan fungsi pemoderasi dan hanya sebagai prediktor *trust*. Hasilnya disajikan pada Gambar 9. Nampak bahwa prosedur berpengaruh positif signifikan terhadap *trust* (koefisien= 0,45 dan nilai  $p<0,01$ ).

**Tabel 12:** Goodness of Fit Model Respesifikasi 2

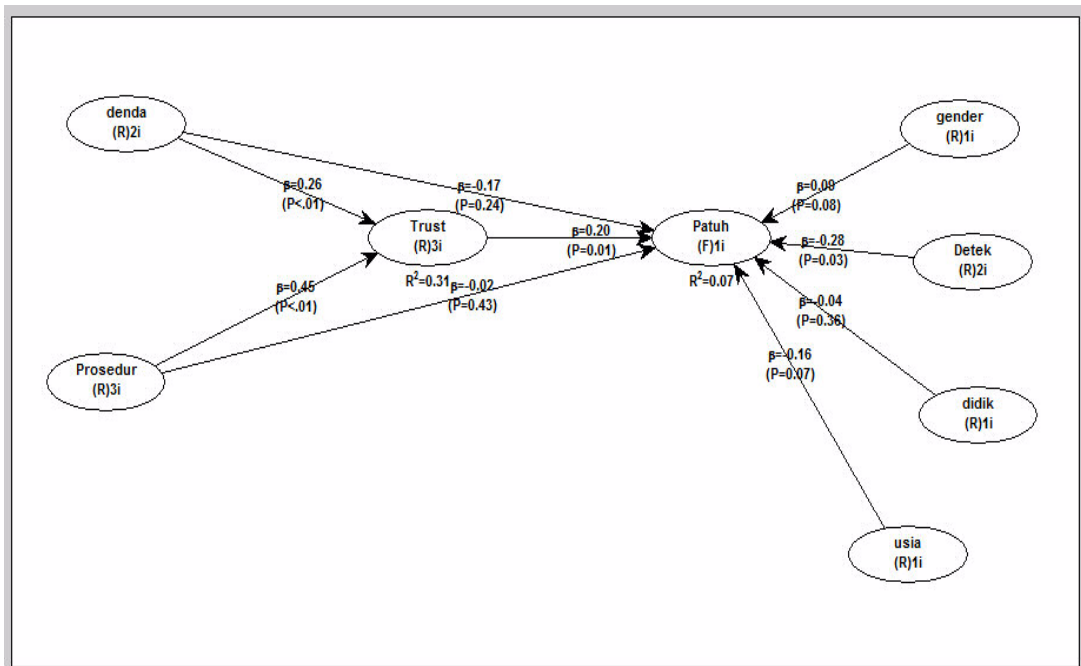
Model fit indices and P values
APC=0.212, P<0.001
ARS=0.232, P=0.003
AVIF=1.201, Good if < 5

Tabel 12 melaporkan hasil penilaian model fit untuk model respesifikasi kedua. Hasil output menunjukkan semua kriteria *goodness of fit* model telah terpenuhi untuk APC yaitu sebesar 0,212 serta bernilai signifikan dengan nilai p kurang dari 0,001. Demikian juga ARS yaitu sebesar 0,232 serta bernilai signifikan dengan nilai p 0,003. Nilai AVIF sebesar 1,201 juga telah memenuhi kriteria yaitu di bawah batasan 5. Secara keseluruhan, hasil model fit menunjukkan bahwa model respesifikasi 2 telah didukung oleh data empiris.





Gambar 9: Hasil Pengujian Hipotesis-Respesifikasi 2



Gambar 10: Hasil Pengujian Model Mediasi

Hasil pengujian pada Gambar 10 mengindikasikan peran variabel kepercayaan terhadap otoritas pajak sebagai pemediasi hubungan antara denda dan kepatuhan serta hubungan antara keadilan prosedural dan kepatuhan. Untuk lebih memperjelas maka dilakukan pengujian model mediasi dengan menambahkan jalur langsung denda dan ke-

adilan prosedural pada kepatuhan. Hasil pada Gambar 10 menunjukkan bahwa pengaruh langsung denda terhadap kepatuhan adalah tidak signifikan dengan koefisien 0,17 dan nilai p 0,24. Namun pengaruh denda terhadap kepatuhan adalah tidak langsung yaitu melalui *trust* dengan koefisien denda terhadap *trust* sebesar 0,26 dan signifikan sedangkan *trust*

terhadap kepatuhan juga signifikan dengan koefisien 0,20 dan signifikan.

Pengaruh langsung prosedur terhadap kepatuhan juga tidak signifikan dengan koefisien 0,02 dan nilai p 0,43. Hasil pada Gambar 10 menunjukkan bahwa pengaruh prosedur terhadap kepatuhan adalah tidak langsung yaitu melalui *trust* dengan koefisien prosedur terhadap *trust* sebesar 0,45 dan signifikan sedangkan *trust* terhadap kepatuhan juga signifikan dengan koefisien 0,20 dan signifikan.

**Tabel 13:** *Goodness of Fit Model*  
Pengaruh Langsung

Model fit indices and P values
APC=0.185, P<0.001
ARS=0.188, P=0.421
AVIF=1.180, Good if < 5

Tabel 13 melaporkan hasil penilaian model fit untuk pengujian model dengan pengaruh langsung denda dan keadilan prosedural terhadap kepatuhan pajak. Hasilnya menunjukkan bahwa kriteria *goodness of fit* model telah terpenuhi untuk APC yaitu sebesar 0,185 serta bernilai signifikan dengan nilai p kurang dari 0,001. Nilai AVIF sebesar 1,180 juga telah memenuhi kriteria yaitu di bawah batasan 5. Namun nilai ARS tidak memenuhi syarat karena nilai p sebesar 0,188 di atas 0,05 sehingga tidak signifikan. Secara keseluruhan, hasil model fit menunjukkan bukti tambahan bahwa pengaruh langsung denda dan keadilan prosedural terhadap kepatuhan pajak tidak didukung oleh bukti empiris. Namun pengaruh denda dan keadilan prosedural terhadap kepatuhan pajak adalah tidak langsung melalui *trust* seperti pada Gambar 10.

### Model Alternatif

Dalam rangka memperoleh model terbaik untuk kepatuhan pajak sukarela maka penelitian ini juga menguji model alternatif hubungan antarvariabel yang berbeda dengan model yang telah dibahas pada bagian di atas.

Model alternatif ini dikembangkan dengan menggunakan teori yang berbeda dengan teori *slippery slope*. Teori yang digunakan adalah teori *fairness heuristic* (van Dijke dan Verboon 2010). Model yang dikembangkan berdasarkan peran keadilan prosedural dan kepercayaan dalam meningkatkan kepatuhan pajak sukarela.

Variabel kepercayaan mempunyai sebuah peran penting dalam memahami mengapa keadilan prosedural dapat mendorong kepatuhan pajak sukarela yang merepresentasikan kebersamaan sosial (*social collectives*). Hal ini dapat dijelaskan oleh konsep yang disebut *fundamental social dilemma* yaitu anggota masyarakat menghadapi sebuah dilema ketika memutuskan apakah akan terlibat atau berinvestasi dalam kebersamaan sosial. Hal ini karena kebersamaan atau keanggotaan sosial merupakan sebuah kesempatan untuk perbaikan kondisi sosial dan menunjukkan identitas dan perasaan memiliki (*belongingness*). Namun pada saat yang sama, keanggotaan sosial juga menimbulkan kemungkinan eksploitasi dari otoritas yang menyalahgunakan wewenangnya.

Relevansi pemikiran tentang keadilan prosedural dijelaskan oleh *fairness heuristic theory* (Lind 2011). Teori ini menyatakan bahwa anggota masyarakat sering tidak yakin apakah otoritas dapat dipercaya untuk tidak menyalahgunakan kekuasaannya. Dalam situasi tersebut, anggota masyarakat menggunakan *judgment* tentang keadilan prosedural sebagai panduan heuristik untuk menilai apakah otoritas telah menyalahgunakan wewenangnya dan selanjutnya memutuskan seberapa besar ia akan terlibat atau berinvestasi dalam kebersamaan sosial. Oleh karena itu, anggota masyarakat dengan tingkat kepercayaan yang rendah kepada otoritas akan mengamati secara cermat apakah otoritas telah bertindak dengan prosedural yang adil (tidak bias) untuk menilai apakah otoritas telah menyalahgunakan wewenangnya. Selanjutnya berdasarkan penilaian tersebut, anggota masyarakat akan memutuskan apakah untuk patuh atau tidak patuh. Sebaliknya, anggota masyarakat dengan kepercayaan yang tinggi

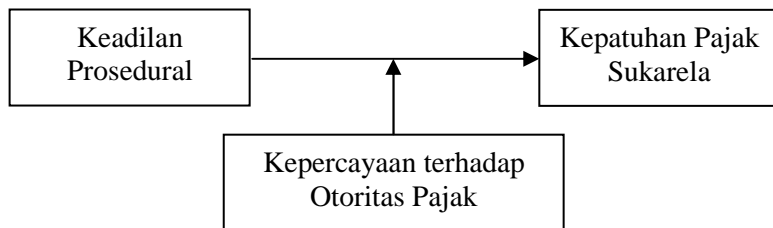
pada otoritas (sehingga ia tidak takut akan eksploitasi dan penyalahgunaan wewenang), tidak akan terlalu mengamati keadilan prosedur yang dilakukan otoritas. Oleh karena itu, pengaruh keadilan prosedural terhadap kepatuhan pajak sukarela akan lebih besar untuk anggota masyarakat dengan tingkat kepercayaan yang rendah pada otoritas.

Argumen di atas menunjukkan peran kepercayaan sebagai pemoderasi pengaruh keadilan prosedural terhadap kepatuhan sukarela. Argumen ini mengacu pada literatur terkini yaitu keadilan prosedural dapat menjadi antedecenn kepercayaan namun kepercayaan juga dapat menjadi pemoderasi pengaruh keadilan prosedural terhadap kepatuhan sukarela. Van Dijke dan Verboon (2010) telah menunjukkan bukti empiris peran variabel kepercayaan sebagai pemoderasi pengaruh keadilan prosedural terhadap kepatuhan pajak sukarela. Model alternatif yang dikembangkan disajikan pada gambar 11.

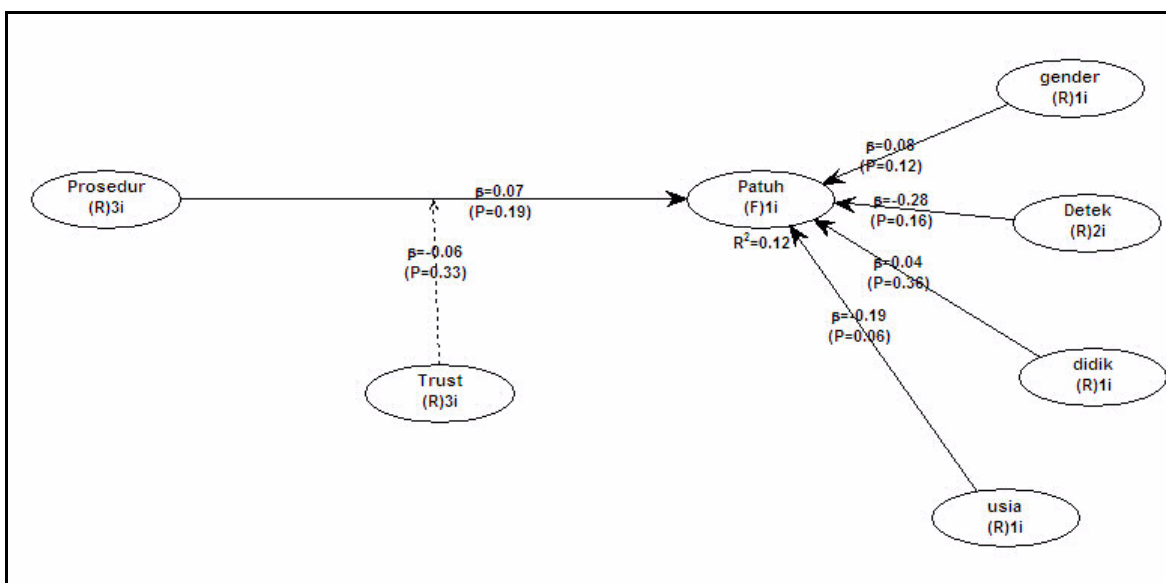
Gambar 12 menyajikan hasil pengujian model pada Gambar 11 dengan menggunakan data survei kuesioner dari 204 responden wajib pajak pribadi di kota Semarang. Hasil pengujian pada gambar 12 menunjukkan hipotesis bahwa kepercayaan (*trust*) sebagai pemoderasi pengaruh keadilan prosedural (*Prosedur*) terhadap kepatuhan pajak sukarela (*Patuh*) tidak didukung oleh data empiris. Nilai p pengaruh moderasi adalah sebesar 0,33 sehingga tidak signifikan pada alpha 5%. Hasil ini diperoleh setelah mengontrol efek gender, probabilitas terdeteksi, dan tingkat pendidikan responden.

**Tabel 14:** Goodness of Fit Model Alternatif

Model fit indices and P values	
APC=0.119,	P<0.001
ARS=0.122,	P=0.960
AVIF=1.251,	Good if < 5



**Gambar 11:** Model Alternatif untuk Kepatuhan Pajak Sukarela



**Gambar 12:** Hasil Pengujian Model Alternatif untuk Kepatuhan Pajak Sukarela

Tabel 14 melaporkan hasil penilaian model fit untuk pengujian model alternatif. Hasil menunjukkan bahwa kriteria *goodness of fit* model telah terpenuhi untuk APC yaitu sebesar 0,119 serta bernilai signifikan dengan nilai p kurang dari 0,001. Nilai AVIF sebesar 1,251 juga telah memenuhi kriteria yaitu di bawah batasan 5. Namun nilai ARS tidak memenuhi syarat karena nilai p sebesar 0,960 di atas 0,05 sehingga tidak signifikan. Secara keseluruhan, hasil analisis terhadap model fit menunjukkan bukti tambahan bahwa model alternatif dengan variabel kepercayaan sebagai pemoderasi pengaruh keadilan prosedural terhadap kepatuhan pajak sukarela tidak didukung oleh bukti empiris.

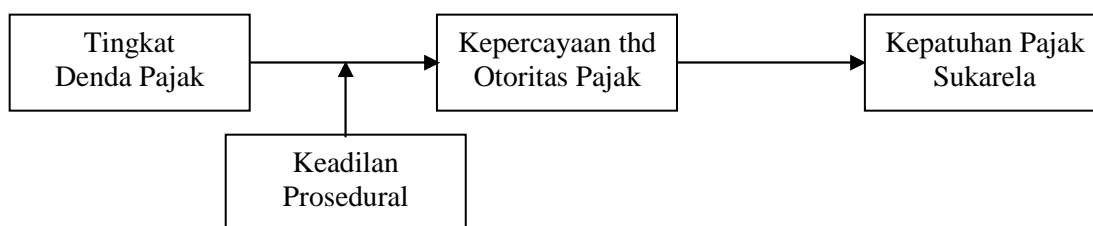
### Pembahasan Hasil Pengujian Model Kepatuhan Pajak Sukarela

Berdasarkan hasil pengujian hipotesis dengan data kepatuhan pajak dari 204 responden wajib pajak pribadi di Kota Semarang maka dapat disusun model kepatuhan pajak sukarela sebagai berikut. Model kepatuhan pajak sukarela yang diajukan penelitian ini adalah seperti pada Gambar 13. Dalam model tersebut diajukan argumen bahwa pemberian tingkat denda yang dilakukan dengan prosedur yang adil akan dapat meningkatkan kepercayaan wajib pajak terhadap otoritas pajak. Selanjutnya kepercayaan terhadap otoritas pajak akan

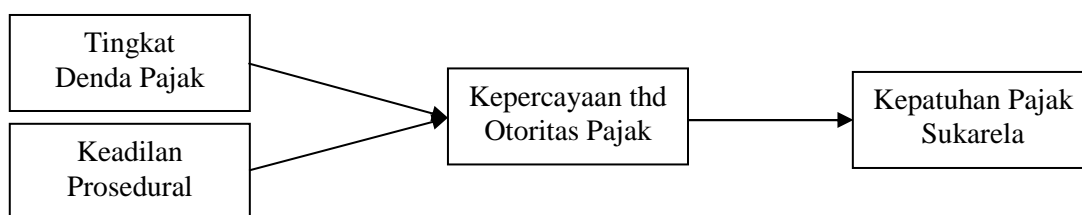
dapat meningkatkan kepatuhan pajak sukarela para wajib pajak pribadi.

Hasil pengujian model pada Gambar 13 dengan menggunakan data 204 responden wajib pajak pribadi menunjukkan bahwa model tersebut tidak sepenuhnya didukung bukti empiris. Dalam hal ini, keadilan prosedural tidak berperan sebagai variabel pemoderasi namun sebagai variabel prediktor kepercayaan terhadap otoritas pajak. Oleh karena itu, dilakukan respesifikasi model sehingga diperoleh model kepatuhan pajak sukarela yang mempunyai indeks fit terbaik seperti pada Gambar 14.

Model pada gambar 14 menyatakan bahwa upaya meningkatkan kepatuhan pajak sukarela (*voluntary tax compliance*) hanya dapat dilakukan dengan meningkatkan kepercayaan terhadap otoritas pajak. Pemberian sanksi denda pajak tidak dapat langsung meningkatkan kepatuhan pajak sukarela namun denda dapat mempengaruhi kepercayaan terhadap otoritas pajak baru kemudian mempengaruhi kepatuhan pajak sukarela. Demikian juga variabel keadilan prosedural. Prosedur yang dipersepsikan adil oleh wajib pajak dapat meningkatkan kepercayaan terhadap otoritas pajak dan selanjutnya kepercayaan terhadap otoritas pajak meningkatkan kepatuhan pajak sukarela.



**Gambar 13:** Model Kepatuhan Pajak Sukarela (Sebelum Pengujian)



**Gambar 14:** Model Kepatuhan Pajak Sukarela (Setelah Pengujian)

Hasil pengujian di atas juga dapat menjelaskan ketidakkonsistenan hasil penelitian terdahulu yang menguji pengaruh denda terhadap kepatuhan. Hasil penelitian terdahulu menunjukkan bukti empiris yang tidak konsisten, yaitu ada yang menunjukkan bukti bahwa semakin tinggi denda maka semakin tinggi kepatuhan pajak namun terdapat juga bukti bahwa kedua variabel tersebut tidak berhubungan (Fischer et al., 1992).

Hasil penelitian ini menunjukkan dukungan terhadap peran denda dalam meningkatkan kepatuhan pajak namun melalui variabel mediasi kepercayaan terhadap otoritas pajak. Sesuai argumen teori *slippery slope*, tingkat denda dapat dipersepsikan sebagai balasan (*retribution*) yang tepat dari otoritas bagi perilaku yang membahayakan masyarakat. Tingkat denda karenanya dapat mempengaruhi kepercayaan terhadap otoritas. Denda yang tidak tepat misalnya hanya karena seorang wajib pajak secara tidak sengaja membuat kesalahan yang disebabkan ketidakjelasan hukum pajak atau denda yang terlalu ringan untuk pelanggaran yang berat dapat menurunkan kepercayaan masyarakat terhadap otoritas pajak.

Hasil penelitian ini juga mendukung argumen teori *slippery slope* tentang peran keadilan prosedural untuk membangun dan mempertahankan kepercayaan wajib pajak terhadap otoritas pajak (Kirchler et al. 2008). Jika otoritas pajak dan para pegawainya memperlakukan wajib pajak secara sama dan setara dengan cara yang penuh hormat dan bertanggungjawab maka kepatuhan pajak sukarela akan dapat meningkat. Hal ini dapat mendukung terciptanya iklim sinergistik di mana hubungan otoritas pajak dan wajib pajak seperti pemberi jasa dan klien dengan wajib pajak akan berperilaku berdasarkan persepsi keadilan tentang sistem pajak dan patuh secara sukarela.

## SIMPULAN

Penelitian ini telah mengumpulkan data dengan survei kuesioner dengan responden 204 orang wajib pajak di Kota Semarang. Data penelitian dianalisis dengan *structural equa-*

*tion modeling* (SEM) sebagai alat statistika untuk pengujian hipotesis. Hasil analisis data menunjukkan hipotesis yang menyatakan bahwa keadilan prosedural sebagai pemoderasi hubungan antara tingkat denda pajak dan kepatuhan sukarela wajib pajak tidak dapat didukung. Hasil ini setelah variabel-variabel lain yang kemungkinan mempengaruhi kepatuhan pajak sukarela seperti gender, probabilitas terdeteksi, tingkat pendidikan, dan usia responden dimasukkan ke dalam model sebagai variabel kontrol. Keadilan prosedural cenderung berperan sebagai variabel determinan atau prediktor kepatuhan pajak sukarela.

Hasil penelitian ini juga menunjukkan variabel kepercayaan terhadap otoritas pajak sebagai mediasi pengaruh denda dan keadilan prosedural terhadap kepatuhan pajak sukarela. Hasil penelitian ini mendukung beberapa argumen teori *slippery slope*. Berdasarkan hasil pengujian hipotesis tersebut maka disusun model kepatuhan pajak sukarela. Model yang dihasilkan menyatakan bahwa upaya meningkatkan kepatuhan pajak sukarela hanya dapat dilakukan dengan meningkatkan kepercayaan terhadap otoritas pajak. Pemberian sanksi denda pajak tidak dapat langsung meningkatkan kepatuhan pajak sukarela namun denda dapat mempengaruhi kepercayaan terhadap otoritas pajak baru kemudian mempengaruhi kepatuhan pajak sukarela. Demikian juga variabel keadilan prosedural. Prosedur yang dipersepsikan adil oleh wajib pajak dapat meningkatkan kepercayaan terhadap otoritas pajak dan selanjutnya kepercayaan terhadap otoritas pajak meningkatkan kepatuhan pajak sukarela.

Berdasar hasil studi empiris penelitian ini maka dapat disusun beberapa saran bagi otoritas pajak dalam kebijakan meningkatkan kepatuhan pajak sukarela. Kepercayaan terhadap otoritas pajak merupakan determinan utama kepatuhan pajak sukarela. Oleh karena itu, perlu dikembangkan berbagai kebijakan untuk meningkatkan kepercayaan terhadap otoritas pajak khususnya setelah berbagai kasus korupsi yang justru melibatkan aparat pajak sendiri. Kebijakan inovatif dalam

rekrutmen pegawai pajak, sistem pengendalian internal, remunerasi, dan hukuman diperlukan untuk mengembalikan kepercayaan terhadap otoritas pajak.

Kebijakan denda pajak tidak dapat langsung mempengaruhi kepatuhan pajak sukarela. Otoritas pajak harus mengkombinasikannya dengan kebijakan yang bersifat psikologi-sosial seperti diuraikan pada poin 1 untuk dapat meningkatkan kepercayaan terhadap otoritas pajak.

Tingkat keadilan prosedural merupakan salah satu sumber penting bagi masyarakat dalam mengevaluasi tingkat moral otoritas pajak. Hasil penelitian ini menunjukkan temuan bahwa masyarakat mempersepsikan otoritas yang memberikan sanksi dengan prosedur yang tidak *fair* sebagai otoritas yang tidak mempunyai legitimasi. Persepsi terhadap ketidakadilan prosedural tersebut dapat menyebabkan kepercayaan (*trust*) terhadap otoritas menjadi menurun. Ketika otoritas pajak telah membuat prosedur secara *fair* masyarakat akan cenderung taat pada keputusan otoritas pajak. Oleh karena itu, penting bagi otoritas pajak menyajikan transparansi bagaimana prosedur yang mereka lakukan dapat diketahui dan dievaluasi oleh publik.

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# THE IMPACT OF ENTERPRISE RESOURCE PLANNING AND AUDIT COMMITTEE ON ACCOUNTING INFORMATION QUALITY

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## Abstract

This paper discusses the impact of ERP implementation and audit committee on the accounting information quality. This quality is measured with absolute discretionary accrual. The impact of audit committee is measured with audit committee score. In this study, ERP implementation is treated as a dummy variable, which is set as 1 for companies that implement ERP and 0 for companies that do not implement ERP. The population of this study is all of the companies listed in the Indonesia Stock Exchange. The sampling method employed in this study is purposive sampling. By using a sample of 78 publicly listed companies in the Indonesia Stock Exchange for the fiscal year of 2010 to 2011, this study presents evidence of a negative impact of ERP implementation on the accounting information quality. This study also finds that audit committee has a positive impact on the accounting information quality produced by companies that implement ERP.

**Keywords:** ERP, Reliability, Audit committee

## Abstrak

*Artikel ini mendiskusikan dampak implementasi ERP dan komite audit terhadap kualitas informasi akuntansi. Kualitas ini diukur dengan absolute discretionary accrual. Dampak dari komite audit diukur dengan skor komite audit. Dalam studi ini, implementasi ERP dianggap sebagai variabel dummy yang ditetapkan sebagai 1 untuk perusahaan yang mengimplementasikan ERP dan 0 untuk perusahaan yang tidak mengimplementasikan ERP. Populasi studi ini adalah semua perusahaan yang terdaftar di Bursa Efek Indonesia. Metode sampling yang digunakan di studi ini adalah purposive sampling. Dengan menggunakan 78 perusahaan yang terdaftar secara publik di Bursa Efek Indonesia untuk tahun fiskal 2010 hingga 2011, studi ini menampilkan fakta adanya dampak negatif dari implementasi ERP terhadap kualitas informasi akuntansi. Studi ini juga menemukan bahwa komite audit mempunyai dampak positif terhadap kualitas informasi akuntansi di perusahaan-perusahaan yang mengimplementasikan ERP.*

**Kata kunci:** ERP, Reliabilitas, Komite audit

## INTRODUCTION

This paper discusses the effect of enterprise resource planning (ERP) implementation and audit committee on the accounting information quality. ERP system is an integrated in-

formation system. This system consists of a set of structured and integrated modular software that includes and supports most of business processes (Hitt, Wu and Zhou 2002; Poston and Grabski 2001). Prior literature

claim that the ERP implementation have many benefits, such as assisting the business process reengineering (O'Leary 2008; Bradford and Robert 2001; Winters 2004), increasing operational performance (Hayes, Hunton and Reck 2001; Hunton, Lippincott and Reck 2003), improving managers ability to process and analyze accounting information (Davenport 1998; Hitt *et al.* 2002), providing information that enable management to have a whole view of firm's financial condition (Dillon 1999), decreasing function barriers, and enabling managers to access accounting information quickly (O'leary 2008).

However, ERP system implementation also raises new problems. Previous research shows that firms' external audit quality decreases when ERP system is implemented (Hunton, Wright and Wright 2004) and this problem may be caused by financial auditors who do not fully realize the exposure risks of ERP system. Additionally, there is a prior study that finds a decrease in internal control effectiveness after ERP implementation (Wright and Wright 2002). The study by Wright and Wright (2002) also shows that the ERP implementation process has an impact on the system reliability.

Many countries have implemented regulations that require firms to disclose the weaknesses of their internal control system. One of those countries is the United States with its Sarbanes-Oxley Act of 2002 (SOX 2002). Under the SOX 2002, the reliability of financial information should be increased due to the increase of internal control quality and audit quality conducted by the external auditors. Nevertheless, prior literature demonstrate that the audit quality and the internal control system decrease after the implementation of ERP system (Wright and Wright 2002; Hunton *et al.* 2004). Specifically, Brazel and Dang (2008) find the increase of absolute discretionary accrual after the implementation of ERP system. This implies that after the implementation of ERP system, the reliability of accounting information quality decreases even though it has an environment with powerful

internal control rules. The increase of absolute discretionary accrual provides evidence of the increase of earning management.

The debatable benefit of ERP system implementation raises a question whether or not the ERP system implementation decrease the reliability of accounting information due to the decrease of audit quality and the decrease of the effectiveness of internal control, especially in Indonesia. Indonesia does not have a regulation like SOX 2002. However, it has similar regulations with the same purpose. Since 2004, Indonesia has implemented a regulation issued by Capital Market Supervisory Agency No. Kep-29/PM/2004 concerning the establishment and guidance of Audit Committee implementation. The objective of this regulation is to ensure a good quality of accounting information published by companies listed in the Indonesia Stock Exchange.

By implementing such regulation, it is argued that accounting information quality increases after implementing ERP system. Nevertheless, this argument needs to be further investigated in order to get empirical evidence. To our knowledge, there is a little (if any) empirical studies about the impact of ERP implementation and audit committee on accounting information quality, especially in Indonesia. This motivates us to conduct a research about the joint impact of ERP implementation and audit committee on the accounting information quality. Based on the description above, a research question can be formulated as follows: do ERP implementation and audit committee influence accounting information quality resulted by companies listed in the Indonesia Stock Exchange?

The remainder of the paper is structured as follows: section two discusses the literature review along with the hypotheses development. The research method and results discussion are presented in the third and fourth sections, respectively. Finally, the fifth section presents conclusions along with implication of this study, limitations and suggestions for further research.

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Enterprise Resource Planning (ERP) implementation and Reliability

One of the advantages of the ERP system implementation is the ability to improve internal management decision-making. This condition should enable the firms that implement ERP system to perform better than non-ERP firms (Hunton *et al.* 2003). The ERP system implementation also improves the ability of managers to manage financial information for external users. ERP system is able to improve information set of management and to increase the asymmetry information level between managers and external financial report users. Prior research has empirically shown that higher level of asymmetry information and the related agency cost increases the investor's attention toward quality of reported earnings (Chow 1982; Francis and Wilson 1988). Therefore, the higher level of asymmetry information between management and investor increase the moral hazard problem because management can use higher discretion in earning reporting. This happens because the management has more control over the internal information regarding the firm's financial conditions than investors.

The information time lag on legacy system often forces management to manage external accounting information by conducting more transparent adjustments at the year-end period. Such adjustment is easier to be identified and questioned by external auditors (Lanza and Gilbert 2007). On the other hand, the constant accounting information flow and the enterprise-wide view that is the outcome of ERP system give management the opportunity to manage accounting information continuously at anytime.

Basically, earnings management is not a simple game. It requires multi-period planning because accrual manipulation in one year will affect subsequent years (Brazel and Dang 2008). ERP implementation facilitates multi-period accrual planning. Therefore, ERP system helps management to conduct earnings

management. If ERP implementation allow managers greater access and control over financial accounting data (Dillon 1999), the opportunity for management to interpret financial statement to meet incentives is increased. Therefore, ERP implementation should improve the ability of managers to respond to market and contractual incentives by managing earnings.

Financial statement audits and related internal controls are instruments that can reduce management opportunities to conduct financial statement management. Prior research found a positive relationship between discretionary levels and audit quality (Becker, DeFond, Jiambalvo, and Subramanyam 1998). When the opportunity to manage financial statement decrease, a company is able to produce more reliable financial statement for external users. The objective of the audit is to determine whether, in all material respects, the financial statements are prepared according to the GAAP (AICPA 1972). Hogan and Wilkins (2005) found that audit functions as a constraint in potential earnings management. Previous research also found that reported material weaknesses in internal control are associated with lower earnings quality (Doyle, Ge and McVay 2005; Chan, Farrel, and Lee 2008). Extant research also indicates that safeguards to reliability may be impaired in an ERP system setting. Hunton *et al.* (2004) and Brazel and Agoglia (2007) reported that auditor risk assessment and testing quality might be inadequate for clients that have implemented an ERP system. Wright and Wright (2002), through semi-structured interviews with IT audit specialists found that 31.8 percent of their participants had experiences in practice where their client's ERP system lacked adequate controls.

Following an ERP system implementation, the opportunity to manage financial accounting information may increase due to enhanced managerial information access and control and reductions in the safeguards of audit quality and internal control effectiveness. Policy makers (AICPA 2002) state that opportunity

is an important component affecting whether managers actually do manage accounting information to report financial results that meet their objectives, but do not reflect the true financial condition of the firm. Thus, the reliability of accounting information may be damaged by implementation of ERP system. We therefore test the following hypothesis:

H<sub>1</sub>: ERP system implementation decreases the reliability of accounting information.

### Audit Committee and Reliability

Previous research investigated the effect of corporate governance on reliability of accounting information was conducted by Habbash (2010), who reported that the size and Board of Commissioner (BOC) independence, competence and independence of audit committee, independence of nomination committee, independence of head of BOC, amount of non-executive directors' remuneration, and independence and external auditor specialization negatively associated with earnings management significantly. Furthermore, other research conducted by Roodposhti and Chashmi (2010), Verriest and Gaeremynck (2008), Baxter and Cotter (2006), Bugshan (2005), and Li (2009) that employed earnings management proxy also found similar results.

Previous research that used magnitude of abnormal accrual (discretionary accrual) and accrual quality found that the strong corporate governance negatively associated with abnormal accrual (discretionary accrual) or the strong corporate governance increased earnings reliability. These findings had been documented by Lara, Osma, and Penalva (2007), Kiatapiwat (2010), Moradi and Nezami (2011), Nasr, Boubakri, dan Cosset (2009), Shivaramakrishnan and Yu (2008), Dhaliwal, Naiker, and Navissi (2007), Houqe, Zijl, Dunstan, and Karim (2010), Kent, Routledge, and Steward (2008), Mitra (2002), Hashim and Devi (2008).

Garven (2009) found that audit committee and characteristics of BOC negatively associated with REM, whereas Ismail, Dunstan, and Zijl (2010) found that BOC and size

of audit committee positively associated with earnings quality (reliability). Klein (2006) found that a non-linear negative relation is found between audit committee independence and earnings manipulation. Other research conducted by Beasley and Salterio (2001), McMullen and Raghunandan (1996), DeZoort and Salterio (2001) support the finding that the existence of audit committee increase financial reporting quality, whereas Dechow, Sloan, and Sweeney (1996) find that companies without audit committee are more likely to be involved in a financial fraud. Based on the previous research regarding the effect of audit committee on accounting information reliability or reliability, we state hypothesis as follows:

H<sub>2</sub>: Audit committee positively affects reliability of accounting information

## RESEARCH METHODOLOGY

### Sample Selection

The population of this study is all companies listed in the Indonesia Stock Exchange. The sampling method employed in this study is purposive sampling. The samples in this study are companies that fulfill criteria such as having complete financial and audit committee data. Data sources used in this study are the Indonesia Capital Market database and companies website.

### Research Design

Reliability quality is measured with one of variables used by Barua (2006), which is abnormal accrual. Abnormal accrual is estimated with *Modified-Jones Model* developed by Dechow *et al.* (1996) in equation (1).

$$TA_{it} = \beta_1(1/A_{it-1}) + \beta_2 (\Delta REV_{it} - \Delta REC_{it}) + \beta_3 PPE_{it} + \varepsilon_{it} \dots\dots\dots (1)$$

Where:

- TA<sub>it</sub> = total accrual scaled by total asset for firm sample i at period t,
- A<sub>it-1</sub> = lagged total asset, for firm sample i at period t-1,

$\Delta REV_{it}$  = changes on net income for firm sample *i* at period *t*,  
 $\Delta REC_{it}$  = changes on net receivable for firm sample *i* at period *t*,  
 $PPE_{it}$  = gross fixed asset for firm sample *i* at period *t*, and  
 $\varepsilon_{it}$  = error term.

ERP = dummy variable which is stated to 1 for a company which implement ERP system and 0 for a company which does not implement ERP system.  
 AC = audit committee,  
 Size = log of total assets,  
 Lev = total liabilities divided by total assets,  
 MTB = market to book value equity, and  
 $\varepsilon$  = error term.

Discretionary accrual for the year is residual value of equation (1). Absolute discretionary accruals (ABSDA) is a proxy of reliability. The greater magnitude of ABSDA, the lower is the quality of reliability.

Audit committee is an independent variable and measured with audit committee score, based on decision of Capital Market Supervisory Agency (Kep-29/PM/2004) and several previous research done by Ramral (2011) and Ananchotikul (2007). Meanwhile, ERP is a dummy and independent variable. This variable is stated to 1 for a company which implements ERP system and 0 for a company which does not implement ERP system. Control variables used in this research are: Firm-size (*Size*) which is calculated with natural log of total assets, Market-to-book ratio (MTB) which is calculated by dividing market value of firm equity with book value of firm equity. Previous research done by Zhou and Elder (2001) found that firm’s market-to-book-value (MTB) is a proxy for growth opportunities and may influence discretionary accruals. Leverage is another control variable and it is calculated by dividing total liabilities with total assets. Previous research concludes that leverage (*Lev*) correlated with *discretionary accruals* (DeFond and Jiambalvo, 1994; Becker et al. 1998).

**Model Specification**

The main statistical method to test hypotheses is GLS regression. The GLS models to be estimated are as follow:

$$ABSDA = \beta_0 + \beta_1 ERP + \beta_2 AC + \beta_3 SIZE + \beta_4 LEV + \beta_5 MTB + \varepsilon \dots\dots\dots(2)$$

Where:  
 ABSDA = absolute discretionary accrual and the proxy of reliability quality,

**RESULTS AND DISCUSSION**

Based on the sampling process described above, this study used 78 firms as samples to be included in this research. The samples consist of 39 ERP-adopted and 39 non-ERP-adopted firms for two years. The total observation conducted is 156 firm-years. Moreover, in order to be comparable, both the ERP-adopted firms and non-ERP-adopted firms selected in this study came from a similar sector. The data sample is presented in Table 1 below.

Table 2 shows descriptive statistics for the data sample. From Table 2, it can be seen that the mean of ABSDA is 0,068 with standard deviation of 0,060. The range between maximum (0,284) and minimum value (0,001) is 0,283. Since this variable is an inverse measure of predictive value quality, hence, the smaller the value, the better is the quality.

ERP has a mean value of 0,500 with standard deviation of 0,501. The range between maximum (1,000) and minimum value (0,000) is 1,000. AC score has mean value of 0,813 with standard deviation of 0,087. The maximum value of AC is 1,000 and minimum value of 0,590, so this variable has range of 0,410. The mean of MTB is 2,331 with standard deviation of 3,950. The maximum value of MTB is 38,970 and minimum value of 0,091, so this variable has a range of 38,869. Lev has a mean value of 0,483 with standard deviation of 0,198. The range between maximum (1,070) and minimum value (0,070) is 1,000. The mean of Size is 13,414 with standard deviation of 3,317. The maximum value of Size is 18,849 and minimum value of 4,768, so this variable has range of 14,081.

**Table 1:** Firms Data Sample

Firms listed in Indonesia Stock Exchange in 2010 and 2011	459
Deducted:	
- Firms with incomplete data	298
- Firms in financial industry	83
Final Samples	<b>78</b>

**Table 2:** Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.
ABSDA	0,068	0,051	0,284	0,001	0,060
ERP	0,500	0,500	1,000	0,000	0,501
AC	0,813	0,800	1,000	0,590	0,087
MTB	2,331	1,355	38,970	0,091	3,950
Lev	0,483	0,510	1,070	0,070	0,198
Size	13,414	14,042	18,849	4,768	3,317

**Hypothesis Testing**

In order to test the hypotheses, this study used regression statistics analysis with software EVIEWS. The classic assumptions of regression model were tested before the regression statistics analysis was conducted. The assessment shows that the data were normally distributed and there were no problems with multicollinearity, heteroscedasticity, and autocorrelation in the data. The regression analysis results and reliability quality testing is presented in Table 3.

Regression results show that determination coefficient (*Adj. R<sup>2</sup>*) is 0,098 or 9,8 percent. This number shows that all independent variables are only able to explain 9,8 percent effect of independent variables on dependent

variable, and the rest are explained by other variables which are not taken into account in this research.

Table 3 shows a significant ( $p = 0.031$ ) and positive coefficient for ERP. Since ABS-DA is an inverse measure of reliability quality, this result indicates that reliability decrease in the firms that implement ERP systems. Therefore, this result supports H1 of this research. This result also provides evidence that after ERP implementation, the discretionary accrual number increase. The finding of this study is consistent with prior research by Brazel and Dang (2008), Brazel and Agoglia (2007); and Hunton *et al.* (2003) who find that ERP implementation reduces reliability quality of accounting information.

**Table 3:**Regression Analysis

<b>ABSDA = <math>\beta_0 + \beta_1ERP + \beta_2AC + \beta_3SIZE + \beta_4LEV + \beta_5MTB + \epsilon</math></b>			
Variable	Coefficient	Std. Error	P-value.
(Intercept)	0.136***	0.040	0.000
ERP	0.033**	0.015	0.031
AC	-0.228***	0.043	0.000
LEV	0.017*	0.010	0.071
MTB	0.000	0.000	0.571
SIZE	0.000	0.000	0.756
Adjusted R-squared	0.098		
F-statistic	2.532***		0.005

For hypothesis 2, the result shows that the value of  $\beta_2$  equals to -0,228 and significant in the level  $\alpha = 0,01$ . It means that AC positively and significantly affects reliability. Therefore, there is empirical evidence to accept  $H_2$ . It can be concluded that  $H_2$  that states that audit committee have positive effect on reliability of accounting information is supported by empirical data of this study. This result is consistent with studies conducted by Beasley and Salterio (2001), DeZoort and Salterio (2001), and McMullen dan Raghunandan (1996) who found that the existence of audit committee increases the quality of financial reporting. This result is also in line with previous research by Garven (2009) who found that audit committee associated with REM,; Ismail, Dunstan, and Zijl (2010) who found that size of audit committee positively associated with earnings quality (reliability); and Klein (2006) who discovered that a non-linear negative relation is found between audit committee independence and earnings manipulation.

## CONCLUSION

This research provides evidence that ERP implementation has negatively affect the reliability quality of accounting information produced by companies listed in the Indonesian Stock Exchange. These results show that the reliability of accounting information quality decrease for companies which implement ERP. These results support  $H_1$  which states that ERP implementation negatively affect the reliability of accounting information quality. Therefore, it can be concluded that as a whole, ERP implementation negatively affects accounting information quality.

The data analysis conducted in this study also demonstrates that audit committee significantly and positively affect the reliability of accounting information produced by companies listed in the Indonesia Stock Exchange. This result demonstrates that the reliability of accounting information increase post-ERP implementation. This result supports  $H_2$  of this study which states that audit com-

mittee positively affect the reliability of accounting information. Therefore, it can be concluded that as a whole, audit committee positively affects accounting information quality.

This research has several implications. Firstly, the results confirm the agency theory, which predicts that monitoring and controlling activities by independent parties such as audit committee ensure the agent acts on behalf of the principle interest, so the accounting information quality increase. Secondly, the results give an understanding that the expected benefit from ERP implementation, which is an increase of the accounting information quality, cannot be achieved. This should become one of the main concerns for the companies' management. As previously mentioned, there are several factors that contribute to the decrease of the reliability of accounting information quality such as the quality of auditors who do not have sufficient familiarity with ERP.

This research has several limitations. Firstly, this study uses a small sample size. This limitation should be considered when making any conclusions and generalization of the results. Secondly, this study compares between companies that implement ERP and companies that do not implement ERP. The different characteristic between the two sample groups may limit the generalization of the results of this study. Thirdly, this study does not take into account the industry characteristic. Fourthly, this research does not use market data to measure the accounting information quality. However, these limitations offer avenues for further research in this area. Firstly, similar research can be done by using another accounting quality measurement that is more market-oriented such as earnings response coefficient (ERC). Secondly, further research can employ pre- and post-design, which aims to compare between period before and after ERP implementation. Thirdly, research can also be conducted by considering industry characteristics in order to distinguish one industry from another.

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# THE IMPACT OF CLIENT IMPORTANCE ON EARNINGS MANAGEMENT AND GOING-CONCERN OPINION: EMPIRICAL EVIDENCE FROM INDONESIA

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## Abstract

This study investigates the impact of client importance on auditor independence measured by accrual earnings management and going-concern opinion. Our research sample consists of 1,080 firm-years of observation from listed companies in the Indonesia Stock Exchange (IDX) with eight years of observation (2004-2011). With pooled OLS we found that client importance has a negative impact on accrual earnings management. We also found evidence that client importance has a positive impact on going-concern opinion. Collectively, our evidence suggests that although audit firms have economic dependence toward their clients, those audit firms can maintain their audit quality by keeping their independency toward their clients, reflected by the lower accrual earnings management and higher tendency of issuing going-concern opinion. Our results are robust by considering the results of our sensitivity tests that support the main results.

**Keywords:** audit quality, auditor independence, client importance, earnings management, going-concern opinion

## Abstrak

*Penelitian ini menguji pengaruh kepentingan klien terhadap independensi auditor yang diukur dengan manajemen laba berbasis akrual dan opini going-concern. Sampel penelitian terdiri dari 1.080 observasi dalam tahun-perusahaan dari perusahaan terdaftar di Bursa Efek Indonesia (BEI) dengan delapan tahun pengamatan (2004-2011). Dengan menggunakan pooled OLS, kami menemukan bahwa kepentingan terhadap klien (client importance) berpengaruh negatif terhadap manajemen laba akrual. Kami juga menemukan bukti bahwa kepentingan terhadap klien berpengaruh positif terhadap opini going-concern. Secara keseluruhan, temuan-temuan kami menyimpulkan bahwa walaupun Kantor Akuntan Publik memiliki kepentingan ekonomi terhadap klien, namun Kantor Akuntan Publik memelihara kualitas audit dengan menjaga tingkat independensi terhadap klien mereka, tercermin dari manajemen laba akrual yang lebih rendah, dan terdapat kecenderungan yang lebih tinggi dalam memberikan opini going-concern. Hasil studi ini robust setelah mempertimbangkan hasil dari pengujian sensitivitas yang mendukung pengujian utamanya.*

**Kata kunci:** kualitas audit, independensi auditor, kepentingan terhadap klien, manajemen laba, opini going-concern

## INTRODUCTION

The audit quality of public accounting firms has been criticized in the last decade, since they could not protect the interests of investors (Coffee 2002; 2003; Levitt 1998). This audit quality

has been defined by various definitions. DeAngelo (1981), for example, defines audit quality as the joint probability that the auditor will find a breach in the client's accounting system, and report that violation. In this definition, audit

quality covers the dimensions of competence and independence. Fitriany (2011) suggests that a higher degree of competence from auditors is not always accompanied by a higher degree of independence. In terms of independence, audit quality can be measured from different aspects, i.e., economic dependence toward clients, the influence of client practices toward the propensity to meet earnings targets, corporate governance practices, the propensity to issue going-concern opinions, the conducted peer review, or other measure of independence (Bamber and Bamber 2009).

Due to the auditor-client relationship, auditors may have incentives to compromise with their clients depending on the auditors' economic interests on their clients (DeAngelo 1981; Reynolds and Francis 2001). The proposition that the auditors will report favorably to retain important clients is known as the economic bonding (DeAngelo 1981). The independence of auditors can be reflected in the extent to which auditors will tolerate opportunistic earnings management, and how likely the auditors will issue going-concern opinion (Herusetya 2012; Francis and Yu, 2009).

Most of prior studies found that economic dependence does not encourage larger clients to perform greater discretions in accrual-based earnings management (e.g., Reynolds and Francis 2001; Francis and Yu 2009; Herusetya 2012). Some previous studies found evidence that auditor independence impaired when clients pay for non-audit services is relatively higher compared to the total fee (Frankel, Johnson and Nelson 2002). They found evidence of a positive association between client importance (i.e., the ratio of non-audit services to total fee) and the amount of discretionary accruals. While Chung and Kallapur (2003) found no evidence on the association between client importance and abnormal accruals.

Past research also found the association between client importance and audit opinion issued by public accounting firms (e.g., Reynolds and Francis 2001; Craswell, Stokes and Laughton 2002; Chen, Sun and Wu 2010). Reynolds and Francis (2001) found that Big 5 did not treat larger clients with more compro-

mise than smaller clients based on the size of individual practice offices, i.e., by not reducing the propensity to issue going-concern opinions. Existing financial incentives were considered enough to motivate the auditors to be independent, despite the fact that the presence of economic dependence relationships was inherently in the auditor-client contract. Similarly, Craswell *et al.* (2002) found that fee dependence as a threat to auditor independence does not affect the likelihood of auditors to issue qualified audit opinions, both at national and local market levels.

The lack of evidence on the previous studies, which examined the associations between client importance, earnings management, and going-concern opinion are the main reasons of our study. The lack of past research on auditor independence in Indonesia, as measured by the economic dependence of auditors toward their clients will make some contributions to this study. First, Marchesi (2000) for example, found that audit quality in ASEAN countries was so compromise. But as the climate of audit environment in the United States has started to change since the corporate failure in 2001, which also gave impact to the legal and audit environment around the world including Indonesia (Fargler and Jiang 2008; Chen *et al.* 2010), we expect to provide evidence on these associations. Secondly, past researches on audit quality were more dominated by the measurement of the competence dimension, for example, using the size of accounting firms (Big 4, etc) (Fitriany 2011; Siregar 2006; Francis 2004). Audit quality of the Big 4 firms in Indonesia may differ from the Big 4 firms in the United States who are under the Sarbanes Oxley Acts (Gordon *et al.* 2013). Our study contributes to the measurement of independence of the audit firms in Indonesia using a proxy of client importance which includes a sample of the Big 4 firms.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Client Importance as a Measure of Auditor Independence**

It was long been a suspicion that the auditors' financial interest toward their clients can greatly affect the auditor independence (Mautz and Sharaf 1961 in Chen *et al.* 2010). DeAngelo (1981) suggests that auditors' incentives to compromise their independence toward their client depends on the importance of a client to the auditor (client importance), i.e. the ratio of quasi rents specific to the client divided by the total number of quasi rents received by the auditor.

DeAngelo (1981) observed that if the percentage of the entire fee depends on one client used as a measure of audit quality (i.e., perceived independence with respect to that client) then the audit quality will decrease. The proposition that auditors will report favorably to retain important clients is known as economic bonding (DeAngelo 1981; Francis and Yu 2009), fee dependence, or economic dependence (Reynolds and Francis, 2001; Chen *et al.* 2010). It is probable that the greater the size of the clients in auditor's portfolio, the greater the incentive for the auditor to retain his clients, in which audit quality is likely to be compromised (Chen *et al.* 2010).

### **Client Importance and Earnings Management**

Since the corporate scandals involving auditors in the United States by the end of 2001 that gave birth to the Sarbanes-Oxley Act (SOX) of 2002, the change of audit environment is also felt through over the world, including Indonesia. The Indonesian Government issued various regulations concerning the audit services provided by audit firms. These regulations were expected to increase the competence and the independence of the auditors (Herusetya 2012).

Auditor independence can be reflected in the extent to which the auditor became more tolerant to the earnings management done by the clients. The higher the quality of the independence of the auditors, the lower the earnings management behavior was reflected. Previous research has examined the association between client importance and earnings management (e.g., Herusetya 2012; Reynolds

and Francis 2001; Frankel *et al.* 2002; Chung and Kallapur 2003; Francis and Yu 2009).

Reynolds and Francis (2001) examined the association between client importance and audit outcome, i.e. total accruals and total discretionary accruals as measures of earnings quality. They suspect that the client importance (INFLUENCE variable) at the level of individual practice office can reduce auditor independence, but they found that Big 5 auditors did not treat larger clients more compromisingly compared to smaller clients.

With a sample of 6,568 U.S. firms-years observations for the period 2003 to 2005, Francis and Yu (2009) examined whether the larger offices of Big 4 auditors have higher audit quality. Using an INFLUENCE variable as a measure of the auditor's incentives with respect to a fee-dependence and used as a control variable, they found that larger Big 4 practice offices have a negative association with absolute abnormal accruals. Herusetya (2012) in his study used a composite measure of audit quality that covered the dimension of competence and independence, and client importance (CI) was one of the proxies used in the dimension of independence. By using a single proxy of CI, he found that CI has a negative association with the absolute discretionary accruals.

In summary these findings conclude that even though the auditors have economic dependence on their clients, but the auditors do not encourage greater discretion in accrual-based earnings management. In other words, the auditors do not provide greater tolerance to earnings management behavior for their important clients. Based on the arguments given above, the hypothesis to be tested is:

H<sub>1</sub>: Client importance is negatively associated with earnings management.

### **Client Importance and Going-Concern Opinion**

Auditor's independence can be reflected in the propensity to issue going-concern opinion. Auditor independence will decline if the auditor compromise not to report the financial condition of the clients related to going-

concern problems, because the auditor has economic dependence to the client (DeAngelo 1981; Reynold and Francis 2001).

Previous research found evidence on the association of client importance and audit opinion issued by public accounting firms (Reynolds and Francis 2001; Craswell *et al.* 2002; Chen *et al.* 2010) Reynolds and Francis (2001) found that Big 5 did not treat large clients with more compromise than the smaller clients. Reynolds and Francis (2001) found the size of individual practice offices of the Big 5 did not reduce the propensity to issue going-concern opinion. Existing financial incentives were considered enough to motivate the auditor to be independent, despite the fact that the presence of economic dependence relationships was inherently in the auditor and client contract. Similarly, Craswell *et al.* (2002) found that the fee dependence as a threat to auditor independence does not affect the likelihood of auditors to issue a qualified audit opinion, both at the national and local market levels.

Chen *et al.* (2010) conducted a study in China, and found that the level of auditor independence increase in line with the improvement of legal and regulatory environment. Chen *et al.* (2010) found that after 2001, when the legal and regulatory environment began to grow well in China, the tendency for clients to receive modified audit opinion (MAO) is higher compared to the period before 2001 (i.e., 1995-2000) for client importance measured by individual auditors. Similarly, Li (2009) found that after the period of SOX in the United States, higher audit fees and total audit fee ratio have a positive associ-

ation with the auditor's propensity to issue going-concern opinion. The findings of Li (2009) and Chen *et al.* (2010) provide additional evidence that in line with the improvement of the institutional and regulatory climate, the tendency of auditors to compromise in audit quality seems to decrease, given the risks of litigations and penalties for auditors are higher than the economic incentives they earned. Based on the above arguments, the hypothesis will be tested is:

H<sub>2</sub>: Client importance is positively associated with the propensity to issue going-concern Opinion

## RESEARCH METHODOLOGY

### Population and Sample

Population of this research is all listed companies in IDX along the year 2004-2011. Sample selection is performed with the criteria as follows: a) Companies issued annual report each year, with the fiscal year ended at December 31, starting from year 2004 to 2011. b) Companies are fully operated from 2004 to 2011 and not included new listing (IPO) companies from 2004 to 2011. c) Companies are never delisted from IDX, discontinued its activities as well as merger. d) The sample does not include financial industries due to the classification of regulated industries (Balsam, Krishnan & Yang, 2003; Francis & Yu, 2009; Herman, 2009; Herusetya, 2012).

Based on the sample criteria, we obtained 135 final samples of company per year for 8 year-period (2004-2011), or 1,080 firm-years of observation of pooled OLS data.

**Table 1:** Sample Description

Description	Total
Number of firm-years observation from listed companies at IDX for the year 2004-2011	4,560
Number of firm-years observation from financial industries	(1,144)
Total preliminary sample	3,416
Number of firm-years observation from new listing and delisted companies in 2004-2011	(1,440)
Number of firm-years observation with incomplete data in 2004-2011	(696)
Number of firm-years observation that does not meet the minimal observations in each industry per year	(200)
Total final sample (firm-years)	1,080
Total final sample (company)	135

**Empirical Model**

***Client Importance and Earnings Management***

Prior research used discretionary models to identify earnings management (Francis and Yu 2009; Reynolds and Francis 2001; Balsam *et al.* 2003). To test the association between client importance and accrual earnings management we use pooled-OLS of Model 1 as follows:

$$\begin{aligned}
 \text{ABSDAC}_{it} = & \alpha_0 + \alpha_1 \text{CI}_{it} + \alpha_2 \text{SIZE}_{it} + \alpha_3 \\
 & \text{CFO}_{it} + \alpha_4 \text{LEV}_{it} + \alpha_5 \text{LOSS}_{it} + \\
 & \alpha_6 \text{ABSTACC}_{it} + \alpha_7 \text{SGRW}_{it} + \\
 & \varepsilon_{it} \dots\dots\dots \text{Model 1}
 \end{aligned}$$

Hypothesis H<sub>1</sub> of this research can be formulated in statistical form as follows:

H<sub>1</sub>:  $\alpha_1 < 0$ ; the expectation for each variable control is:  $\alpha_2 \neq 0, \alpha_3 < 0, \alpha_4 > 0, \alpha_5 < 0, \alpha_6 > 0, \alpha_7 > 0$ . All variables are defined as in Table 2.

The main variable in Model 1 is CI, and the coefficient  $\alpha_1$  is predicted negative and significant toward the absolute discretionary accruals (ABSDAC), which indicates that client importance has a negative association with accrual earnings management.

**Table 2:** Variable Descriptions

<b>Model 1 and 2:</b>	
ABSDAC	= Absolute discretionary accruals scaled by lagged total assets, using Kothari et al. (2005) estimated model, computed cross sectionally each year for each industry
GCO	= Dummy variable for going-concern opinion, equal to 1 if the company receive going-concern opinion in the current year; and 0 otherwise
CI	= Client importance, as the ratio of audit firm’s economic dependence toward its client
SIZE	= Natural logarithm of total assets
CFO	= Cash flow from operation of client i in year t scale by lagged total assets
LEV	= Leverage ratio, defined as total liabilities divided by total assets at year end t
LOSS	= Dummy variable for loss firm, 1 if firm i at year t report net loss; 0 otherwise
ABSTACC	= Absolute value of total accruals of client i in year t
SGRW	= Sales growth, defined as (sales t – sales t-1)/sales t-1
PRIORGC	= Dummy variable, 1 if firm i receives going-concern opinion in the last year financial statements; 0 otherwise
CASH	= Cash and cash equivalent
LLOSS	= Dummy variable for prior year loss, 1 if firm i report net loss in t-1; 0 otherwise
<b>Equation (1):</b>	
TACC	= Total accruals, defined as earnings before extraordinary items less cash flow from operation
A	= Total assets
ΔREV	= Change in firm’s net revenue in year t
ΔAR	= Change in firm’s account receivables in year t
PPE	= Property, plant and equipment
ROA	= Firm’s return on assets, defined as the ratio of net earnings deflated by total assets
ε <sub>it</sub>	= Residual errors
Subscript i,t	= Identification for firm i and year t

To control other factors that affect absolute discretionary accruals, we include several variables in Model 1. Clients with larger size (SIZE) has less discretionary accruals, due to larger clients have more resources to maintain the sustainability of the entity (Becker, Defond, Jiambalvo and Subramanyam, 1998; Reynolds and Francis, 2001; Balsam *et al.* 2003). However, large companies have also higher market pressure to meet analysts' expectations (Barton and Simko 2002), thus having greater opportunities to perform earnings management (Tresnaningsih 2008). Therefore we do not predict the sign of SIZE coefficient. Higher level of sales would increase accruals but will reduce operating cash flows (Dechow, Sloan and Sweeney 1995), thus we expect a negative sign for CFO coefficient. Companies with the higher level of liabilities (LEV) have more incentives to deal with earnings management compared to the lower level of liabilities (Reynolds and Francis 2001; Balsam *et al.* 2003), therefore leverage (LEV) is predicted to be positively related to ABSDAC. Dechow and Schrand (2004), and Francis and Yu (2009) found a negative association of the company with net loss toward its accruals quality, therefore LOSS coefficient is predicted negative. ABSTACC, the absolute value of total accruals scaled by total assets t-1 is used to control the propensity to generate accruals, and is predicted to have positive relationship with ABSDAC (Balsam *et al.* 2003; Francis and Yu 2009). McNichols (2000), and Menon and William (2004) found evidence that sales growth has a positive association with abnormal accruals, due to high growth companies have higher discretionary accruals adjustment. We predict SGRW has a positive association with ABSDAC.

#### **Client Importance and Going-Concern Opinion**

Most prior research examined the propensity to issue going-concern opinion (e.g., Geiger, Raghunandan and Rama 2005; Reynolds and Francis 2001; Craswell *et al.* 2002; Francis and Yu 2009; Geiger and Rama 2006; Francis 2004). To test hypothesis H<sub>2</sub>, we use logistic regression of Model 2 to identify the effect of

client importance toward going-concern opinion:

$$GCO_{it} = \beta_0 + \beta_1 CI_{it} + \beta_2 SIZE_{it} + \beta_3 PRIORG-C_{it-1} + \beta_4 CASH_{it} + \beta_5 LEV_{it} + \beta_6 LOSS_{it} + \beta_7 LLOSS_{it} + \epsilon \dots \text{Model 2}$$

The statistical form of the hypothesis H<sub>2</sub> of this research is as follows:

H<sub>2</sub>:  $\beta_1 > 0$ ; the expectation for each control variable is:  $\beta_2 > 0$ ,  $\beta_3 > 0$ ,  $\beta_4 < 0$ ,  $\beta_5 > 0$ ,  $\beta_6 > 0$ ,  $\beta_7 > 0$ . All variables are defined as in Table 2.

The main variable in Model 2 is CI, and we estimate the coefficient  $\beta_1$  is positive and significant toward going-concern opinion (GCO), which indicates that client importance has a positive association with the propensity to issue going-concern opinion. Several control variables included in the Model 2 to control other factors that may affect audit firms to issue going-concern reports. Companies with larger size (SIZE) have greater resources and are more likely to survive compared to smaller companies (Francis and Yu 2009), therefore we predict variable SIZE has a negative association with GCO. Companies that received going-concern opinion on the previous year (PRIORG) are more likely to receive going-concern opinion in the current year (Reynolds and Francis, 2001). CASH is a liquidity measure that is the sum of cash and cash equivalent, scaled by total assets. Companies with more liquid assets have more resources to deal with financial difficulties, therefore we expect CASH coefficient is negative. Companies with high debt levels (LEV) and experience net loss in the current year (LOSS) are more likely to fail and more likely to receive going-concern reports, therefore, we predict LEV and LOSS coefficients have positive associations with GCO (Francis and Yu 2009).

#### **Operational Variables Absolute Discretionary Accruals (ABSDAC)**

We use accrual model from Kothari, Leone and Wasley (2005) to measure the discretionary accrual which is as follows:



$$TACC_{it}/A_{it-1} = \alpha_0 + \alpha_1 (1/A_{it-1}) + \beta_{1i} (\Delta REV_{it-1} / A_{it-1}) + \beta_{2i} (PP\&E_{it-1} / A_{it-1}) + \gamma_1 ROA_{it-1} + \epsilon_1 \dots \dots \dots (1)$$

Discretionary accruals equal the value of residual errors (ϵ) or the difference between total accruals and the fitted value of normal accruals, defined as  $DA_{it} = (TACC_{it}) - NDA_{it}$  (Cohen, Dey and Lys 2008) [1]. The absolute value of discretionary accrual (ABSDAC) is used as a proxy of accrual earnings management by considering the possibility of positive and negative accrual earnings management (Myers, Myers and Omer 2003; Barton and Simko 2002; Cohen *et al.* 2008). All variables are defined as in Table 2.

**Going-Concern Opinion (GCO)**

GCO is a dummy variable (1; 0), equal to 1 if the auditor assumes that the company cannot survive within 12 months after the balance sheet date, and receive going-concern opinion; and 0 if otherwise (Geiger *et al.* 2005).

**Client Importance (CI)**

Client importance (CI) examines the tendency of auditors having economic dependence that may reduce the auditor independence (e.g., Frankel *et al.* 2002; Craswell *et al.* 2002; Chung and Kallapur 2003; Chen *et al.* 2010). Following Chen *et al.* (2010), we use natural logarithm of total client assets as a proxy of economic dependence with the following measurements:

$$CI_{it} = SIZE_{it} / [\sum_{i=1}^n SIZE_{it}] \dots \dots \dots 2$$

Where:

$CI_{it}$  = client importance, as a measure of audit firm’s economic dependence toward the client.

$SIZE_{it}$  = natural logarithm of client’s assets.

$\sum_{i=1}^n SIZE_{it}$  = the sum of total assets (in natural logarithm) from n clients of certain audit firm.

**Control Variables**

We use control variables which have been used in the prior research as follows: company size (SIZE), cash flow from operation (CFO), leverage (LEV), net loss (LOSS), absolute value of total accruals (ABSTACC), prior year going-concern opinion (PRIORGCO), cash and cash equivalents (CASH), sales growth (SGRW), prior year loss (LLOSS). See Table 2 for variable definitions.

**RESULTS AND DISCUSSION**

**Descriptive Statistics and Correlations**

The descriptive statistic of all operational variables can be seen on Table 3 [1]. The mean of ABSDAC in Table 3, Panel A is 0.110 or 11.0% of the total assets, indicating the magnitude of accrual earnings management. The mean of GCO (Panel B) is 0.230 indicating that the average firm-years observation to receive going-concern opinion is 23.0%. The mean of CI is 0.239, indicating that the average proportion of audit firms’ revenue per client is 23.9%. In Table 4, CI variable has a positive correlation with CGO at a significance level of 0.01, consistent with our prediction.

**Table 3: Descriptive Statistics for Regression Variables**

Panel A: Model 1						
	N	Minimum	Maximum	Mean	Std Deviation	Skewness
ABSDAC	1,080	0.000	2.319	0.110	0.168	5.843
CI	1,080	0.018	1.000	0.239	0.309	1.746
SIZE	1,080	6.339	18.849	13.574	1.687	0.129
CFO	1,080	-1.617	1.082	0.067	0.148	-1.639
LEV	1,080	0.000	5.025	0.543	0.512	3.736
LOSS	1,080	0.000	1.000	0.170	0.377	1.747
ABSTACC	1,080	0.000	2.465	0.101	0.154	6.047
SGRW	1,080	-2.418	453.055	0.582	13.79	32.819

Table 3

Panel B: Model 2						
	N	Minimum	Maximum	Mean	Std Deviation	Skewness
<b>GCO</b>	1,053	0.000	1.000	0.230	0.424	1.255
<b>CI</b>	1,053	0.018	1.000	0.238	0.308	1.753
<b>SIZE</b>	1,053	6.339	18.849	13.590	1.689	0.122
<b>PRIORGC</b>	1,053	0.000	1.000	0.320	0.468	0.759
<b>CASH</b>	1,053	0.000	0.931	0.100	0.112	2.216
<b>LEV</b>	1,053	0.000	5.025	0.532	0.499	3.905
<b>LOSS</b>	1,053	0.000	1.000	0.170	0.372	1.805
<b>LLOSS</b>	1,053	0.000	1.000	0.190	0.394	1.568

All variables are defined as in Table 2.

Table 4: Pearson Correlations among Variables

Panel A: Model 1 (n=1,080)								
	ABSDAC	CI	SIZE	CFO	LEV	LOSS	ABSTACC	SGRW
<b>ABSDAC</b>	1.000							
<b>CI</b>	0.039	1.000						
<b>SIZE</b>	-0.128***	-0.333***	1.000					
<b>CFO</b>	-0.134***	-0.124***	0.159***	1.000				
<b>LEV</b>	0.247***	0.134***	-0.197***	-0.184***	1.000			
<b>LOSS</b>	0.143***	0.123***	-0.209***	-0.191***	0.259***	1.000		
<b>ABSTACC</b>	0.914***	0.040*	-0.096***	0.002	0.253***	0.183***	1.000	
<b>SGRW</b>	0.014	-0.002	-0.022	0.051**	-0.034	-0.017	0.033	1.000

Panel B: Model 2 (n=1,053)								
	GCO	CI	SIZE	PRIORGC	CASH	LEV	LOSS	LLOSS
<b>GCO</b>	1.000							
<b>CI</b>	0.154***	1.000						
<b>SIZE</b>	-0.165***	-0.341***	1.000					
<b>PRIORGC</b>	0.797***	0.130***	-0.161***	1.000				
<b>CASH</b>	-0.119***	-0.143***	-0.004	-0.112***	1.000			
<b>LEV</b>	0.309***	0.139***	-0.200***	0.226***	-0.146***	1.000		
<b>LOSS</b>	0.393***	0.135***	-0.196***	0.349***	-0.172***	0.258***	1.000	
<b>LLOSS</b>	0.413***	0.150***	-0.231***	0.360***	-0.147***	0.216***	0.543***	1.000

\*\*\*, \*\*, \* significant at 0.01, 0.05, and 0.10 respectively. All variables are defined as in Table 2.

### Test of Hypothesis 1 (H<sub>1</sub>)

Hypothesis H<sub>1</sub> predicts a negative association between client importance (CI) and accrual-based earnings management (ABSDAC). Empirical result of Model 1 in Table 5 has adjusted R-square of 85.68% with F-stat 923.766

(prob < 0.01) **1** The coefficient of CI ( $\alpha_1$ ) is -0.011 (t-stat = -1.303), negative but not significant at 0.10 with two-tailed test. However, the coefficient of CI is negative and significant at 0.10 with one-tailed test (critical value of t-stat = 1.28), consistent with our prediction.

**Table 5:** Regression of the Impact of Client Importance on the Accrual-Based Earnings Management

Model 1					
$ABSDAC_{it} = \alpha_0 + \alpha_1 CI_{it} + \alpha_2 SIZE_{it} + \alpha_3 CFO_{it} + \alpha_4 LEV_{it} + \alpha_5 LOSS_{it} + \alpha_6 ABSTACC_{it} + \alpha_7 SGRW_{it} + \varepsilon_{it}$					
Dependent Variable: ABSDAC					
Independent Variable	Prediction	Coefficient	t-stat	p-value	VIF
C	?	0.076***	2.858	0.004	
CI	-	- 0.011	-1.303	0.193	1.137
SIZE	-/+	-0.004*	-1.916	0.056	1.191
CFO	-	-0.164***	-5.813	0.000	1.083
LEV	+	-0.001	-0.140	0.888	1.176
LOSS	-	-0.026***	-4.110	0.000	1.143
ABSTACC	+	1.006***	25.743	0.000	1.095
SGRW	+	-0.000***	-6.127	0.000	1.006
Adj R-squared (%)		85.68			
F-statistic		923.766			
Prob (F- statistic)		0.000			
n =1,080					

\*\*\*, \*\*, \* significant at 0.01, 0.05, and 0.10, respectively in two-tailed tests; t-statistics are calculated using the Huber-White procedure to correct heteroscedasticity. All variables are defined as in Table 2.

This result implies that the bigger the proportion of the economic dependence of audit firms toward their clients, the smaller the magnitude level of accrual earnings management. Our result gives interpretation that audit firms in Indonesia that have larger clients and bigger economic dependence to their clients, are less likely to allow earnings management behavior. This result is also consistent with previous research that found larger offices of Big 4 provides higher audit quality and have clients with less earnings management behavior (Francis and Yu, 2009).

Four control variables are significant in the expected direction (CFO, LOSS, ABSTACC, SIZE), and the other control variable is not significant at the 0.10 (LEV), or is significant in the opposite direction (SGRW).

**Test of Hypothesis 2 (H<sub>2</sub>)**

Hypothesis H<sub>2</sub> predicts a positive association between client importance (CI) and going-

concern opinion (GCO). Logistic regression in Model 2 (Table 6) has Cox and Snell R-square 53.70%, and Nagelkerke R-square 80.90% with the value of -2Log Likelihood 336.233. The result of the test in Model 2 indicates that the coefficient of CI ( $\beta_1$ ) is 1.218 (Wald test = 5.923), positive and significant at 0.05 with two-tailed test. This result implies that although the proportion of audit fee in audit firm’s portfolio is bigger, audit firms can still maintain their independence, measured by the issuance of going-concern opinion. Our result is consistent with previous studies, which document that larger offices of public accounting firms are more likely to issue going-concern opinion, and give better prediction for financial distress in the upcoming period (e.g., Francis and Yu, 2009).

Five control variables are significant in the expected direction (SIZE, PRIORGC, LEV, LOSS, LLOSS) and the other control variable is not significant at the 0.10 (CASH).

**Table 6:** Logistic Regression of the Impact of Client Importance toward Going-Concern Opinion

<b>Model 2</b>				
$GCO_{it} = \beta_0 + \beta_1 CI_{it} + \beta_2 SIZE_{it} + \beta_3 PRIORGC_{it} + \beta_4 CASH_{it} + \beta_5 LEV_{it} + \beta_6 LOSS_{it} + \beta_7 LLOSS_{it} + \epsilon_{it}$				
<b>Dependent Variable: GCO</b>				
<b>Independent Variable</b>	<b>Prediction</b>	<b>Coefficient</b>	<b>Wald</b>	<b>p-value</b>
C	?	-12.752***	25.499	0.000
CI	+	1.218**	5.923	0.015
SIZE	+	0.162*	2.743	0.098
PRIORGC	+	9.564***	28.244	0.000
CASH	-	0.049	0.002	0.969
LEV	+	1.900***	21.874	0.000
LOSS	+	0.836**	5.164	0.023
LLOSS	+	1.340***	14.015	0.000
-2Log Likelihood		336.233		
Cox & Snell R <sup>2</sup> (%)		53.7		
Nagelkerke R <sup>2</sup> (%)		80.9		
n = 1,053				

\*\*\*, \*\*, \* significant at 0.01, 0.05, and 0.10, respectively in two-tailed tests. All variables are defined as in Table 2.

### Sensitivity and Robustness Tests

We use alternate measure of client importance (CI), i.e., client's sales instead of total assets to test the robustness of our main results. Conversely to the hypothesis result of H<sub>1</sub>, we find no evidence of the association between client importance (CI) and accrual-based earnings management (ABSDAC) at 0.10 (not tabulated). The usage of client importance model using total sales as a proxy becomes sensitive and does not support the main result.

Sensitivity test for hypothesis H<sub>2</sub> using the same measure of client importance (CI) finds similar result as in the main test (Table 6) (not tabulated). Our result indicates that client importance (CI) has a positive association with going-concern opinion (GCO) at 0.05. The usage of the different measure of client importance (CI) in Model 2 is robust to all alternative test and support the main result. This result strengthens our main result and previous study (e.g., Francis and Yu 2009), which suggest that larger offices of audit firms are more likely to issue going-concern opinion rather than smaller offices.

### CONCLUSION

Our study investigates the independence of auditors measured by the client importance, and reflected in the accrual-based earnings management and going-concern opinion. The main result of our study finds a negative association between client importance and accrual-based earnings management. Our evidence implies that audit firms with larger clients and with more economic dependence to their clients are less likely to allow earnings management behavior. This result is consistent with previous studies that suggest that larger audit firms, like Big 4 with more expertise and ability to detect earnings management behavior are less likely to allow earnings management rather than smaller audit firms (Francis and Yu 2009; Reynolds and Francis 2001).

Our second main test finds that client importance has a positive association with going-concern opinion. This evidence implies that although the proportion of client dependence is bigger, public accounting firms can maintain their independence measured by the

issuance of going-concern opinion. Our result is consistent with the previous studies (e.g., Reynolds and Francis 2001) and robust to other sensitivity tests that support the main test result. The combine results indicate that client importance as a measure of auditor independence has a negative association with earnings management and has a positive association with going-concern opinion.

This research has some limitations: (i) the conclusions drawn in this study should be conducted with caution, because we use only single measure of auditor independence, i.e., the client importance. There are some other measurements, such as the influence of client practices toward the propensity to meet earnings targets, and corporate governance practices (Bamber and Bamber 2009); (ii) accrual-based earnings management is the only measure of earnings management used in this study. Previous research documented several other earnings management techniques, such as real earnings management, and classification shifting (e.g., Cohen and Zarowin 2010; Fan *et al.* 2010).

We recommend for further study to use the composite measure of independence. Herusetya (2012) for example, the use composite measures of audit quality from the dimension of competency and independence. In order to reflect the different aspect of earnings management, we also recommend to examine the other tools of earnings management, such as real earnings management and classification shifting (Cohen and Zarowin 2010; Graham *et al.* 2005).

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<sup>1</sup>For example, the Indonesian Government issued a number of regulations concerning the independence and competence of auditors and audit firms, such as: KEP-310/BL/2008 regarding "The Independence of Accountant Providing Services in the Capital Markets in 2008"; and The Act No. 5 for the Public Accountants in 2011.

<sup>2</sup>Recent research found that public listed companies not only did accrual-based earnings management, but also real-based transactions (e.g., Cohen and Zarowin, 2010; Graham, Harvey, and Rajgopal, 2005; Chi, Lisic & Pevzner, 2011; Challen and Siregar, 2011). Other research found other earnings management tools, such as classification shifting (Fan, Barua, Cready & Thomas, 2010).

<sup>3</sup>Frankel et al. (2002) found evidence of a positive association between client importance, i.e., the ratio of non-audit services fee to total fee and the amount of discretionary accruals. The findings and methodology used by Frankel et al. (2002) were questioned by many researchers. Chung and Kallapur (2003) for example, found that the association of the ratio of non-audit to total fee and absolute abnormal accruals are less robust, because it did not include control variable of each industry.

<sup>4</sup>Francis and Yu (2009) for exception, found no evidence of the association between economic dependence and auditor's going-concern opinion.

<sup>5</sup>Our sample consist of 53.33% from manufacture industry (basic and chemical industry, consumer goods, and miscellaneous), 32.59% from trade, service & investment, and 14.07% from property & real estate industry.

<sup>6</sup>For accrual model used, our study requires a minimum of 15 observations for each type of industry each year (Chi et al., 2011; Cohen et al., 2008).

<sup>7</sup>All continuous data are winsorized to avoid outliers using 2 standard deviations from the mean, so that the data is spread over an area of 95.45% (Acock, 2008). All variables in Table 3, Panel A and B have low standard deviation except for SGRW.

<sup>8</sup> We test for multicollinearity problem and found that all variables have small value of VIF (below 1.50). The tolerance (TOL) value of all variables are also close to 1.00, indicating that there are no multicollinearity problem (Gujarati, 2003; Nachrowi and Usman, 2006). While the test for heteroscedasticity indicates that there is a problem with heteroscedasticity, but we treat using the Huber-White procedure to correct heteroscedasticity in order to get estimated coefficient from robust variance-covariance (Wooldridge, 2009).

<sup>9</sup> We eliminate 27 outliers out of 1080 firm-years observation to obtain robust standard errors. We also test whether there is a multicollinearity problem in our empirical model, and found that all independent variables have VIF value below 1.50, indicating that there is no multicollinearity problem (Gujarati, 2003). Our logistic regression has  $\text{Chi}^2 = 3.930$  ( $p > 0.10$ ) for Hosmer and Lemeshow test, indicating that the data and model used are fit.