



Conservatism and Value Relevance: an empirical study of Indonesian Companies

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Abstract

The purpose of this study is to measure the conservatism and provide evidence about its value relevance. Feltham-Ohlsion Model is applied to investigate the conservatism. We use the secondary data of companies listed in JSX 1999-2003. We find that conservatism has no value relevance, there is an association between ERC and earning persistence and coefficient of cash flow from investing activities is positive in conservative condition. Our research support the implication of FO model that the effect of abnormal operating earning on goodwill increases with operating cash receipt persistence. On the other hand, this research can not provide evidence that there is earnings management in companies that implement conservatism. Furthermore, the interaction between discretionary accruals and bonus plan and debt covenant could effect company's value.

Keywords : conservatism, value relevance, Feltham-Ohlsion Model, earnings management

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Introduction

Some researches have long struggled with the need to operationalize qualitative properties of financial reporting system such as objectivity, reliability, consistency, comparability and materiality. Some attempts have been made to quantify the attributes of those qualitative properties. With some exception such as Hagerman and Zmijewski (1979, 1981), Satubus (1985) and Leftwich (1995), little attempt has been made over the years to quantify conservatism, despite it being one of the most prominent characteristics of financial accounting. One measure of conservatism comes from the work of Feltham and Ohlson (1995), that is the expected market to book ratio. This ratio has been used to gauge changes in reporting conservatism over time (e.g. Ahmed, Morton and Schaefer (2000), Beaver and Ryan (2000), Givoly and Hayn (2000) and Stober (1996) and coupled with other financial ratio, to measure conservatism across countries (Joos and Lang (1994))

Basu (1997) introduced a number of measures that capture the essence of conservatism principle as reflected in the adage “anticipate no profits but anticipate all losses”. That is, conservatism reporting means that events with an expected unfavourable outcome are recognized promptly in income whereas the recognition of the effects of expected favourable events is deferred. Accordingly, Basu’s measures are based on the speed of response of accounting earnings to bad news relative to good news.

Conventional accounting is inherently conservative. Even under the most liberal interpretation of GAAP, management is seldom allowed to recognize gains before they are realized as evidenced by the fact that net assets are consistently understated (Watts 2003a, 2003b). Aggressive accounting choices by management may reduce the degree of reporting conservatism but they can not turn the whole tenor of the financial statements to being non conservative or even natural.

In the accounting based valuation literature, researchers often refer to Feltham and Ohlson (1995) who characterises conservative or “biased” accounting as an



expectation that reported net assets will be less than market value in the long run. That definition classifies the accounting for anticipated positive net-present-value investments at historical cost as conservative accounting, because those investments are expected to be carried at less than their value. Others, like Gjesdal (1999), distinguish “economic profitability” from accounting profitability such that the accounting for anticipated investments is conservative if it gives them a carrying value that yields an accounting rate of return greater than the internal rate of return on their cost. SO, for example, conservative accounting follows the practice of carrying an asset whose value is equal to its historical cost (a zero net present value investment) at less than historical cost.

Research in value relevance is designed to fixate the usefulness of accounting value toward company equity valuation. Value relevance is closely related with the prediction value of accounting number. It can not be separated from the relevance criteria of accounting standard as the accounting numbers are relevant when it reflects the company value (Mayangsari and Wilopo, 2002). FO model is evidenced as the most appropriate model as the Ball and Brown model (1968) has difficulties to determine the event date and isolate the confounding effects (Farnkel and Lee, 1998 in Lee et al., 1999), .

Problems and Research Aim

This research would investigate whether conservatism has a value relevance, operating asset and residual operating earnings have positive sign in the conservative condition, the association of conservatism and earning management and the association between conservatism and accrual, bonus plan, cost of debt and political cost.

This research aim is to recognise the usefulness of conservatism concept, which nowadays is still controversial issue. It also emphasizes the interaction between bonus plan hypothesis, debt covenant hypothesis and political cost hypothesis. It would not explore the motivation of accounting method policy

Theoretical and Hypothesis development

Watts (2003a) argues that conservatism in financial reporting arises for a number of economic reasons. In particular, conservatism is generated by :

1. Its role as part of efficient technologies employed in firm governance (e.g. management compensation) and firm contracts with external parties (e.g. debt contracts)
2. Increases in litigation costs
3. Regulators' asymmetric loss functions
4. Links between reported income and income taxes

The common attribute in these economic determinants is that there is an asymmetric loss function involved. For example, shareholders have an asymmetric loss function due their limited liability and so have incentives to transfer wealth from debt holders by overstating earning and net assets. Similarly, managers have limited liability and have incentives to overstate financial performance and transfer wealth from shareholders. Litigation costs are asymmetric. Managers, auditors are much more likely to be sued for overstatements of earning and net assets than for understatements (e.g. Kellogg, 1984)

The choice of accounting method is not limited to the factors that influence the company cashflow, but also earning as an indicator of company value. This is commonly called as an economic consequence. This consequence comes up because of bonus plan hypothesis and debt covenant hypothesis

An accounting number is termed “value relevant” if it is significantly related to dependent variable (Beaver 2002). The theoretical of value relevance is a combination of a valuation theory plus contextual accounting argument that allow us to predict how accounting variables relate to the market value of equity.

Furthermore, value relevance would typically incorporate contextual accounting arguments to predict the relation between accounting variables and market value. Value relevance provides evidence as to whether the accounting numbers



relate to value in the predicted manner. To the extent value relevance captures information reliability and latter increases earnings precisions, greater value relevance will reduce information risk.

The FO model could show the value relevant concept in terms of conservatism. This model reveals that conservatism is an appropriate concept as it shows the company growth because the net asset is reported lower than market value. Penman and Zhang (2000) also stated that conservatism is aligned with growth. That is, conservative accounting would reduce earning when there is net asset growth hence result a lower accounting rates of return.

Quality of earnings issues arise, then, if a change in a reported accounting rate of return that is induced by a change in investment is temporary. If an analyst accepts the current book rate of return as an indicator of future rates of return, they will be misled if the reported rate of return is temporarily affected by the joint effect of conservative accounting and investment activity. But if the analyst penetrates the joint effect, they will discover the reported number to be poor quality of long run “sustainable” profitability. The lower reported earning creates a hidden reserve, so it will boost the higher earning in the future periods.

Based on Clean Surplus Theory, Ohlson shows that market value could be shown in the income statement and balance sheet. This reveals a consistent conceptual of measurement.

H1: Conservatism has value relevance

FO Model provides evidence about conservatism when the operating cash increase aligned with its net investment (Feltham and Ohlson, 1995). Company applying conservative has a hidden reserve which is used for investment; therefore, this is identical with company in a growth phase. This growth would be responded positively by investors hence company value would exceed its book value and would create goodwill. The more goodwill would create the more operating asset value.

H2 : The correlation coefficient of operating asset is positive in a conservative condition



Correlation coefficient of residual operating earning is positive in conservative condition. It shows a positive association between Earning Response Coefficient and earning persistence where it shows the special characteristic of conservatism (Kormendi and Lipe, 1987; Easton and Zmijewski, 1989; Collins and Kothari, 1989; Ali and Zarowin, 1992).

H3 : Coefficient of residual operating earnings is positive in a conservative condition.

Management can improve or impair the quality of financial statement through the exercise of discretion over accounting numbers. Discretionary behaviour includes voluntary earning forecasting, voluntary disclosure, choice of accounting methods, and estimation of accruals. Motives fall into two broad categories : opportunistic or signalling. It can be used to signal their private information or to opportunistically manipulate earning. Signalling is expected to improve the ability of earning to measure firm performance since management presumably have superior information about their firm's cash generating ability (Holthausen and Leftwich, 1983; Watts and Zimmerman, 1986; Holthausen, 1990; and Healey and Palepu, 1993). Therefore, a credible signal will reduce information asymmetry and result in more efficient contracting. The concern that management will use their information advantage to opportunistically manipulate accruals is consistent with the allowable set of accruals being limited by accounting conventions (Watts and Zimmerman, 1986). Accounting conventions, such as objectivity, variability and the use of the historical cost valuation model, limit the flexibility of management to manipulate revenue and expense recognition.

Motives for managing accruals relate to compensation contract, debt covenant, capital market pricing, taxes, litigation and regulatory behaviour (Watts and Zimmerman 1986; Beaver and Engel 1996). Each motive constitutes a broad category that encompasses a variety of specific behaviours. For example, capital market effects include management's attempts to influence the offering price in equity offering, the

terms of value of stock options, and prices at which management-held securities are sold

These motives can operate in either opposing or reinforcing ways, often making it difficult to isolate the primary motive (Healey and Wahlen 1999). For example, both capital market and compensation contracts can lead to incentives to overstate earnings. As result, many researches are not specified the precise nature of the underlying motivation, seeking instead to determine whether an empirical estimate of the discretionary accrual is related to some firm characteristic e.g. financial difficulty, loss avoidance, income smoothing and big baths.

Management appears to manage earning to avoid a loss, to avoid an earning decline (Burgstahler and Dichev 1997) and avoid falling below analysis' forecast (Burgstahler and Eames 1998). Firms that issue earning forecasts tend to manage earning toward meeting those forecasts (Kasznik 1999; Matsunaga and Park 2001). Earning management appears to be widespread and relatively easy to detect, at least as estimated by extant techniques. Loan loss reserves in the banking sector and policy loss reserves in the insurance sector to be two major accounts subject to management. Capital markets appear to price differently the nondiscretionary and discretionary component of accrual

H4 :There is an association between the choice of conservatism method with earnings management

Market value is closely related with accounting policy and positive accounting theory hypothesis. Paek and Press (1997) stated that market value is influenced by management motivation to manipulate accruals. It is also related with bonus and debt contract. This research would investigate opportunistic behaviour which leads to negative accruals. Skinner (1993) said that bonus contract is measured by accounting numbers. Furthermore, Smith and Watts (1991) stated that bonus could be related with market capitalization for growth company . On the other hand, it is related with earning for not growth company. Hence, it is easier for not growth company to manipulate earning through discretionary accrual.

Conservatism in some cases is correlated with LIFO and FIFO method, and would affect tax payable (Mayangsari and Wilopo, 2002). Stock return is unable to detect accounting method choice because of many distortions in this research field. Confounding effect and difficulty to determine event study is the most acceptable reason (Field 1999)

H5 :Market value is influenced by conservatism score, total accrual, bonus plan, cost of debt and political cost

Variables Definition

Market Value

Market value is measured using the FO model(1995). This model shows that the market value in year t(V_t) is a linear function of abnormal operating earning (ox^a_i), beginning operating asset (oa_{t-1}) and current investment in the operating assets (ci_i). Market value (MV) could be computed as follows)

$$V_t = \frac{B_t + \sum E_t (ROE_t + 1 - r) B_{t-1}}{(1 + r)^i} \tag{1}$$

Where ;

- Bt book value of equity in period t
- Et expected value, it is a coefficient of residual *operating earnings* from the *Goodwill Valuation Model*
- ROE_{t+1} *return on equity* in period t+1
- V_t intrinsic value of stock
- R *Cost of Capital* computed by *capital pricing model* (Botosan, 1996)
 { COC = $R_{ft} + \beta(R_{mt} - R_{ft})$ }

Conservatism

Conservatism is measured with the C score, developed by Penman and Zhang (1999). It measures the effect of the application of conservative accounting on the

balance sheet by the level of hidden reserve that are created by conservatism relative to net operating assets

$$C_{it} = (INV_{it}^{res} + DEPR_{it}^{res})/NOA_{it} \quad (2)$$

NOA, is the book value of operating asset minus operating liabilities. It excludes financial assets and liabilities from total net assets (shareholders' equity) as these financial items typically are at, or close to, market value on the balance sheet and so not affected by conservative accounting.

Earnings Management

Among the various discretionary accruals models, Dechow at al (1995) report that the Jones and Modified Jones Model perform the best. We use the Modified Jones Model as this model attributes the entire change in receivables to earnings management.

$$TAC = \text{Net income} - \text{Cash flows from operations} \quad (3)$$

Current accruals (CA) defined as the change in non cash current assets minus the change in the operating current liabilities and computed as follows :

$$CA = \Delta (\text{current assets-cash}) - \Delta (\text{CL-current maturity of long-term debt}) \quad (4)$$

Nondiscretionary current accruals (NDCA) is an expected accruals computed by using the modified Jones model. Expected current accruals in particular year is estimated by using the cross-sectional ordinary least square (OLS) regression toward current accruals and that change in sales.

$$\frac{CA_{i,t}}{TA_{i,t-1}} = a_1 \left(\frac{1}{TA_{i,t-1}} \right) + a_2 \left(\frac{\Delta Sales_{i,t}}{TA_{i,t-1}} \right) \quad (5)$$

Non discretionary current accruals (NDCA) is computed as follows :

$$NDA_{i,t} = a_1 \left(\frac{1}{TA_{i,t-1}} \right) + a_2 \left(\frac{\Delta Sales_{i,t} - \Delta TR_{i,t}}{TA_{i,t-1}} \right) \quad (6)$$

Where : a_0 = Estimated intercept for firm i in year t

a_1 = Slope for firm i in year t

$TA_{i,t-1}$ = Total assets at t-1

ΔSales = change in sales

ΔTR = change in receivables

Discretionary current accruals (DCA) for a firm in the particular year is computed as follows :

$$DCA_{i,t} = \frac{CA_{i,t}}{TA_{i,t-1}} - NDCA_{i,t} \quad (7)$$

To compute the discretionary and nondiscretionary long-term accruals (DLTA and NDLTA) , we need to compute the discretionary and nondiscretionary total accruals (DTA and NDTA). Discretionary total accruals (NDTA) of firm in particular year computed by regress the total accruals (AC) as dependent variable and gross property, plant, and equipment (PPE) as additional explanatory variable.

$$\frac{AC_{i,t}}{TA_{i,t-1}} = \hat{b}_0 \left(\frac{1}{TA_{i,t-1}} \right) + \hat{b}_1 \left(\frac{\Delta\text{Sales}_{i,t} - \Delta\text{TR}_{i,t}}{TA_{i,t-1}} \right) + \hat{b}_2 \left(\frac{PPE_{i,t}}{TA_{i,t-1}} \right) \quad (8)$$

Nondiscretionary total accruals (NDTA) is computed as follows :

$$NDTA_{i,t} = \hat{b}_0 \left(\frac{1}{TA_{i,t-1}} \right) + \hat{b}_1 \left(\frac{\Delta\text{Sales}_{i,t} - \Delta\text{TR}_{i,t}}{TA_{i,t-1}} \right) + \hat{b}_2 \left(\frac{PPE_{i,t}}{TA_{i,t-1}} \right) \quad (9)$$

Where: \hat{b}_0 = Estimated intercept of firm i in year t

\hat{b}_1, \hat{b}_2 = Slope for firm i in year t

PPE = Gross property, plant, and equipment

$TA_{i,t-1}$ = Total assets at t-1



Bonus Plan Hypothesis

Dummy variable, 1 if bonus is based on accounting performance, and 0 for market value performance based.

Debt Covenant Hypothesis

Debt covenant hypothesis predicts that managers want to enhance the earning and asset to reduce the negotiation cost of debt covenant. Leverage shows the inter relation of accounting constraints in debt covenant. (Duke and Hunt, 1990). LEV (leverage) is a ration of long term debt to book value of equity (Press and Weintrop 1990).

Political cost

Conflict of interest between company and government would lead to political cost. Government as the society representative has an authority to transfer wealth from company to society based on tax regulatory. Some empirical studies said that manager tend to minimize profit to decrease the political cost. (Watts and Zimmerman, 1986)

Some empirical studies also stated that company size is a surrogate of political cost. The bigger the size, the bigger the political cost is.

Research Methodology

This research uses all companies listed in Jakarta Stock exchange. The sampling method is purposive sampling, with criteria as follows:

1. Listed in JSX since 1999 – 2003
2. They are not financial institution and service companies as they have specific characteristics comparing with other companies
3. The companies using LIFO or average method for inventory valuation, and using double declining balance for the depreciation. Those methods imply conservatism

Research Models

Hypothesis 1

We use FO model to test hypothesis 1 to 3, especially to test the conservatism. (Paek and Press, 1997). To test the conservatism and value relevance, the model is

$$MV = \alpha_0 + C_{score} + \epsilon_{it} \tag{10}$$

MV = market value

Cscore = C-score

Hypothesis 2

To test that operating asset coefficient is positive in conservative condition. The model is called Cash Flow Dynamic Model.

$$cr_{t+1} = \gamma cr_t + \kappa ci_{it} + \epsilon_{it+1} \tag{11}$$

cr_{t+1} = cash inflow from operating asset in year t+1

cr_t = cash inflow from operating asset in year t

ci_{it} = operating asset in year t

Hipotesis 3

Third hypothesis is tested with FO model showing residual operating earning influence, operating activities, and cash investment on goodwill. We use the Goodwill Valuation Model :

$$g_{it} = \alpha_{0i} + \alpha_1 OX^a_{it} + \alpha_2 oa_{i,t-1} + \alpha_{3i} \dot{ci}_{it} + \epsilon_{it} \tag{12}$$

OX^a_{it} = residual operating earnings

$oa_{i,t-1}$ = operating asset in year t-1

\dot{ci}_{it} = investment in operating asset

Hypothesis 4

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We would see the correlation between discretionary accruals with C score as a proxy of conservatism. We use Spearman's rho to consider the not normal distribution of data

Hipotesis 5

To test the influence of conservatism, earnings management, bonus compensation, debt covenant and political cost toward market value

$$\begin{aligned}
 MV_{it} = & b_0 + b_1Cscore_{it} + b_2NACC_{it} + b_3DACC_{it} + b_4Cscore_{it} \times DACC_{it} + \\
 & b_5BONUS_{it} + b_6BONUS_{it} \times DACC_{it} + b_7LEV_{it} + b_8LEV_{it} \times DACC_{it} + \\
 & b_9BONUS_{it} \times LEV_{it} \times DACC_{it} + b_{10}DUMMY_{it} + b_{11}DUMMY_{it} \times DACC_{it} + \\
 & b_{12}BONUS_{it} \times LEV_{it} \times DUMMY_{it} \times Cscore_{it} \times DACC_{it} + \epsilon_i
 \end{aligned}
 \tag{13}$$

Where :

- MV is market value
- Cscore conservatism score
- NACC non-discretionary accruals ,accruals from operating activities, such as the increase in.
- DACC discretionary accruals , accruals with management intention to manipulate accounting policy, such as the increase in depreciation expense
- BONUS We use dummy variable; 1 for bonus based on accounting performance and 0 otherwise
- LEV is ratio of long term debt to book value of equity
- DUMMY dummy variable, 1 is for the big companies, and 0 otherwise

Result

From the normality test using Kolmogorov-Smirnov, the p values show that the models is distributed normally. Multicollinearity test shows that all variables have VIF < 10. The autocorrelation test investigate DW value lies between du and (4-du) . Finally, heterokedasticity test shows value more than 5%.

Hypothesis 1 is to test whether conservatism has a value relevance. It uses market value (MV) as a dependent variable and CSCORE as an independent variable

Insert table 5 in here

.Table 5 presents the significant t is 0,287, bigger than 0,05. It implies that C-score has no value relevance. Hypothesis 1 is not supported.

Hypothesis 2 is tests whether the correlation coefficient of operating asset is positive in a conservative condition

Insert table 6 in here

Using goodwill valuation model, table 6 shows that the coefficient is significant positively during abnormal operating earning. It also shows that there is an association between earning respond coefficient and earning persistence. In conservative condition, earning persistence is coming from an abnormal operating earning, especially from cash flow investment. There is a hidden reserve that is continuously used in operating asset which finally boosts the abnormal operating earning.

Hypothesis 3 tests whether coefficient of residual operating earnings is positive in a conservative condition.

Insert table 7 in here

Based on statistical evidence (table 7), hypothesis 3 is supported. During conservative condition, the coefficient of investing cash flow (CFINV) is significant positively. This is closely related with the company persistence and growth which apply conservatism. Growth happen because in the big expenditure. There would be a big hidden reserve for future investment and also the continuity to invest in the operating assets.

Hypothesis 4 tests the association between the choices of conservatism method with earnings management

Insert table 8 in here

Based on statistical test, hypothesis 4 is not supported. The correlation coefficient C score and DACC is negative -0.017 , with significant value 0.971. It indicates that association between conservatism and earning management is weak. Furthermore, it shows that firms in the conservative condition do not do earnings

management. The most interesting thing is that the correlation coefficient is negative, implies the more conservative, the lower earning management done by the companies.

This could be understood because when company in the conservative condition, it is difficult for management to manipulate earning. It is contradictive with bonus plan hypothesis which based on accounting performance. From investors' point of view, it is good news as it will minimize the likeliness of earning management.

Hypothesis 5 tests the influence of conservatism, accruals, bonus plan, cost of debt and political cost toward market value.

Insert table 9 in here

Simultaneously, C score, DACC, NACC, BONUS, LEV, DUMMY and their interaction could explain the market value statistically positif ($R^2=0.825$ $F=59.673$)

Individually, only non-discretionary accruals (NACC) (Pval 0,000), Cscore (Pval 0,000), LEV x DACC (Pval 0,000), LEV x BONUS x DACC (Pval 0,000) could explain the market value

Non-discretionary accruals have value relevance. It could be concluded that it shows positive association towards company value. The more accruals, the more operating assets value as company has more receivable or cash, and the increase the non discretionary accruals is coming from the decrease of credit sale policy. The increase of operating asset and abnormal operating earnings variables lead to the increase of market value simultaneously. From the analysis, C score is relevant to explain the market value. The more conservative, the more market value of the company is.

The interaction of leverage and discretionary accruals interaction is significant negatively. The value of company which does earnings management because of debt contracting could not show company market value. It also works for interaction between bonus plan and discretionary accruals. Meanwhile, positive interaction of bonus and debt contract towards earnings management means that market value



depends on the increase of bonus and the decrease of cost of debt covenant. Discretionary accruals lead the increase of bonus paid to manager and at the same time decrease the cost of debt. This trade off would increase the abnormal operating earning and cash investment in operating asset and finally increase the market value.

Some variables are not significant (DAC, Bonus, Lev, political cost, interaction between political cost and interaction between CScore, Bonus, Lev, dummy and DAC). It shows that company market value is not influenced by those variables. Dummy variable may bias the result as it does not show the real phenomena.

From the analysis, we conclude that conservatism has no value relevance, there is an association between ERC and earning persistence and coefficient of cash flow from investing activities is positive in conservative condition. Further more, this research also provide evidence that the association of conservatism and earning management is weak. In general, we also conclude that market value could be explained by earning managements detection variables. Conservatism index and accounting theory hypothesis is significant positively.

The limitation of this research lies on the conservatism score, which is only based in depreciation expense and inventory. Furthermore, the dummy variable also contributes such weakness as it could not depict the real condition of the real compensation towards earnings management.



References

- Ahmed, Anwer S., Richard M. Morton and Thomas F. Schaefer. 1998. Accounting Conservatism and the Valuation of Accounting Numbers; Evidence on the Feltham-Ohlson (1996) Model. *Social Science Research*. September :1-13
- Basu, S. 1997. The Conservatism Principle and Asymmetric Timeliness of Earnings. *Journal of Accounting and Economics* 24:3-37
- Beaver, W H., 2002, Perspective of Recent Capital Market research, *The Accounting Review* 77 (April), 453-474
- Burgstahler, D.C., and I.D. Dichev, 1997 Earning, Adaptation and Equity Value, *The Accounting Review* 72 (april) : 187 – 215
- Dechow, Patricia M., Richard G. Sloan, dan Amy P. Sweeny, 1995, “Detecting Earnings Management”, *The Accounting Review*, 7(2), April.
- Dechow, Patricia M., 1994, “Accounting Earnings and Cash Flows as Measures of Firm Performance: The Role of Accounting Accruals”, *Journal of Accounting and Economics*, (18).
- Feltham, G and J.A. Ohlson. 1995. Valuation and Clean Surplus Accounting for Operating and Financial Activities. *Contemporary Accounting Research*. 689-731
- Givoly, Dan., Carla Hayn and Ashok Natarajan, 2004. Measuring Reporting Conservatism. *Working Paper*, Pennsylvania State University
- Hagerman R.L. and M.E. Zmijewski. 1979. Some Economic Determinants of Accounting Policy Choices. *Journal of Accounting and Economics*. VI(2) : 141-161
- Healy, Paul M., dan James M. Wahlen, 1998, “A Review of the Earnings Management Literature and Its Implications for Standard Setting”, *Working paper*.
- Joos, P. and M. Lang. 1994. The Effect of Accounting Diversity: Evidence from the European Union. *Journal of Accounting Research*
- Kothari, S. P., 2001, “Capital Market Research in Accounting”, *Journal of Accounting and Economics* 31, 105-232



- Mayangsari, Sekar and Wilopo. 2002. Konservatisme Akuntansi, Value Relevance dan Discretionary Accruals : Implikasi Empiris Model Feltham Ohlson (1996). *Jurnal Riset Akuntansi Indonesia*. Vol 5. September : 291-310
- Paek, Wonsun and Eric Press.1997. Discretionary Accruals, Manager incentives and Stock Prices. *Social Science Research Network*. November ;1-24
- Pennman, Stephen H., and Xiao-Jun Zhang.2000. Accounting Conservatism, the Quality of Earnings, and Stock return. *Social Science Network*. August : 1-44
- Press, E.G. and J.B. Weintrop. 1990. Accounting-Based Constraints in public and Private Debt Agreements : Their Association with Leverage and Impact on Accounting Choice. *Journal of Accounting and Economics* 12. January : 65-95
- Roychowdhury, Sugata and Ross L. Watts. 2004. Asymmetric Timeliness of Earnings, Market to Book and Conservatism in Financial Reporting. *Working Paper*. University of Rochester
- Staubus, G. 1985. An Induced Theory of Accounting Measurement. *The Accounting Review*. V.60 (1) :53-75
- Stober T.L. 1996. Do prices Behave as if Accounting Book Values Conservative?Cross Sectional Tests of the Feltham Ohlson (1995) Valuation Model. *Working Paper*,University of Notre Dame
- Sweeney,A.P.1994. Debt-Covenant Violations and Managers' Accounting Response. *Journal of Accounting And Economics* 17.May :281-308
- Watts., R., 2003a. Conservatism in Accounting Part I : Explanation and Implications. *Accounting Horizon*. V.17 (3) : 207-221
- _____.2003b. Conservatism in Accounting Part II: Evidence and Research Opportunities.. *Accounting Horizon*. V.17 (4) :287-301

Table 1
Sample selection

Company identification	
Companies listed in JSX	333
Delisted during year 199 to 2003	(6)
Service and financial companies	(123)
Do not use LIFO or average for inventory and double declining balance for depreciation	(116)
Sample in total	88

Source : Secondary data, 2006

Table 2
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
MV	166	- 94698700 00000000 0000.000	11075600 00000000 000000.00 0	47277816 34481920 0000.0000 0	113056244205 620400000.00 0000
CSCORE	166	,000	,000	,00000	,000006
DAC	166	- 4367525.9 78	2202671.9 98	- 207053.22 863	705644.62651 4
LEV	165	-400,657	11132,975	72,65785	869,162109
Valid N (listwise)	165				

Table 3
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
G	158	13713714 55.000	44230800 00000.000	17370603 1324.7341 0	376685436654 .349000
OX	158	- 165210.00 0	2810567.0 00	56303.746 84	237377.52526 4
OA	158	,000	1982303.0 00	60401.879 75	243880.76847 4
CI	158	- 52100000 00.000	28361800 0000.000	50393797 46.83544	24728205593. 105080
Valid N (listwise)	158				

Table 4
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CFOP+t	164	- 144518.00 0	3179423.0 00	120373.91 463	372984.63275 2
CFOPt	164	- 55848.000	2218911.0 00	112034.43 902	318741.06335 8
CVNIFt	164	- 1364099.0 00	1108727.0 00	- 28556.365 85	153147.30572 0
Valid N (listwise)	164				

Table 5
Hypothesis 1

Variable	t-statistik	<u>Sig t</u>
Constant	5,893	0,000
CSCORE	1,070	0,287

Table 6
Hypothesis 2

Variabel	Beta	t-statistik	<u>Sig t</u>
Constant		9,407	0,000
AbOPEAR	1481300	14,558	0,000
NOA	231823,1	5,560	0,000
CFINV	-1,048	-1,073	0,285

Table 7
Hypothesis 3

Variable	Beta	t-statistik	<u>Sig t</u>
Constant	-1144,390	-0,366	0,715
CFOP	1,192	125,961	0,000
CFINV	0,420	21,313	0,000

Table 8
Hypothesis 4

Correlations

			DACC	CSCORE	MV
Spearman's rho	DACC	Correlation Coefficient	1,000	-,017	-,004
		Sig. (2-tailed)	.	,791	,948
		N	246	246	246
	CSCORE	Correlation Coefficient	-,017	1,000	-,081
		Sig. (2-tailed)	,791	.	,207
		N	246	246	246
	MV	Correlation Coefficient	-,004	-,081	1,000
		Sig. (2-tailed)	,948	,207	.
		N	246	246	246

Table 9
Hypothesis 5

Variable	Unstandardized Coefficients	t	Sig.
	Beta		
(Constant)	7144925403159640000.	,943	,347
CSCORE	14199315324285120000000000.	21,567	,000
NDAC	-1308770330040785000000.	-7,301	,000
DAC	-33932706938137	-1,127	,261
CXDAC	14397456171984490000	4,489	,000
BONUS	10630588368477160000	1,286	,200
BNSXDAC	38043746659877	2,848	,005
LEV	-6556849432321590	-1,438	,152
LEVXDAC	-1921800084811	-13,260	,000
BnsxLevxDAC	2068252525873	3,866	,000
Political Cost	3711891746157337000	,438	,662
BPOLXDAC	16615779623113	,621	,535
INTEGRAT	-8531296476782380000	-,109	,913