

THE BALANCE SHEET AS AN EARNINGS MANAGEMENT CONSTRAINT

Case Study in Indonesia Manufacture Company

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ABSTRACT

This research has the purpose to examine the balance sheet existence as an earnings management constraint. This research use the secondary which it is taken from the quarterly financial statement of manufacture companies listed on Indonesia Stock Exchange (IDX) during 2008-2009 periods. This research used 68 manufacture companies as its sample. Then, the obtained data has regression analyzed by Generalized Ordered Logit Model. The Output of regression indicates that there is significant relation between net assets with the earnings surprise. The reporting earnings surprise smaller negative or larger positive decrease when the value of net asset is overstated. So, it can be concluded that balance sheet is as an earnings management constraint.

Key Words: Balance Sheet, Earnings Surprise, Net Assets, Earnings Management.

INTRODUCTION

Investor use balance sheet information to infer earnings management constraint and the extent to which they utilize that information to assess the quality of subsequent earnings surprises. If investors use constraint information to infer the quality of reported earnings, a stronger reaction to subsequent earnings surprises should be observed for ex-ante constrained firms than for ex-ante flexible firms. When a firm reports a small positive earnings surprise (defined as 0 to 2 cents), the firm could have arrived at that result through real performance or through earnings management. Smith (2004) stated that investors use balance sheet information to determine a constraint level and use this constraint information to infer the quality of earnings reported in subsequent earnings announcements. Other end users of financial

reports, such as mutual fund managers and individual investors, often rely on analysts' reports and recommendations, given the constraints of their limited time and resources.

Smith (2004) argued that the results provided by the balance sheet constraint literature give important insights into how the accounting reporting system in conjunction with generally accepted accounting principles (GAAP), can constrain earnings management. The balance sheet constraint concept is not only useful in determining the likelihood a firm will at least meet the consensus forecast, but it is also potentially useful in interpreting the quality of subsequent earnings surprises.

In recent years, the existence and pervasiveness of earnings management and the circumstances under which firms are most likely to engage in earnings management have been subjects of considerable discussion and debate among accounting researchers as well

as among practitioners, government regulators, and investors. While the methods used by various studies to detect earnings management are controversial and results not always consistent, previous findings suggest that earnings management occurs and is quite prevalent (Dechow and Skinner, 2000).

Earnings management can be classified into three categories: fraudulent accounting, accruals management and real earnings management. Fraudulent accounting involves accounting choices that violate GAAP. Accruals management involves within-GAAP choices that try to “obscure” or “mask” true economic performance (Dechow and Skinner, 2000).

The balance sheet as the element in financial reports can be used by manager as an information to manage earnings. The balance sheet information also can be used by investor to infer the quality of earnings reported in subsequent earnings announcements. Barton and Simko (2002); Hansen (2004) conclude that overstated balance sheets become constraints on firms’ ability to manage earnings.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The Objective of Financial Reporting

The objective of financial reporting are to provide (1) information that is useful in investment and credit decisions, (2) information that is useful in assessing cash flow prospects, and (3) information about enterprise resources, claims to those resources, and changes in them (Kieso and Weygant, 1998).

Effective use of financial statements requires that the user understands the roles of those responsible for preparing and auditing financial statements. Financial statements are

the representation of management (Cooper *et al.*, 1997).

The following three categories of user groups are identified as the primary users of general purpose financial reports, and those who’s common information needs should dictate the type of information to be disclosed by such reports (1) resource providers include those who may be compensated either directly or indirectly for the resources they provide, (2) recipients of goods and services are those who consume or otherwise benefit from the goods and services provided by the reporting entity, and (3) parties performing a review or oversight function including parliaments, governments, regulatory agencies, analysts, labour unions, employer groups, media and special interest community groups, perform oversight or review services on behalf of the community.¹

The Balance Sheet

A balance sheet is a statement of the financial condition of a business at a specific time. It is one of the principal reports provided by a good accounting system. The balance sheet shows what is owned in a business, what is owed, and the owner’s share or net worth of the business. By comparing past balance sheets with the present balance sheet, the growth or decline of assets, loans, and net worth of a business can be determined.

The balance sheet provides a basis for (1) computing rates of return, (2) evaluating the capital structure of the enterprise, and (3) assessing its liquidity and financial flexibility. The balance sheet is the fundamental report of a company's possessions, debts and capital invested. Before investing in any company, an

¹ “Objective of General Purpose Financial Reporting,” Statement of Accounting Concepts (SAC 2 (8/90)), pars. 16-19.

investor can use the balance sheet to examine the following questions: can the firm meet its financial obligations, how much money has already been invested in this company, is the company overly indebted, and what kind of assets the company has purchased with it's financing (Kieso and Weygant, 1998).

Accrual Basis

The accrual basis recognizes the impact of transaction on the financial statement in the periods when revenues and expenses occur instead of when cash is received or disbursed. The accrual basis evolves in response to a desire for a more complete, and therefore more accurate, report of the financial impact of

various events (Horngren, Sundem, and Stratton, 1996).

Earnings Management

Earnings management is a new phenomenon, which has contributed to the development of accounting theory. The term earnings management occurs as a direct consequence of the efforts undertaken by managers or preparers of financial statements in an attempt to affect accounting information, especially earnings, for his/her own and/or company's benefits. Earnings management can not be interpreted as a negative action since it does not solely concern with earnings manipulation (Gumanti, 2000).

Table 1.
Elements of the balance sheet

Balance sheet element	Examples
Current asset	Petty Cash, Cash at Bank, Accounts Receivable (debtor), Inventory, Prepayments
Non-current assets	Buildings, Motor Vehicle, Land, Equipment, Furniture, Investment
Current liabilities	Accounts Payable (creditors), Bank Overdraft, Accruals
Deferred liabilities	Loan, Mortgage, Debenture
Proprietorship	Capital, Net Profit, net Loss, Drawings

Source: Cooper *et al.* (1997)

Table 2.
Comparing the Cash and Accrual Bases of Accounting

	Cash Basis	Accrual Basis
Revenue is recognized	when received	when earned
Expenses is recognized	when paid	when incurred

Source: Porter and Norton (2001:142-143)

Leuz *et al.* (2003), define earnings management as the alteration of firms' reported economic performance by insiders to either mislead some stakeholders or to influence contractual outcomes. They argue that incentives to misrepresent firm performance through earnings management arise, in part, from a conflict of interest between

firms' insiders and outsiders. Insiders, such as controlling owners or managers, can use their control over the firm to benefit themselves at the expense of other stakeholders. Managers and controlling owners have incentives to manage reported earnings in order to mask true firm performance and to conceal their private control benefits from outsiders. For

example, insiders can use their financial reporting discretion to overstate earnings and conceal unfavorable earnings realizations (i.e., losses) that would prompt outsider interference. Insiders can also use their accounting discretion to create reserves for future periods by understating earnings in years of good performance, effectively making reported earnings less variable than the firm's true economic performance. In essence, insiders mask their private control benefits and hence reduce the likelihood of outside intervention by managing the level and variability of reported earnings.

Obviously, agency theory studies frequently fall under the category of earnings management since a firm's management may attempt to influence earnings in order to (1) maximize its compensation, (2) avoid the breaching of debt covenants of bond liabilities, which would prevent the payment of dividends, and (3) minimize reported income to lessen the possibility of governmental interference if the enterprise has high political visibility (Wolk and Tearney, 1997).

Magnan and Cormier (1997) in Gumanti (2000) stated that there are three targets that are reachable by manager related to earnings management practice. The three targets are political cost minimization, manager wealth maximization and minimization of financing costs.

Motivations of Earnings Management

Manager may engage in earnings management for variety reasons, for example as stated by Scott (2000:352-364):

Bonus Purpose

Managers have inside information on the firm's net income before earnings management. Since outside parties, including the Board itself, may be unable to learn what

this number is, Healy predicted that managers would opportunistically manage net income so as to maximize their bonuses under their firm's compensation plans.

Other contractual motivations

There are other contractual motivations for earnings management. An important case arises from long-term lending contrast, which typically contains covenants to protect the lenders against actions by managers that are against the lenders' best interest, such as excessive dividends, additional borrowing, or letting working capital or shareholders' equity fall below specified levels, all of which dilute the security of existing lenders.

Political motivations

Many firms are quite politically visible. Such firms may want to manage earnings so as to reduce their visibility. This would entail, for example, accounting practices and procedures to minimize reported net income, particularly during periods of high prosperity. Otherwise, public pressure may arise for the government to step in with increased regulation or other means to lower profitability.

Taxation motivations

Income taxation is perhaps the most obvious motivation for earnings management. However, taxation authorities tend to impose their own accounting rulers for calculation of taxable income, thereby reducing firms' room to maneuver. Consequently, taxation should not play a major role in earnings management decisions in general.

Changes of CEO

A variety of income management motivations exist around the time of a change of CEO. For example, the bonus plan hypothesis predicts that CEOs approaching retirement would be particularly likely to

engage in a strategy of income maximization, to increase their bonuses. Similarly, CEOs of poorly performing firms may income-maximize to prevent, or postpone, being fired. This motivation also applies to new CEOs, especially if large write-offs can be blamed on the previous CEO.

Initial public offerings

By definition, firms making initial public offerings (IPOs) do not have an established market price. This raises the question of how to value the shares of such firms. Presumably, financial accounting information included in the prospectus is a useful information source.

To communicate information to investors

The use of earnings management to communicate information to investors may seem questionable in view of efficient securities market theory. Investors will look through firms' accounting policy choices when evaluating and comparing earnings performance. Recall, however, that we define market efficiency relative to publicly available information. If earnings management can reveal inside information, it can actually improve the informativeness of financial reporting.

Patterns of Earnings Management

Scott (2000:365) tried to collect and briefly summarized some earnings management patterns:

Taking a bath

This can take place during of organizational stress or reorganization, including the hiring of new CEO. If a firm must report a loss, management may feel compelled to report a large one; it has little to lose at this point. Consequently, it will write off assets, provides for excepted future costs,

and generally "clear the decks". This will enhance the probability of future reported profits. Healy (1985), also mentions that managers whose net income is below the bogey of the bonus plan may also take a bath, for a similar reason-it will enhance the probability of future bonuses. In effect, the recording of large write offs puts future earnings "in the bank".

Income minimization

This is similar to taking a bath, but less extreme. Such a pattern may be chosen by politically visible firm during periods of high profitability. Policies that suggest income minimization include rapid write offs of capital assets and intangibles, expensing of advertising and R&D expenditures, successful-efforts accounting for oil and gas exploration costs, and so on. Income taxation, such as for LIFO inventory, provides another set of motivations for this pattern, as does enhancement of arguments for relief from foreign competition.

Income maximization

As seen in Healy's study, managers may engage in pattern of maximization of reported net income for bonus purpose, providing this does not put them above the cap. Firms that are close to debt covenant violations may also maximize income.

Income smoothing

This is perhaps the most interesting earnings management pattern. Healy suggest that managers have an incentive to smooth income sufficiently that it remains between the bogey and cap. Otherwise, earnings may be temporally or permanently lost for bonus purpose. Furthermore, if managers are risk-averse, they will prefer a less variable bonus stream, and hence may want to smooth net income.

Arya *et al.* (1998) stated that two of the better known forms of earnings management are "smoothing" and "big bath." For example, in estimating their bad debt allowance, companies might be tempted to provide a generous allowance in good years and skimp in lean years in order to smooth the stream of reported earnings. In contrast, the big bath hypothesis suggests that managers undertake income decreasing discretionary accruals in lean years. Perhaps managers believe that one very poor performance report is not as harmful as several mediocre performance reports. It has been suggested that big baths often occur under the guise of restructuring charges and may coincide with top management transition.

Hypotheses Formulation

Financial reporting consists of balance sheet, income statement, cash flow statement and notes of financial statement. All of those financial reports are used as financial information for the internal and external parties of the company. The internal parties such as managers, accountants, owners and employees while the external parties such as investors, creditors, government, customers and market. The financial information of the company will describe about the condition, economics prospect, investment plan also earnings forecast and dividend which is became a basis on decisions making.

The balance sheet reports the summary of financial position at a given point in time. It shows assets, liabilities, and owners' equity. The income statement reports the excess of revenue over expense, that is, the earnings (profit, net income), or in the event of an excess of expense over revenue, the net loss of the period. Earnings are frequently used as a measure of company performance or as the basis for other measures, such as return on investment or

earnings per share (IASB, par 69). In other word, earnings are the summary measure of firms performance produced under the accrual basis of accounting. Therefore, the information of earnings is the main information that is needed by the investors to look for the performance of the company. In order to attract the investor in turn to invest in the company, the managers try to give a good financial report through accrual accounting to manage the earnings. It is concerned to Teoh *et al.* (1997) and DuCharme *et al.* (2000), which is stated that conceptually earnings management can be done because the accrual accounting give the possibility of managerial policy in confession of time, earnings and cost.

Actually, earnings are affecting by income and expenses as the element that directly related to the measurement of earnings. Income increases in economics benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, while expenses decreases in economic benefits during the accounting periods in the form of outflows or depletions of assets or incurrance of liabilities that result in decreases in equity (IASB, par 70). The negative of earnings, that is loss, will increase the earnings management; conversely, the positive of earnings, that is profit, will decrease the earnings management. Meanwhile assets, liabilities and equity are the element of the balance sheet. It is concerned with the literature that stated there is a relationship between balance sheet and income statement. So that, the effort of managers' to manage the earnings or called as earnings management, would base on the balance sheet.

The articulation between balance sheet and income statement causes accruals to be reflected in earnings on the income statement while at the same time being reflected in net assets on the balance sheet. Opportunistic

accrual management (within the bounds of GAAP) that increases earnings causes a firm's net assets to be reflected at higher values than would be reported under a neutral use of GAAP.

According to Barton and Simko, 2002, that basic accounting relations show that net income in a given period is the free cash flows (FCF) (i.e., the operating cash flows net of investment) the firm generates plus the change in net operating assets during the accounting period (Δ NOA).

Prior research of Barton and Simko (2002) shows that the likelihood of reporting larger positive or smaller negative quarterly earnings surprises decreases with the beginning balance of net operating assets relative to sales, suggesting that managers' ability to optimistically bias earnings decreases with the extent to which net assets values are already overstated on the balance sheet. According to Smith (2004), there is the constraint effect in four earnings surprises settings: small positive, large positive, small negative, and large negative. And to the extent that a firm's net operating assets (NOA) have been affected by income-increasing earnings management, the reported net assets are likely to be overstated.

Earnings management is conducted by the manager in the process of financial reporting because some motivation to achieve the goals. Actually, earnings management is a tool to manage earnings by using the financial report information. Earnings surprise as an earning report is determined by balance sheet as summary of financial position. The good of financial position refers to the high earnings (profit) of the company so that the earning management is low. Or in the other words that when the report of earning (earnings surprise) is higher, the earnings management will be high

to increase their performance to attract the investors.

Barton and Simko (2002) stated that the articulation between the income statement and the balance sheet ensures that biased assumptions reflected in earnings are also reflected in net assets value. The overstated on balance sheet means that the reachable earnings of the company's is low, so that the large positive or small negative earnings report decrease.

This research is a replication from the previous research by Barton and Simko (2002) about earning management constraint. Barton and Simko (2002) predict that managers will use available financial reporting discretion to report higher levels of earnings surprises, all else equal. Based on the main problem, review of the related literature and previous research about earnings management constraint, so that the hypotheses of this research can be formulated as follows:

- Ha1 : the reported large positive or small negative earnings surprises decreases with the extent to which net assets are overstated on the balance sheet.**
- Ha2 : the reported large negative or small positive earnings surprises increases with the extent to which net assets are overstated on the balance sheet**

RESEARCH METHOD

Population and Sample

In this research, population encompasses companies listed in Indonesia Stock Exchange. Therefore, the research object is all of the manufacture company listed in Indonesia Stock Exchange. Sample of this research is taken by Purposive Sampling method. Purposive Sampling method is taken sample which

is not random and sample chosen base on the certain consideration (Sekaran, 1992:235).

Data Collection

This research uses the secondary data, the data source taken from Indonesia Stock Exchange both in the form of file or printing, which contains information about the data needed in this research.

Research Variables

Dependent variable

Earnings surprise (SURPRISE) is ICMD (Indonesian Capital Market Directory) actual EPS for quarter t less the consensus forecast for quarter t , both rounded to the nearest penny. The consensus forecast is the mean of analysts' most recent EPS forecast for quarter t available on ICMD prior to the earnings announcement for quarter t . This research combine SURPRISE on $\leq -5\text{¢}$ into one category and SURPRISE $\geq 5\text{¢}$ into another;

Independent variable

1. NOA is net operating assets (i.e., shareholders' equity less cash and marketable securities, plus total debt) at the beginning of quarter t , scaled by sales for quarter $t - 1$;
2. SHARES is weighted average number of common shares outstanding during quarter t ;
3. BIG4 is indicator variable coded 1 if the firm has a Big 4 auditor in quarter t , 0 otherwise;
4. PB is market capitalization of common shares divided by shareholders' equity, both at the end of quarter t ;
5. LTGN_RISK is indicator variable coded 1 if the firm is in one of the following

industries:

pharmaceuticals/biotechnology, computer, electronics, or retail sector, 0 otherwise;

6. PREV_MB is indicator variable coded 1 if, based on ICMD, the firm reported a nonnegative earnings surprise in quarter $t - 1$, 0 otherwise;
7. CV_FORECAST is coefficient of variation in analysts' most recent forecasts for quarter t ;
8. SALES_GROWTH is sales for quarter t divided by sales for $t - 3$, less 1;
9. ROE is net income for quarter t divided by shareholders' equity at the end of quarter t ;
10. Δ ROE is ROE for quarter t less ROE for quarter $t - 1$;
11. MKT_CAP is natural logarithm of market capitalization of common shares at the end of quarter t .

RESEARCH FINDINGS AND DISCUSSION

Descriptive Statistics

Selecting sample in this research is based on the company consistency in publishing the quarterly financial statement and complete data that owned by manufacturing companies listed on Indonesia Stock Exchange during 2008-2009. The data used are secondary data taken from the Indonesia Stock Exchange (IDX) corner in the Economic Faculty of UPN "Veteran", libraries and internet. After the observation and the selection to the manufacture companies listed on Indonesia Stock Exchange there are 68 companies that can fulfill the criteria.

Table 3.
Descriptive Statistics for Independent Variables and Rank Correlation with Earnings Surprise (SURPRISE)

Independent Variable	Mean	Standard Deviation	Predicted Sign	Spearman Rank Correlation with SURPRISE
NOA	3.04	2.40	-	-0.84**
SHARES	1254.42	1976.72	-	-0.15**
BIG4	0.50	0.50	?	0.21**
PB	1.26	2.41	+	0.29**
LTGN_RISK	0.76	0.43	-	-0.05
PREV_MB	0.55	0.50	+	0.28**
CV_FRCST	-136.86	328.95	+	0.01
SALES_GRW	0.18	0.67	+	0.18**
ROE	0.06	0.36	+	0.24**
ΔROE	-0.006	0.55	+	0.08
MKT_CAP	5.54	0.87	+	0.11*

** Correlation is significant at the 0.01 level (1-tailed test for signed predictions and two-tailed test otherwise)

* Correlation is significant at the 0.05 level (1-tailed test for signed predictions and two-tailed test otherwise)

Table 4.
Multicollinearity Test

Variable	Collinearity Statistics		Decision
	Tolerance	VIF	
NOA	0.781	1.281	No Multicollinearity
SHARES	0.614	1.628	No Multicollinearity
BIG4	0.777	1.286	No Multicollinearity
PB	0.864	1.158	No Multicollinearity
LTGN_RISK	0.378	2.646	No Multicollinearity
PREV_MB	0.936	1.069	No Multicollinearity
CV_FRCST	0.386	2.591	No Multicollinearity
SALES_GRW	0.920	1.086	No Multicollinearity
ROE	0.826	1.211	No Multicollinearity
ΔROE	0.887	1.127	No Multicollinearity
MKT_CAP	0.489	2.047	No Multicollinearity

Table 3 reports descriptive statistics for the independent variables. The mean level of NOA is 3.04, suggesting that net operating assets are about third as large or larger as sales for most firm quarters. Sample firm have on average 1254.42 million shares outstanding, and 50 percent of them have a BIG4 auditor. The mean price-to-book ratio

is 1.26; about 76 percent of firms are in highly litigious industries. The mean coefficient of variation analysts' forecast is -136.86. Average sales growth is 18 percent; however ROE is 6 percent, about 10 percent higher than ROE for same quarter in the previous year. The mean MKT_CAP is 5.54.

Classical Assumption Tests

Multicollinearity Test

The term multicollinearity means the existence of a “perfect” or exact, linear relationship among some or all explanatory variables of a regression model. The existence of multicollinearity causes in appropriate estimation result (Gujarati, 1995). The classical linear regression model assumes that there is no multicollinearity among explanatory variables because if multicollinearity is perfect, the regressions coefficients of the explanatory variables are determined and the standard error is infinite. According to Gujarati (1995), as a rule of thumb, if the VIF (Variance Inflation Factor) of variable exceeds 10 and value of tolerance is closed to 0, variable is said to be highly collinear.

Table 4 shows that there is no multicollinearity among independent variables in this research. Because VIF is less than 10 and tolerance value of each variable is more than 0.1. Multicollinearity happens when variance inflation factor (VIF) is more than 10 or tolerance less than 0.1.

Autocorrelation Test

To test whether there is autocorrelation, the Durbin Watson (D-W) table statistics is used. The criteria used must be between dU and 4-dU in order that there is no autocorrelation fulfilled (Gujarati, D N, 1995:343-344).

Table 5.

Autocorrelation Test

dU	4-Du	Durbin- Watson	Detection
1,885	2,115	1.538	No Auto- correlation

The dU value is obtained from D-W value based on the number of samples and the number of independent variables. In this

research, the number of samples is 408 and there are 11 independent variables. In the table of Durbin Watson at the level of significance 5%, the sample which is more than 200 and 11 independent variables can be explained by dU value 1.885 thus $4-dU = 4 - 1.885 = 2.115$. Thus, D-W is 1.538 (between 1.885–2.115) that is fulfills the assumption there is no autocorrelation in the regression model.

Heteroscedasticity Test

The heteroscedasticity symptom will appear when the residual has the difference variance from one observation to another. The existence of heteroscedasticity causes the regression coefficient estimation becomes inefficient. There are two methods (informal methods and formal methods) to detect the heteroscedasticity. In this research, to detect the heteroscedasticity by using formal methods called “Spearman’s rank correlation test” (Gujarati, 1995).

Table 6. reports the heteroscedasticity test for all independent variable by using Spearman’s rank correlation test. The table reports that there is no heteroscedasticity among the independent variable. To indicate that there is no heteroscedasticity, the probability value is more than $\alpha = 0.05$. Heteroscedasticity happens when the coefficients of the computed t value is less than the critical t value or the computed t value is more than - the critical t value means that there is no heteroscedasticity. This research uses the heteroscedasticity test with $\alpha = 0.20$ (more than $\alpha = 0.05$) and the coefficients of the computed t value is less than the critical t value (0.843). It means that there is no heteroscedasticity in this data.

The Result of Hypothesis Testing

The hypothesis testing will be done by using the generalized ordered logit regression. The dependent variable (SURPRISE) is an ordinal dependent variable and it allows the

coefficients on all independent variables to vary across levels of SURPRISE. The generalized ordered logit model as follow:

$$\Pr(\text{SURPRISE}_{it} < k) / \Pr(\text{SURPRISE}_{it} < k) = \exp(\beta_{0,k} + \beta_{1,k}\text{NOA}_{it} + \beta_{2,k}\text{SHARES}_{it} + \beta_{3,k}\text{BIG4}_{it} + \beta_{4,k}\text{PB}_{it} + \beta_{5,k}\text{LTGN_RISK}_{it} + \beta_{6,k}\text{PREV_MB}_{it} + \beta_{7,k}\text{CV_FORECAST}_{it} + \beta_{8,k}\text{SALES_GROWTH}_{it} + \beta_{9,k}\text{ROE}_{it} + \beta_{10,k}\Delta\text{ROE}_{it} + \beta_{11,k}\text{MKT_CAP}_{it} + v_{it})$$

From that model above, it will test the sign (coefficient) of each independent variable (right-side) to prove the hypothesis and reject the null hypothesis. The prediction sign of each independent variable is negative sign on NOA, SHARES, LTGN_RISK and CV_FORECAST; positive sign on PB, PREV_MB, SALES_GROWTH, ROE, ΔROE and MKT_CAP. Meanwhile, BIG4 is no prediction. Those entire coefficients are in order to reject Ho₁ and Ho₂.

Table 6.
Heteroscedasticity Test

Independent Variable	The computed <i>t</i> value	The critical <i>t</i> value	Decision
NOA	-0.84	0.843	No heteroscedasticity
SHARES	-0.15	0.843	No heteroscedasticity
BIG4	0.21	0.843	No heteroscedasticity
PB	0.29	0.843	No heteroscedasticity
LTGN_RISK	-0.05	0.843	No heteroscedasticity
PREV_MB	0.28	0.843	No heteroscedasticity
CV_FRCST	0.01	0.843	No heteroscedasticity
SALES_GRW	0.18	0.843	No heteroscedasticity
ROE	0.24	0.843	No heteroscedasticity
ΔROE	0.08	0.843	No heteroscedasticity
MKT_CAP	0.11	0.843	No heteroscedasticity

* n = 333; df = 332; α = 0.20

Table 7.
Regression Result for Generalized Ordered Logit Model

Model: $\Pr(\text{SURPRISE}_{it} < k) / \Pr(\text{SURPRISE}_{it} < k) = \exp(\beta_{0,k} + \beta_{1,k}\text{NOA}_{it} + \beta_{2,k}\text{SHARES}_{it} + \beta_{3,k}\text{BIG4}_{it} + \beta_{4,k}\text{PB}_{it} + \beta_{5,k}\text{LTGN_RISK}_{it} + \beta_{6,k}\text{PREV_MB}_{it} + \beta_{7,k}\text{CV_FORECAST}_{it} + \beta_{8,k}\text{SALES_GROWTH}_{it} + \beta_{9,k}\text{ROE}_{it} + \beta_{10,k}\Delta\text{ROE}_{it} + \beta_{11,k}\text{MKT_CAP}_{it} + v_{it})$

Independent Variable	Predicted Sign	Coefficient
NOA	-	-0.140
SHARES	+	5.447E-06
BIG4	?	0.012
PB	+	0.015
LTGN_RISK	-	-0.111
PREV_MB	+	0.116
CV_FRCST	+	0.000
SALES_GRW	+	0.033
ROE	-	-0.011
ΔROE	+	0.030
MKT_CAP	+	0.014

Table 7. reports that the coefficient regression on NOA is 0.140, it explains that decrease (because negative sign) on NOA will increase SURPRISE. Conversely, SURPRISE will decrease when NOA increase. This result is consistent with Ha that the earnings surprise decreases with extend to which net operating assets are already overstated on the balance sheet.

While the coefficient regression of SHARE is positive, it means that the increases on SHARES will increase SURPRISE. It is contradictory with the evidence that managers of firms with more shares outstanding may find it more difficult to manage earnings toward expectation. The insignificant coefficient on BIG4 suggests that audit quality is unrelated to the earnings surprise. The coefficient on PB and PREV_MB are positive, and for PREV_MB is a significant coefficient at the 0.05 level. These results suggest that increases in the firm price-to-book ratio, its record in the

previous quarter. While, coefficient regression in LTGN_RISK is negative contrast to the predicted sign which is positive. The coefficient on CV_FRCST is positive; means that firm with imprecise forecast are more likely to miss expectations by large amount. Payne and Robb (2000) state that managers are more likely to report earnings that misses expectation if the expectations are imprecise. The coefficient on ROE is negative; it means that net income for quarter t lower than shareholders` equity. Finally, the coefficients on SALES_GRW, ΔROE, and MKT_CAP are positive, suggesting that level of earnings surprise increase with firm performance and firm size.

Coefficient determination (Adjusted R²) is 0.569 which means that around 56.9% of the variation on SURPRISE variable can be explained by 11 independent variables in the model, where as the residual of 43.1% is explained by other factors outside the model. Standard error of estimation is 0.319.

Table 8.
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.764 ^a	.584	.569	.319

a. Predictors: (Constant), LTGNRISK, PREVMB, STDEV, EPS, DROE, PB, BIG4, SLGROWTH, SHARE, ROE, NOA, MKT_CAP, CVFRCST.

Table 9.
ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	45.900	12	3.825	37.472	.000 ^a
Residual Total	32.664	320	.102		
	78.565	332			

a. Predictors: (Constant), LTGNRISK, PREVMB, STDEV, EPS, DROE, PB, BIG4, SLGROWTH, SHARE, ROE, NOA, MKT_CAP, CVFRCST.
b. Dependent Variable: SURPRISE

The standard deviation of SURPRISE is 0.486. It is more than standard error of estimation which is just only 0.319. Because it is less than the standard deviation, the regression model is better in bestirred as predictor SURPRISE than the mean of SURPRISE itself. F-Statistic testing obtained from regression analysis on Table 9 shows

the values of F-Statistic for the model which is 37.472 by the significant level of 0.000. Because the probability (0.000) < 0.05, the regression model can be used to predict the earnings surprise (SURPRISE). In other word, all of the independent variables simultaneously influence the SURPRISE.

Table 10.
t-Statistic Testing

Model	t	Sig.
(Constant)	6.343	0.000
NOA	-16.975	0.000
SHARES	0.481	0.631
BIG4	0.295	0.768
PB	1.895	0.059
LTGN_RISK	-1.665	0.097
PREV_MB	3.190	0.002
CV_FRCST	1.622	0.106
SALES_GRW	1.208	0.228
ROE	-0.198	0.843
ΔROE	0.900	0.369
MKT_CAP	0.493	0.622

t-statistic is used to test the constant significant and dependent variable (SURPRISE). Taking decision based on probability, if the probability > 0.05, Ho is accepted and if the probability < 0.05, Ho is rejected. As seen in column Sig (significance) is 0.000 (Constant), 0.000 (NOA), 0.002 (PREV_MB), in other word, it far bellowed 0.05. So, Ho rejected or significant coefficient regression or Constant, NOA and PREV_MB are simultaneously significant to SURPRISE. Thus result consistent to the first and second hypothesis that the changes of earnings surprises extent to the net assets on the balance sheet. Although the others remaining independent variable, the probability is more than 0.05, Ho is accepted or non- significant coefficient regression or SHARES, BIG4, PB, LTGN_RISK, CV_FRCST, ROE, ΔROE and

MKT_CAP are not influential significantly to SURPRISE.

CONCLUSIONS

The balance sheet accumulates the effects of the previous accounting choices, so the level of net assets partly reflects the extent of previous earnings management. Based on the result of this research, it can be concluded that the change on earnings surprise affected by the net asset on balance sheet. The regression analysis result of the model gives the evidence to the hypothesis that the balance sheet is as an earnings management constraint. Coefficient value of NOA which is negative gives the probability that the decreasing on NOA will increase the earnings surprise (SURPRISE). Although most of the other remaining independent variables as a control are

insignificant based on T-statistic testing, they are simultaneously significant to SURPRISE on F-statistic testing. Earnings management which is done by managers' has kinds of pattern and kinds of motivation in order to achieve a certain goal. The management does earnings management by affecting the financial statement report.

Managers have some incentives to manage earnings, such as reduce the likelihood of outside intervention, maximize company compensation, avoid the breaching of debt covenants of bond liabilities, minimize reported income to lessen the possibility of governmental interference, etc.

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