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EARNINGS MANAGEMENT ANALYSIS ON SERVICE INDUSTRIES THAT SUPPORT TOURISM SECTOR AFTER THE EARTHQUAKE OF LOMBOK AND PALU

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Abstract

Earnings management practices in corporate financial statement continues to be an issue of debate in the financial accounting realm. Earnings management is done by the management of a company for various reasons. Information disclosed in the financial statement ideally must reflect the condition and performance of a company. Extraordinary events such as natural disaster surely will affect the performance of a company that is impacted by the event. A decline in corporate financial performance will affect the corporate stakeholders. This research aims to detect earnings management practices that might be conducted by service companies that support tourism industries affected by the earthquake that occurred in Lombok and Palu. Using the equation formulated by Stubben (2009) to detect earnings management practices by observing the change in discretionary revenues, this research has found that the natural disaster that hit Lombok and Palu was not a powerful enough extraordinary event that might have driven the management to conduct earnings management practices.
Keywords: earnings management, extraordinary items, earthquake

Abstrak

Praktek manajemen laba pada laporan keuangan perusahaan senantiasa menjadi perdebatan dalam lingkup akuntansi keuangan. Pihak manajemen perusahaan melakukan manajemen laba dengan alasan yang sangat beragam. Informasi yang disajikan dalam laporan keuangan idealnya harus mencerminkan kondisi dan kinerja perusahaan. Kejadian luar biasa seperti bencana alam tentunya akan mempengaruhi kinerja perusahaan yang terimbas kejadian tersebut. Penurunan performa perusahaan akan mempengaruhi para pemangku kepentingan perusahaan. Penelitian ini bertujuan untuk mendeteksi adanya upaya perusahaan jasa pendukung industri pariwisata yang terimbas gempa yang terjadi di Lombok dan Palu untuk melakukan manajemen laba setelah terjadinya kejadian luar biasa tersebut. Dengan menggunakan persamaan Stubben (2009) untuk mendeteksi manajemen laba melalui pengamatan terhadap perubahan pendapatan diskresioner, penelitian ini membuktikan bahwa kejadian luar biasa tidak mengakibatkan perusahaan yang terdampak gempa bumi untuk melakukan praktek manajemen laba.
Keywords: manajemen laba, kejadian luar biasa, gempa

INTRODUCTION

Earnings management continues to be a debatable practice. Management's flexibility in determining ways to record transaction to reflect specific conditions in the company, to some, can be considered as a form of manipulation because the objective of financial reporting should be to report the actual condition of the company. Earnings management actions conducted by the management will compromise the reliability of the financial report because it will not reflect the actual performance of the company. Information disclosed in the financial statement should reflect the actual performance of the company so that stakeholders who use the finacial statement can make an informed decision from it. The impact that financial statement information has on the decision of investors, board of directors and other stakeholders causes the management to conduct earnings management practices.

Cases revealing earnings management practice in Indonesia include the one conducted by PT Indofarma Tbk in 2001. This company overstated the value of its work in process inventory so that the company's income for that year appeared to be higher. High income indicates that the company's financial performance is high which in turn reflects high management performance. This act of fraud is considered a violation because it was done against the acceptable accounting standards. Therefore, PT Indofarma Tbk was fined by

Bapepam and sentenced their board of directors to pay 500 million Rupiahs in corporate fine and 500 million Rupiahs of administrative fine.

The reasons for conducting earnings management vary. Some of the earnings management practices that the management of a company takes are lowering the company's earnings per share, income smoothing and income decreasing. These practices are generally proven by empirical study related to the reaction of stakeholders towards the information disclosed in the financial statement (Belkaoui, 2004).

In the middle of 2018, beginning at the end of July until the end of September, Indonesia was struck by a series of massive earthquakes and tsunami that hit the islands of Lombok and Sulawesi. This catastrophic natural disaster caused many casualties and destruction. Lombok being one of the tourism destinations promoted by the Visit Indonesia program set forth by the Ministry of Tourism, suffered from this natural disaster. The 5.9 to 6.9 scale earthquakes forced many tourism facilities such as hotels and restaurants to close their businesses for more than six months. The tsunami in Palu, Central Sulawesi destroyed notable tourism facilities, even a hole regency due to liquefaction. Other service companies that support the tourism industry in these islands were also affected. How does the shutting down of service companies that support the tourism industry affect the overall financial performance of the companies for that year? Was it enough to drive the management to conduct earnings management practices? This research aims to analyze the financial reports of service companies that support the tourism sector that was affected by the earthquake and tsunami that year to detect the presence of earnings management practice caused by the extraordinary event.

By analyzing the financial reports of service companies in the tourism sector that were affected by the earthquake and tsunami that hit Lombok and Central Sulawesi (Palu), we try to detect the presence of earnings management practices that might have been conducted by the management.

LITERATURE REVIEW

Prior Researches

Prior researches that study earnings management from the revenue perspective are Plummer and Mest (2001), Marquardt and Wiedman (2004) and Caylor (2009). As stated in Stubben (2009), Plummer and Mest viewed earning management practices using revenue as indicator. Their research found that companies conduct earnings management by increasing their revenue to make it the same as their revenue projection which in turn causes the company revenue to be overstated after they also reduce their operational expenses.

Still within Stubben's paper, it is stated that the research conducted by Marquardt and Wiedman estimated discretionary accruals, including receivables, to determine which revenue post was manipulated in order to alter reported earnings. Marquardt and Wiedman found that smaller companies tend to increase special accounts instead of main revenue accounts. Moreover, they also found that companies apply certain policies revenues that enable them to increase or decrease earnings before capital release.

Caylor's research used discretionary revenue to see how those posts are used to avoid reporting extraordinary events that can reduce company earnings. This research found that managers apply certain policies that affect accrued receivables and revenues so that they can report positive income.

These researches serve as a foundation to see the impact of extraordinary items on the reporting of revenue and income that can be classified as an attempt to alter company income to avoid sending negative signaling that can influence stakeholders and market reaction.

Theoretical Framework

Agency Theory and Signaling Theory

Positive Accounting Theory focuses on the reasoning behind the role of contractual and political costs in explaining the motive of the management in a company in making accounting decisions in the presence of information asymmetry in the market; if there is significant cost in establishing and executing a contract (agency cost); and if there is political cost that arise from a regulatory process. Agency Theory can explain the decision to report an event voluntarily. (Karim, 2012)

Agency theory is an important theoretical paradigm in accounting. This theory considers disclosure as a mechanism to lower cost as the result of reducing the conflict that arises between the manager and the shareholders (due to compensation contract) and the conflict between the company and its creditor (due to debt contract). Therefore, disclosure functions as a control mechanism for manager's performance. As a result, managers are encouraged to disclose information voluntarily.

One of the aspects emphasized in agency theory is the presence of information asymmetry between the agent and its principal. The inequality of information possessed by each party creates a signaling relationship. The Signaling Theory was first suggested by Michael Spence to explain the relationship between two parties that have different information (Connelly, 2010). According to Connelly, each party involved will choose how they communicate the information they possess in a way to elicit a certain reaction they hope to get from the other party.

A good information disclosed in a financial statement will create a positive reaction, for example, information about a rise in company financial performance in the stock market will make shareholders decide to hold their investment. The opposite will apply with bad information. The management, as the agent, reports the financial performance of the company they oversee, in a way that they hope to generate a positive reaction from the company stakeholder.

Earnings Management

Healy and Wahlen in Riahi-Belkaoui (2004) defined earnings management as an incident where a manager uses his or her judgment in reporting the financial condition of the company and arranges the transactions so as to alter the financial statement, either to mislead the stakeholders regarding the company performance or to influence the contractual result that is influenced by the figures reported in the financial statement. From this definition, we can infer that there is a notion of deceit conducted by the management. However, earnings management may have a good side and a bad side. The cost that arise from misplacement of resources is considered a bad side of earnings management while a more reliable disclosure of company performance by the management is considered a good side.

Earnings management is mainly done by managing accruals. Riahi-Belkaoui (2004, h. 456) formulated the following equation to correlate earnings management with accruals:

a. Total accruals = Reported Net Income – Cash Flows from Operations
b. Total accruals = Non-discretionary accruals + Discretionary accruals

According to Riahi-Belkaoui, the accruals that have been proven to be used for earnings management are:

- Depreciation estimates and bad debt provisions surrounding initial public offerings.
- Loan loss reserves of banks and claim loss reserves of insurers.
- Deferred tax valuation allowances.

Stubben (2009) used discretionary revenues to detect earnings management. Revenues that are considered discretionary include revenues from real activities but are uncertain in nature and occurrence such as sales discounts or those that are intangible such as fictious revenues. Stubben put more focus on revenue recognition that is done earlier than necessary as an indicator for earnings management. Based on his observation on revenues, Stubben formulated the following equation to detect earnings management:

$$\Delta AR_{it} = \alpha + \beta_1 \Delta R1\text{-}3_{it} + \beta_2 \Delta R4_{it} + \varepsilon_{it}$$

Where:

ΔAR represents the change in annual receivables
$\Delta R1\text{-}3$ represents the change in revenues from the first to third quarter
$\Delta R4$ represents the change in revenues from the fourth quarter
α represents the constant
β represents the regression coefficient
ε represents the error
i represents the company
t represents the year

Schroeder (2016) suggest that earnings management is another aspect of earnings quality. Schroeder defined earnings management as an attempt by corporate officials to influence reported short-term income. He stated that managers try to manage company income because they believe that reported income will influence the decision made by investors and creditors. In his observation from various cases, Schroeder said that earnings management practices are designed to improve the impact of reported income and to decrease corporate capital expense. Still according to Schroeder, the management might choose to report bad news in periods where management performance is lacking in order to increase gain in the following periods that might insinuate an improved management performance. Moreover, Schroeder also suggested that the greater the focus on benefits and incentives for senior management, the higher the risk of fraud; the higher the influence of senior management politics on external directors, the higher the risk of fraud; and the higher the commitment on stock options and benefits that influence long-term decisions, oversight and balance between the management and board of directors, the lower the risk of fraud.

Still according to Schroeder, managers often choose accounting policies that maximize the income and market value of the company by using techniques that involve issues relating to revenue and expense recognition, including estimating bad debt allowances, conducting inventory write-down, estimating long-term construction projects completion percentange and selecting certain depreciation methods.

Arthur Levitt, as stated in Schroeder (2016) listed five earnings management techniques that he said jeopardizes the integrity of financial reporting:

1. Taking a bath. Overstating the restructuration assessment to decrease asset that will decrease future expenses. This is done in order to expect the one-time loss will be overlooked by analysts and investors in the market because they tend to focus more on future income.
2. Creative acquisition accounting. Avoiding future expenses by charging research and development expenses.

3. "Cookie jar" reserves. Overstating sales return or warranty when the company shows good financial performance and using the excess amount when the company is not showing good financial performance to decrease similar expenses.
4. Abusing the materiality concept. Purposely record errors or neglecting errors in the financial report assuming the errors are insignificant.

Conceptual Framework

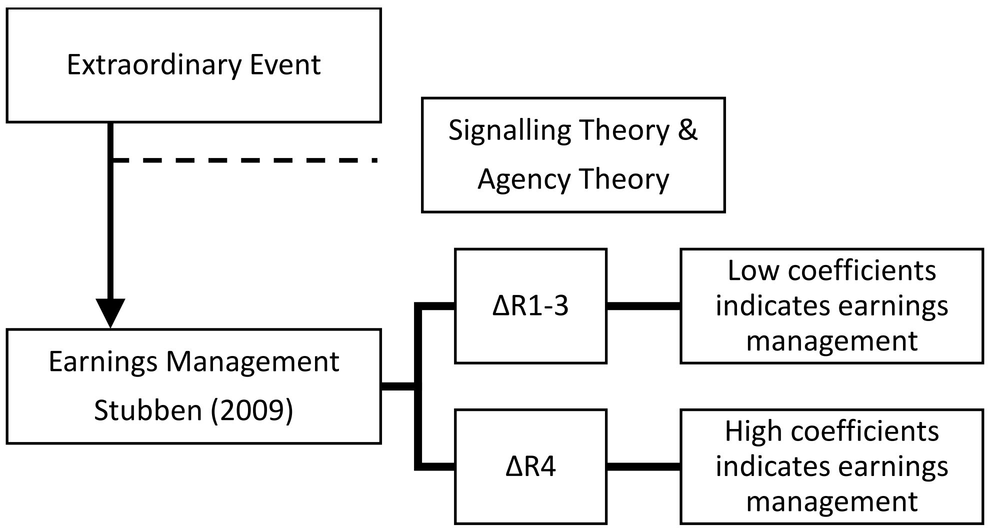

Figure 2: Conceptual Framework

Figure 2 illustrates the relationship between reported quarterly revenues with earnings management practices. Earnings management will be detected using the formula proposed by Stubben (2009), namely by observing the ΔR1-3 and ΔR4 values. Low ΔR1-3 coefficient and high ΔR4 coefficient will indicate earnings management.

RESEARCH METHODOLOGY

Research Design

This is a descriptive quantitative research that aims to analyze the change in quarterly accrual revenues to detect the presence of earnings management practices that might be conducted by the management of companies impacted by the earthquake in Lombok and Palu.

Research Period and Location

The data analyzed in this research is secondary data in the form of financial figures obtained from financial statements downloaded from the Indonesian Stock Exchange website www.idx.co.id, company websites and www.sahamok.com. The financial data used in this research is for the period of one year, which is 2018, the year the earthquake and tsunami in Lombok and Palu occurred.

Research Population and Sample

The population in this is service companies within the category that is considered to support the tourism industry in Indonesia. The sample companies are selected using the purposive random sampling method based on the following criteria:

1. Companies within the category of airport, harbor and allied products, telecommunication, transportation, tourism, as well as *restaurant and hotel* in the Indonesian Stock Exchange list.
2. The companies report all the pertaining data for the observed variables.

The names of companies being observed for this research are listed in Table 1.

Table 1
List of Sample Companies

No	Company Name	Company Code	Type of Company
1	Samudera Indonesia Tbk	SMDR	Sea Transportation and Freight Forwarding
2	PT. Blue Bird Tbk	BIRD	Land Transportation
3	PT. Eka Sari Lorena Transport Tbk	LRNA	Land Transportation
4	PT. Indonesia Transport&Infrastructure Tbk	IATA	Land Transportation and Airport Services
5	Garuda Indonesia (Persero) Tbk	GIAA	Air Transportation
6	PT. Telekomunikasi Indonesia (Persero) Tbk	TLKM	Telecommunication
7	PT. XL Axiata Tbk	EXCL	Telecommunication
8	Jasa Marga Tbk	JSMR	Road and Toll
9	Panorama Sentrawisata Tbk	PANR	Tourism Services
10	PT. Fast Food Indonesia Tbk	FAST	Restaurants
11	Jakarta International Hotels&Development	JIHD	Hotel
12	Hotel Sahid Jaya Tbk	SHID	Hotel

Number of observed companies in 2018	12

Source: www.idx.co.id (selected data, 2018)

Variable Classifications

The variables observed and analyzed here are quarterly revenues and change in reported annual receivables, which are variables used to detect earnings management based on the formula suggested by Stubben (2009).

Operational Definition of Variables

Earnings management will be detected using the formula suggested by Stubben (2009) which will compare the quarterly revenues with the annual receivables reported by the company. The coefficients ΔR1-3 and ΔR4 will be calculated. A company is said to have conducted earnings management if the change in the revenues of the fourth quarter is higher that the the change in the revenues of the first to third quarter (ΔR4 coefficient > ΔR1-3 coefficient).

Data Analysis Technique

The figures obtained from the financial statements are entered into the formula suggested by Stubben (2009). The coefficients generated from the formula for ΔR1-3 and ΔR4 variables are then compared with the value of ΔAR to determine whether or not there is earnings management applied to the disclosure of the income for 2018.

ANALYSIS AND DISCUSSION

General Overview

The sample companies here have subsidiaries or division in Lombok and Palu where the earthquake and tsunami hit at the end of third quarter of 2018. Table 2 shows the figures for revenues and receivables of the observed companies in 2018. PT. Telkom showed the highest reported receivables reaching 12 billion Rupiahs while PT. Lorena showed the lowest, almost 8 billion Rupiahs. PT. Telkom overall showed the highest revenue for the first to third quarter and the last quarter. The lowest revenue for the first to third quarter was reported by PT. Bluebird and the fourth quarter by PT. Indonesia Transport & Infrastructure.

The figures for the fourth quarter of 2018 is the most crucial in this observation because this is the main indicator of earnings management should the company opt to practice it to suppress the impact that the natural disaster had on the company's financial performance. Although the public might not be surprised to see a plunge in the financial performance caused by this extraordinary event, this might also be a focal point for investors and creditors to see how the management deals with such travesty.

After the extraordinary event, PT. Telkom did not report a loss caused by the earthquake and tsunami in Lombok and Palu. The company just reported their decision to insure their assets. However, the cost spent for the insurance was not big enough to affect the revenue and income of the company for that year.

Table 2
Company Revenue and Receivables Observed for 2018
(in Rupiah)

Company Code	R1-3	R4	AR
SMDR	5.357.703.516.112	1.644.221.704.787	1.952.561.998.530
BIRD	47.554.149.866	4.240.991.850.134	299.060.000.000
LRNA	75.584.701.037	29.512.414.875	7.985.757.679
IATA	233.065.994.412	60.690.213.618	36.794.671.533
GIAA	48.267.658.893.139	15.315.869.040.527	6.239.147.770.296
TLKM	100.855.000.000.000	32.695.000.000.000	12.141.000.000.000
EXCL	17.349.449.000.000	6.499.705.000.000	631.565.000.000
JSMR	27.766.399.398.000	9.524.539.835.000	5.550.282.213.000
PANR	1.744.043.082.000	306.860.477.000	286.797.056.000
FAST	4.491.073.103.000	1.596.916.820.000	94.618.958.000
JIHD	1.150.253.563.000	490.917.160.000	78.789.155.000
SHID	124.681.831.444	65.917.062.699	63.156.324.986

Source: quarterly company financial statements (processed data), www.idx.co.id

The companies that report a decrease in revenue and receivables after the event are PT. Indonesia Transport & Infrastructure and PT. Bluebird.

Results of Descriptive Analysis

Figures from the twelve sample companies that have been calculated to show the change in revenue (ΔR) and receivables (ΔAR) from 2017 to 2018 are listed in Table 3. The highest change for revenue in the first to third quarter is reported by PT. Garuda Indonesia while the lowest is PT. Lorena. The highest change for revenue in the fourth quarter is reported by PT. Telkom while the lowest is PT. Garuda Indonesia. As for the annual revenue, the highest increase was reported by PT. Telkom while the lowest is PT. Jasa Marga. However, PT. Telkom did not make a statement in their annual report regarding cause of the high increase in their annual receivable that year. Most of the companies observed did not include additional content regarding the extraordinary event in relation to their financial performance except for their increased CSR related activities in response to the earthquake and tsunami.

Table 3
Change in Revenue and Receivables of Observed Companies (in Rupiah)

Company Code	ΔR1-3	ΔR4	ΔAR
SMDR	620.185.713.292	127.588.146.983	370.228.066.551
BIRD	(560.703.382)	68.206.703.382	111.092.000.000
LRNA	(6.017.397.751)	(102.022.684)	628.545.651
IATA	61.847.547.691	(1.365.218.383)	(9.731.391.291)
GIAA	43.482.491.484.427	(40.582.829.106.289)	2.296.789.762.644
TLKM	1.964.000.000.000	857.000.000.000	2.577.000.000.000
EXCL	245.038.000.000	61.214.000.000	(243.000.000)
JSMR	4.498.286.096.000	(2.583.498.361.000)	(5.997.081.952.000)
PANR	261.346.714.000	(268.185.265.000)	(139.458.549.000)
FAST	525.580.028.000	177.144.234.000	(54.201.382.000)
JIHD	70.736.588.000	34.292.245.000	(6.396.622.000)
SHID	23.218.583.581	(1.983.834.130)	13.311.239.484

Source: quarterly company financial statements (processed data), www.idx.co.id

Results of Regression Analysis

Earnings management detection is done by running a multiple regression analysis on ΔR1-3 and ΔR4 variables as the independent variable and ΔAR variable as the dependent variable formulated by Stubben (2009). The results of regression analysis are presented in Table 4 to 6. In Table 4, the *R square* value for the observed variables is quite low, which is only 8% from the independent variable. From Table 5, it is shown that the level significance of the research model for the observed companies is higher than ɑ 0,05 meaning that the correlation is insignificant.

Table 4
Summary of Regression Statistics

Multiple R	0,296582593
R Square	0,087961234
Adjusted R Square	-0,114714047
Standard Error	2,20537E+12
Observations	12

Source: regression statistics of observed data

Table 5
ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2	4,22168E+24	2,11E+24	0,434001	0,660784
Residual	9	4,37731E+25	4,86E+24		
Total	11	4,79947E+25			

Source: regression statistics of observed data

Table 6
Model Summary

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-173.722.892.324	807.199.922.498	-0,21522	0,834396
ΔR1-3	-0,130607015	0,754688498	-0,17306	0,866433
ΔR4	-0,190086517	0,799859565	-0,23765	0,817474

Source: regression statistics of observed data

From the values listed in Table 6, the regression coefficient for the change in revenue in the fourth quarter is smaller than the change in revenue in the first to third quarter meaning that the companies observed here did not perform any earnings management practices.

CONCLUSION

The natural disaster that struck Lombok and Central Sulawesi at the last quarter of 2018 caused considerable consequences for the service companies in the tourism sector of Indonesia as a whole. The halt of business activities and the nationwide focus on the rehabilitation process afterwards have caused considerable decline in the companies' financial performance. The use of Stubben's formula for detecting earnings management practice by observing the change in quarterly revenues and receivables did not detect any earnings management practices present in the financial statement of the observed companies. This means that the decline in financial performance did not lead to earnings management practices.

The fact that this research only observed 12 companies listed in the Indonesian Stock Exchange classified as service industries in the tourism sector might have caused the inability to reflect a more thorough evidence of financial disclosure. Further study can be conducted to each of the 12 companies by breaking the business down to its subsidiaries to obtain a more comprehensive view on the impact of the particular event.

REFERENCES

Ball, R., dan Brown, P. 1968. *An Empirical Evaluation of Accounting Income Numbers*. Journal of Accounting Research.

Connelly, Brian L., S. Trevis Certo, R. Duane Ireland. 2010. *Signalling Theory: A Review and Assessment*. Journal of Management. Diakses melalui situs https://journals.sagepub.com/doi/abs/10.1177/0149206310388419?journalCode=joma.

Cooper, R Donald dan Schindler S Pamela. 2014. *Business Research Methods*. Twelfth Edition. McGraw-Hill.

DeChow, Patricia M. dan Dichev, I.. 2002. The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. The Accounting Review.

DeChow, Patricia M. dan Schrand, Catherine M. 2004. *Earnings Quality*. The Research Foundation of CFA Institute.

Ewert, Ralf dan Wagenhofer, Alfred. 2009. *Earnings Quality Metrics and What They Measure.* Retrieved from www.kellogg.northwestern.edu: http://www.kellogg.northwestern.edu/accounting/papers/ewert.pdf

Karim, Nina Karina. 2014. Pengaruh Kualitas Pengungkapan Sukarela Tanggung Jawab Sosial Perusahaan Terhadap Nilai Perusahaan Jasa yang Terdaftar pada Bursa Efek Indonesia.

Kormendi, R.C. dan Lipe, R.. 1987. Earnings Innovations, Earnings Persistence, and Stock Returns. Journal of Business.

Perroti, P. d. 2014. Earnings Quality Measures and Excess Returns. *Journal of Business Finance & Accounting*, 41(5-6): 545–571.

Ramakhrisnan, R.T.S dan Thomas, J.K. 1991. *Valuation of Permanent, Transitory and Price-Irrelevant Components of Reported Earnings*. Working Paper. Columbia University Business School.

Riahi-Belkaoui, Ahmed. 2004. Accounting Theory, 5th Edition. South-Western Cengage Learning.

Schipper, Katherine, dan Vincent, Linda. 2003. *Earnings Quality*. Accounting Horizons 17 Supplement: 97-110.

Schroeder, Richard G., Myrtle W. Clark, dan Jack M. Cathey. 2016. Financial Accounting Theory and Analysis: Text and Cases, 12th Edition. Wiley.