



The Effect of Factors in Fraud Diamond Perspective on Fraudulent Financial Reporting

Shofia Nur Inayanti, Sukirman[✉]

Jurusan Akuntansi, Fakultas Ekonomi, Universitas Negeri Semarang, Indonesia

Article History

Received Juny 2016
Approved July 2016
Published August 2016

Keywords:

Fraud; Fraud Diamond;
Fraudulent Financial
Reporting

Abstrak

Perusahaan dalam menerbitkan laporan keuangan dituntut untuk membuat laporan keuangan yang wajar dan menunjukkan kinerja manajemen yang baik. Dengan adanya tuntutan tersebut, dapat mendorong manajemen untuk melakukan tindakan kecurangan dengan memanipulasi laporan keuangan. Penelitian ini bertujuan untuk menganalisis pengaruh financial stability, personal financial need, nature of industry, multiple directorships of board members, change in auditor, rationalization, dan capability terhadap fraudulent financial reporting. Populasi dalam penelitian ini adalah perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia tahun 2011-2014 yang terdiri dari 130 perusahaan. Teknik pengambilan sampel adalah metode purposive sampling yang menghasilkan sampel sebanyak 38 perusahaan. Metode analisis data menggunakan analisis statistik deskriptif dan analisis regresi logistik. Hasil pengujian secara simultan menunjukkan bahwa financial stability, personal financial need, nature of industry, multiple directorships of board members, change in auditor, rationalization, dan capability berpengaruh terhadap fraudulent financial reporting. Pengujian parsial menunjukkan bahwa financial stability, nature of industry, dan rationalization berpengaruh positif terhadap fraudulent financial reporting. Sedangkan personal financial need, multiple directorships of board members, change in auditor, dan capability tidak berpengaruh terhadap fraudulent financial reporting.

Abstract

Companies in publishing their financial statements is always demanded to make a fair financial statement and show a good management performance. The existence of these demands can push management to commit fraud by manipulating financial statement. This study aims to give empirical evidence about the effect of financial stability, personal financial need, nature of industry, multiple directorships of board members, change in auditor, rationalization, and capability toward fraudulent financial reporting. The population in this study was the manufacturing companies listed in Indonesia Stock Exchange for year of 2011-2014 which consisted of 130 companies. The sampling technique used was purposive sampling method which resulted for 38 samples. The data analysis method used descriptive statistics analysis and logistic regression analysis. The result of this study simultaneously showed that financial stability, personal financial need, nature of industry, multiple directorships of board members, change in auditor, rationalization, and capability gave effects on fraudulent financial reporting. Partial test showed that financial stability, nature of industry, and rationalization gave effects on fraudulent financial reporting, while personal financial need, multiple directorships of board members, change in auditor, and capability did not affect on fraudulent financial reporting.

© 2016 Universitas Negeri Semarang

ISSN 2252-6765

[✉] Correspondence Author:

Gedung L2 Lantai 2 FE Unnes
Kampus Sekaran, Gunungpati, Semarang, 50229
Email: sukirman3002@mail.unnes.ac.id

INTRODUCTION

Financial statements are the final process in an accounting cycle that reflects corporate condition within a given period. At the time company publishes its financial statements, then every company is always required to make reasonable financial statements and show good management performance. Given these demands, it can encourage management to commit fraud acts by manipulating or distorting financial statement information so that the corporate condition looks to stay healthy and perform well. The act of manipulating these financial statements is one form of fraud or cheating action. According to Tuanakotta(2012) fraudulent financial reporting is a deliberate or carelessness in doing something or not doing something that should be done, which causes financial statements to be misleading materially.

The result of Report to the Nation on Occupational Fraud and Abuse (RTTN) in 2014 conducts a survey concerning fraud that was completed with a total of 1.483 cases reported by ACFE (2014). The number of fraud cases that occur will affect the misleading financial statements for users of financial statements. Some accounting scandals concerning fraudulent financial reporting which occurring in some developed and developing countries also provide evidence that there is an audit failure. According to Cressey's theory (1953), there are three conditions that are always present in fraud action that is pressure, opportunity, and rationalization that is called as fraud triangle. Wolfe and Hermanson (2004) also state a new view of fraud phenomenon that is fraud diamond. Fraud diamond adds a qualitative element that is believed to have significant influence on fraud that is Capability.

Several previous studies on factors affecting fraudulent financial reporting have previously been conducted, among others, by Skousen et al. (2009), Hasnan et al. (2013), Nor et al. (2010), Sukirman dan Sari (2013), Ratmono et al. (2014), Rachmawati dan Marsono (2014), Sihombing dan Rahardjo (2014), Tiffani dan Marfuah (2015), Ardiyani (2015), and Pardosi (2015).But from the results of these studies there are still findings that are not consistent and there are variables that are rarely used in research, so it is needed to conduct further research. This research is intended to analyze and find empirical evidence about the influence of factors in fraud diamond perspective on fraudulent financial reporting.

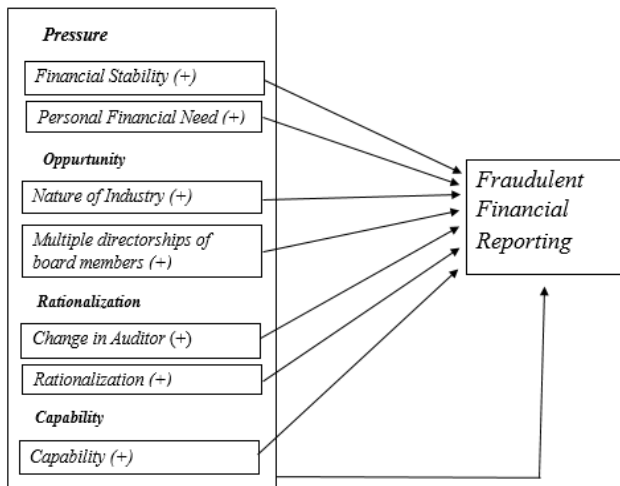


Figure 1.Theoretical Thinking Framework

Financial stability is a condition that describes the condition of corporate financial instability. According to SAS No. 99 (AICPA, 2002), managers face the pressure to commit fraudulent financial statements when financial stability and / or profitability are threatened by the condition of economy, industry or entity which operating. Based on the description, it is formulated the following hypothesis:

H1: Financial stability has a positive effect on fraudulent financial reporting.

Personal financial need is a condition when corporate finance is also influenced by the financial condition of corporate executives (Skousen et al., 2009). With the existence of shareholding by insiders

causing them feel to have the claim right on the income and assets of the company so that will affect the corporate financial condition. Unclear separation between owner and control of the company triggers management using corporate funds for personal gain so as to encourage fraudulent financial statements. Based on the description, it is formulated the following hypothesis:

H2: Personal financial need has a positive effect on fraudulent financial reporting.

Nature of Industry is the ideal state of a company in the industry. Summers dan Sweeney (1998) note that accounts receivable and inventory require subjective assessments in estimating uncollectible accounts and obsolete inventory. Given the subjective assessment in determining the value of the account, management can use the account as a tool for the manipulation of financial statements. Based on the description, it is formulated the following hypothesis:

H3: Nature of Industry has a positive effect on fraudulent financial reporting.

Multiple directorships of board members are a condition in which a director holds another position outside the company. Morck et al. (1988) in Hasnan et al. (2013) states that having other positions outside the company can make the director busy and their ability to monitor management is disrupted so that managerial oversight is reduced. Based on the description, it is formulated the following hypothesis:

H4: Multiple directorships of board members have a positive effect on fraudulent financial reporting.

At the time an auditor audits a new client, then the auditor should study the client's business, if it fails then there is possibility that the client will commit fraud and the auditor cannot find the fraud. Loebbecke (1989) in Skousen et al. (2009) states that a large number of fraud indications are contained within the sample owned by auditor within the first two years of auditor's tenure. Based on the description, it is formulated the following hypothesis:

H5: Change in auditor has a positive effect on fraudulent financial reporting.

Accrual is the difference between net cash inflow from corporate operations and net income of a company in the reported income statement. There is a relationship between accrual and the possibility of earnings manipulation. Based on the description, it is formulated the following hypothesis:

H6: Rationalization has a positive effect on fraudulent financial reporting.

Capability is how much power and capacity of a person is doing fraud in the corporate environment. Wolfe and Hermanson (2004) conclude that change in directors may indicate the occurrence of fraud. Changes in directors are not always good for the company. Change in directors can be a company's attempt to get rid of directors who are considered to know the fraud of the company. Based on the description, it is formulated the following hypothesis:

H7: Capability has a positive effect on fraudulent financial reporting

METHODS

The population in this study was companies listed in Indonesia Stock Exchange (IDX) in 2011-2014. This study limited the population by using purposive sampling technique, namely (1) manufacturing companies listed in Indonesia Stock Exchange consecutively during the period of 2011 - 2014; (2) companies which presented complete annual report in a row during the observation period; (3) companies issued financial statements in rupiah currency (Rp); (4) companies experienced profits during the study period; (5) data related to research variables was available completely. Based on the result of sample selection with certain criteria, the sample in this research were 38 companies.

Fraudulent Financial Reporting was measured using dummy variables that were categorized into two, that was if the corporate financial statements indicated fraud then given score "1", while companies whose financial statements were not indicated fraud given score "0". To know the companies that committed fraud and did not fraud using the Beneish M-Score formula which consisted of eight factors to detect the fraud.

$$M\text{-Score} = -4,84 + 0,92*DSRI + 0,528*GMI + 0,404*AQI + 0,892*SGI + 0,115*DEPI - 0,172*SGAI + 4,679*TATA - 0,327*LVGI$$

If Beneish M-Score was greater than -2.22, it was categorized as a fraud company. Whereas if the score was smaller than -2.22, it was categorized as a non-fraud company. Here was a complete description and formula about M-Score which could be seen in table 1.

Table 1. Financial Ratios to Measure Beneish- M Score

No.	Financial Ratios	Formulas
1	Days Sales in Receivable Index (DSRI)	$DSRI = \frac{(Net\ Receivables_t / Sales_t)}{(Net\ Receivables_{t-1} / Sales_{t-1})}$
2	Gross Margin Index (GMI)	$GMI = \frac{[(Sales_{t-1} - COGS_{t-1}) / Sales_{t-1}]}{[(Sales_t - COGS_t) / Sales_t]}$
3	Asset Quality Index (AQI)	$AQI = \frac{1 - [(CA_t + PPE_t) / TA_t]}{1 - [(CA_{t-1} + PBB_{t-1}) / TA_{t-1}]}$
4	Sales Growth Index (SGI)	$SGI = \frac{Sales_t}{Sales_{t-1}}$
5	Depreciation Index (DEPI)	$DEPI = \frac{[(Depreciation_{t-1} / (PPE_{t-1} + Depreciation_{t-1}))]}{[(Depreciation_t / (PPE_t + Depreciation_t))]}$
6	Sales General and Administrative Expenses Index (SGAI)	$SGAI = \frac{(SG \ \& \ A \ Expense_t / Sales_t)}{(SG \ \& \ A \ Expense_{t-1} / Sales_{t-1})}$
7	Leverage Index (LVGI)	$LVGI = \frac{[(Curren\ Liabilities_t + Long\ Term\ Debt_t) / Total\ Assets_t]}{[(Curren\ Liabilities_{t-1} + Long\ Term\ Debt_{t-1}) / Total\ Assets_{t-1}]}$
8	Total Accruals to Total Assets (TATA)	$TATA = \frac{Income\ Before\ Extradiinary_t - Cash\ Flows\ from\ Operations_t}{Total\ Assets_t}$

Source: Beneish and Nichols, 2005

The independent variables in this research were financial stability, personal financial need, nature of industry, multiple directorship of board members, change in auditors, rationalizations, and capability. Each variable had different proxies and indicators to measure.

Table 2. Variable Measurement and Variable Operational

Variable measured	Indicators	Scale
Fraudulent Reporting (Y)	Code 1 (one) for companies that committed fraudulent financial reporting , Code 0 (zero) for the contrary	Nominal Scale
Financial Stability (X1)	$\frac{(Total\ Asset_t - Total\ Asset_{t-1})}{Total\ Asset_t}$	Ratio Scale
Personal Financial Need (X2)	$\frac{Total\ shares\ owned\ by\ insiders}{Total\ common\ shares\ outstanding}$	Ratio Scale
Nature of industry (X3)	$\frac{Receivable_t}{Sales_t} - \frac{Receivable_{t-1}}{Sales_{t-1}}$	Ratio Scale
Multiple directorships of board members (X4)	Number of boards of directors who had at least 1 (one) position in another company	Nominal Scale
Change in auditor (X5)	Code 1, if there was a change of public accounting firm during the period 2011-2014, otherwise if it was not coded 0.	Nominal Scale

Rationalization (X6)	$\frac{NI - CFO}{TA}$	Ratio Scale
Capability (X7)	Code 1, if there was a change of the Board of Directors of the company during the period 2011-2014, Code 0 (zero) for the contrary	Nominal Scale

This research was obtained by documentation method which was done by accessing www.idx.co.id. The literature used in this research were research journals, previous studies, internet search related to research theme, and book from various sources. The methods of analysis used in this research were descriptive statistical analysis and logistic regression. Descriptive statistics was used to determine the maximum, minimum, mean, and standard deviations values of each variable. Logistic regression analysis was used to examine the relationship between independent variables and dependent variables.

RESULTS AND DISCUSSIONS

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ACHANGE	152	-0.75	0.56	0.1559	0.14756
OSHIP	152	0.00	0.26	0.0259	0.05582
RECEIVABLE	152	-0.21	0.16	0.0024	0.03753
TATA	152	-0.16	0.42	0.0146	0.09359
Valid N (listwise)	152				

Source: Output of SPSS, 2016

Financial stability variable (ACHANGE) had a mean value equal to 0.1559 with a standard deviation equal to 0.14756, a minimum value equal to -0.75 and a maximum value equal to 0.56. Personal financial need variable (OSHIP) had a mean value equal to 0.0259 with a standard deviation equal 0.05582, a minimum value equal to 0.00, a maximum value equal to 0.26. The nature of industry variable (RECEIVABLE) had a mean value equal to 0.0024 with a standard deviation equal to 0.03753, a minimum value equal to -0.21 and a maximum value equal to 0.16. Variable of rationalizations (TATA) had a mean value equal to 0.0146 with a standard deviation equal to 0.09359, a minimum value equal to -0.16 and a maximum value equal to 0.42. Variables of fraudulent financial reporting, multiple directorship of board members, change in auditors, and capability were not included in descriptive statistical calculation because both variables had nominal scales. Based on the result of feasibility testing, all models of comparison between the initial -2LL value which only included the constants of 204.757 and the final -2LL value decreased to 134.453. Thus, it could be concluded that the addition of variables into the model could improve the model. Based on the result of goodness of fit test, the value of Hosmer and Lemeshow's Goodness of Fit statistic was 14.230 with probability of significance equal to 0.074 which value was far above 0.05, so it could be concluded that the model was acceptable or feasible in explaining research variables.

For the coefficient of determination showed Nagelkerke's R Square value of 0.500 which meant that the variability of dependent variables which could be explained by the variability of independent variables equal to 50.0% and the rest was explained by other variables outside the model. Correlation Matrix table showed that there was no correlation coefficient value between independent variable which was above 0.90. Therefore, it could be concluded that there were no symptoms of multicollinearity among independent variables. Prediction of model accuracy could also use 2X2 classification table which

showed that the predictive power of the regression model to predict the possibility of companies committing fraud was equal to 65.6%. According to the prediction of companies indicated committing fraudulent financial statements were 61 companies and companies that were not indicated the existence of fraudulent financial statements were 91 companies.

Based on the result of a Omnibus Tests of Model Coefficients test showed that the value of Chi-square model was 70.303 with df equal to 7 and significance value equal to 0.000. Since the probability was less than 0.05, the regression model could be used to predict fraud or it was said that variables of financial stability, personal financial need, nature of industry, multiple directorships of board members, change in auditor, rationalization, and capability jointly affecting fraudulent financial reporting. Hypothesis testing of logistic regression could be done by only checking the table of logistic coefficient test result on the significant column compared with significance value used ($\alpha = 5\%$). If the level of significance < 0.05 then H1 could not be rejected or accepted. If the level of significance > 0.05 then H1 was rejected.

Table 4. Parameter Estimation and its Interpretation

		B	S.E.	Wald	Df	Sig.	Exp(B)	Hypothesis Result
Step 1 ^a	ACHANGE	6.038	1.807	11.172	1	0.001	419.208	Accepted
	OSHIP	0.557	4.081	0.019	1	0.892	1.745	Rejected
	RECEIVABLE	16.719	7.045	5.631	1	0.018	18234152.334	Accepted
	CROSSDIR	0.414	0.456	0.823	1	0.364	1.513	Rejected
	CPA	-0.789	0.607	1.691	1	0.194	0.454	Rejected
	TATA	18.148	3.705	23.993	1	0.000	76127622.008	Accepted
	DCHANGE	0.437	0.715	0.375	1	0.540	1.549	Rejected
	Constant	-1.871	0.485	14.855	1	0.000	0.154	

Source: Secondary Data processed, 2016

The result of the research on financial stability variable (ACHANGE) showed that the significance value was 0.001, it could be concluded that financial stability had a positive effect on fraudulent financial reporting. The result of this study was consistent with the results of the study of Skousen et al. (2009), Sihombing and Rahardjo (2014), and Tiffani and Marfuah (2015). According to SAS No. 99, managers faced pressure to commit fraudulent financial statements when financial stability and / or profitability were threatened by the condition of economy, industry, or entity which operating. For this reason, management made use of financial statements as a tool to cover up the condition of poor financial stability by committing fraud.

The result of the research on personal financial need variable (OSHIP) showed that the significance value was 0.892, it could be concluded that personal financial need did not have effect on fraudulent financial reporting. The result of this study was in accordance with studies conducted by Rachmawati and Marsono (2014) and Tiffani and Marfuah (2015). However, this study was not in accordance with studies conducted by Hasnan et al. (2013) and Skousen et al. (2009). Tiffani and Marfuah (2015) revealed that low managerial ownership indicated that in the sample companies has been a clear separation between shareholders as owners who control the company and managers as the superintendents of the company. The existence of a clear separation caused the manager did not have sufficient ability to commit fraudulent financial statements.

The result of the research on nature of industry variable (RECEIVABLE) showed that the significance value was 0.018, it could be concluded that nature of industry had a positive effect on

fraudulent financial reporting. The result of this study was consistent with research conducted by Sihombing and Rahardjo (2014). Summers and Sweeney (1998) noted that accounts receivable required subjective assessments in estimating uncollectible accounts. Given the subjective assessment in determining the value of the account, management could use the account as a tool for the manipulation of financial statements.

The result of the research on multiple directorships of board members variable (CROSSDIR) showed that the significance value was 0.364, it could be concluded that multiple directorships of board members did not have effect on fraudulent financial reporting. The result of this study was not in accordance with research conducted by Hasnan et al., (2013). Richardson, (1987) in Haniffa dan Hudaib (2006) stated that the position of director outside the company could benefit the company in several ways. They served as a source of information related to new policies, trade secrets, and practices between companies that could give better performance. For that reason, the existence of multiple directorships of board members did not affect on fraudulent financial reporting due to by having other positions outside the company then they would minimize all the way against the occurrence of it.

The result of the research on change in auditor variable (CPA) showed that the significance value was 0.194, it could be concluded that change in auditor did not affect on fraudulent financial reporting. The result of this study was consistent with research of Summers and Sweeney (1998), Skousen (2009), Sihombing and Rahardjo (2014). Sihombing and Rahardjo (2014) stated that change in auditor was done as a result company was not satisfied with the performance of previous independent auditors from the audited results, not because they wanted to cover fraudulent financial reporting done by the company.

The result of the research on rationalization variable (TATA) showed that the significance value was 0.000, it could be concluded that rationalization had a significant positive effect on fraudulent financial reporting. The result of this study was consistent with research conducted by Sihombing and Rahardjo (2014). Rahayu (2009) in Ardiyani (2015) stated that accrual is an accounting product that could be considered to have a "relatively fixed" amount from year to year. Accrual changes that occurred could be regarded as abnormal. This change was the result of excessive management policies use and when at the same time management also had motive incentive to manipulate earnings.

The result of the research on capability variable (DCHANGE) showed that the significance value was 0.540, it could concluded that capability did not have effect on fraudulent financial reporting. The result of this study was consistent with research of Sihombing and Rahardjo (2014). Wolfe dan Hermanson (2004) argued that the reason of the company changed directors was due to the highest stakeholders in the company wanted to improve the corporate performance by recruiting directors who were considered more competent than previous directors. The result of the research would be different if the change of directors was done to cover the fraud committed by the previous directors.

CONCLUSIONS

Based on the results of the testing by using logistic regression in the study shows that there are simultaneous influence of financial stability, personal financial need, nature of industry, multiple directorships of board members, change in auditor, rationalization, and capability variables toward fraudulent financial reporting. Partial testing shows that financial stability, nature of industry, and rationalization have a positive effect on fraudulent financial reporting. Meanwhile, personal financial need, multiple directorships of board members, change in auditors, and capability do not have effect on fraudulent financial reporting.

It is expected that auditors be professional and independent in carrying out their duties so as to able to provide good audit quality to their clients. Companies can also apply good internal controls to prevent fraud. In addition, investors and potential investors are expected to be more observant in choosing a company to invest by first knowing the condition of the company deeply.

REFERENCES

- ACFE. 2014. Report to The Nations on Occupational Fraud and Abuse.
- AICPA. 2002. Consideration of Fraud in a Financial Statement Audit. Statement on Auditing Standard No. 99. New York: AICPA.
- Ardiyani, Susmita. 2015. Analisis Determinan Financial Statement Melalui Pendekatan Fraud Triangle. *Accounting Analysis Journal* Vol. 4 (1).
- Beneish, M. D., dan D.C. Nichols. 2005. Earning Quality and Future Returns: The Relation between Accruals and the Probability of Earnings Manipulation.
- Haniffa, Roszaini, dan Mohammad Hudaib. 2006. Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance & Accounting* Vol. 33 (7 & 8):pp. 1034–1062.
- Hasnan, Suhaily, Rashidah Abdul Rahmana, dan Sakthi Mahenthirana. 2013. Management Motive, Weak Governance, Earnings Management, and Fraudulent Financial Reporting Malaysian Evidence. *Journal of International Accounting Research* Vol. 12 (1):1-27.
- Nor, Juahir Mohd, Norsiah Ahmad Norman, dan Mohd Saleh. 2010. Fraudulent financial reporting and company characteristics: tax audit evidence. *Journal of Financial Reporting and Accounting* Vol. 8 Iss 2 (2):pp. 128 - 142.
- Pardosi, Rica Widia. 2015. Analisis Fraud Diamond dalam Mendeteksi Kecurangan Laporan Keuangan pada Perusahaan Manufaktur di Indonesia dengan Menggunakan Fraud Score Model (Tahun 2010-2013). Skripsi.Lampung:Universitas Lampung.
- Rachmawati, Kurnia Kusuma, dan Marsono. 2014. Pengaruh Faktor-Faktor dalam Perspektif Fraud Triangle terhadap Fraudulent Financial Reporting (Studi Kasus pada Perusahaan Berdasarkan Sanksi dari Bapepam Periode 2008-2012). *Diponegoro Journal of Accounting* Vol. 3 (2).
- Ratmono, Dwi, Yuvita Avrie D, dan Agus Purwanto. 2014. Dapatkah Teori Fraud Triangle Menjelaskan Kecurangan dalam Laporan Keuangan? Simposium Nasional Akuntansi ke 17 Lombok.
- Sihombing, Kennedy Samuel, dan Shiddiq Nur Rahardjo. 2014. Analisis Fraud Diamond dalam Mendeteksi Financial Statement Fraud : Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2010-2012. *Diponegoro Journal of Accounting* Vol. 3 (2):1-12.
- Skousen, Christopher J., Kevin R. Smith, dan Charlotte J. Wright. 2009. Detecting and Predicting Financial Statement Fraud: The Effectiveness of The Fraud Triangle and SAS No. 99. *Advances in Financial Economics* Vol. 13:53–81.
- Sukirman, dan Maylia Pramono Sari. 2013. Model Deteksi Kecurangan Berbasis Fraud Triangle (Studi Kasus Pada Perusahaan Publik Di Indonesia). *Jurnal Akuntansi dan Auditing* Vol. 9 (2).
- Summers, Scott L., dan John T. Sweeney. 1998. Fraudulently Misstated Financial Statements and Insider Trading: An Empirical Analysis. *The Accounting Review* Vol. 73 (1):131-146.
- Tiffani, Laila, dan Marfuah. 2015. Deteksi Financial Statement Fraud dengan Analisis Fraud Triangle pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. Simposium Nasional Akuntansi ke 18 Medan.
- Tuanakotta, Theodorus M. 2012. *Akuntansi Forensik dan Audit Investigatif*. 2 ed. Jakarta: Salemba Empat.
- Wolfe, David T., dan Dana R. Hermanson. 2004. The fraud diamond: Considering the four elements of fraud. *The CPA Journal* 74:38-42.
- www.idx.co.id