ATLANTIS PRESS

Advances in Economics, Business and Management Research, volume 102

5th International Conference of Accounting and Finance (ICAF 2019)

Analysis of Financial Fraud Using The Fraud Diamond Model with Corporate Governance as The Moderating Variable

Wahyu Manuhara Putra
Department of Accounting
Universitas Muhammadiyah Yogyakarta
Yogyakarta, Indonesia

***Abstract* - This research aims to analyze the factors that influence financial fraud. The basic theory used was Wolfe and Hermanson's (2004)Fraud Diamond Model stating that the factors that influence financial fraud are Pressure, Opportunity, Rationalization, and Capability. The model was added with corporate governance as the main trigger for financial fraud as suggested by Gbegi, D.O and Adebisi, J. F. The research samples were manufacturing companies listed on the Indonesia Stock Exchange for the period of 2012-2014. The data used were secondary data from company annual reports. Hypothesis testing was performed by the partial least squares (PLS) method. The research results showed that external pressure and capability have effectson financial statement fraud.Financial stability, nature of industry, and rationalization have no effects on financial statement fraud. Subsequent test results verified that corporate governance has no effect on the fraud diamond model. It means that the relationship between the financial stability, nature of industry, external pressure, and capability variables and financial statement fraud is not moderated by corporate governance.**

Keywords: fraud, fraud triangle, fraud diamond, financial statement fraud, corporate governance, f-Score model.

I. INTRODUCTION

Financial fraud or corruption is always associated with weak systems and controls in a company. Weaknesses in controls include leadership structure, corporate governance, financial performance, company values and are supported by internal motivations of fraud perpetrators. There are several models for explaining the factors that influence financial fraud. The Fraud Triangle Model as Donald's research results (Kassem & Higson, 2012)states that the Fraud triangle consists of three components, i.e. opportunity, pressure, and rationalization. Another model developed by Albrecht (Pardosi, 2015) introduces the "Fraud Scale Model" as an alternative for the Fraud Triangle model.The fraud scale includes personal integrity instead of rationalization and it is particularly applicable to financial reporting fraud where sources of pressure (e.g. analysts' forecasts, managements' earnings guidance, a history of sales and earnings growth) are more observable.

Additionally, (Wolfe & Hermanson, 2004)extend the Fraud Triangle model by adding the fourth element, "capability". They believe many frauds would not have occurred without the right person with the right capabilities implementing the details of the fraud. The model alone is an inadequate tool for investigating, deterring, preventing, and detecting fraud. This is because some important factors like organizational/national value system and corporate governance are ignored. Gbegi and Adebisi (2013) suggest that financial fraud will be more likely to happen in weak corporate governance mechanisms. Various studies have proven that good corporate management can be done by implementing corporate governance mechanisms. Thus, fraud will occur in companies with weak corporate governance mechanisms (Gbegi & Adebisi, 2013).

Indonesia is one of the countries with the highest corruption rank in the world. It can be seen from the liquidation of several banks, the filing of SOEs and private managements to the court, banking crime cases, tax manipulation, and corruption in the general election commission and the DPRD (Wilopo, 2006). In the United States, (Spathis, 2002)state that financial fraud leads to huge losses. As a result, shareholders increase the cost of monitoring management. The results of the Association of Certified Fraud Examiners (Rini & Achmad, 2012)showed that frauds are committed at all managerial levels. Moreover, a finding showed that 83% of frauds are actually committed by company owners. A similar result was found by (dela Rama, 2012)that financial fraud is mostly committed by family-owned conglomerates in Asia. The increasing cases of financial fraud scandals in the world cause various parties to assume that management has conducted financial statement fraud(Skousen, Smith, & Wright, 2008).

This research aims to confirm that fraud is influenced by internal personal factors and is triggered by corporate value system or national value system where the company is located. A poor value system, such as honesty, integrity, and character, will lead to fraud. This research further shows corporate governance as the lock to all factors that cause fraud in a country. An important theme of corporate governance is the nature and extent of accountability of people in the organization.

II. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

A. The Concept of Financial Statement Fraud

Financial statement fraud is deliberate or negligent misstatements in reporting financial statementsin which the financial statements not to be presented in conformity with generally accepted accounting principles.According to Wells, 2011 (in Sihombing, 2014) financial statement fraud may involve these schemes:

a. Falsification, alteration, or manipulation of material financial records, supporting documents, or business transactions.
b. Material intentional omissions or misrepresentations of events, transactions, accounts, or other significant information from which financial statements are prepared.
c. Deliberate misapplication of accounting principles, policies, and procedures used to measure, recognize, report, and disclose economic events and business transactions.
d. Intentional omissions of disclosures or presentation of inadequate disclosures regarding accounting principles and policies in addition to related financial amounts (Rezaee, 2002).

One's motivation to commit fraud varies. One of the basic concepts of Fraud prevention and detection is the Fraud triangle. This concept is also called Cressey's Theory due to research conducted by Donald R. Cressey in 1953. Cressey's research generallyexplains the reasons why people commit fraud. The fraud diamond is a new view of the Fraud phenomenon proposed by Wolfe and Hermanson (2004). The fraud diamond is a refined version of Cressey's (1953) fraud triangle, i.e.: Opportunity, Rationalization, Pressure, and Capability.

a. Pressure
According to Salman (2005), pressure is an incentive that encourages people to commit fraud because of lifestyle demands, financial pressures, gambling habits, a strong challenge to beat the system, and job dissatisfaction. Pressure is a factor from individual conditions that cause someone to commit fraud. Personal pressure can be influenced by the work environment. One environmental factor that can cause pressure on an employee is organizational justice in the company. Justice is related to how people get rewards in the form of salary or other compensation for their work (distributive justice) and procedures related to those rewards (procedural justice).
b. Opportunity
Opportunity is the circumstances that allow someone to commit fraud. These circumstances can actually be controlled by the company. Factors that can influence the occurrence of these circumstances within government entities include enforcement of regulations, the effectiveness of internal control system, and information asymmetry.
c. Rationalization
According to Skousen (2009), rationalization is an important component in many frauds. Rationalization causes fraud perpetrators to seek justification for their actions. Rationalization is the most difficult part of the fraud triangle to measure. Organizational culture and organizational commitment are factors allegedly used as justification for employees to commit fraud. Nearly all Fraud is motivated by Rationalization. Rationalization makes someone who initially does not want to commit Fraud eventually does it. Rationalization is a personal reason (because there are other factors) to justify an action albeit the action is actually wrong.
d. Capability as the fourth element of Fraud
Wolfe and Hermanson (2004) argue that many frauds, especially some of the multibillion-dollar ones, would not have occurred without the right person with the right capabilities in the company.Opportunity opens the doorway to Fraud, and Pressure and Rationalization can draw the person toward it. However, according to Wolfe and Hermanson (2004), the person must have the capability to recognize the open doorway as an opportunity and to take advantage of it by walking through, not just once, but time and time again. They argue that when designing detection systems, it is important to consider who within the organization has the capability to commit fraud or to cause a potential inquiry by internal auditors. This theory explains that a key to mitigating fraud is to focus particular attention on situations offering, in addition to Pressure and Rationalization as well as a combination of Opportunity and Capability.

B. Corporate Governance

Corporate governance describes the relationship among stakeholders used to determine and control the strategic direction and performance of a company.At its core, corporate governance is concerned with identifying ways to ensure that strategic decisions are made effectively. In some developed countries, such as the United States and the United Kingdom, a primary objective ofcorporate governance is to ensure that the interests of top-level managers are aligned with the interests of the shareholders. Corporate governance involves oversight in areas where owners, managers, and members of boards of directors may have conflicts of interest. These areas include:

a. Institutional Ownership
Institutional ownership is the number of shares owned by institutional investors. Institutional ownership as one of corporate governance mechanisms receives high profits because shareholders are very active in monitoring the company, causing it to easily and effectively control the company's actions. Thus, with high degrees of institutional ownership, the probability is greater that managers' strategic decisions will be intended to maximize shareholder value.
b. The Board of Commissioners
The Board of Commissioners is a corporate body that has collective duties and responsibilities to supervise and provide advice to the board of directors and ensure that the company implements GCG. The board of commissioners shall not participate in making operational decisions. The position of each member of

the board of commissioners, including the president commissioner, is equal. The board of commissioners is needed to monitor and control the management's actions because of the management's opportunistic behavior. The higher the number of members of the board of commissioners is, the easier it will be to control the CEO and the more effective the monitoring will be. Related with corporate governance disclosure, with pressure on management, corporate governance disclosure will be more extensive.

c. Managerial Ownership

Managerial ownership is the share ownership by company management as measured by the percentage of shares owned by management. It can be explained from two points of view, i.e. the agency approach and the asymmetric information approach. The agency approach considers the managerial ownership structure as an instrument or tool to reduce agency conflict between several claim holders against the company. The asymmetric information approach views the managerial ownership structure as a way to reduce asymmetric information between insider and outsider through information disclosure in capital markets.

d. The Audit Committee

An audit committee is a committee appointed by the company as the liaison among the board of directors, external auditors, internal auditors, and independent members, which has the tasks of providing audit oversight and ensuring management takes appropriate corrective actions against laws and regulations. Communication between the commissioners, the directors, and the internal and external auditors is an important aspect in assessing the effectiveness of the audit committee. This communication will lead to an effective audit committee. The existence of an audit committee is no longer relevant in research because the audit committee has been made mandatory. The more qualified the audit committee is, the more they will be able to understand the strategic meaning of information disclosure and stakeholder needs extensively.

e. Audit Quality

In the business environment, The Big Four is a guarantee for the quality of accounting and taxation services. It is called The Big Four because of market dominance throughout the world. The biggest public accounting firm is not called The Big One because market dominance always changes from year to year. Even so, The Big Four still controls around 75% of the accounting and taxation services market (Ali, 2008). The fee charged is almost equivalent among the Big Four. Therefore, client trust is an important key to business continuity. Assets of The Big Four are professional staff and trust.

C. Hypothesis Formulation

The Effect of Financial Stability on Financial Statement Fraud

When a company is in a stable condition, the company's value will increase in the investors, creditors, and public perspectives. Loebbecke et al. and Bell et al. in Sihombing (2015) indicate that, in instances where a company is experiencing growth that is below the industry average, management may resort to financial statement manipulation to improve the company's outlook (Skousen et al., 2009). The company tries to improve the company's outlook, one of which is by manipulating information on assets owned. Financial statements manipulation by management is related to the company's asset growth (Skousen et al., 2009). Sihombing's (2015) research results showed that the financial stability variable proxied by a change in total assets ratio has an effect on financial statement fraud. Skousen et al.'s (2009) research verified that whena change in total assets ratio of a company increases, the probability of fraud in the company's financial statements becomes higher.

Corporate governance among countries has different levels or qualities. The quality of corporate governance in America and Europe differs from the quality of corporate governance in Indonesia. Public companies in America and Europe have good quality corporate governance, while the quality of corporate governance in Indonesia varies. Not all public companies in Indonesia have a good quality of corporate governance. A company with low financial stability and weak corporate governance can indicate that the level of corporate financial fraud may increase. Based on the above description, the following research hypotheses are proposed:

H1a: Financial stability has an effect on financial statement Fraud

H1b: Financial stability has an effect on financial statement Fraud with corporate governance as the moderating variable

The Effect of External Pressure on Financial Statement Fraud

Companies often experience pressure from external parties. Company management may feel pressure as a result ofthe need to obtain additional debt or external financing sources to stay competitive, including research funding and development or capital expenditure (Skousen et al., 2009).Needs for external financing related to cash generated from debt in this research is proxied by a leverage ratio. Sihombing's (2015) research results attested that the external pressure variable proxied by a leverage ratio has an effect on financial statement fraud.

Corporate governance will also influence a company to commit financial statement fraud. High-quality corporate governance will reduce the tendency of fraud while low-quality corporate governance will increase the motivation to commit fraud. Not all public companies in Indonesia have a good quality of corporate governance. A company with a high level of external pressure and weak corporate governance can indicate that the level of corporate financial fraud may increase. Based on the above description, the following research hypotheses are proposed:

H2a: External Pressure has an effect on financial statement Fraud

H2b: External Pressure has an effect on financial statement Fraud with corporate governance as the moderating variable.

The Effect of Nature of Industry on Financial Statement Fraud

Summers and Sweeney (1998) state that accounts receivable and inventory require subjective judgments in estimating uncollectible accounts and obsolete inventory. Management can use such accounts as a tool when engaging in financial statement manipulation. This argument is supported by Loebbecke et al. (1989), who found that a number of frauds in their sample involve accounts receivable and inventory. Sihombing's (2015) research results evidenced that the nature of industry variable proxied by a change in receivables ratio has an effect on financial statement fraud. Summers and Sweeney (1998) found that the conditions of inventory and accounts receivable differ between companies that have committed fraud and companies that have not.

A company with a high level of nature of industry and weak corporate governance can indicate that the level of corporate financial fraud may increase. Based on the above description, the following research hypotheses are proposed:

H3a: Nature of industry has an effect on financial statement Fraud

H3b: Nature of industry has an effect on financial statement Fraud with corporate governance as the moderating variable.

The Effect of Rationalization on Financial Statement Fraud

A research conducted by Stice (1991) and St. Pierre and Anderson (1984) in Sihombing (2015) indicated that the incidence of audit failures and litigation increase immediately after a change in auditor. Sihombing's (2015) research results proved that a change in auditor has no effect on financial statement fraud. Loebbecke et al. (1989) found that a large number of frauds in their sample were perpetrated in the first two years of an auditor's tenure. Albrecht (2002) noted that a change in auditor is associated with financial statement fraud. The replacement of the public accounting firm can be one proxy for Rationalization (Skousen et al. 2009). A company with a change in auditor and different corporate governance can indicate a change in the level of corporate financial fraud. Based on the above description, the following research hypotheses are proposed:

H4a: A change in Auditor has an effect on financial statement Fraud

H4b: A change in Auditor has an effect on financial statement Fraud with corporate governance as the moderating variable.

The Effect of Capability on Financial Statement Fraud

Capability means one's power and capacity of a person to commit fraud in a corporate environment. This research will use a Change in Directors as a Proxy for Rationalization.Changes in directors are generally full ofpolitical content and the interests of certain parties which trigger the emergence of conflict of interest. Sihombing's (2015) research proved that Capability proxied by a change in directors has no effect on financial statement fraud. Wolfe and Hermanson (2004) concluded that changes in directors may indicate fraud. Changes in directors may be the company's attempt to dismiss directors considered to know fraud committed by the company.

A company with a change in directors with different corporate governancecan indicate a various level of corporate financial fraud. Based on the above description, the following research hypotheses are proposed:

H5a: Capability has an effect on financial statement Fraud

H5b: Capability has an effect on financial statement Fraud with corporate governance as the moderating variable.

III. RESEARCH METHOD

A. Samples and Data

The sampling method used in this study was a purposive sampling method with two criterias. The criterias were companies that get sanctions from the OJK (Financial Services Authority, *Otoritas Jasa Keuangan*) which is an indication of financial statement irregularities or fraud and companies have data that can be processed.

B. Classification Shifting's Variable Measurement

1. The Dependent Variable

Financial statement fraud was analyzed using the fraud score model as determined by Dechow et al., (2007) known as the F-Score model. The F-Score model is the sum of the accrual quality and financial performance variables.

F-Score = Accrual Quality + Financial Performance

Accrual Quality component:

RSST $= \frac{\Delta WC + \Delta NCO + \Delta NFI}{\text{Average Total Assets}}$

WC = (Current Assets – Current Liabilities)

NCO = (Total Assets – Current Assets – Investments and Advances) – (Total Liabilities– Current Liabilities – Long Term Debt)

FIN = Total Investment – Total Liabilities

ATS = (Beginning Total Assets + End Total Assets) / 2

Financial Performance component:
Financial performance=change in receivables + change in inventory + change in cash sales + change in earnings.

Change in receivables=Δ Receivables / Average Total Assets

Change in Inventory =Δ Inventory / Average Total Assets

Change in cash sales=[(Δ Sales / sales (t) – (Δ Receivables / receivables (t))]

Change in earnings =[(Earnings (t) / Average Total Assets (t)) - (Earnings (t-1) / Average total Assets (t-1))]

2. The Independent Variables

Financial Stability proxied by ACHANGE:

$$\text{ACHANGE} = \frac{(\text{Total Assets}_t - \text{Total Assets}_{t-1})}{\text{Total Assets}_{t-1}}$$

External Pressure, proxied by a leverage ratio (LEV) because to overcome pressure, companies need additional debt or external financing sources to stay competitive, including research funding and development or capital expenditure (Skousen et al., 2009).

$$\text{LEV} = \frac{\text{Total debt}}{\text{Total Assets}}$$

Nature of Industry is the ideal state of a company in the industry. Summers and Sweeney, 1998 (in Skousen et al., 2009) note that accounts receivable and inventory require subjective judgments in estimating uncollectible accounts. Therefore, this research used a Total Inventory Ratio:

$$\text{INVENTORY} = \frac{\text{Inventory}_t}{\text{Sales}_t} \quad \frac{\text{Inventory}_{t-1}}{\text{Sales}_{t-1}}$$

Rationalization is full of the company's subjective judgments. This is a justification for the action taken. A change in auditors in a company can be considered as an attempt to remove any traces of fraud found by previous auditors. Therefore, a changein external auditors was measured using a dummy variable.If there is a change in the Public Accounting Firm, the code is 1. If there is no change in the public accounting firm,the code is 0.

One's capability in the company will influence the probability of someone to commit fraud. Wolfe and Hermanson (2004) suggest that changes in directors will cause a stress period resulting ina wider opportunityto commit fraud. Therefore, a change in company directors was measured using a dummy variable. If there is a change in company directors, the code is 1. If there was no change in company directors,the code is 0.

3. The Moderating Variables

The audit committee (AC), measured using a dummy variable. If the sample companies have an audit committee, thescore is 1, otherwise,the score is 0.

The size of the audit committee (ACSIZE), measured by the number of audit committee members in each company. Audit Quality (AQ), measured using a dummy variable. If the company is audited by the Big 4 Public Accounting Firms, the score is 1, otherwise, the score is 0.

Institutional Ownership (INSTOWN), measured by the formula:

$$\text{INSTOWN} = \frac{\text{Number of institutional shares}}{\text{Number of shares outstanding}}$$

Managerial Ownership (MGROWN), measured by the formula:

$$\text{MGROWN} = \frac{\text{Number of shares of directors and commissioners}}{\text{Number of shares outstanding}}$$

Board of Commissioners' size (BOARDSIZE), measured by the number of the company's board of commissioners. Proportion of Independent Board of Commissioners (BOARDINP), measured by:

$$\text{BOARDINP} = \frac{\text{Number of independent board members}}{\text{Total members of the board of commissioners}}$$

IV. HYPOTHESES TEST AND FINDINGS

A. Hypotheses test

Hypothesis testing in this study used the Partial Least Square (PLS) method. Data quality testing in Smart PLS has several tests, such as validity and reliability tests. The method in validity testing is to use factor analysis with the output in the form of AVE (Average Variance Extracted). In reliability testing, the output can be seen in the form of Cronbach's Alpha or Composite Reliability or can also be seen from the correlation value between constructs. Hypothesis testing can be seen from the t-statistic test and also the correlation test. This research only used hypothesis testing, because the sample was secondary data, causing it to not require validity and reliability tests.

Hypothesis testing in SmartPLS is presented in Table 4.2 as follows.

Figure 1.1 Path Coefficient (t-Values)

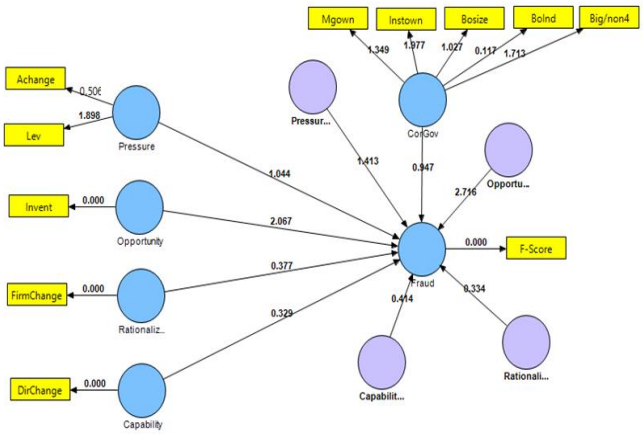

Table 1.1 Hypotheses testing result

Interaction	T-Statistics	T-Table	Hypothesis
Capability -> Fraud	0.3221	1.96	Do not Support
Capability * CorGov -> Fraud	0.4051	1.96	Do not Support
CorGov -> Fraud	1.0183	1.96	Do not Support
Opportunity -> Fraud	1.8045	1.96	Do not Support
Opportunity * CorGov -> Fraud	2.5170	1.96	Support
Pressure -> Fraud	1.0585	1.96	Do not Support
Pressure * CorGov -> Fraud	1.1694	1.96	Do not Support
Rationalization -> Fraud	0.3693	1.96	Do not Support
Rationalization * CorGov -> Fraud	0.3253	1.96	Do not Support

Source: SmartPLS output (processed)

When the company's financial condition is unstable, financial statement fraud might increase. With good corporate governance, the tendency of financial statement fraud might decrease. However, the addition of corporate governance as the moderating variable also shows no significant effect because the implementation of corporate governance in various companies in Indonesia varies greatly.

The Effect of Rationalization on Financial Statement Fraud

The interaction between rationalization and financial statement fraud shows that the t-statistics value of 0.3693 is smaller than the t-table value of 1.96 or the significance level of 0.05. It can be concluded that the interaction between rationalization and financial statement fraud has no significant effect. Thus, hypothesis 4a is rejected. Likewise, the interaction between the two variables with corporate governance as the moderating variable shows the t-statistic value of 0.3253 is smaller than the t-table value of 1.96. Thus, corporate governance as the moderating variable has no significant effect on the interaction between the rationalization variable and financial statement fraud. A change in auditors has no direct effect on the level of fraud in the company. Good or bad corporate governance has no effect on the level of fraud in the company. It is because companies have different corporate governance management. Therefore, this hypothesis is rejected.

B. Research Findings

The Effect of Pressure on Financial Statement Fraud

The interaction between the Pressure variable and Financial statement fraud shows that the t-statistics value of 1.0585 is smaller than the t-table value of 1.96 or the significance level of 0.05. Thus, the financial stability variable has no significant effect on financial statement fraud. The relationship between financial stability and financial statement fraud is that under any circumstances the company's financial conditions do not influence the level of fraud in the company. The interaction between the Financial stability variable and fraud with corporate governance as the moderating variable shows that the t-statistic value of 1.1694 is smaller than the t-table value of 1.96. Thus, corporate governance does not moderate.

The Effect of Capability on Financial Statement Fraud

The interaction between capability and financial statement fraud shows that the t-statistics value of 0.3221 is smaller than the t-table value of 1.96 or the significance level of 0.05. Thus, capability has no significant effect on financial statement fraud. Changes in directors are usually related to political content and the interests of certain parties which trigger the emergence of conflict of interest. In this research, it is evident thatthe high director turnover rate will further increase the level of fraud in the company. Thisresearch proves that changes in directors do not always bring a good impact on the company. Changes in directors may be the company’s attempt to dismiss directors considered to know fraud committed by the company. Thus, hypothesis 5a is rejected. The next hypothesis shows that the t-statistic value of 0.4051 is smaller than the t-table value of 1.96 or the significance level of 0.05. It means that corporate governance as the moderating variable has no significant effect on the interaction between the capability variable and financial statement fraud. It is because high director turnover will further increase the level of fraud if the company’s corporate governance is weak. Thus, this hypothesis is rejected.

The Effect of Opportunity on Financial Statement Fraud

The interaction between opportunity and financial statement fraud shows that the t-statistics value of 1.8045 is smaller than the t-table value of 1.96 or the significance level of 0.05. Thus, opportunity has no significant effect on financial statement fraud. Inventory is usually related to political content and the interests of certain parties which trigger the emergence of conflict of interest. In this research, it is evident that the high level of inventory changes will further increase the level of fraud in the company. This

research proves that inventory changes do not always bring a good impact on the company. Thus, this hypothesis is rejected. The next hypothesis shows that the t-statistic value of 2.5170 is smaller than the t-table value of 1.96 or the significance level of 0.05. It means that corporate governance as the moderating variable has a significant effect on the interaction between the opportunity variable and financial statement fraud. It is because high opportunity will further increase the level of fraud if the company's corporate governance is weak. Thus, this hypothesis is accepted.

C. Conclusions, Limitations and Suggestions

Conclusions

Some conclusions can be drawn from this research. The pressure variable proxied by a change in total assets ratio and a leverage ratio has no significant effect on financial statement fraud. Corporate governance has no effect on the relationship between pressure and financial statement fraud. Opportunity in the form of Nature of industry calculated by changes in inventory on sales has no significant effect on financial statement fraud. Nature of industry with corporate governance as the moderating variable has an effect on financial statement fraud. Rationalization has no significant effect on financial statement fraud. Rationalization strengthened or weakened by corporate governance has no effect on financial statement fraud. Capability has no significant positive effect on financial statement fraud. Capability moderated by corporate governance has no significant effect on financial statement fraud.

Suggestions

Future research are expected to increase the sample size or use sample companies from other sectors. The observation period should be extended to providelong-term predictions. Future researchers are expected to use other measuring instruments to obtain more valid results. Future researchers should use other measures or factors in predicting the level of fraud in the company in addition to using the diamond fraud model.

Limitations

The researchers only used3-year research period, so long-term predictions cannot be provided. In this study, the researcher removed the ineffective monitoring variable because there were no data variations in the internal audit proxy. So, the ineffective monitoring variable must be removed from this research.

REFERENCES

[1] Albrecht, W. S., C. O. Albrecht and C. C. Zimbelman: 2011, Fraud Examination, 4th Edition (Cengage Learning: Mason, Ohio).

[2] Dechow, Patricia M., Weili Ge, Chad R. Larson, and Richard G Sloan. 2009. Predicting material accounting misstatements. Working Paper. University of California, Berkeley, available at http://ssrn.com/abstract=997483.

[3] Gbegi, D.O dan Adebisi, J. F., 2013. The New Fraud Diamond Model- How Can It Help FOorensic Accountants In Fraud Investigation In Niggeria?. *European Journal of Accounting Auditing and Financé Research*, Vol.1, No. 4.

[4] Ghozali, Imam. 2011. Aplikasi Analisis Multivariate Dengan Program SPSS.Semarang : BP Universitas Diponegoro.

[5] Najahningrum, A.F., Ikhsan S., dan Sari, M.P. 2013. Faktor-Faktor yang Mempengaruhi Kecenderungan Kecurangan (Fraud) : Persepsi Pegawai Dinas Provinsi DIY. SNA XVI, Manado.

[6] Pardosi, Rica Widia. 2015. Analisis Fraud Diamond Dalam Mendeteksi Kecurangan Laporan Keuangan Pada Perusahaan Manufaktur Di Indonesia Dengan Menggunakan Fraud Score Model. Penelitian S1. Universitas Lampung.

[7] Rezaee, Zabihollah.2002. Financial Statement Fraud: Prevention and Detection. Wiley. Canada.

[8] Rini, Viva Yustitia. 2012. *Analisis Prediksi Potensi Risiko Fraudulent Financial Statement Melalui Fraud Score Model (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2008-2010).* Penelitian S1. Universitas Diponegoro.

[9] Sihombing, K.S. 2015. Analisis Fraud Diamond dalam Mendeteksi Financial Statement Fraud : Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI) Tahun 2010-2012. *Penelitian S1*. Universitas Diponegoro.

[10] Skousen, CJ, Smith, K.R, & Wright, C.J.(2009). Detecting and Predicting Financial Statement Fraud: the Effectiveness of the Fraud Triangle and SAS No.99 Journal of Mekanisme corporate governance and Firm Performances, Vol 13, h. 53-81.

[11] Wilopo, dkk., 2006. Analisi Faktor-Faktor Yang Berpengaruh Terhadap Kecenderungan Kecurangan Akuntansi: Studi Pada Perusahaan Publik Dan Badan Usaha Milik Negara Di Indonesia. *Simposium Nasional Akuntansi IX, Padang*

[12] Wati, dkk., 2010. "Pengaruh Independensi, Gaya Kepemimpinan, Komitmen Organisasi, dan Pemahaman Good Governance Terhadap Kinerja Auditor Pemerintah (Studi Pada Auditor Pemerintah di BPKP Perwakilan Bengkulu)". *Simposium Nasional Akuntansi XII.*

[13] Wolfe, David T.; Hermanson, Dana R. 2004. The Fraud Diamond: Considering the Four Elements of Fraud. CPA Journal; Dec2004, Vol. 74 Issue 12, p38.

[14] Ghozali, Imam., dan Latan, Hengki. 2015. Partial Least Squares Konsep, Teknik dan Aplikasi menggunakan Program SmartPLS 3.0 edisi 2.Semarang : BP Universitas Diponegoro.

[15] Efitasari, Hema C. 2013. Pendeteksian Kecurangan Laporan Keuangan (*Financial Statement Fraud*) dengan Menggunakan *Beneish Ratio Index* pada Perusahaan Manufaktur yang Listing di Bursa Efek Indonesia Tahun 2010-2011. *Penelitian S1*. Universitas Negeri Yogyakarta.