Analysis Of The Implementation Of Corruption Detection Using Hu-Model In State Financial Management Institutions

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Abstract

This study was conducted to analyze the implementation of corruption detection using HU-Model in state financial management agencies. Corruption acts caused by fraud star elements (pressure, opportunity, capability, rationalization, and lack of integrity) are detected using the HU-Model. By implementing this model, we can know the classification of agencies that are indicated or not as corrupt. Secondary data were collected from regencies, cities, provinces, ministries, institutions, and state universities in Indonesia. The tools used were STATCAL and CART to classify agencies/organizations that are indicated or not indicated as being corrupt. The implementation of corruption detection using HU-Model tested Fraud Star components. It was found that the detection of corruption using HU-Model can classify organizations into not indicated (green), partially indicated (gray), and indicated (red). Of the five fraud star components, lack of integrity is the most influential on corruption, followed by pressure, opportunity, capability, and rationalization. Detection of corruption using HU-Model can help organizations find their internal conditions to improve efforts to prevent corruption and increase the detection ability of auditors.

Keywords: HU model, corruption detection and lack of integrity.

I. INTRODUCTION

In recent years, the public has been surprised by many corruption cases that have been revealed. On September 21, 2022, KPK (Indonesian Corruption Eradication Commission) arrested a supreme judge of the Supreme Court of the Republic of Indonesia for accepting bribes in the civil dispute of Intidana Savings and Loans Cooperative. Previously, two professors, namely the Chancellor and his deputy from a state university, were also arrested for the bribery case of new student admissions. Also, four Indonesian Supreme Audit Agency auditors were red-handed for accepting bribes from the Bogor Regent regarding the audit opinion of BPK (The Audit Board of The Republic of Indonesia) on the Bogor Regency's financial statements.

In profit organizations, the motives of many fraud cases are related to financial statements, such as the case of PT Sunprima Nusantara Financing (SNP Finance). It is suspected that SNP Finance did not submit financial statements correctly based on accounting standards, so rating companies and auditors did not issue warnings before defaults occurred. Related to this case, on October 8, OJK (Financial Services Authority) imposed administrative sanctions on the accountant who audited it (www.liputan6.com, 2018). Another case is related to PT Garuda Indonesia Tbk (GIAA), which submitted its 2018 financial report, which has been manipulated. A phenomenal case with a state loss of tens of trillions of rupiah is the Jiwasraya case. The Attorney General's Office stated that the state's losses due to alleged corruption in the management of Jiwasraya's investment funds were around Rp13.7 trillion in August 2019. BPK also revealed that Jiwasraya carried out financial engineering to cover the company's losses since 2006 (Datakata.co.id, 2020).

Another case occurred in the giant company, British Telecom, which was hit by an accounting fraud scandal in 2017. This company did accounting fraud in one of its business lines in Italy. This scandal has had an impact on its public accountant, namely Price Waterhouse Coopers (PwC), which is a world-renowned public accounting firm and one of the big four.

These various cases illustrate the rampant fraud and corruption in Indonesia. However, corruption eradication is still focused on the efforts of law enforcement officials, even though corruption is a complex crime that involves many sophisticated parties. Given that corruption is very difficult to eradicate, efforts are needed not only in terms of prosecution but also prevention and education. Empirical data show that repressive efforts require high costs, a long time, and commotion in the community. In addition, repressive efforts cannot restore state losses and community losses caused by acts of corruption. Prevention efforts should be intensified to close the gaps in corruption. Many have been carried out, such as the issuance of ISO 370001 concerning Anti-Bribery Management Systems, POJK (Financial Services Authority) number 19 of 2019 concerning ISAF, and the Ministry of State Apparatus Empowerment Regulation number 10 of 2019 concerning building an integrity zone towards a corruption-free area. Internal and external auditors have the most ability to prevent fraud and corruption. A quality audit can detect fraud (De'Angelo, 1981; Coram, 1998), meaning that the audit should be directed at detecting fraud or corruption (Singleton et al., 2006). SAS Number 99 (AICPA, 2002).

The aforementioned cases are also related to the failure of auditors to detect fraud and corruption. Besides financial scandals involving public accountants such as Deloitte Indonesia, which failed to prove fraud at SNP Finance (CNN Indonesia), E&Y Indonesia, which presented an opinion based on insufficient evidence on the audit results of PT Indosat Tbk (Tempo Jakarta) financial statements, and the auditor's failure to detect earnings management in the 2018 financial statements of PT Garuda Indonesia, another shocking case was the Enron case audited by Arthur Anderson who was unable to detect fraud at Enron, resulting in the closure of Arthur Anderson's accounting firm. The case of British Telecom was audited by Pricewater House Coopers for 33 years, which did not find any major fraud. Quality and effective audits are demonstrated by detecting corruption to prevent cases that are detrimental to finances and damage the reputation of the auditor and accounting professions.

Based on the explanation of the background, the research problems are formulated as follows.

- 1. What factors encourage corruption?
- 2. What is the classification of agencies indicated as being corrupt?
- 3. Is HU-Model effective in detecting corruption?

I. Theoretical Basis and Conceptual Framework

2.1. Fraud Star

The factors that encourage the occurrence of fraud and corruption have long been discussed scientifically and empirically. There were originally three causes of fraud, so it was called the Fraud Triangle (Clinard & Cressey, 1954; Cressey, 1986). The three elements that cause fraud include pressure, opportunity, and rationalization (Cressey, 1986; Huber, 2017; Kassem & Higson, 2012). Then, in 2004, Wolfe and Hermanson stated that the Fraud Triangle would not be effective if the perpetrator did not have the authority. Therefore, they introduced a fourth element, which is capability or authority

because of the position. This is what changes the previous Fraud Triangle to Fraud Diamond Model (David T. Wolfe, 2004; Umar et al., 2020a). This is in line with the fact that corruptors arrested by the KPK are government officials.



Figure 1. Officials committing corruption

In 2016, Umar introduced the fifth element that triggers corruption, so it became Fraud Star. There are five causes or drivers of corruption, namely opportunity, pressures, rationalization, capability, and lack of integrity (Siahaan et al., 2019; Umar, 2016a). Powerful people tend to abuse authority. Article 3 of Law No. 31 of 1999 in conjunction with Law No. 20 of 2001



concerning the Criminal Act of Corruption, regulates the abuse of office that occurs because the perpetrator has bad intentions (mens rea) to gain personal or group benefits, which results in state losses. Abuse of office is driven by a conflict of interest, thereby triggering the lack of integrity of officials and driving them to commit criminal acts of corruption.

Source: (Umar, 2016b)

Figure 2.

Fraud Star

on are (Cressey, 1964; Yusof et al., 2013). These four elements are then strengthened by the occurrence of a conflict of interest as a form of lack of

Figure 2 explains that acts of corruption are triggered by several elements, namely opportunity, pressure, rationalization, and power integrity. These five elements (fraud stars) play an important role in the occurrence of corruption crimes. It means that when an official is caught in the act of corruption, he/she has lost his/her integrity significantly.

Integrity is an attitude and behavior that must be done and exemplified to anyone and anywhere because good things will transmit good things to those around them. Integrity inspires and motivates others positively and breeds integrity everywhere. All problems in carrying out the mandate are conflicts of interest, leading to lack of integrity (Umar, 2016a, 2020). Even though the system and opportunities have been closed, the pressure has been reduced by new policies such as salary and income increases, justifications that no longer exist, and the opening of power management. If there is a lack of integrity, the deviation will still exist. Integrity is a firm personal commitment to ethical, ideological principles and becomes part of the self-concept that is represented through behavior (Schlenker, 2008). Personal integrity is measured by the level of honesty, courage, prudence, and responsibility (Moroney & Lilienthal, 2009).

An official who carries out the mandate based on integrity will always ask him/herself whether the policies and decisions he/she has made have been carried out in a neutral. noninclusive, discriminatory, transparent, and accountable manner and with moral values, openness, honesty, and, more importantly, correspondence between of thoughts, words, and actions. Honesty is an attitude that is not contaminated by a conflict of interest so that it can build integrity, and an honest person will have thoughts, words, and actions that match each other. Integrity will lead a person to uphold the rules, norms, ethics, and good values and oppose all evil even though he/she is alone in a very permissive community (Umar, 2020).

2.2 Corruption Detection

External pressure

Detecting corruption is not easy to do, considering the perpetrators cover up the evil deeds in an organized manner so that it is tightly closed. Corruption is always carried out by many parties and with well-organized cooperation involving many parties. In some cases, corruption or fraud is not detected successfully by either the management, internal auditors, or external auditors. The ability to detect corruption is the skill, ability, or expertise of auditors in obtaining initial evidence of indications of corruption. Kumaat (2011) states that, in detecting corruption, it is necessary to get a sufficient picture from the beginning of the existence of corruption. In this study, the independent variables used are pressure, opportunity, rationalization, and capability.

Pressure

Pressure is essential during the preparation of credible financial statements and establishing an adequate supervisory system for the company. It is also used to implement the principle of avoiding fraud. Pressure is measured with financial stability, financial target, and external pressure proxies using ratios (Sunardi & Amin, 2018).

Financial stability

Financial stability can be defined as the smooth operation of all segments of the financial system. A financial condition is said to be stable if the company can meet all current and future routine needs, including emergency needs (Jaunanda & Agoes, 2019). Financial stability is a public good that involves all market participants in an economy. The measurement used in this study is the change in total assets (ACHANGE), which is calculated by the following formula.

 $ACHANGE = \frac{Total Asset_{t} - Total Asse_{t-1}}{Total Asse_{t}}$

External pressure is pressure for management to meet the requirements or expectations of third parties or stakeholders. The pressure that often occurs for the company management is the need to earn more money or sources of financing to remain competitive or maintained, including research and expenditure financing (Skousen et al., 2009). Considering that this research is related to public agencies that get financial sources from state money, the external pressure proxy, the measurement used is Revenue Budget (RB). RB is a performance measurement in public agencies that shows the ratio between the amount of transfer income received from the central/higher agency and the total agency income. The ratio can be calculated by the following formula.

$$AP = \frac{\text{Total Transfer Revenue}}{\text{Total Revenue}}$$

Financial needs

Public agencies manage state finances for their operational activities to achieve the targets set in the annual planning. Such budgeting is referred to as provided performance-based budgeting only for one fiscal year. Organizational financial needs are proxied by OSHIP with the following measures.

$$OS = \frac{\text{Total Budget}}{\text{Total Revenue}}$$

Financial targets

Financial targets proxy is measured using Return on Assets (ROA). This ROA is part of the profitability ratios in financial statement analysis or company performance measurement (Skousen et al., 2009). ROA can be formulated as follows.

$$ROA = \frac{Budget \ Absorption}{Total \ Budget}$$

Opportunity

Opportunity is a person's opportunity to commit fraud. The opportunity first arises with the existence of a state financial budget managed by the agency for the community through the achievement of predetermined targets.

Governance

The high number of corruption cases is caused by weak Governance in implementing the budget used by agencies. There are three forms of corruption in the management of the state budget, namely mark-ups (increasing prices with fixed quality), markdowns (fixed state expenditures but lower quality), and fictitious (expenditures with no compensation received by the state, either physical compensation or services). This projected Governance is with Capital Expenditure (CE):

$$BM = \frac{\text{Total Capital Expenditure}}{\text{Total Expenditure}}$$

Ineffective monitoring

The next opportunity variable measurement is proxied using ineffective monitoring. Ineffective monitoring is a condition where there is no effective supervision of an operation or performance of the company. In SAS No. 99, because the opportunity is dominated by a person or a group of people, in the absence of control, the supervision of the board of directors and audit committee is ineffective over the process of reporting a financial statement and control or the like (AICPA, 2002). Internal audit needs to be supported concretely by providing a budget that is proportional to the total budget overseen by the internal auditor. Therefore, this study uses the ratio of the total budget for internal audit (AB) to the total budget with the following ratio.

 $AA = \frac{\text{Total Internal Audit Budget}_t}{\text{Total Internal Audit Budget}_{t-1}}$

Rationalization

A rationalization is a form of self-rationalization for something that is not true. Rationalization is an instinct of every human being so fraud perpetrators often justify their actions with various rationales. According to Umar et al. (2020b), rationalization is a reason that justifies an action as something common.

Auditors play an important role in overseeing a company's financial statements, so auditor turnover can be considered as a form of action to eliminate traces of deficiencies found by previous auditors (Sari & Nugroho, 2020). Companies that commit fraud more often change auditors because their management is more likely to reduce the possibility of detection by the old auditors related to fraudulent financial statements (Barus et al., 2021).

Goods expenditure

Goods expenditure is a form of government agency expenditure for the purchase of consumable goods and/or services for agency operations. Goods expenditure is also required to produce goods and/or services for trade and nontrade. The goods are intended to be delivered or sold to the public outside the criteria for spending on social assistance and travel expenditures (Ministry of Finance).

$$BB = \frac{\text{Total } BB_{t}}{\text{Total } B_{t}} - \frac{\text{Total } BB_{t-1}}{\text{Total } B_{t-1}}$$

Total Accruals to Total Assets (TATA)

Dummy variable

1 = the agency receives an opinion that tends to fluctuate during the 3 years of observation. 0 = otherwise.

Capability

Competence is the ability that can penetrate the control of a company so that it can commit fraud. Several important characters in the capability Another measure related to rationalization is TATA which is the ratio of Total Accruals to Total Assets. This formula calculates total accruals for changes in working capital other than cash and tax receivables deducted by depreciation expense. By calculating TATA, we can predict a company's revenue and expenditure activities in the short term. The formula for TATA is as follows.

$$TATA = \frac{Income_t - Cash Flow}{Total Assets}$$

Audit opinion

As a form of management accountability for the management of organizational resources, financial statements must be ensured that they contain actual financial information. To ensure that the information is reliable, a third party should conduct an audit and express an opinion on the financial statements. The audit opinion on the financial statements is submitted by the auditor after an audit is carried out using criteria such as financial accounting standards. After going through lengthy processes such as collecting, obtaining, and objectively evaluating evidence that supports the figures in the financial statements and comparing them with the criteria used, there are five forms of the audit opinion, namely unqualified, WTP (reasonable without exception) with an explanatory paragraph, qualified or WDP (reasonable with exception), disclaimer, and adverse. In this study, a dummy size was used.

element of a person who will commit fraud are his/her position or function in the organization (position), committing fraud intelligently to understand and exploit internal control weaknesses (intelligence), having a strong ego and high confidence that he/she will not be detected (confidence/ego), making others commit or conceal fraud if successful (coercion), lying effectively and consistently (deceit) if successful, and handling stress very well if successful (stress) (David T. Wolfe, 2004).

Changes in the board of directors are one of the factors driving the occurrence of financial statement fraud because the impact of these changes is the management's efforts to improve the results of the previous directors' performance by changing the company's organizational structure or recruiting a new director who is considered more capable than the previous one (Sari & Nugroho, 2020). Capability (DCHANGE) is measured by a nominal scale.

Dummy variable

1 = the agency has a change of leadership for three years of observation.

0 =otherwise.

Lack of Integrity

Lack of integrity is a condition of making decisions, carrying out activities, and exercising authority by ignoring the rules, norms, and ethics as a result of a conflict of interest. Integrity is an attitude and behavior that must be done and exemplified by anyone and anywhere because good things will transmit good things to those around them (Umar, 2016a). Integrity inspires and motivates others positively and breeds integrity everywhere. Integrity is the main problem in Indonesia. Even though the system and opportunities have been closed, the pressure has been reduced by new policies such as salary and income increases, justifications that no longer exist, and the opening of power management. If there is a lack of integrity, the deviation will still exist. Lack of integrity is measured by the organizational conservatism index.

$$C_{it} = \frac{RPres_{it} + DEPRres_{it}}{NOA_{it}}$$

C: conservatism index of company i in year t.

- RP : total research and development costs in the financial statements of company i in year t.
- DEPR : depreciation expense contained in the financial statements of company i in year t.
- NOA : net operating assets, as measured by the net financial liabilities formula: (total debt + total shares + total dividends) -(cash + total investment) of the company i in year t.

II. RESEARCH METHOD

This research is associative and aims to find out the relationship, pattern, form, and influence between two or more variables (Umar et al., 2021; Sugiyono, 2016). using descriptive analysis. Secondary data were collected from regencies, cities, provinces, ministries, institutions, and state universities in Indonesia. From 92 provinces, 416 regencies, and 98 cities, ministries, institutions, and state universities, 544 agency data were collected. Incomplete data were eliminated, resulting in 367 agency data.

Detection of corruption with HU-Model uses five elements of fraud star, namely pressure, opportunity, rationalization, capability, and lack of integrity. The pressure variable has four indicators: (1) financial stability is proxied by ACHANGE; (2) external pressure is proxied by revenue budget (RB); (3) organizational financial needs are proxied by OSHIP; (4) financial targets are proxied by return on assets (ROA). The opportunity variable has two indicators: (1) governance is proxied by capital expenditures (CE); (2) Ineffectiveness of supervision is proxied by audit budget (AB). The rationalization variable has three indicators: (1) goods expenditure is proxied by GE; (2) rationalization is proxied by TATA; (3) audit opinion is proxied by OPNADT. Capability is measured by the proxied capability (DCHANGE) indicator. Finally, lack of integrity is measured by the company's conservatism index with the proxy Cit.

The data analysis method used to form the classification model is the classification and regression tree (CART), using R software (Gio & Caraka, 2018). CART is one of the data exploration techniques methods or algorithms, namely the decision tree technique. CART was developed to perform classification analysis on response variables, either nominal, ordinal, or continuous. This method can also select the most important variables and interaction variables. In addition, data cleaning was carried out in the

data analysis process. Factor analysis methods were also used to form pressure, opportunity, and rationalization variables scores. Data analysis was conducted using the CART to form a prediction model for corruption detection classification. The data analysis model used is an econometric model with the analysis technique using the least squares model. The software used in conducting data analysis is STATCAL. It provides various data visualization features and CART.

The data analysis method used is CART. It is used to create a classification prediction model for corruption detection. For the corruption detection variable, there are three areas (RED, GREY, and GREEN). Figure 1 presents the results of the prediction model for the classification of corruption detection.

Clasification Tree of Corruption Detecti



Based on the results of the prediction model for the classification of corruption detection in Figure 1, the most decisive factor of corruption detection is X2 (opportunity). Based on the results of the CART, the following rules are obtained.

- An area with an opportunity value < -34 is predicted to enter the red area.
- 2) An area with an opportunity value ≥ -34 and ≥ 230 is predicted to enter the green area.
- 3) An area with an opportunity value >= -34and < 230 is predicted to enter the gray area.

Detection of corruption by implementing HU-Model in 367 regencies, cities, provinces, ministries, institutions, and state universities. The elements detected include (1) pressure variable with four indicators proxied by ACHANGE, RB, OS, and ROA; (2) opportunity variable with two indicators proxied by CE and AB; (3) rationalization variable with three indicators proxied by GE, TATA, and OPNADT; (4) capability variable with one indicator proxied by DCHANGE. Finally, the variable of lack of integrity is measured by the company's conservatism index proxied by Cit.

4.1. Factors that encourage corruption

III. Discussion

Corruption

uption Detecti Detection Classification Prediction Model Detection of corruption by applying HU-Model examines the variables that drive corruption; they are pressure, opportunity, rationalization, capability, and lack of integrity. Each variable is measured by indicators and their proxies ACHANGE, RB, OS, ROA, CE, AB, GE, TATA,

Table 1. Descriptive Statistic

OPNADT, DCHANGE, and Cit. Table 1 presents several descriptive statistical measures, including minimum score, maximum score, mean, and standard deviation based on ACHANGE, RB, OS, ROA, CE, AB, GE, TATA, OPNADT, capability, and lack of integrity indicators.

Variable	Minimum	Maximum	Mean	Standard Deviation	Variation Coefficient
ACHANGE	-8.563	0.707	0.022	0.462	21.009
RB	0.000	12.192	0.842	0.668	0.793
OS	0.130	107.266	1.945	8.622	4.433
ROA	0.556	1.123	0.938	0.045	0.048
CE	0.018	0.670	0.197	0.081	0.410
AB	-5.668	1.000	0.096	0.486	5.076
GE	-0.495	0.493	-0.002	0.080	-41.895
TATA	0.000	13.232	0.566	0.773	1.366
OPNADT	0.000	1.000	0.057	0.233	4.066
Capability	0.000	1.000	0.379	0.486	1.283
Lack of Integrity	-6.168	21.721	0.614	1.206	1.966

Source: Processed data (2022)

Based on the descriptive statistical information in Table 1, the pressure variable has the largest variation coefficient value. This variable has four indicators, namely financial stability proxied by ACHANGE, external pressure proxied by revenue budget (RB), organizational financial needs proxied by OSHIP, and financial targets proxied by return on assets (ROA). The ACHANGE indicator value is 21.009 giving the highest influence on the occurrence of acts of corruption in an agency. This indicates that there is a change in total assets which is a pressure in the emergence of indications of corruption. In his book Corruption the Devil, Umar (2016a) states that one of the drivers of corruption is pressure or opportunity, rationalization. motive. and Deviations are usually driven by the urgent need of the perpetrators or employees. The motive that drives someone to commit fraud is usually the need for money so he/she will try to find opportunities and make rationalizations for his/her actions. Thus, people are corrupt because they need some money quickly and think that they will not be caught because of their hidden nature. Besides, they feel that what they have done is right. The pressure that comes from within can be due to an urgent financial need that available sources, such as salaries and savings, cannot meet.

The next biggest influence comes from the rationalization variable with three indicators of GE, TATA, and OPNADT. Indicators and GE show a coefficient of variation of -41,895, meaning that the rationalization effect of GE is quite high as the second biggest cause of corruption. Perpetrators tend to find excuses to justify all their actions considered to be unusual and harmful. Rationalization also supports an organization not worrying too much about small or trivial things about the fraud that occurred. This incident will make the fraud perpetrators do more fraudulent activities because they get

opportunities. Therefore, an organization should not tolerate fraud, even though it is classified as minor fraud.

The large value of the coefficient of variation indicates that the data on the pressure varies with the ACHANGE indicator, and the rationalization variable with the GE indicator has a high level of variation or heterogeneity. In other words, the data tends to be far from the average value, so it has the second largest influence on the occurrence of corruption and must be a concern prevention management for efforts. of Meanwhile, the smallest coefficient of variation is in the variables RB, ROA, and CE. The small value of the coefficient of variation indicates that the data on the variables RB, ROA, and CE have a low level of variation or heterogeneity. In other words, the data tends to be close to the mean value, which indicates that these three indicators are not too prone to cause corruption.

3.2 Classification of agencies indicated as being corrupt

Corruption is still very rampant everywhere and involves various professions, genders, levels of education, and interests. The government and the community (practitioners and students, executives, and legislatures) should support each other to efficiently and optimally prevent and eradicate corruption (Umar, 2006, 2011, 2016b).

The variables studied are corruption detection, pressure, opportunity, rationalization, capability, and lack of integrity. Before a classification model was created using CART, the factor analysis method was used to form a pressure score based on the ACHANGE, RB, OS, and ROA indicators, an opportunity score based on CE and AB indicators, and a rationalization score based on GE, TATA, and OPNADT indicators. Based on the data processing, the results obtained are in the form of agency clustering based on the level of indications of corruption. There are three clusters of agencies with indications of corruption, namely, not indicated (green), partially indicated (gray), and indicated (red).

	Detection Result		
Category	Total	Percentage (%)	
Green	7	1.91	
Gray	225	61.31	
Red	135	36.78	
Total	367	100	

Table 2. Frequency Distribution Based on Predicted Classification Results

Source: Processed data (2022)

Based on the classification results using CART, 7 (1.91%) areas are predicted to fall into the green category, 225 (61.31%) areas fall into the gray

category, and 135 (36.78%) areas fall into the red category.

Figure 4. Clusters of Agencies Indicated as Being Corrupt



3.3 The effectiveness of HU-Model in detecting corruption

Detection of corruption using HU-Model is shown by the multiple linear regression equation as follows.

Y = -2,106 + 0,0890p +	0,177Pr +	0,038 <i>Rat</i>	By 0,0197 the	pHU-Mp8121 tagressi	on equation	or
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Note:

Y : Corruption Detection

Op : Opportunity

Pr	: Pressure
Rat	: Rationalization
Cap	: Capability
LoI	: Lack of Integrity

By 050197 (hepHU-M5821 fegression equation on 367 agency data (regencies, cities, provinces, ministries, institutions, and universities), we can see the clustering of indications of corruption in the agency groups as follows.

Table 3. Clustering of Indications of Corruption by Group of Agencies

Agency	Detection Result					
	Green	Gray	Red	Total	Percentage (%)	
Regency	3	180	99	282	76.84	
City	1	29	19	49	13.35	
Province	1	16	13	30	8.17	
Ministry	2	-	4	6	1.64	
Institution	-	-	-	-	-	
State University	-	-	-	-	-	
Total	7	225	135	367		
Percentage	1.91%	61.31%	36.78%		100	

Source: Processed data (2022)

The green area has four agencies (one city, three regencies, one province, and two ministries), while the gray area consists of 12 cities, 197 regencies, and 16 provinces. The red category consists of 18 cities, 100 regencies, 13 provinces, and four ministries.

IV. Conclusion

Frauds in the form of fraudulence, misappropriation, abuse, and manipulation are motivated by existing factors and make fraudsters deviate. In the book entitled Corruption The Devil, when power holders abuse their power for their personal and group interests, the perpetrators of corruption have lost their virtues (Umar, 2016b). They have been lured by the devil to break the rules and harm many people. There is no longer honesty and willingness to serve others, especially the community. They have lost the value of integrity.

With the implementation of HU-Model (Umar, 2020; Umar & Br. Purba, 2020), we can see the indications of corruption in an agency, whether it is included in the indicated (red), partially indicated (gray), or not indicated (green) cluster. The implementation of corruption detection using HU-Model can contribute to efforts to eradicate corruption, especially corruption prevention. If it is known that the agency is in the red cluster, the management can take intervention measures to improve it to gray or even green. Likewise, auditors can improve audit quality and audit results with their ability to detect corruption (Purba & Umar, 2021; Umar et al., 2019). Detecting corruption from the fraud star components using HU-Model improves the auditor's ability to carry out their obligations to detect corruption in audit tasks.

The findings indicate that pressure is the biggest cause of corruption. There are many cases of corruption, especially bribery. Many

REFERENCE

- AICPA. (2002). Statement on Auditing Standards: SAS No. (99) In AU Section 316, Consideration of fraud in a financial statement audit. <u>http://www.aicpa.org/Research/Standar</u> <u>ds/AuditAttest/DownloadableDocument</u> <u>s/AU-00316.pdf</u>
- Barus, Y. P. P., Chung, J., & Umar, H. (2021).
 Pengaruh Fraud Triangle Terhadap Kecurangan Laporan Keuangan Dengan Ukuran Perusahaan Sebagai Pemoderasi Pada Perusahaan Perbankan Yang Terdaftar Di Bursa Efek. Kocenin Serial Konferensi, 1(1).

government officials are also caught red-handed for accepting bribes. They cannot cope with the pressure of bribery even though they know that it is strictly prohibited and carries severe penalties. The second factor that encourages corruption is rationalization. Government officials often show up with no remorse for the crimes they have committed. Corruptors feel that their actions are not a mistake. They think they are caught just because they are unlucky, so they do not show remorse. A tool called HU-Model is needed to detect corruption, which is very complicated. With this model, an auditor can improve the quality of the audit and the audit results because it gives information about an indication of corruption committed by the auditee.

With the implementation of HU-Model, corruption detection activities will be helpful in management to prevent corruption in a real, concrete, efficient, and effective manner. Prevention carried out by various efforts such as socialization, supervision, and system development has not focused on the source of problems (indications of corruption) that can occur significantly. Therefore, HU Model is important to build an institution with integrity and free from corrupt practices.

- Clinard, M. B., & Cressey, D. R. (1954). Other People's Money: A Study in the Social Psychology of Embezzlement. American Sociological Review. https://doi.org/10.2307/2087778
- Cressey, D. R. (1964). Delinquency, Crime And Differential Association.
- Cressey, D. R. (1986). Why managers commit fraud. Australian \& New Zealand Journal of https://doi.org/10.1177/0004865886019 00402
- Datakata.co.id. (2020). Babak Baru Kasus Dugaan Korupsi Jiwasraya.
- David T. Wolfe, D. R. H. (2004). The Fraud Diamond: Considering The Four

Elements of Fraud. CPA Journal, 74(12), 38–42. https://doi.org/DOI:

- Gio, P. U., & Caraka, R. E. (2018). Pedoman Dasar Mengolah Data Dengan Program Aplikasi Statistika STATCAL (Disertai Perbandingan Hasil Dengan SPSS & Minitab).
- Haryono Umar, Rahima Br Purba, & Muhammad Dharma Tuah Putra Nasution. (2021). Metode Penelitian Ilmiah (1st ed., Vol. 1). Penerbit Universitas Trisakti.
- Huber, W. (2017). Forensic accounting, fraud theory, and the end of the fraud triangle. Journal of Theoretical Accounting Research.

http://search.ebscohost.com/login.aspx? direct=true%5C&profile=ehost%5C&sc ope=site%5C&authtype=crawler%5C& jrnl=15565106%5C&AN=125119419% 5C&h=GMIZABmLQEaqIW%2F44k8 88JXk4TbcgSiiGlvAJTRWbI4m4Cjy% 2FenxzN6SlofAgEKESowarCkbWFr% 2FTRdWZAEvsg%3D%3D%5C&crl=c

- Jaunanda, M., & Agoes, S. (2019). Prediksi Fraud Pada Laporan Keuangan Dengan Fraud Diamond Menggunakan Benish M-Model. Jurnal Muara Ilmu Ekonomi Dan Bisnis, 3(2), 323–330.
- Kassem, R., & Higson, A. (2012). The new fraud triangle model. Journal of Emerging Trends in Economics and https://doi.org/10.10520/EJC132216
- Moroney, W. F., & Lilienthal, M. G. (2009). Human factors in simulation and training (1st ed., Vol. 1). CRC Press Taylor & Francis Group.
- Purba, R. B., & Umar, H. (2021). Kualitas Audit & Deteksi Korupsi (1st ed., Vol. 1). CV Merdeka Kreasi Group.
- Sari, S. P., & Nugroho, N. K. (2020). Financial Statements Fraud dengan Pendekatan Vousinas Fraud Hexagon Model: Tinjauan pada Perusahaan Terbuka di

Indonesia. Proceedings of 1st Annual Conference on IHTIFAZ: Islamic Economics, Finance, and Banking ACI-IJIEFB) 2020, 409–430.

- Schlenker, B. R. (2008). Integrity and character: Implications of principled and expedient ethical ideologies. Journal of Social and Clinical Psychology, 27(10), 1078– 1125.
- Siahaan, M., Umar, H., & Purba, R. Br. (2019). Fraud Star Drives To Asset Misappropriation Moderated By Internal Controls. Journal of Southwest Jiaotong University, 54(4), 1–10.
- Singleton, T., Singleton, A., Bologna, J., & Lindquist, R. (2006). Fraud Auditing and Forensic Accounting.
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. (99) Corporate Governance and Firm https://doi.org/10.1108/S1569-3732(2009)0000013005
- Sugiyono. (2016). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Penerbit Alfabeta.
- Sunardi, S., & Amin, M. N. (2018). Fraud detection of financial statement by using fraud diamond perspective. International Journal of Development and Sustainability, 7(3), 878–891.
- Umar, H. (2006). Strategic Control, Membangun Indonesia yang Bebas KKN, Berkinerja, dan Good Governance. Penerbit Universitas Trisakti.
- Umar, H. (2011). Government Financial Management Strategy for Preventing Corruption in Indonesia. The South East Asian Journal of Management, 5(2), 19– 36.
- Umar, H. (2016a). Corruption The Devil. Penerbit Universitas Trisakti.
- Umar, H. (2016b). Corruption The Devil. Penerbit Universitas Trisakti.

- Umar, H. (2020). Detecting Corruption, HU-Model. Penerbit Universitas Trisakti.
- Umar, H., & Br. Purba, R. (2020). HU Model: Incorporation of Fraud Star in Detection of Corruption. International Journal of Economics and Management Studies, 7(12), 1–8. https://doi.org/10.14445/23939125/ijem s-v7i12p101
- Umar, H., Erlina, Fauziah, A., & Purba, R. Br. (2019). Audit Quality Determinants And The Relation Of Fraud Detection. International Journal of Civ, 10(04), 292–305.
- Umar, H., Partahi, D., & Purba, R. B. (2020a). Fraud diamond analysis in detecting fraudulent financial report. International

Journal of Scientific and Technology Research, 9(3), 6638–6646.

- Umar, H., Partahi, D., & Purba, R. B. (2020b). Fraud Diamond Analysis in Detecting Fraudulent Financial Report. International Journal of Scientific and Technology Research, 9(3), 6638–6646.
- www.liputan6.com. (2018). Kasus SNP Finance yang Rugikan 14 Bank.
- Yusof, M. K., Khair, A., & Simon, J. (2013). Fraudulent Financial Reporting: An Application of Fraud Models to Malaysian Public Listed Companies. A Multidisciplinary Journal of Global Macro Trends, 2(4), 144–160. https://doi.org/10.1353/jda.2014.0042