

## THE FACTORS OF FRAUD: A STUDY IN THE LOCAL GOVERNMENTS IN MALANG REGION

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### ABSTRACT

*Based on evidence fraud cases that occurred in local governments in Malang region from 2017 to 2018, the objective of this study is to investigate the effect of pressure, opportunity, and rationalization on fraud. The research sample consisted of expenditure treasurers, sub-division heads of finance, and secretaries in 80 regional government organizations in the Batu city, Malang city, and Malang regency. Factors that influenced the fraud in this study referred to the fraud triangle theory developed by Donald Cressey (1953). A survey of 228 civil apparatuses in local governments of Malang region showed empirical findings that the elements of pressure, opportunity and rationalization are always present in fraud. The measurement model testing results indicated that pressure had the largest effect, while the opportunity had a medium effect and rationalization had a small effect.*

Key words: Fraud Triangle Theory, Pressure, Opportunity, Rationalization

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### INTRODUCTION

Fraud is not a new phenomenon related to several cases of financial fraud that were massively publicized over the last two centuries. It can be found in the early history of our world because humans have practiced tricks, manipulations, and trickery to earn money, land, goods, or trust to gain a profit (Petrascu and Tleanu, 2014). The emerging of accounting and auditing was linked in the economic history of states and churches to prevent the embezzlement and misrepresentation of their financial records. (Petrascu and Tleanu, 2014)

It cannot be denied that fraud is very expensive for organizations and the economy (Albrecht, *et.al.*, 2012: 6). How much undetected and unreported fraud is still a mystery to this day. In Indonesia, corruption is in the first position with more than 69.9% of cases with the largest median loss of Rp. 373.65 billion. The second position is the misuse of assets as much as 20.9% with a total loss of Rp. 257.52 billion. The third place is financial reports containing fraud as much as 9.2% with a total loss of Rp. 242.26 billion (ACFE Indonesia Chapter, 2020)

On January 29, 2019, Transparency International released the 23<sup>rd</sup> Corruption Perception Index for the 2018 measurement year. Indonesia was ranked 89<sup>th</sup> out of 180 countries surveyed with a score of 38 (Transparency International Indonesia, 2019). The score under 50 shows that the level of corruption in Indonesia is extremely high. Based on the Indonesian Corruption Watch report, 454 corruption cases in the Indonesian public sector which were investigated by law enforcement in 2018 had 1,087 suspects including 104 regional heads, 247 members of the House of Representatives-Regional House of Representatives and political elites, and the others with total state losses of 5,6 trillion (Tribunnews.com, 2019). Based on a press release on September 13, 2018, the State Civil Service Agency said that 2,357 civil servants were involved in criminal acts of corruption with permanent legal force. The Civil Servants consist of 1,917 Civil Servants who actively work in the Regency/City Government, 342 Civil Servants in the Provincial Government, and 98 Civil Servants at Ministries/Agencies in the Central Region. (BKN, 2018)

As stated by Okoye and Gbegi (2013), fraud has been considered a global phenomenon, since it has universally penetrated both the private and public sectors to the extent that no country is protected from it although developing countries suffer the most. In Indonesia, fraud cases are quite common at the level of local government. From 2017 to 2018, local governments in Malang Raya were affected by sting operation (OTT). The Corruption Eradication Commission has arrested the Mayor of Batu for the 2012-2017 period, the head of the Procurement Service Unit, and the company director of PT Dailbana Prima related to the bribery case for the furniture procurement at Batu City Government in 2017 with a project value of 5.26 billion (Kompas.com, 2017). Besides, Corruption Eradication Commission has adjudged 22 Regional House of Representatives members of Malang City as suspects who received bribes and gratification from the Mayor of Malang for the 2014-2018 period. Therefore, the Mayor of Malang, Head of the Public Works and Housing Agency, and a total of 41 Regional House of Representatives members of Malang City for the 2014-2019 period were charged as bribery suspects. (Kompas.com, 2018). On July 15, 2019, the Corruption Court of Surabaya administered the head and the treasurer of Technical Implementer Unit (UPT) Public Health Center Karangploso who were involved in a corruption case by cutting the capitation fund of National Health Insurance (JKN) for the 2018 fiscal year (Akuratnews.com, 2019).

The theory of the fraud triangle has survived and has formed the basis of what is often considered the "fraud theory" from 60 years ago to the present day despite criticisms and multidimensions of financial crime are taken into account in a model that attempts to explain, predict, prevent, detect, and prosecute financial crime. The fraud triangle theory has been adopted in professional auditing standards around the world (IAASB, 2009; PCAOB, 2005) including the United States (SAS No. 99), Australia (ASA 240), and international auditing standards (ISA 240). The fraud triangle is not only being adopted in auditing standards but also discussed in academic textbooks and professional instruction manuals in the field of forensic accounting, fraud examination (Albrecht and Albrecht, 2004;), and academic research (eg Wilks and Zimbelman, 2004).

According to Cressey's original thought, his hypothesis might need to be reformed because the scholars have re-tested his theory in various fields (Homer, 2020). Several researchers found that one of the elements of the fraud triangle was more prominent than the others, but the weight of the three elements was equally important. Skousen (2004) had succeeded in developing 5 proxies for pressure and opportunity, but he had not been able to identify the significant variables that can be used as proxies for rationalization. However, Cohen *et al.*, (2010) found that attitude and rationalization factors dominate the causes of fraud.

In addition, the result of Schuchter and Levi's (2013) interviews with 13 white-collar criminals who were committing fraud in Switzerland and Austria found that the only opportunity is a universal prerequisite for conducting fraud. Rae and Subramniam (2008) in their research asserted that low perceptions of organizational justice will increase pressure or motivation of the employees to commit fraud. By surveying 64 companies, Rae and Subramaniam found a negative coefficient on the quality of internal control procedures. In this finding, the stronger the ICP, the more employees' perceptions of organizational justice increased, so that the fraud of employee could decrease. However, the coefficients among variables are not significant. Therefore, the relationship between perceptions of organizational justice and the quality of internal control procedures to reduce the fraud of employees is not significant.

Meanwhile, Pras Maulida (2016) and Tiffani and Marfuah (2015) found that financial pressure and external pressure had a significant positive effect on fraud. Pras Maulida (2016) found that personal financial needs, ineffective monitoring, and financial targets had no significant effect on the fraud of financial reports. Meanwhile, Tiffani and Marfuah (2015) found that effective monitoring had a negative effect on fraud. The results of research by Lou and Wang (2011) showed that fraud in the financial report had a positive correlation with the situation of financial pressure from superiors, the ratio of transaction complexity, the integrity of managers, and the relationship between companies and auditors. The research result conducted by Nurbaiti and Hanafi (2017) showed that rationalization has a significant positive effect on the level of accounting deviation. Whereas, pressure, opportunity, and ability do not have a significant effect on the level of accounting deviation.

Simbolon *et al.*, (2018) who conducted a study on 189 executives in the provincial government of North Sumatera showed further different results, namely the fraud triangle element did not affect the incidence of fraud. Likewise, the results of a survey conducted by Anindyia and Adhariani (2019) on 109 company employees found that none of the fraud triangle factors had a significant effect on fraud.

The problem of fraud within the government has not been resolved to this day. The researcher who is a practitioner in the public sector is interested in investigating the effects of fraud triangular elements, namely the pressure, opportunity, and rationalization experienced by the State Civil Apparatus toward fraud. It is due to the phenomenon of fraud in Malang Raya which has experienced chain sting operation, the survival of the fraud triangle theory used in international auditing standards, and the adoption of fraud triangle theory in the Supreme Audit Institution Regulation No.1 of 2017. Hence, the main objective of this study is to examine the influence of the fraud triangle toward unearthing the factors that cause the occurrences of fraud in Local Governments in the Malang Region.

The researcher implemented 6 pressure situations and 2 opportunity situations from Cressey's (1953) fraud triangle theory to develop the indicators of pressure and opportunity variables. Meanwhile, to develop indicators of rationalization variables, the researcher refers to Cohen, *et al.* (2010) who found that rationalization was the dominant factor of causing fraud. Thus, this study is expected to provide additional empirical evidence on the application of the fraud triangle in the public sector (Governmental Accounting Standards Committee and The Institute of Internal Auditors Indonesia) regarding the effects of pressure, rationalization, and opportunities toward the emerging of fraud, especially in local governments.

Based on public sector administrators, placing the spotlight on the factors of the fraud triangle may be an important approach either for fraud detection or for prevention. The results of this study are expected to provide benefits for academic literature and practice. Those are adding to the empirical evidence of the application of the fraud triangle to fill the expressions of interest among practitioners and regulators in the public sector as a basis for consideration in assessing the possibility of fraud in local governments.

This research is also required to strengthen the policies related to the eradication of fraud through the prevention by elaborate the factors of the fraud triangle in detail on the government auditing standards which become the reference for auditors. From this perspective, the organization is are expected to ensure that the foundations of the fraud triangle (pressure, opportunity, and rationalization) are properly monitored through a strict internal control system.

## LITERATURE REVIEW

There are many definitions of fraud. In common law terms, fraud is an intentional or deliberate fraud. Fraud is false representations by the defendant on the available facts committed consciously or unfaithfully in their truth, or randomly, or carelessly whether they are true or false, with the intention that the prosecutor must take action against them as well as the results cause the damage to the prosecutor. (L.B. Curzon, 2002: 183). According to The World Book Dictionary (1992: 848), fraud is an intentional misstatement of truth or facts that are used to grab money, other rights or privileges, or property from a person or many people. Briefly, fraud can be interpreted as an act, dishonest statement, or something that is not what it cracked up to be.

Fraud is different from unintentional mistakes. For example, if someone has entered an incorrect number on a financial report, this is not a fraud because it was not committed with the intention or purpose of gaining an advantage over someone else through pretense. However, if in the same situation someone deliberately entered wrong numbers on the financial report to deceive the investors, then that would be a fraud.

Another way to describe the types of fraud is to use the definition of occupational fraud from ACFE. ACFE defines fraud as, "The use of one's occupation for personnel enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets." Occupational fraud results from the misconduct of employees, managers, or executives. Occupational fraud can be anything from lunch break abuses to high-tech schemes. The Report to the Nation on Occupational Fraud & Abuse by the ACFE states that, "The key to occupational fraud is that the activity (1) is clandestine, (2) violates the employee's fiduciary duties to the organization, (3) is committed for the purpose of direct or indirect financial benefit to the employee, and (4) costs the employing organization assets, revenues, or reserves" (Albrecht, *et al.*, 2012: 9-10).

In 1983, Cressey with Joseph Walsh established *The Association of Certified Fraud Examiners* (ACFE) (Donegan and Ganon, 2008). In the edition issued in 2006, *Fraud Examiner Manual*, Cressey was named as the smartest student from Shutterland. Shutterland (1940) developed a theory of criminal behavior by comparing the crimes in the upper-class or white-collar with the crimes in the lower classes. Upper-class crimes are committed by business people and professionals who are honored or respected. Lower class criminals are committed by people with underprivileged socioeconomic status.

Cressey (1953) looked for another direction while writing his doctoral dissertation in sociology. He describes the embezzlement that Shutterland did not explain in white collar-crime. Cressey (1953) explained that fraud perpetrators are people who have violated trust, those who have accepted a job position in good faith, and they violated the expectations of trust inherent in the obligations associated with that position. In his hypothesis, Cressey (1953) stated:

*Trusted persons become trust violators when they conceive of themselves as having a financial problem which is non-shareable, are aware this problem can be secretly resolved by violation of the position of financial trust, and are able to apply to their own conduct in that situation verbalizations which enable them to adjust their conceptions of themselves as trusted persons with their conceptions of themselves as users of the entrusted funds or property.*

The theory of the fraud triangle depicted the root causes of fraud on the three situations that are faced by employees, namely the pressures they feel, the opportunities they have, and rationalizations which justify their deviant behavior.

Cressey (1953) argued that shareable and non-shareable problem is based on individual perceptions that may not be in line with objective facts. Under similar circumstances between two individuals, one may consider a problem as shareable, while the other defines it as non-shareable. Perceived non-shareable financial need becomes a pressure factor from the first corner of the "fraud triangle".

Cressey (1953) proposed that non-shareable problems emerged from situations that can be divided into six groups. A violation situation that is considered from violation of ascribed obligation. Skousen, *et al.* (2008) who researched 113 fraud firms between 1992 and 2001 found that rapid asset growth, increased cash needs and external financing had a significant positive relationship toward fraud. Moreover, Lou and Wang (2011) who researched 97 fraud firms and 467 non-fraud firms found a significant positive correlation between fraudulent reporting and a higher percentage of complex transactions of a firm.

Dellaportas (2013) found the motivations for the inmates' behavior among individual offenders broadly classified into two major categories: financial and non-financial pressures. Financial pressure created by distressed businesses and failed investments appeared to be root cause of fraudulent behavior for six of the ten offenders. Non-financial pressure was motivated by 'anger' when employees feel that they are treated unfairly. Besides that, commonly motivates fraud is represented by greed, revenge and avoidance of failure. The situation of employer-employee relations that was revealed by Ramamoorti (2008) stated "I deserve these 'perks' as reasonable compensation, and the company can certainly afford it".

The example of physical isolation situations are dissatisfied or alienated employees such as those who are poorly paid or lack respect from colleagues, have little commitment to the organization and are more likely to engage in activities such as fraud that serve their own interests (Baucus, 1994; Cressey, 1953). Meanwhile, the situation of status gaining which is an egocentric motivation to fraudulently enhance personal prestige. This type of motive can be seen in those people with very aggressive behavior and desire to achieve higher functional authority in the corporation (Rezaee, 2005).

Based on the results of several research findings, the researcher supposes that an employee, whether he/she works in a company or in a government agency, will experience a tendency to commit fraud if he/she is under such pressure. However, Nurbaiti and Hanafi (2017) concluded that financial stability pressures, external pressures, personal financial needs, and financial targets did not have a significant effect on accounting fraud. Furthermore, Simbolon (2018) who researched in the Provincial Government of North Sumatra and Anindya and Adhariani (2019) who conducted research in companies found that the element of pressure did not have a significant effect on fraud. Based on this explanation, the researcher formulated the following hypothesis:

**Hypothesis 1:** Pressure has a positive effect on fraud in local governments.

The second important element required for the emerging of fraud is the knowledge that a non-shareable problem can be secretly resolved by violating someone's position of financial responsibility. The perception that an opportunity to solve non-shareable problem unknowingly by other people is called as a perceived opportunity. It is the second corner of the foundation of the fraud triangle.

Cressey (1953) argues that two components of the perception about this opportunity are available. First, general information which is the knowledge that a position containing trust can be violated without consequences. Second, the technical skills needed to carry out these crimes. Dellaportas (2013) found that knowledge and understanding of systems and processes provided the ability to manipulate and bypass the controls to avoid detection. The inmate accountant interviewed by Dellaportas (2013) described how he used his knowledge of check-clearing protocols to commit check fraud. Schuter and Levi (2013) asserted that the only opportunity was a universal prerequisite for committing fraud.

Based on the findings of this study, the researcher proposes that an employee at both a private company and State Civil Apparatus in a local government will have a potential for committing fraud when he understands that his position contains trust and he has the skills to commit fraud. However, Nurbaiti and Hanafi (2017), Simbolon *et al.* (2018), Anindya and Adhariani (2019), did not find a significant effect of opportunities on fraud both in local governments and in companies in Indonesia. Based on this explanation, the researcher formulated the following hypotheses in this study:

**Hypothesis 2:** Opportunity has a positive effect on fraud in local governments.

The final element of the foundation of the fraud triangle which is required for the violence of trust is the individual's ability to rationalize behavior as acceptable to the image of himself (Cressey, 1953). To commit a violation, individuals must justify their actions by using rationalizations that allow them to defend their conception about themselves as good people despite they personally illegally use the funds entrusted to them.

For independent businessmen and long-term offenders, this rationalization usually takes the form of trust that they are only "borrowing" money and will return it on the due date. Another justification is that they consider legally the funds taken are "theirs" because they have been underpaid for tasks performed for a long time.

The research results conducted by Cohen, *et al.*, (2010) supported that personality traits and rationalization were the main risk factors for fraud. The hallmark of white-collar crime is the lack of feeling or indifference expressed by the perpetrator from a series of reasons or rationalizations to free oneself from the guilt which is caused by the deviant behavior (Anand, *et al.*, 2004; Benson, 1985). In this part of the fraud triangle, the perpetrator admits his mistake but denies it is wrong. It allows them to maintain a non-distorted self-image while engaging the criminal activity continuously (Benson, 1985).

Dellaportas (2013) showed that inmate accountants who had violated the trust realized that their behavior was inappropriate, but they rationalized their fraud behavior based on three types of denial, namely denial of responsibility, denial of injury, and denial of victims. They rationalize their actions by eliminating mistakes, the perception that no one was hurt, and believing that the money stolen will be returned someday. Nurbaiti and Hanafi (2017) who researched 81 non-financial companies found that rationalization had a significant positive effect on the level of accounting deviation.

Whereas, Skousen (2004) and Schuter and Levi (2013) found that elements of rationalization are frequently cited too briefly. The inner voice that stops committing fraud and feeling of guilt toward the inner heart exists after committing fraud. Tiffani and Marfuah (2015) who conducted a study on 90 companies registered on the IDX, Simbolon (2018) who conducted research in the Provincial Government of North Sumatra, and Anindya and Adhariani (2019) who surveying on 109 employees found that rationalization had no significant effect on fraud incidents. Based on this elaboration, the researcher presumes that the ability of a state civil apparatus to rationalize before committing fraud has a positive effect on fraud in local government, so that the temporary answers to this study are as follows:

**Hypothesis 3:** Rationalization has a positive effect on fraud in local governments.

## METHODS

This study uses a quantitative approach with survey techniques to obtain the data of individual opinions by asking questions to the individual respondents. The population in this study were all State Civil Apparatus (ASN) in Malang Raya. The research sample was conducted according to purposive sampling with criteria (Hartono, 2018: 98) consisted of expenditure treasurers, sub-division heads of finance, and secretaries in 80 regional government organizations in the Batu city, Malang city, and Malang regency. The questionnaires which were distributed directly to the respondents contained a set of structured questions. Part 1 of the questionnaire was the profile of the respondents. Part 2 contained 19 situational questions consisting of 7 questions related to fraud, 6 questions related to pressure situations, 2 questions related to opportunities, and 4 questions related to the rationalization. Of the 240 questionnaires distributed, 228 questionnaires were returned, 1 questionnaire was lost, and 2 questionnaires were damaged. Therefore, the number of questionnaires that could be processed without making changes or intervention were 225 copies.

The data analysis method to test the hypothesis in this study uses Partial Least Square (PLS). The measurement model is implemented to test the validity and reliability, while the structural model is used to test the causality (hypothesis testing with predictive model). This study uses descriptive statistics to describe the characteristics of the data (the distribution character),

including the average (mean), median, and mode values. Evaluation of the research model using PLS consists of evaluating the outer model, namely the measurement model, and the inner model, namely the structural model.

**RESULT**

Most of the State Civil Apparatus who became the respondents in this study were women and had worked for more than 10 years. Nearly half of the respondents were more than 49 years old and more than half of the respondents had bachelor’s degrees.

**Table 1 Description Results of Respondents Characteristics**

Karakteristik		F	%
Gender	Man	30	13.3%
	Woman	195	86.7%
Age	20-29 Years	6	2.7%
	30-39 Years	39	17.3%
	40-49 Years	77	34.2%
	>49 Years	103	45.8%
Education	Undergraduate degree	6	2.7%
	Bachelor Degree	138	61.3%
	<b>Graduate</b>	71	31.6%
	Post Graduate	2	0.9%
	Others	8	3.6%
Work Period	1-5 Years	14	6.2%
	6-10 Years	13	5.8%
	>10 Years	198	88.0%

In descriptive statistical analysis, the researcher divided each question in the questionnaire into four parts consisting of fraud, pressure, opportunity, and rationalization.

**Table 2n Measurement Indicators of Research Variable**

<i>Fraud</i>	Pressure	Opportunity	Rationalization
- Asset misappropriation	- violations of ascribed obligations associated with the role of the trusted individual	- General Knowledge - Technical Skills	- attitudes toward the behavior
- Corruption	- personal failure		- subjective norms
- Financial statement fraud	- business reversals		- perceived behavioral control
	- physical isolation		- Moral obligations
	- status demands		
	- problematic employer-employee relations		
Sumber: ACFE	Sumber: Cressey (1953)	Sumber: Cressey (1953)	Sumber: Cohen, et al., (2010)

**Table 3 Test Result of Convergent Validity**

Variable	Indicator	Factor Loading	P-value	Information
Fraud	Y1	0.783	<0.001	Valid
	Y2	0.644	<0.001	Valid
	Y3	0.833	<0.001	Valid
	Y4	0.817	<0.001	Valid
	Y5	0.799	<0.001	Valid
	Y6	0.790	<0.001	Valid
	Y7	0.815	<0.001	Valid
Pressure	X1.1	0.868	<0.001	Valid
	X1.2	0.854	<0.001	Valid
	X1.3	0.706	<0.001	Valid
	X1.5	0.664	<0.001	Valid
	X1.6	0.676	<0.001	Valid
Opportunity	X2.1	0.865	<0.001	Valid
	X2.2	0.865	<0.001	Valid
Rationalization	X3.1	0.736	<0.001	Valid
	X3.2	0.830	<0.001	Valid
	X3.3	0.826	<0.001	Valid
	X3.4	0.797	<0.001	Valid

The test result of the convergent validity on the variables of fraud, pressure, opportunity, and rationalization with the reflective measurement model obtained the factor loading value from the indicator more than 0.500. Thus, the indicators of the variables have accomplished convergent validity.

**Table 4 Test Result of Discriminant Validity (Cross-Loading)**

Variable	Indicator	Y	X1	X2	X3	M
Fraud	Y1	<b>0.783</b>	0.155	-0.043	-0.209	-0.016
	Y2	<b>0.644</b>	-0.358	-0.154	0.244	0.054
	Y3	<b>0.833</b>	-0.163	0.177	0.015	0.094
	Y4	<b>0.817</b>	0.278	0.202	-0.342	0.047
	Y5	<b>0.799</b>	0.285	0.162	-0.392	-0.047
	Y6	<b>0.790</b>	0.010	-0.214	0.257	-0.026
	Y7	<b>0.815</b>	-0.268	-0.173	0.470	-0.099
Pressure	X1.1	0.190	<b>0.868</b>	-0.150	0.133	-0.047
	X1.2	0.243	<b>0.854</b>	-0.155	0.010	-0.006
	X1.3	0.012	<b>0.706</b>	0.110	-0.199	0.218
	X1.5	-0.529	<b>0.664</b>	-0.154	0.111	-0.148
	X1.6	-0.043	<b>0.676</b>	0.425	-0.085	-0.014
Opportunity	X2.1	-0.357	0.000	<b>0.865</b>	0.144	-0.038
	X2.2	0.357	0.000	<b>0.865</b>	-0.144	0.038
Rationalization	X3.1	-0.210	-0.231	0.215	<b>0.736</b>	0.207
	X3.2	-0.055	-0.231	0.037	<b>0.830</b>	0.092
	X3.3	0.027	0.051	-0.049	<b>0.826</b>	-0.201
	X3.4	0.223	0.401	-0.187	<b>0.797</b>	-0.078

The test result of the discriminant validity using the cross-loading value obtained that the loading factor in the column of each variable (bold print) is the highest value compared to the cross-loading value of other variables. Therefore, the indicators of each variable of fraud, pressure, opportunity, and rationalization have accomplished the validity discriminant.

**Table 5 Test Result of Discriminant Validity (Roots of AVE)**

Variable	Y	X1	X2	X3	M
Fraud	<b>0.785</b>	0.805	0.703	0.706	-0.261
Pressure	0.805	<b>0.759</b>	0.714	0.770	-0.316
Opportunity	0.703	0.714	<b>0.865</b>	0.647	-0.294
Rationalization	0.706	0.770	0.647	<b>0.798</b>	-0.236

The test result of the discriminant validity using the AVE root value acquired that the AVE root value (bold print) is greater than the correlation value among latent variables. Thus, the fraud, pressure, opportunity, and rationalization variables have accomplished the discriminant validity.

**Table 6 Test Result of Construct Reliability**

Variable	Composite reliability	Cronbach's alpha
Fraud	0.918	0.895
Pressure	0.870	0.811
Opportunity	0.856	0.664
Rationalization	0.875	0.809

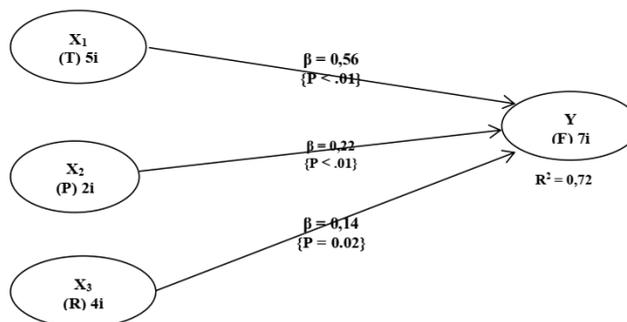
Based on table 6 above, it shows that the value of Composite reliability and Cronbach's alpha > 0.7. Hence, the fraud, pressure, opportunity, and rationalization variables have accomplished the construct reliability.

**Table 7 Test Result of Model Fit**

Average path coefficient (APC)=0.173, P=0.002
Average R-squared (ARS)=0.720, P<0.001
Average adjusted R-squared (AARS)=0.712, P<0.001
Average block VIF (AVIF)=2.221, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF)=2.739, acceptable if <= 5, ideally <= 3.3

Based on table 7, the four test criteria have accomplished the significance value. The Average Path Coefficient (APC) significance value, the Average R-squared (ARS) significance value, the Average Adjusted R-Squared (AARS) significance value are less than 0.05 or 5%, and the *Average Full Collinearity VIF* (AFVIF) is less than 3.3. Therefore, it indicates that the established test model has been fit.

**Figure 1 Research Model with Partial Least Square**



Based on the path coefficient displayed in Figure 1, it can be recognized that pressure, opportunity, and rationalization have a significant positive effect on fraud

Model testing is conducted to predict the causality relationship among latent variables. The test result of the inner model includes the coefficient of determination (R-square) to measure the changing variation degree in the independent variable toward the dependent variable. The higher the R-Square value, the better the prediction model in the research model (Hartono and Abdilllah, 2015: 197).

**Table 8 Result of the determination coefficient**

Endogen Variable	R Square
Y	0.720

The coefficient of determination as much as 0.720 shows that pressure, opportunity, and rationalization have an effect of 72.0 percent on fraud. Meanwhile, the remaining 28.0 percent of the effect is explained by other variables.

**The Effect of Pressure on Fraud (H<sub>1</sub>)**

The results of this study provide empirical evidence that pressure has a positive effect on fraud incidence in the local governments in Malang Region. Pressure has a large influence of 45.2%. This result supports Cressey's (1953) fraud triangle theory and supports several previous studies such as Skousen (2004), Lou and Wang (2011), Pras Maulida (2016), Tiffani and Marfiah (2015), Dellaportas (2013), Ramamoorti (2008), Baucus (1994), Rezaee (2005). This study is not in line with the results of research by Nurbaiti and Hanafi (2017), Simbolon (2018), and Anindya and Adhariani (2019) who found pressure did not affect fraud.

From the perspective of pressure or motivation, greed has always been considered a supporting factor behind excessive fraud cases as suggested by various studies, (Prabowo, 2011c). This is frequently known as the "live beyond someone's means" phenomenon. For example, a global study by ACFE in 2012 placed a person's desire to live beyond someone's means as the most observable behavioral symptom of fraud perpetrators (Association of Certified Fraud Examiners, 2012b, p. 57). The luxurious lifestyle of the offenders is proved by their assets such as mansions, luxury apartments, luxury cars, etc. As the fraud case in the Batu City government, around Rp. 300 million of the total bribes was received by the Mayor of Batu in the form of a discount for the payment of the Mayor's Toyota Alphard car (Kompas.com, 2017).

In the situation of position with financial responsibility as the fraud case in Malang city government, Regional House of Representative members who were caught in the sting operation suspected of receiving the fees ranging from Rp. 12.5 million to Rp. 50 million from the non-active Malang Mayor, Moch Anton, regarding the implementation of their functions and authorities as Regional House of Representative members so that the stipulation of the regional regulation draft of Malang City regarding APBD-P was approved. Together with the Mayor, the head of the Public Works and Housing Office was also arrested. (Kompas.com, 2018).

The fraud case committed by the head and the treasurer of the Public Health Center at Karangploso was initially with the distribution of capitation funds to the staff of Public Health Center with the improper amount. This is due to the cutting of service fees received by each staff of Karangploso Public Health Center in Malang Regency which is used for doctor salaries (Non-Civil Servant), for an internship or volunteer salaries as many as 16 people. Besides, it is used for the deposits to the Health Office as much as 1/14 (one-fourth) of the capitation revenue value every month after tax (beritakorupsi.co, 2019). The perception that there is no option for the head and the treasurers of Public Health Center to pay the salaries for non-civil servant doctors, volunteers, and for deposits to the Health Office is a pressure that causes fraud at Karangploso Public Health Center.

Based on these findings, public sector administrators may place the attention on pressure factors in local government such as pressure on a certain position or lifestyle as an important approach either for fraud detection or for prevention.

**The Effect of Opportunity on Fraud (H<sub>2</sub>)**

The results of this study provide empirical evidence that opportunities have a positive effect on fraud in local governments in Malang Region. It shows that the higher the opportunity, the stronger the fraud incident. The results of this study support Cressey's (1953) fraud triangle theory and support several previous studies such as Dellaportas (2013) and Schuter and Levi (2013).

The opportunities for committing fraud may be caused by a person's position in the organization which can be abused to gain an unlawful advantage (Dorminey *et al.*, 2012). According to the ACFE study, the higher the position of the fraud perpetrator in the organization, the greater the impact on the organization (ACFE, 2012b). The fraud perpetrator must know how to overcome existing obstacles such as internal organizational control to abuse their position. In this case, the fraud perpetrator must have adequate knowledge about internal control weaknesses and be able to use official positions, functions, or access for his advantage (Dorminey *et al.*, 2012). About 54 percent of fraud perpetrators have a bachelor's degree or higher (ACFE, 2012b).

Cressey (1953) argues that the two components from the perception of opportunity are available. The first is general information which is the knowledge that a position containing trust can be violated without consequences. The second is the technical skill or expertise that is required to conduct the fraud usually acquired through routine work experience. It can be conveyed that general information and technical skill are obtained by employees from work experience as well as regular and predictable organizational routines make fraud perpetrators easier to scan the environment and take appropriate decisions so that they commit fraud without being caught.

The acceptance of the second hypothesis in this study shows that the two components of opportunity from Cressey's fraud triangle theory (1953), namely general information and technical skills, have been proven to have a significant positive effect on fraud in local governments throughout Malang Raya. Therefore, someone who understands that his position contains trust and someone has the skills to commit fraud will encourage the higher potential for incidents of fraud. Based on these findings, local governments

in Malang Raya can place the spotlight on general information and technical skills possessed by an employee as an important approach of the opportunity aspect that is not only for fraud detection but also for prevention.

### The Effect of Rationalization on Fraud (H<sub>3</sub>)

The results of this study provide empirical evidence that rationalization has a positive effect on fraud in local governments. It indicates that the higher the rationalization committed by State Civil Apparatus, the stronger the fraud incidents. The results of this study support Cressey's (1953) fraud triangle theory and support several previous studies such as Cohen, et.al. (2010), Dellaportas (2013), Anand, et al., (2004), Nurbaiti and Hanafi (2017), and Benson (1985).

However, this study is not as research findings conducted by Skousen (2004) and Schucter and Levi (2013) who found that elements of rationalization are frequently quoted too simply. Furthermore, Tiffani and Marfuah (2015) who researched 90 companies listed on the IDX, Simbolon (2018) who conducted research in the Provincial Government of North Sumatra, and Anindya and Adhariani (2019) who conducted a survey of 109 employees asserted that rationalization had no significant effect on fraud incidents.

With the acceptance of this hypothesis, it can be elaborated that the four indicators of the rationalization variables which refer to Cohen, et al., (2010). It can be proved that attitudes towards behavior, subjective norms, perceived behavioral control, and moral obligations have a significant positive effect on fraud in local governments throughout Malang Raya. It shows that a person's perspective regarding the choice of actions he/she does which is based on the rules he/she believes, perceptions of how others think about an act, the difficulty or ease that he/she feels in committing an act, and usage of the results of fraud for moral activity are proven to have a positive effect on fraud. Therefore, the higher an employee's ability to rationalize the choice of actions, the higher the possibility of fraud emergence in local government

### CONCLUSION

This study aims to explain the factors that influence the incidence of fraud in local governments. It is very important to examine the factors which affect fraud regarding the high number of fraud cases found in local governments. Local governments need to understand the root causes of fraud - who commits fraud and why - and therefore, they proactively manage their exposure to fraud risk. It is as Ramamoorti's (2008) statement that someone needs to "think like a criminal to catch criminals."

The survey result shows that pressure, opportunity, and rationalization always exist in fraud situations. The finding of this study contributes to the literature review in several ways. First, these finding confirms previous research which states that situations of pressure, opportunity, and rationalization are the factors affected on fraud such as Skousen (2014), Lou and Wang (2011), Prasmaulida (2016), Tiffani and Marfuah (2015), Dellaportas (2013), Ramamoorti (2008), Baucus (1994), and Rezaee (2005).

This research will be very interesting if it can be broadly and deeply implemented. It can be conducted by combining closed questions in the form of questionnaires and interviews with several respondents. They are active State Civil Apparatus in the local government, State Civil Apparatus who stumble on fraud cases and received penalties, and external parties such as interviews with Indonesian Corruption Watch activists as well as journalists, law enforcers, and other competent parties in charge of white-collar crime.

There are three implications of the research results, namely implications, in theory, practice, and policy. The theoretical implication provides additional empirical evidence on the application of the fraud triangle in the public sector regarding the effect of pressure, rationalization, and opportunity on fraud, especially in local governments. The practical implication of the research result provides a real description of the application of the fraud triangle in local governments. The policy implication in this study is expected to provide input for local governments regarding fraud eradication through the identification of the root cause of fraud which is based on pressure, opportunity, and rationalization factors.

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