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THE EFFECT OF MONOPOLY POWER AND INTEGRITY ON THE TENDENCY TO COMMIT FRAUD IN E-PROCUREMENT

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ABTRACT
The main objective of this study is to examine the influence of Monopoly Power and Integrity on fraud that occurs in the e-procurement process. This study involved parties directly related to the procurement of goods and services and the development of electronic procurement systems incorporated in the Procurement Service Unit (referred to in Indonesia as Unit Layanan Pengadaan / ULP) and the Electronic Procurement Services (or referred to Layanan Pengadaan Secara Elektronik / LPSE). This study used a quantitative approach and primary data in the form of questionnaire as measurement instrument. The method of analysis was done using SmartPLS 3. Path analysis and bootstrapping technique were used to test the hypothesis. The results of this study show that power monopoly has a significant positive effect on fraud in e-procurement, while integrity has a significant negative effect on fraud in e-procurement.

Keyword: Monopoly power, Integrity, Fraud, E-procurement

1. INTRODUCTION

Procurement of goods and services is a major factor in driving the wheels of development. Almost all public sector activities involve the process of procuring goods and services, such as in the form of biding / tender, direct procurement, and direct appointment or self-management. Vaidya et al. (2009: 474) states that the government aspires to use public procurement as an economic lever, technology reform, and social reform. Public procurement has an important function in the government. The large amount of budget expenditure for procurement has a big impact on the economy, therefore it needs to be managed properly (Thai, 2001). Procurement of goods includes equipment and buildings for both public and private interests (Bahagia, 2011).

Procurement of goods and services in Indonesia has been regulated in Presidential Regulation Number 54 of 2010 with several changes. The regulation requires that the procurement of goods and services in the public sector be carried out electronically, or commonly referred to e-procurement. E-procurement was only implemented in all local governments in 2013 because it was hampered by a number of technical conditions. E-procurement is expected to be able to suppress the occurrence of fraud in the process of procuring goods and services, which often occurs in the public sector. Data shows that there were 171 cases of corruption in the field of procurement of goods and services as of December 31, 2017 (KPK, 2017). This condition put corruption in the procurement of goods and services in second place after bribery. This proves that until 2017 there was still a lot of fraud in the procurement of goods and services even though e-procurement system had been implemented. Corruption in procurement tends to be a more serious problem in developing countries than in

developed countries (Raymond, 2008).

In practice, the implementation of e-procurement has not been able to suppress the cause of fraud in the procurement of goods and services as a whole starting from planning to the final results of work. One difficult condition to control in e-procurement is that some public officials use monopoly power for personal benefits, such as accepting bribes in exchange for giving tenders or giving contracts to partners they like (OECD, 2010). In certain situations, government officials use their monopoly power over the supply of goods and services, thus leading to corruption without theft (Neupane, 2014). Corruption in public procurement mostly comes from the public administration where the officers who are in charge of managing procedures use their monopoly power to manipulate the process for their own destination (Fazekas, 2015).

Fraud in e-procurement can also be caused by lack of integrity. Integrity plays an important role in the procurement of goods and services and affects the process of procurement of goods and services holistically. Lack of integrity in procurement organizations may result in the lack of objectivity in technical evaluations and qualifications, especially during the evaluation of bid proposals, prices, etc. (Huda et al., 2017). In e-procurement, integrity refers to maintaining the accuracy and completeness of information and processing methods including preventing unauthorized system modifications and information (Zack, 2015). The importance of integrity in the procurement process, especially in the public sector, requires attaching an integrity pact that has been regulated by law. The purpose of this study is to analyze the fraud that occurs in e-procurement by analyzing the influence of monopoly power and integrity on e-procurement fraud.

2. THEORETICAL BASIS
Fraud Diamond Theory
Fraud diamond theory by Wolfe and Hermanson (2004) is a development of the fraud triangle theory by Cressey. Fraud triangle theory consists of only three elements: opportunity, pressure and rationalization while fraud diamond theory consists of four elements: opportunity, pressure, rationalization, and capability. According to Wolfe and Hermanson (2004), the components that affect individual capability to commit fraud are position / function, brains, confidence / ego, coercion skills, effective lying, and immunity to stress.

The four elements in fraud diamond theory explain that incentive is a strong desire based on the needs of a person so that he intends to commit fraud. In this case, Wolfe and Hermanson interpret it as a pressure. Opportunity is a condition that arises because of the weakness in the system that can be used by people who understand the system so they can commit fraud. Rationalization is a description of the attitudes and thoughts of fraudsters that if someone commits fraud, the results and risks obtained will be commensurate with the fraud he has committed. Capability is a condition related to the ability possessed and needed by someone so that he is the right person to commit fraud. With his capability he can recognize the existence of opportunity to commit fraud and can turn it into reality.

Monopoly Power
Klitgaard (1988), in his theory, formulates: $C = M + D – A$ (*Corruption* equals to *Monopoly* plus *Discretion* minus *Accountability*). In the context of procurement of goods and services, Klitgaard (1988) shows that monopoly power is a corrupt behavior that tends to arise when an organization or public official has authority over goods or services that generates money and has the power to decide who will receive it and is not responsible for his actions. Neupane (2014) describes monopoly power as a power owned by a procurement practitioner, in this case government employee, and one of the important keys in the procurement of goods and services in

the public sector. According to Voskanyan (2000), when officials have monopoly power over the provision of government goods, this makes it possible to explain the emergence of corruption incidents without theft. Monopoly power arises because of legal reasons that certain officials are the only ones appointed to do certain tasks.

Integrity

Lack of integrity is an important factor in the occurrence of fraud in the procurement of goods and services. According to OECD (2016), integrity refers to the enforcement of ethical standards and moral values of honesty, professionalism and truth that becomes the basis for ensuring fairness, non-discrimination and compliance in the public procurement process. Schlenker (2008) defines that integrity involves honesty, trust, and loyalty in maintaining one's mandate and obligations, and inability or unwillingness to violate principles without regard to temptations, costs, and preferences of others. Integrity is a quality that underlies public trust and is a benchmark for members to test all their decisions (Sukriah et al., 2009). The importance of integrity in the procurement process, especially in the public sector, requires attaching an integrity pact that has been regulated by law. The Integrity Pact is a statement containing a pledge to prevent and not commit collusion, corruption and nepotism in the Procurement of Goods and Services (Presidential Decree No. 70, 2012).

E-Procurement Fraud

According to Davila et al. (2003), public e-procurement is defined as the use of internet or web-based information and communication technology by the government in conducting procurement relations with bidders for the acquisition of goods, jobs, services and other consulting services needed by the public sector. E-procurement is the integration and electronic management of all procurement activities including purchase requests, authorization, ordering, shipping and payment between buyers and suppliers (Chaffey, 2009).

Fraud may occur in e-procurement because the e-procurement system has not been able to cover holistically and has not been able to prevent fraud related to monopoly power and lack of integrity of the officers involved in it. Fraud usually arises during registration. In this case, officials often request unnecessary conditions or information during the registration process. Unfortunately, the conditions or information are only owned by the preferred vendors, while other vendors (smaller but qualified) may not have them (Zack, 2015). According to Huda et al. (2017) e-procurement fraud can occur at the evaluation stage because there is a subjective element in the valuation of offers including a bandwidth limit game so that only certain participants can register. The lack of technological capabilities of officers/service providers and the level of capabilities of the human resources are inhibiting factors in e-procurement (Nurisra, 2011). For this reason, there needs to be good integration and collaboration among procurement policies, stakeholders involved, and the role of the Procurement Service Unit (ULP) to achieve optimization in implementing public procurement of goods and services through e-Procurement (Nurlukman, 2017).

The Effect of Monopoli Power on E-Procurement Fraud

The e-procurement process involves many parties and must go through several stages. These conditions, added with the existence of different interests, tend to cause fraud due to the monopoly power. According to Klitgaard et al. (2002), if someone controls a monopoly over goods and services and has unlimited authority to decide who has the right to get the goods and services and without accountability, there might be corruption there. This applies to the government sector.

According to the OECD (2010), one of the causes of fraud in procurement of goods and services in Indonesia is the existence of monopoly power. In the case

of rigging tenders, supernormal profits can be expected by bidding participants and tender committees that guarantee certain tender participants to obtain contracts. In some situations, government officials have a monopoly power on the provision of goods and services that are very important for corruption without theft (Neupane, 2014).

Supported by capabilities and knowledge in the field of procurement of goods and services, government officials who are involved in procurement can commit fraud in the e-procurement process. For example, a Commitment Making Officer (PPK) is able to mark price up with existing knowledge and authority on him while other procurement implementers cannot do this. This is in accordance with the theory of Fraud Diamond, one of which is Capability, where in the presence of this element government officials can monopolize power. Based on the description above, the hypothesis proposed in the study is:

H1: *Monopoli Power has an effect on e-Procurement fraud.*

The Effect of Integrity on E-Procurement
Integrity plays an important role in the success of e-procurement. Integrity is needed starting from planning to completion of work. Lack of integrity can cause fraud to occur at the beginning of e-procurement. If fraud occurs at the beginning, there will be a dilemma at the next stage of e-procurement. According to McCue et al. (2015), there are at least five dilemmas that affect the implementation of procurement: flexibility, accountability, bureaucracy, efficiency and procurement training.

Amrizal (2004) explains that fraud often occurs in an entity when the individual employed does not think about honesty and integrity. In e-procurement, integrity is a crucial matter which is prone to neglect. Integrity is an option for someone to do a good job or otherwise commit fraud deliberately for his personal interests.

Integrity violations in the procurement of goods / services are related to the opportunity, rationalization and capability, which are elements of the diamond fraud theory. With opportunity, rationalization, and capability, the procurement officers are usually tempted and easy to commit fraud. Based on the description above, the hypothesis proposed in the study is:

H2: *Integrity has an effect on e-procurement fraud*

3. METHOD
This study employed a quantitative approach with primary data in the form of questionnaires. The questionnaires were distributed to 95 respondents related to the process of e-procurement of goods and services in four Regencies of Regional Government. The respondents involved in this study were Commitment Making Officers (PPK), Auction / Tender Committee, Procurement Officers, and E-Procurement Service (LPSE) Officers. The respondents spread in the Procurement Service Units (ULP), E-Procurement Services (LPSE), and several Regional Apparatus Organizational Units (SOPD) that had a large budget in the procurement of goods and services.

Data Analysis Technique and Hypothesis Test
The data used in this study are analyzed using SmartPLS 3 which is believed to be able to test the predictive relationship between constructs. Therefore, PLS-SEM is very suitable for use in research aimed at developing theory. The stages in the SmartPLS 3 analysis are through the outer and inner models by looking at composite reliability value. The data with composite reliability value > 0.7 have high reliability. The Average Variance Extracted (AVE) value expected is > 0.5. Reliability test is reinforced with. The value of Cronbach Alpha expected is > 0.7 for all constructs. The loading factor value between 0.6 - 0.7 for exploratory studies is still acceptable. In this study, researchers take a factor loading

value above 0.6, while the values below 0.6 would be discarded. The R-Square values of 0.67, 0.33 and 0.19 show that the model is strong, moderate and weak, while the values of 0.75, 0.5 and 0.25 show the model is strong, moderate and weak (Chin, 1998; Hair et.al., 2011 in Ghozali and Latan, 2015).

Hypothesis test is conducted by calculating the value of the relationship between variables using bootstrapping. This test is conducted to see the significance value of t-statistics > 1.96. The significance value of 5 % is obtained by comparing the p-value at alpha (0.05). The hypothesis can be accepted if there is a relationship between **exogenous variable and endogenous variable**, or if t-statistics > t-table (1.96 sig 5%) and P-value < alpha (0.05). The hypothesis equation is as follows:

Y' = α + b1X1 + b2X2+ ε

Were:

Y'= Dependent variable (WI)

α= Constant coefficients

b= Regression coefficient

X= Independent Variable (PC and PW)

ε= Variable interference (Error)

4. RESEARCH RESULT AND DISCUSSION

Partial Least Square (PLS) Analysis

Based on the measurement of the outer model, the results are obtained according to the following table 1.

Table 1
Reliability Test Results of the Constructs

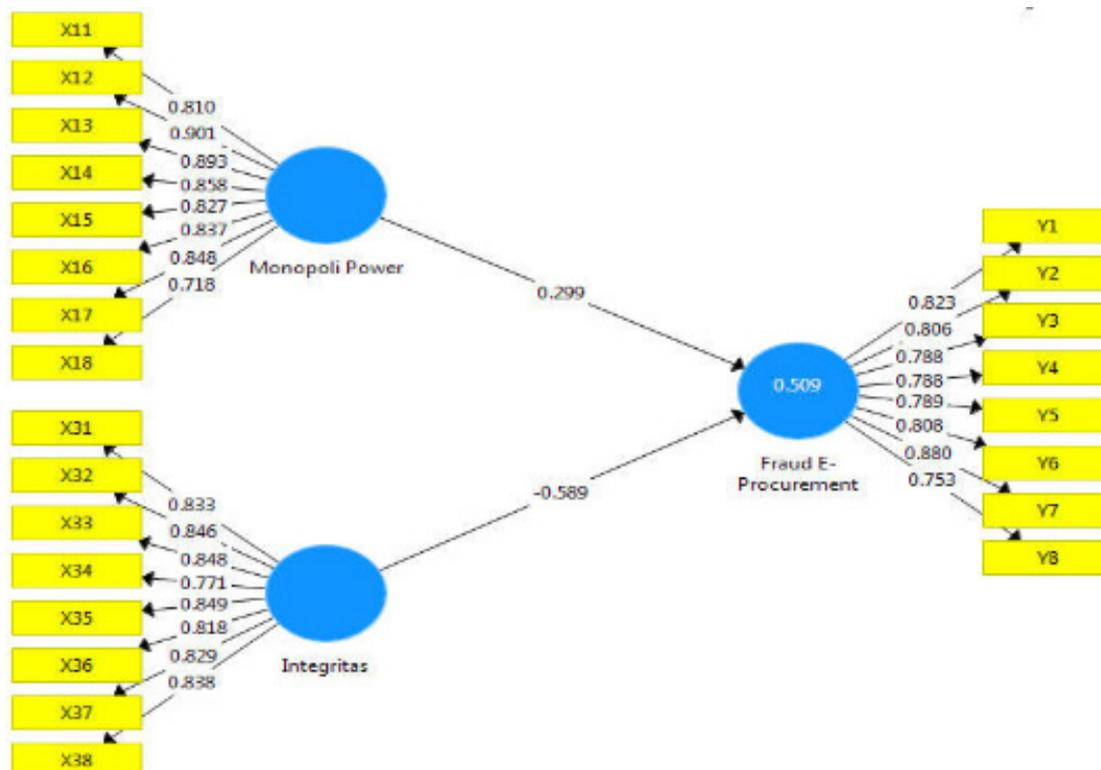| Variable	Composite Reliability	Cronbachs Alpha
Monopoly Power	0.949	0.939
Integrity	0.946	0.935
e-Procurement Fraud	0.936	0.922

Source: Data Process

Figure 1
Coefficient Path

Source: Data Process

Based on the test results in table 1, it can be seen that the Cronbachs Alpha value is greater than 0.6 and the composite reliability value is greater than 0.7. Thus, based on calculations and the provisions of the composite reliability values, all indicators are declared reliable in measuring latent variables.

Table 2
Validity Test Results of the Constructs

Variable	AVE
Monopoli Power	0.702
Integrity	0.688
e-Procurement Fraud	0.648

Source: Data Process

Based on Table 4.2, it can be seen that all variables produce the Average Variance Extracted (AVE) values greater than 0.5. Thus the indicator is declared valid to measure the variable.

Table 3
Determination Coefficient Value

Model	R^2
$Y = \rho_1 X_1 + \rho_2 X_2 + e$	0.509
$Q^2 = 1 -(1- R^2_Y)$	
$Q^2 = 1 -(1- 0.509)=0.509$	

Source: Data Process

The R-square value of e-procurement model is 0.509 or 50.9%. This indicates that the diversity of e-procurement fraud can be explained by the Monopoly Power and Integrity, or 50.9%. In other words, the contribution of monopoly power and integrity to the e-procurement fraud is 50.9%, while the remaining 49.1% is the contribution of other variables not discussed in this study. The Q2 value obtained from the calculation result is 0.509. This value is greater than 0 or the value of Q2 > 0, indicating that the model has predictive relevance. The test results obtained show that the effect size value of the effect of monopoly power on e-procurement fraud is 0.175, where the value is greater than 0.15 and less than 0.35 so that it falls into the strong category. It means that power monopoly has an effect on e-procurement fraud on structural order. Next, the value of the effect size of the effect of integrity on e-procurement fraud is 0.678, where the value is greater than 0.35, so it falls into the strong category. It means that integrity has an effect on e-procurement fraud on structural order.

Hypothesis Test
Significance testing of the hypothesis is used to test whether there is an effect of exogenous variable on endogenous variable or not. The criteria in testing show that if the t-statistic value > t-table (1.96 sig 5%) and P-value < alpha (0.05), with a maximum error rate of 10% or α = 10% and t-statistics > 1.64, then it is said that there is a significant effect of exogenous variable on endogenous variable. The results of testing the significance can be found through the following table.

The Effect of Monopoly Power on e-Procurement Fraud
Based on the test results of the effect of monopoly power on e-procurement fraud in Table 4.4, it can be seen that the value of t-statistics of the effect of monopoly power on e-procurement fraud is 4.833 with p-value of 0,000. The test results show that the value of t-statistics > 1.96 and p-value < 0.01. This means that there is a significant effect of monopoly power on e-procurement fraud. Thus, hypothesis 1 is supported by research data. The coefficient value is 0.218, or positive. This means that monopoly power has a positive and significant effect on e-procurement fraud.

This can be said that the higher the monopoly power, the higher the tendency of e-procurement fraud. This result is in accordance with the conditions in the process of procurement of goods / services in the field, where many procurement organizations misuse power or authority related to their main tasks and functions. Monopoly power is not only limited to the space owned by the procurator, but also used to suppress other procurement personnel to comply with the will of the owner of the power, for example the Regent to the Commitment Making Officer (PPK),

Table 4
Direct Hypothesis Testing Results

Exogenous	Endogenous	Original Sample (O)	t-statistics (|O/ STERR|)	P-Values
Monopoly Power	e-Procurement Fraud	0.218	4.833	0.000***
Integrity		-0.297	7.257	0.000***
e-Procurement Fraud				

Note: *** significance level< 0.01
Source: Data Process

the Bid Committee and the Procurement Officer to win the preferred partner.

This condition is in accordance with the statement in OECD (Organization for Economic Co-operation and Development / OECD, 2010) that in Indonesia, one of the factors of procurement fraud is monopoly power, that is, accepting bribes in return for giving tenders or giving contracts to partners they like. This study also supports the theory presented by Klitgaard (1988) that the monopoly power by government officials (Principal) is the important cause of fraud, as formulated by Klitgaard: C = M + D - A (Corruption equals to Monopoly plus Discretion minus Accountability. This is in line with the statement that many regulations provide public officials monopoly authority which may prove useful for demanding bribes, especially in the procurement of goods / services (Soreide, 2002).

The Effect of Integrity on e-Procurement Fraud
Based on the test results of the effect of integrity on e-procurement fraud in Table 4.4, it can be seen that the value of t-statistics of the effect of integrity on e-procurement fraud is 7.257 with p-value of 0.000. The test results show that the value of t-statistics > 1.96 and p-value < 0.01. This means that there is a significant effect of integrity on e-procurement fraud. Thus, hypothesis 2 is supported by research data. The coefficient value is -0.2970, or negative. This means that integrity has a negative and significant effect on e-procurement fraud.

This can be said that the higher the integrity, the lower the tendency of

e-procurement fraud. This result is in accordance with Presidential Regulation Number 54 of 2010 that to prevent fraud in the procurement of goods / services, procurement organizations must sign the Integrity Pact. This is done for protection in the field of law so that procurement organizations do not commit fraud due to lack of integrity and legal sanctions can be enforced according to regulations

It is expected that the high integrity can significantly suppress the aspects that cause fraud contained in the Fraud Diamond theory. With the suppression of these aspects, it is expected that e-procurement can be reduced and prevented. Related to fraud, this study supports the research conducted by Huslina (2015) which shows that apparatus integrity affects the effectiveness of fraud prevention systems in the Government.

5. CONCLUSION
Based on the description and the results of hypothesis test, it can be concluded that monopoly power has a significant positive effect on e-procurement fraud, while integrity has a significant negative effect on e-procurement fraud. This proves that the poor implementation of e-procurement can lead to a tendency to commit fraud. No matter how good the information technology system is, without being supported by quality human resources that are honest and with integrity, the system will be in vain. Some of the weaknesses of e-procurement occur at the stages of planning, determining technical requirements, determining the specification of goods, giving explanations,

and evaluating bids, where at the stages, the procurement officers can still carry out a monopoly power accompanied by a lack of integrity. The limitation of this study is that this research did not involve the perspective of the provider (vendor) and the recipient of the work result (PPHP) because the distribution of questionnaires was conducted at the beginning of the year where the procurement of goods and services had not been carried out. Another limitation is that the rate of return of the number of questionnaires was uneven because there were several regional apparatus organizations that had not determined who would be appointed to carry out the process of procurement of goods and services. It is suggested that further research add other variables that cause fraud in e-procurement and use a qualitative approach so that the results obtained will be deeper and maximum. For the government, it is recommended to continue to develop e-procurement systems or applications, especially at the evaluation stage, making it easier for procurement personnel to set quality providers. In addition, the quality of procurement organizations needs to be improved, especially in terms of the integrity of procurement people, because without good integrity, e-procurement cannot run optimally as well as to reduce fraud in the procurement of goods and services.

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