Determinants of Goods/Services Procurement Fraud with Performance Accountability as Moderation in Central Lombok Regency Government

Borrys Liandanis Budiarto Patar, Akram, Siti Aisyah Hidayati, Lalu Hamdani Husnan
Master of Accounting Program, Faculty of Economics and Business, University of Mataram, Indonesia

Abstract:

The purpose of this study is to examine the effects of competence and opportunity, as well as organizational commitment to PBJ fraud, directly or with performance accountability as a moderation variable. The study was conducted on a sample of goods and services procurement actors in Central Lombok Regency, with as many as 120 respondents. Data analysis was done using SmartPLS. The results showed the correlation of variables in Goods/Services Procurement Fraud (PBJ) with the principles of agency theory and the fraud triangle. The competence of PBJ implementers has a negative influence on PBJ fraud, in line with agency theory, which emphasizes the importance of highly competent individuals in reducing opportunities for unethical behavior in public agencies. Strong organizational commitment also shows a negative influence on PBJ fraud, confirming agency principles that emphasize adherence to procurement processes. On the other hand, the finding that opportunity has a positive effect on PBJ fraud is in line with the fraud triangle theory, which highlights that opportunity in the procurement system can facilitate fraudulent practices. The role of performance accountability that strengthens the influence of competence and commitment to PBJ fraud is in line with the fraud triangle theory, affirming the importance of accountability in controlling fraud opportunities. These findings consistently support the principles of agency theory and the fraud triangle in the context of the procurement of goods and services in the public sector.

Keywords: Fraud, Competence, Opportunity, Organizational Commitment, and Performance Accountability.

Introduction

Local government, as a public sector organization, aims to provide the best and maximum service to its stakeholders, namely internal stakeholders and external stakeholders. Public services provided by local governments, such as education, health, security, law enforcement, public transportation, and the provision of public needs, can be fulfilled by carrying out a procurement process that includes the procurement of goods and services within the scope of the government. For the smooth implementation of development, which is a form of state service to the people that can improve community welfare through economic improvement in the region and even the nation as a whole, the procurement of goods and services is the main element that plays this strategic role.

In the implementation of the procurement of goods and/or services within the scope of the government, various kinds of fraud are...
vulnerable. Fraud is a deviation or unlawful act committed by people from inside and outside the organization to obtain personal and/or group benefits that directly harm other parties. According to Albrecht, there are 5 types of fraud classified as follows: Management fraud is management that provides financial statements with biased or unclear results. Occupational fraud is theft committed by employees of entities either directly or indirectly. Investment scams are fraudulent investments with the lure of income greater than capital; customer fraud is when sellers commit fraud against customers with certain tricks to get excess profits; and vendor fraud is when companies incur expensive costs in shipping goods so that operational costs swell. This study uses occupational fraud as an opportunity for fraud in the implementation of local government procurement activities. There are three types of occupational fraud: corruption, asset misappropriation, and fraudulent statements. Occupational fraud is defined as the application of one's life to the enrichment of the body through corruption or deliberate corruption stemming from the power or wealth of the employing parliament (Cressey, 1973). There are various kinds of fraud that occur within government agencies, but one of the biggest sources of financial leakage is fraud in the field of procurement of goods and services. Procurement of goods and services is one of the biggest sources of corruption in the government financial sector. Every year, the audit results of the Audit Board of the Republic of Indonesia (BPK RI) and the Corruption Eradication Commission (KPK) report procurement cases containing elements of alleged fraud.

The procurement of goods and services is a part that is still prone to fraud and has great potential for corruption. Based on Presidential Regulation No. 16/2018, the executors of procurement of goods and services are the budget user (PA), budget user authority (KPA), commitment-making officer (PPK), procurement officer, election working group, procurement agent, PjPHP/PPHP, self-managed organizers, and providers. In relation to the triangle theory, it is considered that every executor of the procurement of goods and services has the highest opportunity, while the provider has a high fraud motivation. In an effort to prevent fraud, the competency factor plays an important role. Competence itself is the basic foundation of a person's characteristics that indicate how to behave, think, equalize situations, and provide support for a long period of time. Competence is a basic characteristic of a human being related to the effectiveness of performance in his work. Basically, the more employees have human resource competence or are competent in their fields, the greater the fraud prevention, because high competence can minimize the occurrence of fraud. The elements possessed by procurement implementers in maintaining competent competence include high responsibility, making fixed decisions, maintaining integrity, and high disciplinary actions.

The factors for fraud include the opportunity for someone to take actions that are not in accordance with the provisions. Opportunity is a condition or situation that allows someone to commit or cover up dishonest actions. Usually this can occur due to weak internal control, abuse of authority with a large scope, and/or lack of oversight over authority accessibility. The most common mechanisms to prevent opportunities for fraudulent procurement of goods and services include supervision and monitoring of the authority of the KDP and a good internal control system. A good internal control system is the most effective tool for preventing and detecting fraud. Organizations with a good internal control system can reduce the occurrence of fraud.

This research was carried out in Central Lombok District due to the phenomenon of fraud cases in the Central Lombok District Government over the results of the procurement of goods and services. Research was conducted in Central Lombok District so that efforts to create human resources for implementing the procurement of goods and services are transparent, accountable, integrity-based, and professional, and the process of implementing the procurement of goods and services is of good quality and accountable.
Arifianti et al. (2015) Fithriani et al. (2020) Finalia, Fitri, and Nadirsyah (2019) Zahara (2017) found in the study that Finalia, Fitri and Nadirsyah (2019) found that opportunity did not affect fraud in the procurement of goods and services, while Zahara (2017) suggested that opportunity had a significant positive effect on fraud.

One of the theories in this study is agency theory. Based on the theory of agencies that adopt the opinion of relationships arising from the existence of contracts established by the legislature as representatives of the people (principal), which require the executive or government (agent) as a service provider for the benefit of the people, Agency theory explains the principle of good governance as a benchmark for leaders to use to make decisions. Agency theory in internal control systems can be used to explain fraudulent tendencies. Control in government is needed for actions related to the inspection and evaluation of activities carried out in accordance with established plans with the aim of optimizing performance.

Literature Review and Hypotheses Development

Agency theory describes the relationship between the first two parties, the owner (principal) and the second management (agent). Iqbal et al. (2016) explained that agency relations are an agreement or contract in which one or more people (principals) order others (agents) to perform a service for the benefit of the principal and give authority to agents to make a decision that is best for the principal. Agency theory predicts that if agents already have information advantages over principals and there is a difference between the interests of agents and principals, it can cause problems with the main agent, who performs actions that benefit him but can harm the principal (Nurharjanti, 2017). In the journal, Pongsapan (2014) explained that the purpose of agency theory is to explain how contracting parties can design contracts that aim to minimize costs as a result of asymmetrical information and uncertain conditions. This study uses agency theory to explain the agency relationship that exists between the community (principal) and the government (agent) in the government sector. Puspitasari & Lukman (2021) explained that the community gives trust (mandate) to the government to manage the government (state) so that it can prosper the community and bring changes to the country for the better.

Padget (2014) explains that the Cheating Triangle reveals that a typical cheat executor first and foremost has incentives or pressures, usually financial pressure, but can also be pressured to perform through challenging or expanded key performance indicators. The following are three elements contained in the fraud triangle theory first introduced by Cressey (1973) and Tuanakotta (2012). These three factors are depicted in the fraud triangle.

![Figure 1. Fraud Triangle](source: Tuanakotta (2012))

There are three causes or triggers of fraud, which are as follows:

1. Unshareable pressure or incentive is the motivation of individual employees to act fraudulently due to both financial and non-financial pressure from personal and organizational pressure.

2. Perceived opportunity is the opportunity for fraud due to a weak or ineffective system so as to open up opportunities for fraud. Factors causing fraud are caused by weaknesses in the system where an employee has the power or ability to take advantage so that fraudulent acts can be committed.
3. Rationalization is Fraud occurs because of the condition of local ethical values that encourage ("allow") the occurrence of fraud. Consideration of fraudulent behavior as a consequence of gaps in the employee's personal integrity or other moral reasoning

**Fraud**

According to Karyono (2013), fraud is a deviation and illegal act carried out deliberately for certain purposes, such as deceiving or giving misleads to other parties, carried out by people both inside and outside the organization. There are three conventional types of occupational fraud: corruption, asset misappropriation, and fraudulent statements.

**Procurement of Goods and Services**

Procurement of Government Goods/Services, hereinafter referred to as Procurement of Goods / Services, is a Goods / Services Procurement activity by Ministries / Institutions / Regional Apparatus financed by the APBN / APBD whose process is from the identification of needs to the handover of work results according to Presidential Regulation of the Republic of Indonesia No. 12 of 2021 concerning Amendments to Presidential Regulation Number 16 of 2018.

**Accountability**

Accountability and transparency are the main requirements to ensure integrity and prevent corruption, according to Greiling & Halachmi (2010), and Ahsan (1981) mentioned that accountability is the condition of a person who is judged by others because of the quality of his performance in completing the goals he is responsible for. The main function of public accountability, according to the State Administration Institute (2015), is to provide democratic control (democratic role); to prevent corruption and abuse of power (constitutional role); and to increase efficiency and effectiveness. Lubis (2018) explained that accountability is needed in the procurement of goods and services. Budget Users (PAs) and Commitment Making Officials (KDP) account to the public for everything about the performance that has been implemented.

**Procurement Executor**

The Commitment Making Officer, hereinafter abbreviated as KDP, is an official who is authorized by the PA/KPA to make decisions and/or take actions that may result in the expenditure of the state budget or regional budget. KDP, which is the official responsible for the implementation of the procurement of goods and services. Competency as regulated (LKPP Regulation Number 7 of 2021 concerning Human Resources for Procurement of Goods and Services, 2021) is the work ability of each individual, which includes aspects of knowledge, skills, and work attitudes in accordance with established standards.

**Organizational Commitment**

Islamy (2016) Based on the background and theoretical studies that have been stated above, it can be explained that to be able to suppress the occurrence of fraud in the implementation of procurement of goods and services and increase accountability in regional financial management, it is necessary to emphasize the factors that can cause fraud. Procurement Implementation Competencies, Opportunities, and Organizational Commitment can be associated with an effort to suppress fraud actions with the use of performance accountability as a control in the implementation of procurement of goods and services to be more effective and efficient.

These matters include an inseparable part of the accountability of the implementation of government procurement activities for budget management. Procurement Implementation Competencies, Opportunities, and Organizational Commitment are needed to produce good procurement outputs and avoid fraud that can harm state and regional finances. So that the conceptual framework can be described as follows:
The fulfillment of KDP's technical capacity is closely related to planning, performance management by both providers and self-management, evaluation and monitoring of activity implementation, and follow-up plans for improvements in budget implementation, so that competent KDP will be more capable, more accountable, and more effective and efficient in managing budgets.

The definition of competency, according to LKPP Regulation Number 7 of 2021 concerning Human Resources for Procurement of Goods and Services, 2021, is the work ability of each individual, which includes aspects of knowledge, skills, and work attitudes in accordance with established standards. Competence is not only assessed by having an expert certificate in the procurement of goods and services but also by the fulfillment of managerial requirements.

With adequate procurement implementation competence so that the implementation of goods and services procurement is in accordance with applicable regulations. However, with low competence, fraud against implementation becomes high. Related to the description above, the following hypothesis can be built:

H1: The competence of procurement implementers negatively affects the fraud of procurement of goods and services.

Fraud Triangle, a theory put forward by Donald R. Cressey in 1950 after conducting research for his doctoral thesis. Cressey hypothesizes the fraud triangle theory to explain why someone commits fraud. Cressey revealed that there are three factors that cause someone to commit fraud: the pressure of financial problems and doing work that is closely related to achieving targets (pressure), the opportunity to commit fraud, and rationalization from the implementer.

Zahara (2017) found in her research that opportunity is a dominating factor influencing when someone commits fraud. This research shows that executors rely on their position as professional accountants to deceive others when they are faced with special crises that result in criminal behavior. Fraudsters commit fraud in their workplace to meet financial needs when the opportunity arises to do so and can then rationalize their deeds. Cressey, (1953). With high opportunities, the opportunities for KDP cheating are getting higher; however, if the opportunities are lower, the opportunities for KDP cheating will decrease. Related to the description above, the following hypothesis can be built:

H2: Opportunity to have a positive effect on fraud in the procurement of goods or services.
Organizational commitment can encourage an official to experience conditions where personal considerations influence, dominate, and even eliminate his professionalism in carrying out duties and responsibilities. According to Anggara et al. (2020), organizational commitment is a reflection of how an employee recognizes the organization and is bound to its goals.

In the research of Anggara et al. (2020), it is stated that organizational commitment has a negative and significant effect on the tendency for fraud in the financial management of an organization. According to Anggara et al. (2020), employees who have high organizational commitment will make every effort to achieve organizational goals and will not harm their organization. So, the higher the organization’s commitment, the lower the employee’s willingness to commit fraud. Related to the description above, the following hypothesis can be built:

**H3: Organizational commitment negatively affects fraud in the procurement of goods and services.**

Performance accountability is very necessary in the procurement of goods and services, one of which is carried out by the Commitment Making Officer (PPK) by accounting to the public everything about the performance that has been implemented. To achieve quality public services, it must be supported by three elements: (i) the transparency of government administrators; (ii) the existence of performance standards in each institution that can be measured in carrying out their duties, functions, and authorities; and (iii) participation to create a conducive atmosphere with easy procedures, low costs, and fast service.

Accountability requires rules, measures, or criteria as indicators of success and responsibility for a job or plan. Accountability in the procurement of goods and services: KDP accounts to the public everything about the performance that has been implemented. According to Hidayat (2021), apparatus competence needs to be considered in the fraud prevention system. Competence is the cornerstone of a person's characteristics and indicates how to behave, think, equalize situations, and provide support for long periods of time. In other words, competence is something that a person shows at work every day. Related to the description above, the following hypothesis can be built:

**H4: Performance Accountability strengthens positively the influence of procurement implementation competence on procurement fraud of goods and services.**

Corruption in the procurement of goods and services is one form of fraud motivated by various factors. These factors are derived from the fraud triangle theory developed by Cressey (1953), which consists of pressure, opportunities, and rationalization. Then, in 2004, this theory was refined by Wolfe & Hermanson (2004) with the theory of diamond fraud, which consists of pressure, opportunity, rationalization, and capability.

Opportunity is a factor that influences a person to cheat, which can be defined as a person’s situation accompanied by circumstances that allow him to commit fraudulent acts without being noticed by others. Opportunities are often associated with the scope of authority, accessibility of authority, and internal control systems. The higher the authority and ineffectiveness of the internal control system applied, the more opportunities are available to carry out fraudulent activities. Dellaportas (2012) found in his research that opportunity is the dominating factor influencing when someone commits fraud. This research shows that executors rely on their position as professional accountants to deceive others when they are faced with a special crisis that results in criminal behavior. Related to the description above, the following hypothesis can be built:

**H5: Performance Accountability strengthens the influence of KDP Opportunity on procurement fraud.**

Management and/or supervision of the control system and performance of the state government can describe the effectiveness of the control system and performance. Weak management and/or supervision of government
systems and performance can provide loopholes or open opportunities that can be used by implementers to commit fraud.

Nurlaini & Almasdi's (2020) research shows that organizational commitment has a positive and significant influence on the performance of regional apparatus work units. The performance of work units that have a high commitment to the organization helps the work unit achieve the performance of the organization that has been set.

The results of research by Natasya et al. (2017) show that organizational commitment has a significant positive influence on the prevention of fraud in the procurement of goods and/or services. Research by Natasya et al. (2017) shows organizational commitment has an influence on fraud prevention. Related to the description above, the following hypothesis can be built:

H6: Performance Accountability Strengthens the Influence of Organizational Commitment on Procurement Fraud

Methods

This study uses a quantitative approach that aims to determine the influence of procurement implementation competence, opportunity, and organizational commitment on the factors of goods and services procurement fraud. This type of research is associative research with a quantitative approach, where research aims to determine the relationship between two or more variables (Sugiyono, 2013). The study was carried out in 35 Regional Apparatus Organizations (OPD) within the scope of the Central Lombok District Government (Pemkab). The Central Lombok Regency Government was chosen as the research location due to cases of fraudulent procurement of goods and services between 2020 and 2022 handled by law enforcement officers. Furthermore, research was conducted on the civil servants in Central Lombok Regency, who will be used as a sample in this study: 120 (one hundred and twenty) people, consisting of KDP and PA, in 35 OPD of the Central Lombok Regency Government. The selected sample must show all the characteristics of the population so that they are reflected in the selected sample; in other words, the sample must be able to describe the actual or representative state of the population. The sampling technique in this study is nonprobability, namely purposive sampling, which is a sampling technique based on a certain consideration or criteria in accordance with what is desired in the study (Sugiyono, 2013). The selection of samples in this study is Commitment Making Officers, Expenditure Treasurers, and Budget Users, which is based on the consideration that the sample is employees who are directly involved and responsible for the implementation of the procurement of goods and services and already have a certificate of expertise in government procurement of goods and services.

The classification of variables in this study is grouped into three parts, namely as follows:

Free Variable (Independent)

An independent variable is a variable that affects or causes its change or the emergence of a dependent variable (bound). These variables are also referred to as stimulus, predictor, and antecedent variables (Sugiono, 2013).

Dependent Variables

The dependent variable is an affected variable or cause, due to the presence of an independent variable. Dependent variables are also referred to as output, criterion, and consequent variables (Sugiono, 2013).

Moderation Variables

Sugiyono (2019: 58) defines moderation variables as variables that affect (strengthen or weaken) the relationship between independent and dependent variables. The moderation variable in this study is performance accountability.

This study uses five variables, where each variable consists of indicators that are used as the basis of the questionnaire. This study used independent (independent) variables (procurement implementation competencies, opportunities, and organizational commitments) and dependent (bound) variables (goods and
services procurement fraud) and performance accountability as moderation variables. The above variables each have a relationship, and the relationship affects each other in the following ways:

**Independent Variables**

\( X_1 = \) Procurement Implementation Competence  
\( X_2 = \) Opportunities  
\( X_3 = \) Organizational Commitment

**Dependent Variables**

\( Y_1 = \) Fraud Sale of Goods/Jasa

**Variable Moderation**

\( Z = \) Performance Accountability

The operational definition of variables describes the characteristics and objects into observable elements that cause concepts to be measured and operationalized in research. The variables were measured using a Likert scale with a score of 1 (STS = strongly disagree), 2 (TS = disagree), 3 (N = neutral), 4 (S = agree), and 5 (SS = strongly agree).

The score categories for each variable can be seen in Table 1 below.

The next step is to draw a path diagram of the model to be estimated. The path diagram in this study can be illustrated as in Figure 3.

### Table 1. Range of Value Categories

<table>
<thead>
<tr>
<th>Variable Categories</th>
<th>Value Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-1.80</td>
</tr>
<tr>
<td>Procurement Implementation Competence (X1)</td>
<td>Very Low</td>
</tr>
<tr>
<td>Opportunities (X2)</td>
<td>Very Low</td>
</tr>
<tr>
<td>Organizational Commitment (X3)</td>
<td>Very Low</td>
</tr>
<tr>
<td>Fraud Procurement of Goods/Services (Y1)</td>
<td>Very Not Good</td>
</tr>
<tr>
<td>Performance Accountability (M)</td>
<td>Very Not Good</td>
</tr>
</tbody>
</table>

Figure 3. Measurement and Structural Models with PLS-SEM
Result

The characteristics of respondents based on gender, age, and length of duty are used to determine the diversity of respondents. This is expected to provide a fairly clear picture of the characteristics of respondents and their relationship to research problems and objectives. In this study, the number of samples used was 120 civil servants, including the executors of goods and services procurement (PBJ), spread across OPD Central Lombok Regency, but the questionnaire filled out was only 100, with details according to table 2 below:

<table>
<thead>
<tr>
<th>Keterangan</th>
<th>Jumlah</th>
<th>Persentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30 Tahun</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>30-40 Tahun</td>
<td>14</td>
<td>15%</td>
</tr>
<tr>
<td>40-50 Tahun</td>
<td>41</td>
<td>41%</td>
</tr>
<tr>
<td>&gt; 50 Tahun</td>
<td>39</td>
<td>40%</td>
</tr>
<tr>
<td>Jenis Kelamin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pria</td>
<td>66</td>
<td>67%</td>
</tr>
<tr>
<td>Wanita</td>
<td>33</td>
<td>33%</td>
</tr>
<tr>
<td>Masa Kerja</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 5 tahun</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>5-10 tahun</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>&gt; 10 tahun</td>
<td>42</td>
<td>42%</td>
</tr>
</tbody>
</table>

Based on table 2, it can be summed up as follows:

1. Most respondents are aged 30–50 years, which means that the average employee is experienced in carrying out duties.
2. Most respondents are male (67%), while female (33%).
3. In terms of length of work, those who served between 1 and 5 years amounted to 6 people (6%), while between 6 and 10 years amounted to 15 people (15%), and those who worked 10–20 years amounted to 42 people (42%), and those who worked more than 20 years amounted to 37 people (37%).
4. In terms of education level, respondents with the lowest education were high school as many as 1 person (1%), diploma 4 people (4%), undergraduate 50 people (50%), and postgraduate as many as 45 people (45%).

Figure 4. PLS Algorithm Results
Model evaluation is carried out by analyzing the construct results of the outer model and inner model. The results can be seen in the report from the PLS algorithm on SmartPLS software. Convergent validity is used as a measurement to see positive relationships between indicators on one construct (variable). The required loading factor value is 0.7. The initial PLS algorithm results of this study are as follows (J. Hair et al., 2014). While values below 0.7 are removed from the indicator. In figure 4, the value of the loading factor model can be seen. To explain in detail, the value of outer loading can be seen in table 3.

Based on figure 4, there are indicators with a loading factor value of less than 0.7, including as table 3 below:

| Outer loadings | X1.1 <- Kompetensi PP (X1) | X1.2 <- Kompetensi PP (X1) | X1.3 <- Kompetensi PP (X1) | X1.4 <- Kompetensi PP (X1) | X1.5 <- Kompetensi PP (X1) | X1.6 <- Kompetensi PP (X1) | X1.7 <- Kompetensi PP (X1) | X1.8 <- Kompetensi PP (X1) | X1.9 <- Kompetensi PP (X1) | X2.1 <- Kesempatan (X2) | X2.2 <- Kesempatan (X2) | X2.3 <- Kesempatan (X2) | X2.4 <- Kesempatan (X2) | X2.5 <- Kesempatan (X2) | X2.6 <- Kesempatan (X2) | X3.1 <- Komitmen Organisasi (X3) | X3.10 <- Komitmen Organisasi (X3) | X3.11 <- Komitmen Organisasi (X3) | X3.12 <- Komitmen Organisasi (X3) | X3.2 <- Komitmen Organisasi (X3) | X3.3 <- Komitmen Organisasi (X3) |
|----------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
|                | 0.465                     | 0.570                     | 0.777                     | 0.783                     | 0.747                     | 0.823                     | 0.664                     | 0.599                     | 0.741                     | 0.827                     | 0.556                     | 0.742                     | 0.533                     | 0.762                     | 0.765                     | 0.935                     | -0.166                    | -0.079                    | -0.178                    | 0.900                     | 0.931                     |

Based on (J. Hair et al., 2014), indicators whose loading factor value <0.7 (less than 0.7) are dropped (not used) so that re-estimation is carried out with the results as shown in Figure 5.

Based on figure 5, the loading factor for all indicators is valid because the score is >0.7.

The next step is to test the validity of the discriminant. This test aims to determine whether a reflective indicator is a good measurement of its construction based on the principle that the indicator is highly correlated with the construct. Based on the results of PLS calculations, the value of discriminant validity is obtained in Table 4.
Based on Table 4 it can be seen that the AVE root value of each variable is greater than the AVE root in correlation with other variables, so that the discriminating validity value is achieved.

The determination coefficient (R-square) of endogenous constructs is used to see the ability of exogenous variables to explain endogenous variables. Classification of R-square values according to Hair et al., (2021) consists of 0.75 (strong); 0.50 (moderate); and 0.25 (low).

R Square model path I = 0.536 which means that the independent variable has the ability to explain the dependent variable 53.6% (moderate).

The effect size (f square/F2) is used to see the goodness of the model. The guidelines for assessing F2 according to Jacob Cohen (1988) are 0.02 (small), 0.15 (intermediate), and 0.35 (large). Based on the measurement results, the F square value is obtained as the table 7.
Table 7. F square

| Performance Accountability (Z) -> Fraud PBJ (Y) | f-square |
| Opportunity (X2) -> Fraud PBJ (Y) | 0.047 |
| Organizational Commitment (X3) -> Fraud PBJ (Y) | 0.092 |
| Competence PP (X1) -> Fraud PBJ (Y) | 0.457 |
| Performance Accountability (Z) x PP Competency (X1) -> Fraud PBJ (Y) | 0.150 |
| Performance Accountability (Z) x Opportunity (X2) -> Fraud PBJ (Y) | 0.141 |
| Performance Accountability (Z) x Organizational Commitment (X3) -> Fraud PBJ (Y) | 0.076 |

- Performance accountability (Z) against PBJ fraud (Y) = 0.047 (small). In other words, the model has a small contribution to variation in observational results.
- Opportunities (X2) of PBJ Fraud (Y) = 0.092 (small). In other words, the model has a small contribution to variation in observational results.
- Organizational Commitment (X3) to Fraud PBJ (Y) = 0.457 (large). In other words, the model has a large contribution to variations in observational results.
- Competence of procurement actors (X1) against PBJ fraud (Y) = 0.15 (moderate). In other words, the model has a large contribution to variations in observational results.
- Performance accountability (Z) in the effect of organizational commitment (X3) on PBJ fraud (Y) = 0.186 (large). In other words, the model has a large contribution to variations in observational results.

The significance value can be seen from the p-values and t-statistics in the path coefficient table. The significance value for a two-tailed hypothesis with a confidence level of 95% (alpha ≈ 5 percent) is 1.96; if the t-statistic value is greater than 1.96, then the hypothesis is accepted. It can also be done by looking at the p-values with an alpha of 5% (0.05). Therefore, if the p-values are <0.05, then the hypothesis is accepted, but if the p-values are >0.05, then the hypothesis is rejected. The results of the PLS-SEM direct effects bootstrapping analysis are as follows:

Table 8. Path Coefficient

|                          | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics \((|O/STDEV|)\) | P values |
|--------------------------|---------------------|-----------------|-----------------------------|-----------------------------|----------|
| Kesempatan (X2) -> Fraud PBJ (Y) | 0.284               | 0.231           | 0.128                       | 2.217                       | 0.013    |
| Komitmen Organisasi (X3) -> Fraud PBJ (Y) | -0.552              | -0.574          | 0.117                       | 4.720                       | 0.000    |
| Kompetensi PP (X1) -> Fraud PBJ (Y) | -0.355              | -0.299          | 0.127                       | 2.795                       | 0.003    |
| Akuntabilitas Kinerja (Z) x Kompetensi PP (X1) -> Fraud PBJ (Y) | 0.426               | 0.335           | 0.168                       | 2.541                       | 0.006    |
| Akuntabilitas Kinerja (Z) x Kesempatan (X2) -> Fraud PBJ (Y) | -0.242              | -0.180          | 0.162                       | 1.490                       | 0.068    |
| Akuntabilitas Kinerja (Z) x Komitmen Organisasi (X3) -> Fraud PBJ (Y) | 0.419               | 0.415           | 0.177                       | 2.366                       | 0.009    |
Direct Effects or Direct Effects X1 on Y

The parameter coefficient for the variable X1 to Y is -0.355, which means that there is a negative influence of X1 on Y. Or it can be interpreted that the lower the value of X1, the more Y will increase. A decrease of one unit X1 will increase Y by 35.5%. Based on calculations using bootstrapping or resampling, the test result of the X1 estimation coefficient against Y is -0.299, with a calculated t value of 2.795 and a standard deviation of 0.127. Then the p value is 0.003 (<0.05), which means that the direct effect of X1 on Y is meaningful or statistically significant, so accept H0.

Direct Effects or Direct Effects X2 on Y

The parameter coefficient for the variable X2 to Y is 0.284, which means that there is a positive influence of X2 on Y. Or it can be interpreted that the higher the value of X2, the more Y will increase. An increase of one unit X2 will increase Y by 28.4%. Based on calculations using bootstrap or resampling, the test result of the estimated coefficient of X2 to Y is 0.231 with a calculated t value of 2.217 and a standard deviation of 0.128. Then the p value is 0.013 (<0.05), which means that the direct effect of X1 on Y is meaningful or statistically significant, so accept H0.

Direct Effects or Direct Effects X3 on Y

The parameter coefficient for the variable X3 to Y is -0.552, which means that there is a negative influence of X3 on Y. Or it can be interpreted that the lower the value of X3, the more Y will increase. An increase in one unit X3 will increase Y by 55.2%. Based on calculations using bootstrap or resampling, the test result of the estimation coefficient X3 against Y is -0.574 with a calculated t value of 4.720 and a standard deviation of 0.117. With a p value of 0.000 (<0.05), which means that the direct effect of X3 on Y is meaningful or statistically significant, accept H0.

Moderation effect of Z on X1 against Y

The parameter coefficient for the variable X1 to Y with Z moderation is 0.426, which means that there is a positive influence of Z in strengthening X1 against Y. Or it can be interpreted that the higher the value of Z, the more the influence of X1 on Y will increase as well. An increase of one unit in Z will increase the effect of X1 on Y by 42.6%. Based on calculations using bootstrap, the test result of the Z estimation coefficient in moderating X1 to Y is 0.335 with a calculated t value of 2.541 and a standard deviation of 0.168. With a p value of 0.006 (<0.05), which means that the influence of Z in strengthening X1 against Y is statistically significant, H0 is accepted.

Moderation effect Z on X2 against Y

The parameter coefficient for the variable X2 to Y with Z moderation is -0.242, which means that there is a negative influence of Z in strengthening the influence of X2 on Y. Or it can be interpreted that the higher the value of Z, the more the influence of X2 on Y will decrease. An increase of one unit in Z will increase the effect of X1 on Y by 24.2%. Based on calculations using bootstrap, the test result of the Z estimation coefficient in moderating X2 to Y is -0.180 with a calculated t value of 1.490 and a standard deviation of 0.162. With a p value of 0.068 (>0.05), this means that Z's strengthening of X2 against Y is not statistically significant; in other words, H0 is not proven.

Moderation effect of Z on X3 against Y

The parameter coefficient for the variable X3 to Y with Z moderation is 0.419, which means that there is a positive influence of Z in strengthening the influence of X3 on Y. Or it can be interpreted that the higher the value of Z, the more the influence of X2 on Y will increase. An increase of one unit in Z will increase the effect of X1 on Y by 41.9%. Based on calculations using bootstrap, the test result of the Z estimation coefficient in moderating X3 to Y is 0.415, with a calculated t value of 2.366 and a standard deviation of 0.177. With a p value of 0.009 (<0.05), which means that the influence of Z in strengthening X3 against Y is statistically significant, H0 is accepted.
According to Kenny in (Hair et al. (2021), the interpretation of moderation effects is divided into low, medium, and high. The moderation effect is said to be low when it is in the range of 0.005, medium when it is in the range of 0.10, and high if it is in the range of 0.025. This value can be seen in the f-square value of the moderated results.’

<table>
<thead>
<tr>
<th>Table 9. Moderation Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>P-Values</strong></td>
</tr>
<tr>
<td>KomPP→F PBJ</td>
</tr>
<tr>
<td>AK-Komp PP→F PBJ</td>
</tr>
<tr>
<td>Kesem→F PBJ</td>
</tr>
<tr>
<td>AK-Kesec→F PBJ</td>
</tr>
<tr>
<td>KO→F PBJ</td>
</tr>
<tr>
<td>AK-KO→F PBJ</td>
</tr>
</tbody>
</table>

**Discussion**

**The Effect of Procurement Perpetrators' Competence on PBJ Fraud**

Hypothesis 1 (H1) states that the competence of procurement actors negatively affects PBJ fraud, which means that the better and higher the quality of procurement actors' competence, the lower the level of PBJ fraud. The parameter coefficient for the variable competence of procurement implementers (X1) against PBJ fraud (Y) is -0.355, which means there is a negative influence of X1 on Y. Or it can be interpreted that the lower the value of X1, the more Y will increase, and vice versa. A decrease of one unit X1 will increase Y by 35.5%. Based on calculations using bootstrapping or resampling, the test result of the X1 estimation coefficient against Y is -0.299, with a calculated t value of 2.795 and a standard deviation of 0.127. Then the p value is 0.003 (<0.05), which means that the direct effect of X1 on Y is meaningful or statistically significant, so accept H1. Thus, the hypothesis (H1) is proven, which means that the higher the competence of PBJ fraud procurement actors, the decrease.

**The Effect of Opportunity on PBJ Fraud**

Hypothesis 2 (H2) in this study states that opportunity has a positive effect on PBJ procurement fraud. The parameter coefficient for the variable X2 to Y is 0.284, which means that there is a positive influence of X2 on Y. Or it can be interpreted that the higher the value of X2, the more Y will increase. An increase of one unit X2 will increase Y by 28.4%. Based on calculations using bootstrap or resampling, the test result of the estimated coefficient of X2 to Y is 0.231 with a calculated t value of 2.217 and a standard deviation of 0.128. Then the p value is 0.013 (<0.05), which means that the direct effect of X1 on Y is meaningful or statistically significant, so accept H2.

**The Effect of Organizational Commitment on PBJ Fraud**

Hypothesis 3 (H3) in this study is that organizational commitment negatively affects the procurement of goods and services. The parameter coefficient for the variable X3 to Y is -0.552, which means that there is a negative influence of X3 on Y. Or it can be interpreted that the lower the value of X3, the more Y will increase. An increase in one unit X3 will increase Y by 55.2%. Based on calculations using bootstrap or resampling, the test result of the estimation coefficient X3 against Y is -0.574 with a calculated t value of 4.720 and a standard deviation of 0.117. With a p value of 0.000 (<0.05), which means that the direct effect of X3 on Y is meaningful or statistically significant, accept H3.
The Effect of Procurement Implementation Competence on Procurement Fraud and Service Goods with Performance Accountability as a Moderation Variable

Hypothesis 4 (H4) in this study states that performance accountability moderates positively the influence of procurement executive competence on goods and services procurement fraud. The parameter coefficient for the variable X1 to Y with Z moderation is 0.426, which means that there is a positive influence of Z in strengthening X1 against Y. Or it can be interpreted that the higher the value of Z, the more the influence of X1 on Y will increase as well. An increase of one unit in Z will increase the effect of X1 on Y by 42.6%. Based on calculations using bootstrap, the test result of the Z estimation coefficient in moderating X1 to Y is 0.335 with a calculated t value of 2.541 and a standard deviation of 0.168. With a p value of 0.006 (<0.05), which means that the influence of Z in strengthening X1 against Y is statistically significant, Ha is accepted.

Performance accountability moderates the effect of procurement executive competence on fraud reduction; in this context, performance accountability is a factor that is expected to strengthen the impact of procurement implementation competence in reducing fraud. In the statistical analysis conducted, a significant interaction relationship was found between competence and performance accountability to reduce fraud. This means that the effect of competence on fraud reduction is influenced by the level of performance accountability.

The Effect of Opportunity on Procurement and Service Fraud with Performance Accountability as a Moderation Variable

Hypothesis 5 (H5) in this study states that performance accountability moderates positively the effect of KDP opportunity on procurement fraud. The parameter coefficient for the variable X2 to Y with Z moderation is -0.242, which means that there is a negative influence of Z in strengthening the influence of X2 on Y. Or it can be interpreted that the higher the value of Z, the more the influence of X2 on Y will decrease. An increase of one unit in Z will increase the effect of X1 on Y by 24.2%. Based on calculations using bootstrap, the test result of the Z estimation coefficient in moderating X2 to Y is -0.180 with a calculated t value of 1.490 and a standard deviation of 0.162. With a p value of 0.068 (>0.05), which means that Z in strengthening X2 against Y is not statistically significant, in other words, Ha is not proven. Which means that the hypothesis (H5) is rejected.

The Effect of Organizational Commitment on Procurement Fraud or Service Goods with Performance Accountability as a Moderation Variable

Hypothesis 6 (H6) in this study is that performance accountability moderates positively the effect of organizational commitment on procurement fraud. The parameter coefficient for the variable X3 to Y with Z moderation is 0.419, which means that there is a positive influence of Z in strengthening the influence of X3 on Y. Or it can be interpreted that the higher the value of Z, the more the influence of X2 on Y will increase. An increase of one unit in Z will increase the effect of X1 on Y by 41.9%. Based on calculations using bootstrap, the test result of the Z estimation coefficient in moderating X3 to Y is 0.415, with a calculated t value of 2.366 and a standard deviation of 0.177. With a p value of 0.009 (<0.05), which means that the influence of Z in strengthening X3 against Y is statistically significant, hypothesis (H6) is accepted.

The results of this study are expected to have significant practical implications for organizations looking to reduce fraud risk and improve their operational integrity.

Conclusion

The competence of procurement implementers has a negative and statistically significant effect on goods and services procurement fraud, which means that the higher the competence of procurement implementers, the lower the PBJ fraud. Good competence can increase the knowledge of PBJ implementers about the occurrence of fraud so as to create a more professional, transparent, and goal-oriented
work environment. With the increased competence of PBJ implementers, PBJ implementers will be able to minimize the occurrence of fraud. Therefore, every OPD needs to improve the ability of its human resources according to competence in their fields, especially among PBJ implementers.

Opportunity affects goods and services procurement fraud and is statistically significant. Efforts are needed in organizations to minimize fraud by improving internal control, effective supervision, and understanding motivations and human factors that can influence a person's behavior. That opportunity is one of the important factors in the understanding of fraud in the context of the organization. Opportunity factors include situations or conditions that allow a person or group to commit fraud.

The organization's commitment negatively affects goods and services procurement. Fraud is statistically significant. Organizational competence plays an important role in encouraging and facilitating an effective and motivating work environment, and the need for strong leadership and organization towards ethics, integrity, and compliance can have a negative influence on the occurrence of fraud or fraudulent actions in an organization. In this context, "negative influence" means that the higher the level of commitment of an organization to ethics and compliance, the less likely fraud is to occur.

The competence of the Goods/Services Procurement Implementer against Goods/Services Procurement Fraud has a positive and significant effect on performance accountability as a moderation variable. Performance accountability can affect the extent to which the competence of procurement implementers has an impact on efforts to reduce fraud. Application of environmental accounting. An organization's commitment to the environment has a significant impact on the application of environmental accounting. Strong performance accountability can motivate someone to ensure that the procurement process runs transparently, with integrity, and in accordance with the rules. Performance accountability is a factor that is expected to strengthen the competence of goods and services procurement implementers in reducing fraud. The occurrence of a significant interaction relationship between competence and performance accountability on fraud reduction indicates that the effect of competence on fraud reduction is influenced by the level of performance accountability.

Opportunity for Goods and Services Procurement Fraud Has a positive and significant effect on performance accountability as a moderation variable. The opportunity that PBJ implementers have has a very strong influence on supporting or encouraging fraud. However, when associated with performance accountability, it does not show that it is not important in preventing fraud. This proves that if there are high opportunities, fraud implementers will continue to commit fraud even though there are other factors. It's important to understand that fraud prevention involves a variety of factors, including reducing opportunities, creating a culture of ethics, and implementing strong internal controls. The overall fraud prevention framework should involve many mutually supportive elements.

The Effect of Organizational Commitment to Goods and Services Procurement Fraud with performance accountability as moderation has a positive and statistically significant effect. Performance accountability can affect the extent to which organizational commitment has an impact on efforts to reduce fraud within the organization. Someone who has high performance accountability may be more inclined to comply with the policy rules related to fraud made by the organization and report fraud actions committed by fellow employees, friends, and superiors. This is likely to strengthen the link between organizational commitment and fraud reduction.

Limitations and Future Research Directions

This study has limitations that need to be recognized to understand the limitations and
interpretation of the results carefully. The limitations of this study include:

Research may be limited by the availability of relevant and accurate data. Questionnaires distributed to employees may be difficult to obtain accurately; there may be data provided incorrectly. This may be due to the lack of good communication between researchers and respondents, so that there is a possibility of respondents’ misunderstandings in understanding the instrument statements in the questionnaire. This can limit researchers' ability to measure impact precisely.

According to the results of research conducted by researchers, not all OPDs within the Central Lombok government that fill out questionnaires for specific samples or populations can be widely generalized to all types of organizations, thus limiting the ability to state that the results can be generally applicable.

The research model used by the researcher is known to have a sufficient level of value determination coefficient, thus indicating that there are other factors besides the variables of PBJ implementer competence, PBJ implementation opportunity, organizational commitment, and performance accountability that affect the implementation of PBJ fraud that has been built in this study. There may be other variables that can affect the procurement fraud of goods and services.

This study uses questionnaires in data collection so that there may be answers from respondents that do not match the statements on the questionnaire given. It is expected that future researchers can conduct direct interviews with parties involved in the procurement of goods and services so as to get complete and valid information provided or can use alternative data sources that are more complete or accurate in collaboration with third parties who have relevant data.

Compile a representative sample with a larger sample or sample selection that reflects variations in the population of the procurement of goods and services so that researchers can suggest that future researchers can take samples from all involved in the procurement of goods and services.

Future researchers may add other variables such as SPI quality, conflicts of interest, individual morality, leadership style, and law enforcement. From these variables, it can be believed to affect the fraud of procurement of goods and services.

References


Reskia, R. & Sofie. (2022). Pengaruh Internal Audit, Anti Fraud Awareness, Komitmen Organisasi Dan Budaya Organisasi Terhadap Pencegahan Fraud (Studi kasus PT. Inti Persada Nusantara). *Jurnal Ekonomi Trisakti, 2*(2), 419–432. [https://doi.org/10.25105/jet.v2i2.14531](https://doi.org/10.25105/jet.v2i2.14531)


