

Determinants of Procurement Fraud (PBJ): Pentagon Approach and the Role of Anti-Fraud Awareness

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ABSTRACT

This study aims to understand the factors that encourage the occurrence of PBJ fraud in the public sector. The approach used refers to the Pentagon Fraud Theory, namely using financial pressure proxies, weak systems and procedures, moral justification, procurement committee capabilities, procurement committee egoism, and the role of anti-fraud awareness as a moderating variable. This study employs a quantitative approach with a survey method involving 143 respondents who are members of the Election Working Group (Pokja) at the Ministry of Public Works. Data analysis was carried out using the Partial Least Square–Structural Equation Modeling (PLS-SEM) approach with the SmartPLS 4.0 program. The results of the study show that financial pressure, weak systems and procedures, moral justification, procurement committee capabilities, and procurement committee egoism have a significant positive effect on PBJ fraud. The role of anti-fraud awareness has been proven to weaken the relationship between the Pentagon Fraud elements and PBJ fraud, except for the relationship between egoism and PBJ fraud, which was unproven. These findings affirm the importance of increasing anti-fraud awareness in preventing fraudulent acts and show that the Pentagon Fraud approach is relevant in analyzing the determinants of PBJ fraud. Overall, this research makes both empirical and practical contributions to efforts to strengthen the internal control system in the public sector.

KEYWORDS PBJ fraud, *pentagon fraud*, anti-fraud awareness, public sector, PLS-SEM



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INTRODUCTION

Fraud is a challenge in organizational governance, especially in the public sector. It is defined as an illegal act involving deception, concealment, or breach of trust (The Institute of Internal Auditors, 2019). One of the most vulnerable sectors to fraud is the procurement of goods and services (PBJ) (Graycar, 2019; Rustiarini et al., 2019). PBJ fraud often occurs and causes significant monetary losses, inefficiency, and misuse of state funds (Lyra et al., 2022). The United Nations Office on Drugs and Crime (UNODC) estimates that about 10–25% of state funds are lost to corrupt practices, while the Organisation for Economic Co-operation and Development (OECD) reports that 57% of bribery cases involving foreign public officials are related to attempts to win procurement contracts (Indonesia Corruption Watch, 2023).

In Indonesia, PBJ in the government sector plays an important role because it absorbs a large portion of the state budget. In 2025, PBJ is projected to contribute IDR 1,494.1 trillion, or 41.25% of the State Revenue and Expenditure Budget (LKPP, 2025). This large allocation is proportional to the rising number of PBJ fraud cases over time. The Corruption Eradication Commission (KPK) recorded that from 2004 to 2023, the PBJ sector was the largest contributor

to corruption cases, with a total of 407 cases, and in 2024 noted the highest number of 68 cases (KPK, 2025).

The Ministry of Public Works and Public Housing (PUPR) is one of the agencies with a high level of risk for PBJ fraud. In 2024, it received the largest budget allocation among ministries/institutions—IDR 146.98 trillion (Puspita & Putra, 2023)—with around 65.8% allocated for expenditure activities through PBJ (Bina Konstruksi, 2022). The size of this budget makes PBJ implementation vulnerable to unethical practices.

The phenomenon of PBJ fraud in the Ministry of PUPR has been a recurring concern. In 2023, the Chairman of the Working Group for the Rehabilitation and Renovation of School Infrastructure Package for NTT Province II Post-Disaster in Alor Regency (2022) was designated a suspect, with state losses estimated at IDR 4.143 billion (Kejati NTT, 2024). In 2024, another case involved the arrest of the Chairman of the Election Working Group for corruption related to the Makassar City Wastewater Pipeline Installation (WWTP) Development Project in 2020–2021 (Nurfaisal, 2024).

The Ministry of PUPR has issued Instruction No. 4/IN/M/2022 outlining strategies to prevent PBJ fraud. This strategy reflects internal control measures against fraud risks within the ministry. Weak internal control is a major factor contributing to fraud (Petrovits et al., 2012). Persistent violations in the PBJ process raise questions about employee awareness and commitment to fraud risk prevention through these controls.

Understanding the causes of fraud is essential to identify factors that encourage fraudulent acts. Extensive studies have explored fraud determinants. Cressey's (1953) fraud triangle theory consists of pressure, opportunity, and rationalization. Wolfe and Hermanson (2004) added the element of capability, forming the fraud diamond. Horwath (2011) further developed the fraud pentagon by adding arrogance. Pratiwi and Dewi (2023) and Setiawan and Helmayunita (2017) found that financial pressure significantly affects fraudulent acts, while Zulaikha and Hadiprajitno (2016) and Bicer (2020) found no such effect. Zulaikha and Hadiprajitno (2016) and Nurhajanti (2017) observed that weak systems and procedures create opportunities for fraud, though other studies reported no significant link (Sahla & Ardianto, 2023; Suryandari & Pratama, 2021). Rationalization or moral justification is linked to fraud (Abdullahi & Mansor, 2018; Koomson et al., 2020; Kazemian et al., 2019; Çollaku et al., 2024; Suryandari & Pratama, 2021), but Sahla and Ardianto (2023) found no effect. Capability has been shown to influence fraud in several studies (Mulyandani et al., 2023; Abdullahi & Mansor, 2018; Koomson et al., 2020; Sahla & Ardianto, 2023; Suryandari & Pratama, 2021; Avortri & Agbanyo, 2021; Nurhajanti, 2017), though Debora (2024) found no significant link. Selfishness has been associated with fraudulent tendencies (Koomson et al., 2020; Brown et al., 2010), yet Çollaku et al. (2024) found no correlation. These inconsistencies suggest a need for further research into the fraud pentagon elements in relation to fraud.

The novelty of this study lies in examining the role of anti-fraud awareness alongside fraud pentagon elements and PBJ fraud. Anti-fraud awareness reflects an individual's understanding, attitude, and sensitivity to potential fraud (Ramadhan, 2021), and plays an important role in prevention (Sihombing et al., 2023; Kartadjumena & Indriyati, 2021; Nurbaya, 2022).

The study aims to analyze factors affecting PBJ fraud from the perspective of the Election Working Group (Pokja), which plays a central role in selecting providers of contracted goods and services. Specifically, it seeks to (1) determine whether financial pressure, weak systems and procedures, moral justification, procurement committee capability, and egoism affect PBJ fraud, and (2) assess whether anti-fraud awareness can moderate the effect of fraud pentagon elements on PBJ fraud.

This research is expected to provide empirical evidence on PBJ fraud determinants, inform the need for anti-fraud awareness training, and support the formulation of PBJ policies, particularly in public sector agencies.

Hypothesis Development

Around 95% of fraud cases occur due to financial pressure and bad habits (vices), financial pressure being the most common type of pressure that causes a person to engage in fraudulent acts (Albrecht *et al.*, 2019). Financial stress can occur when a person has a high standard of living, causing unethical actions (Cohen *et al.*, 2010). Financial pressure has a significant influence on fraudulent acts (Pratiwi & Dewi, 2023; Setiawan & Helmayunita, 2017). Financial pressure is the main motive for fraudulent acts, and pressure has a positive effect on fraudulent acts (Avotri & Agbanyo, 2021). From this thought, the first hypothesis is formulated as follows:

H1: Financial Pressure Has a Positive Effect on PBJ Fraud

The PBJ system and procedures determine how procurement goals are achieved, which are economical, effective, and efficient. Public procurement of goods and services has undergone several transformations, especially related to strengthening regulations and transforming the procurement system (Firmansyah *et al.*, 2024). The perpetrator of fraud knows the weaknesses of internal control and has sufficient knowledge on how to commit the fraud (Singleton, 2010). Weaknesses in systems and procedures have a significant effect on the government's PBJ fraud in a positive direction, the weaker the system and procedures in procurement, the more fraud will increase (Zulaikha & Hadiprajitno, 2016). In line with Nurhajanti (2017) who found that the procurement procedure system has a negative effect on PBJ fraud. Based on this description, the second hypothesis proposed is as follows:

H2: Weak Systems and Procedures Have a Positive Effect on PBJ Fraud

Almost all incidents of cheating involve elements of rationalization, the perpetrator rationalizes his actions in several ways, for example by assuming that what is done is legal even though it may be unethical, and assuming that his actions are done by everyone (Albrecht *et al.*, 2019). Çollaku *et al.*, (2024) define rationalization as a moral justification that can influence acts of cheating. Moral justification is the justification of unethical actions committed (Vitell *et al.*, 2011). Rationalization or moral justification has a positive effect on fraudulent acts (Abdullahi & Masor, 2018; Koomson *et al.*, 2020; Kazemian *et al.*, 2019; Çollaku *et al.*, 2024). Based on this description, the third hypothesis proposed is as follows:

H3: Moral Justification has a positive effect on PBJ procurement fraud

The Procurement Committee determines the black or white procurement process (Nurhajanti, 2017). Fraudsters have the ability to realize that there are opportunities to then take advantage of them (Wolfe & Hermanson, 2004; Avotri & Agbanyo, 2021). Capability is seen as a person's advantage in taking advantage of circumstances, this advantage is more directed at the situation to deceive the internal control system (Arles, 2014). Mulyandani *et al.* (2023) found that capabilities have an effect on PBJ fraud. Nurharjanti (2017) and Zulaikha and Hadiprajitno (2016) also found a significant influence between the capabilities of the procurement committee and the tendency to commit fraud. Based on the description above, the fourth hypothesis proposed is as follows:

H4: The Procurement Committee's Capability Has a Positive Effect on PBJ Fraud

Arrogance is a form of arrogance and selfishness, this attitude causes excessive confidence that his actions will not be detected or sanctioned (Aprilia, 2017). Selfishness has been shown to encourage the choice of unethical actions over ethical actions. The higher the level of egoism, the lower the level of ethical decision-making (Brown *et al.*, 2010). In line with this research, Sahla and Ardianto (2023) and Suryandari and Pratama (2021) also found

the influence of arrogance or ego on the tendency to commit fraudulent acts. Based on this description, the fifth hypothesis proposed is as follows:

H5: Procurement committee's egoism has a positive effect on PBJ fraud

Types of *fraud* are growing so that every public and private sector organization must *be aware of fraud* prevention in the organization (Yuri & Sari, 2022). Attribution theory states that when people observe the behavior of other individuals, that person will determine whether the behavior is caused by internal or external factors (Robbins & Judge, 2017). In this case, anti-fraud awareness is an internal factor in fraudulent behavior. A person who has *high fraud awareness* can be able to prevent others with low integrity from committing fraudulent acts (Zanzig & Flesher, 2011). Even if a person has financial problems, the existence of anti-fraud awareness makes the person not commit fraudulent acts because they understand the bad consequences of their actions. Based on the description above, the sixth hypothesis proposed is as follows:

H6: Anti-fraud awareness weakens the influence of financial pressure on PBJ fraud

Attribution theory states that a person's attitude towards oneself and others is influenced by internal and/or external factors, internal factors can refer to factors that originate from within the individual (Heider, 1958). Anti-fraud awareness can influence a person's attitude towards fraudulent acts. Organizations inadvertently and unwisely provide various opportunities to employees to commit fraud (Kazemian *et al.*, 2019). High awareness of fraud is expected to increase the concern of all elements in the organization to control fraud through every policy and rule implemented (Yuniarti, 2017). The existence of anti-fraud awareness has the potential to weaken the influence of weak systems and procedures on fraudulent acts. Based on the description above, the seventh hypothesis proposed is as follows:

H7: Anti-fraud awareness weakens the influence of weak systems and procedures on PBJ fraud

Anti-fraud awareness will form an environment and individuals that are anti-fraud so as to increase employees' self-awareness to stay away from various risks of fraud in the implementation of their obligations and duties (Kartadjumena & Indriyati, 2021). This is supported by the statement that the more people who internalize and integrate the values and norms that apply to the organization in their actions, will encourage the individual to adjust to the values and norms that apply (Sihombing *et al.*, 2023). Rationalization is also defined by moral justification, moral justification is seen as the justification of unethical actions and considers such actions to be ethical actions (Vitell *et al.*, 2011). The existence of anti-fraud awareness encourages a person's understanding of the magnitude of the risks posed by fraudulent acts (Zuberi & Mzenzi, 2019). Anti-fraud awareness has the potential to weaken the relationship of moral justification to fraudulent acts. The eighth hypothesis proposed is as follows:

H8: Anti-fraud awareness weakens the influence of moral justification on PBJ fraud

Fraud in recent years has been carried out by someone who is smart, intelligent, and experienced with a strong understanding of organizational control (Wolfe & Hermanson, 2004). Anti-fraud awareness is formed from the understanding of all elements of the organization of the dangers of fraud risk, such as the motivation for fraud, the types of fraud, and its impact on the organization (Ramadhan, 2022). A person with a high awareness of anti-fraud will stay away from the risk of *fraud* in their work (Kartadjumena & Indriyati, 2021). Anti-fraud awareness has the potential to weaken the relationship between procurement committee capabilities and fraudulent acts. Based on this description, the ninth hypothesis proposed is as follows:

H9: Anti-fraud awareness weakens the influence of procurement committee capabilities on PBJ fraud

Anti-fraud awareness is self-awareness related to fraud prevention in organizations. This anti-fraud awareness has the potential to affect the procurement committee's selfish attitude towards fraudulent acts. The existence of anti-fraud awareness will make a person act in accordance with ethics (Zanzig & Flesher, 2011). The formation of an environment and individuals who have sufficient knowledge about *fraud* will increase self-awareness to stay away from various risks of fraud (Kartadjumena & Indriyati, 2021). Even if a person has an ego in him, a good understanding of *fraud* will make the person avoid the risk of fraudulent acts. Based on this description, the tenth hypothesis proposed is as follows:

H10: Anti-fraud awareness weakens the influence of procurement committee egoism on PBJ fraud

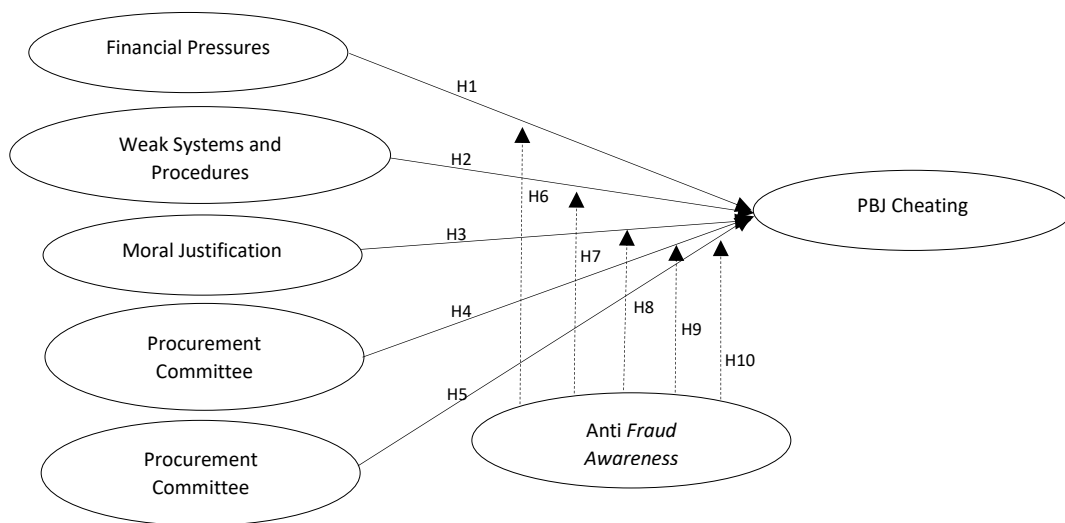


Figure 1. Research Conceptual Framework

RESEARCH METHOD

The population in this study comprised all Goods and Services Procurement Managers at the Ministry of Public Works. Based on personnel data accessed on February 10, 2025, there were 386 Procurement Managers distributed across 34 Regional Construction Services Selection Implementation Center Offices (BP2JK Region) in Indonesia and the Special Goods and Services Procurement Team (TPBJK). Sampling employed a non-probability technique, specifically purposive sampling. The respondents were Procurement Managers who served as members of the Election Working Group (Pokja) and had been active for more than one year.

Data were collected through a survey method conducted from April 24 to May 2, 2025. A total of 143 completed questionnaires were received. The study applied the PLS-SEM (Partial Least Squares Structural Equation Modelling) approach using SmartPLS 4.0 software to analyze the data (Hair et al., 2021).

The endogenous variable in this study was PBJ fraud, measured using modifications from the studies of Nurharjanti (2017) and Zulaikha and Hadiprajitno (2016) based on Presidential Regulation Number 54 of 2010 and its amendment, Presidential Regulation Number 12 of 2021, concerning the Procurement of Government Goods/Services.

Financial pressure was measured using indicators from Albrecht et al. (2019), which consisted of greed, living beyond means, inability to pay debts, personal financial losses, and unexpected financial needs. The variable of weak systems and procedures used indicators from the COSO Framework (2013), namely insufficient control activities, weak control

environment, weak monitoring, and information and communication deficiencies. The moral justification variable used indicators developed by Zuberi and Mzenzi (2019), including social comparison, poor attitude, track record of fraud, blame shifting, and denial of loss.

The capabilities of the procurement committee were measured using indicators from Wolfe and Hermanson (2004), namely position, intelligence, strong confidence, coercion toward others, and immunity to stress. The selfishness of the procurement committee was measured using indicators from Çollaku et al. (2024), namely adaptive, egocentric, and pathological traits.

Anti-fraud awareness, as the moderating variable, was measured using indicators developed by Ramadhan (2022) and adopted from Othman et al. (2015), which included understanding the types of fraud, individual roles, the impact and threats of fraud, anti-fraud training, and recognition of red flags.

RESULT AND DISCUSSION

Reliability and Validity Tests

Outer Model Testing

The results of the convergent validity test using the Average Variance Extracted (AVE) value parameter showed that all AVE values were above 0.5 which means that all statements in each variable are valid. The results of the discriminant validity test showed that all Heterotrait-Monotrait Ratio (HTMT) values were below 0.85 so that the variables used were valid. Furthermore, the reliability of the indicator explains how much each indicator of the variant is explained by its construct. The results of the reliability test showed that all indicators showed an outer loading number above 0.708 which means that each indicator used was reliable to measure variables. The next test, the internal consistency reliability aims to see the extent to which indicators measuring the same construct relate to each other. The results of the internal consistency reliability test showed that the composite reliability and Cronbach's alpha values for all variables were above 0.70 so that it could be concluded that all indicators used were reliable. The results of the outer testing are presented in Tables 3 and 4.

Inner Model Testing

Structural model testing (inner model) uses bootstrapping testing on SmartPLS to calculate the t-value of the path coefficient (Hair et al., 2021:117). In addition, the coefficient of determination (R square) is also noted. The overall t-value was above the critical value of 1.65 (significance of 5% of the one-tailed test) except for one, namely the anti-fraud awareness moderation pathway on the influence of procurement committee egoism on PBJ fraud. R square is a value that shows how much independent variables affect dependent variables. The PBJ Fraud variable can be explained by the variables of financial pressure, moral justification, the capability of the procurement committee, weak systems and procedures, the egoism of the procurement committee, and the moderation of anti-fraud awareness as low as 69.3%, while the other 30.7% are explained by other variables outside the variables in this study. The results of the internal test model are presented in Table 1.

Table 1. Convergent Validity Test Results, Indicator Reliability, and Internal Consistency

Variabel	Indicator	Reliability			
		Outer Loading Value	AVE	Composite reliability	Cronbach's alpha
Procurement of Goods and Services Fraud (FPBJ)	FPBJ1	0,781	0,622	0,928	0,878
	FPBJ2	0,826			
	FPBJ3	0,786			
	FPBJ4	0,771			

Variabel	Indicator	Outer Loading Value	AVE	Composite reability	Cronbach's alpha
Financial Stress (PRES)	FPBJ5	0,759	0,704	0,935	0,907
	FPBJ6	0,807			
	PRES1	0,837			
	PRES2	0,794			
	PRES3	0,846			
	PRES4	0,869			
Weak systems and procedures (OPPR)	PRES5	0,846	0,634	0,911	0,886
	TOPR1	0,787			
	TOPR2	0,753			
	TOPR3	0,788			
	TOPR4	0,765			
	OPPR5	0,853			
Moral Justification (RATI)	UPR6	0,829	0,635	0,913	0,857
	RATI1	0,816			
	RATI2	0,796			
	RATI3	0,789			
	RATI4	0,804			
	RATI5	0,779			
Procurement Committee Capabilities (COVER)	COVER1	0,810	0,652	0,926	0,894
	COVER2	0,846			
	COVER3	0,711			
	COVER4	0,833			
	COVER5	0,836			
	COVER6	0,801			
Procurement Committee Selfishness (EGO)	EGO1	0,875	0,704	0,927	0,862
	EGO2	0,788			
	EGO3	0,845			
	EGO4	0,847			
Kesadaran Anti <i>Fraud</i> (FAW)	FAW1	0,791	0,637	0,913	0,886
	FAW2	0,850			
	FAW3	0,789			
	FAW4	0,803			
	FAW5	0,799			
	FAW6	0,753			

Source: PLS Data Processing, 2025

Table 2. Validity Test Results

Variabel	CLOAK	EGO	FAW	FPBJ	OPPR	MONEY	RATI
CLOAK							
EGO	0,446						
FAW	0,131	0,073					
FPBJ	0,295	0,309	0,269				
OPPR	0,181	0,092	0,108	0,356			
MONEY	0,141	0,400	0,157	0,303	0,369		
RATI	0,430	0,127	0,138	0,264	0,436	0,205	

Source: PLS Data Processing, 2025

Hypothesis Testing

The hypothesis test was carried out using SEM PLS with bootstrapping. Bootstrapping uses the one-tailed hypothesis of 5% significance. The significance parameter is if it has a p-value that is smaller than the significance level and a t-value with a critical value of 1.65 (significance of 5% of the one tailed test). Relevance uses the parameter of the path coefficient

value, by approaching the values of -1 and 1 respectively showing a negative and positive relationship.

Table 3. Hypothesis Test Results

Hypothesis	Path	Coefficients	t-value	P-value	Result
H1	FPBJ PRES →	0,349	3,780	0,000	Accepted
H2	OPPR → FPBJ	0,210	2,790	0,003	Accepted
H3	RATI → FPBJ	0,237	2,599	0,005	Accepted
H4	FPBJ →CAPA	0,264	3,092	0,001	Accepted
H5	EGO → FPBJ	0,156	2,036	0,021	Accepted
H6	FAW x PRES → FPBJ	-0,358	4,210	0,000	Accepted
H7	FAW x OPPr → FPBJ	-0,223	2,436	0,007	Accepted
H8	FAW x RATI → FPBJ	-0,252	2,339	0,010	Accepted
H9	FAW x CAPA → FPBJ	-0,277	2,697	0,004	Accepted
H10	FAW x EGO → FPBJ	-0,085	0,995	0,160	Rejected

Source: PLS Data Processing, 2025

Based on Table 3, it is known that hypotheses 1 to 9 are accepted because they show that the t-value is greater than the critical value of 1.65 and the p-value is less than 0.05, in addition to that the path coefficient value indicates the right direction according to the research hypothesis. Hypotheses 1 to 5 have positive path coefficient values, while hypotheses 6 to 9 show negative coefficient values. Furthermore, it is known that hypothesis 10 is rejected because based on the results of data processing, it is known that the t-value is less than 1.65 and the p-value is more than 0.05.

The Effect of Financial Pressure on PBJ Fraud

The test results on Hypothesis 1 show that financial pressure has a positive effect on PBJ fraud so that Hypothesis 1 is accepted. The results of this study support the Pentagon's fraud theory which states that pressure is one of the elements that motivates someone to commit fraud. The existence of economic problems that cannot be told to others can cause a person to face financial pressure (Cressey, 1953). This financial pressure is the main motive for employees in low management to cheat at their jobs (Kazemian et al., 2019). The Election Working Group (Pokja) at the Ministry of Public Works is the party that has the potential to cheat PBJ because it is tasked with determining the winner of the tender. In the context of financial pressure, often the problems faced are related to housing costs due to the implementation of rolling and mutations. The position of the Election Working Group (Pokja) is required to carry out rolling or mutation between Centers within the scope of Indonesian territory on a scheduled basis to avoid conflicts of interest. Urgent life needs that must be met can encourage people to seek a way out by committing fraudulent acts (Albrecht et al., 2019).

The Influence of Weak Systems and Procedures on PBJ Fraud

Hypothesis 2 states that weak systems and procedures have a significant positive effect on PBJ fraud. Based on Table 5, it is shown that t-value and p-value correspond to the significance test requirements so that it is concluded that Hypothesis 2 is accepted. These results support the fraud theory that states that odds can influence fraudulent actions. Weak internal control systems can be an opportunity for fraud to occur (Dellaportas, 2012). The Ministry of Public Works has used the digitization of the procurement system through e-procurement and e-catalog. However, with digitalization, there are still weaknesses that trigger fraud. One of the problems in procurement systems and procedures that often occur and has the potential to become fraud is blacklisting. The Government Goods/Services Procurement

Policy Institute (LKPP) provides a system used by government agencies to check the national blacklist before determining the tender winner. A total of 84% of the blacklist was not in accordance with the effective date of the sanction decree, with an average time gap of 18 days (LKPP, 2024). This kind of thing can confuse the parties involved in procurement and become a loophole in committing PBJ fraud.

The Influence of Moral Justification on PBJ Fraud

The results of the test on Hypothesis 3 show that moral justification has a positive effect on PBJ fraud, so Hypothesis 3 is accepted. The results of this study support the fraud triangle theory which states that rationalization is one of the elements that causes someone to commit fraud. A person who cheats rationalizes their actions in some way to be acceptable, for example, believing that the action is done by everyone (Albrecht et al., 2019). This rationalization is considered one of the important causes of fraud. The Ministry of Public Works has a Circular Letter Number 01/SE/M/2021 of 2021 which regulates guidelines for ethical behavior limits for PBJ implementers. This guideline should provide behavioral limits that can and should not be done for the Election Working Group in acting so that the rationalization of actions can be minimized with strict limits. However, cheating perpetrators who have high rationalization always look for loopholes and justifications for their behavior so that they can be accepted.

The Influence of the Procurement Committee's Capabilities on PBJ Fraud

Hypothesis 4 states that the capabilities of the procurement committee have a positive effect on PBJ fraud. Based on Table 5.4 shows that t-value and p-value correspond to the requirements of the significance test, so it is concluded that Hypothesis 4 is accepted. The results of this study are in line with the fraud theory which states that capabilities can affect the occurrence of fraud. The Election Working Group at the Ministry of Public Works is a person who has important authority in procurement, namely determining the winner of the tender, authority that has the potential to be abused to commit fraudulent acts. From the perspective of capability, the position is also seen as having more expertise in procurement because being an Election Working Group requires abilities that are in accordance with the qualifications of the LKPP, namely passing the certification exam for the procurement of government goods and services. A person with the ability to develop strategies to trick internal control so that they succeed in committing fraud. In this study, the capabilities of the procurement committee were proven to have an effect on the occurrence of PBJ fraud.

The Influence of Procurement Committee Egoism on PBJ Fraud

The test results on Hypothesis 5 show that the selfishness of the procurement committee has a positive effect on PBJ fraud, so Hypothesis 5 is accepted. This research confirms the Pentagon's fraud theory that arrogance proxied with the selfishness of the procurement committee has a significant effect on PBJ fraud. Selfishness is an attitude that is self-interested. A person who commits an act of fraud, the person is certain to underlie his behavior because he wants to get more benefits from others and does not care that his actions are detrimental to the agency. The position of the Election Working Group at the Ministry of Public Works has a heavy workload and work targets so that it can encourage the thought that they deserve more rewards for their work and foster a selfish attitude. This study proves that the egoism of the procurement committee can affect the tendency of PBJ fraud.

Anti-Fraud Awareness as a Moderate Effect of Financial Pressure on PBJ Fraud

Hypothesis 6 states that anti-fraud awareness weakens the influence of financial pressure on PBJ fraud. Based on Table 5.4 shows that t-value and p-value correspond to the

requirements of the significance test, so it is concluded that Hypothesis 6 is accepted. The results of this study are consistent with attribution theory which states that a person's choice of behavior is based on internal and external factors, anti-fraud awareness can be an internal factor that affects a person's decision-making or behavior towards fraudulent actions. Increasing employee concern and vigilance towards fraudulent behavior causes fraudulent acts to be easier to identify and can be prevented early (Nurbaya, 2022). The Ministry of Public Works itself has Ministerial Instruction Number 4 /IN/M/2022 concerning Strategies for Preventing the Risk of Irregularities in the Procurement Process of Goods/Services. The existence of policies that apply in the organization will force all ranks in the organization to carry out controls for fraud prevention and ultimately can increase anti-fraud awareness for each employee. A person who has anti-fraud awareness, even though faced with financial problems, will not choose to commit fraud. This study proves that the role of anti-fraud awareness is able to weaken the influence of financial pressure on PBJ fraud.

Anti-Fraud Awareness as a Moderate Influence of Weak Systems and Procedures on PBJ Fraud

The test results on Hypothesis 7 show that anti-fraud awareness weakens the weak influence of systems and procedures on PBJ fraud. The results of this study support the attribution theory, namely that anti-fraud awareness can be a factor that influences a person's behavioral choices to commit fraud or not. The weak systems and procedures in this study represent an element of opportunity in the Pentagon's fraud theory. The creation of an anti-cheating culture in the work environment and in employees fosters awareness to stay away from fraudulent actions in the performance of duties (Kartadjumena & Indriyati, 2021). The Ministry of Public Works in carrying out its procurement activities has used the Electronic Procurement System (SPSE) in accordance with the Decree of the Minister of State Apparatus Empowerment and Bureaucratic Reform (Kemenpan-RB) Number 1148 of 2021. Even though procurement digitalization has been implemented, there are still loopholes that can be opportunities for fraud. The increase in anti-fraud awareness in this study is proven to reduce the influence of the opportunity to commit fraud represented by weak systems and procedures on the occurrence of PBJ fraud.

Anti-Fraud Awareness as a Moderation of the Influence of Moral Justification on PBJ Fraud

Hypothesis 8 states that anti-fraud awareness weakens the influence of moral justification on PBJ fraud. Based on Table 5, it is shown that the t-value and p-value are in accordance with the requirements of the significance test, so it is concluded that Hypothesis 8 is accepted. This research is in line with the theory of attribution about the basis of one's behavioral choices, even though a person has a high rationalization of wrong actions, but if there is anti-fraud awareness in him and supported by the work environment, PBJ fraud actions can be minimized from occurring. The Ministry of Public Works over the past few years has been trying to increase anti-fraud awareness through various internal controls carried out such as the implementation of bribery risk assessment, the implementation of Integrity Zones, Anti-Bribery Management Systems and various awareness-raising trainings. Other. The implementation of these various controls encourages understanding of various risks of fraud so that it can reduce the intention of individuals to commit fraud. This study proves that anti-fraud awareness can weaken the influence of moral justification on PBJ fraud.

Anti-Fraud Awareness as a Moderation of the Influence of Procurement Committee Capabilities on PBJ Fraud

The test results on Hypothesis 9 show that anti-fraud awareness weakens the influence of procurement committee capabilities on PBJ fraud. The results of this study support the attribution theory which states that a person's behavior is based on factors within the individual and outside the individual, anti-fraud awareness successfully influences a person's choice to commit fraud or not. Fraudulent acts are mostly carried out by deceiving the internal control of the organization, a strategy is needed to be able to do this so that capabilities play an important role. The Election Working Group (Pokja) is considered as a person who has more capabilities in the field of procurement than other parties. Increasing anti-fraud awareness is carried out to provide an understanding of fraud prevention and impact, with this understanding it will minimize the abuse of authority and capabilities that are actually used to commit fraud. In line with the results of this study, anti-fraud awareness can weaken the influence of capacity on the occurrence of PBJ fraud.

Anti-Fraud Awareness as a Moderate Influence of Procurement Committee's Egoism on PBJ Fraud

Hypothesis 10 states that anti-fraud awareness weakens the influence of procurement committee egoism on PBJ fraud. Based on Table 5.4, it is shown that t-value and p-value are not in accordance with the requirements of the significance test, so it is concluded that Hypothesis 10 is rejected. This is not in accordance with the concept that anti-fraud awareness is related to fraud prevention. Anti-fraud awareness should increase awareness of potential fraud in the workplace so that this awareness can reduce the occurrence of fraud. The failure of this role of anti-fraud awareness can be caused by several things. Anti-fraud training or policies have been implemented, in practice this awareness may only be the fulfillment of policies and has not been really embedded in individual values and behaviors, so it is not able to affect fraud prevention (Wiguna & Sofie, 2023). Next is the too high egoism of the procurement committee to pursue personal gain, power, or position, causing such internal impulses to be stronger than the influence of ethical awareness. In organizations with a low ethical climate and high levels of egoism, individuals tend to focus more on personal interests than common interests (Tuti & Mulyani, 2021). An organizational environment that is permissive to violations or weak in supervision can also cause anti-fraud awareness to play no role in preventing fraud. Individuals may feel that cheating is acceptable, especially if it is unlikely to be detected and there are no strict legal sanctions (Rustiarini et al., 2019). On the other hand, if there is a high organizational commitment and organizational principles (Ulfah et al, 2024) and a strong organizational culture (Mukoffi et al, 2023), fraud prevention can work.

CONCLUSION

PBJ fraud is a problem that needs to be considered, especially by public agencies considering the increasing cases of irregularities in the public PBJ process every year. The results of this study show that financial pressure, weak systems and procedures, moral justification, procurement committee capabilities, and procurement committee egoism have a significant positive influence on PBJ fraud. This research also proves that anti-fraud awareness built through various internal controls of organizations has a close relationship with fraud prevention. The existence of anti-fraud awareness can weaken the relationship of financial pressure, weak systems and procedures, moral justification, and the capability of the procurement committee against PBJ fraud. Data collection took longer because the questionnaire was aimed at all Procurement Implementation Work Units at the Ministry of

Public Works spread throughout Indonesia. The questionnaire also relies on the respondents' subjective perceptions and judgments so that the answers given do not fully describe the actual situation. The suggestion for further research is to consider the use of newer fraud theories such as the hexagon fraud theory or heptagon fraud in exploring the factors that cause PBJ fraud. In addition, future research is expected to use other proxies beyond those that have been studied in this study.

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