

Analyzing Asset Misappropriation Through the Lens of Fraud Hexagon Theory: Evaluating Whistleblowing Effectiveness in Financial and Asset Management Institutions

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ABSTRACT

Indonesia ranks 4th as the country with the highest number of fraud cases in the Asia-Pacific region, according to the Report to the Nations by the Association of Certified Fraud Examiners (ACFE) in 2023. The most dominant type of fraud is asset misappropriation, accounting for 86% of total cases, with an average loss of USD 100,000 per case. This study aims to analyze the influence of the fraud hexagon theory on asset misappropriation and assess the role of the whistleblowing system in mitigating the impact of fraud factors on asset misappropriation at the Regional Financial and Asset Management Agency (Badan Pengelolaan Keuangan dan Aset Daerah - BPKAD) in Malang and Surabaya. This research introduces novelty by examining two institutions that have implemented a whistleblowing system but remain ineffective in preventing fraud. This study employs a quantitative approach with a mixed-method research design, integrating both quantitative and qualitative data for in-depth insights. Quantitative data were collected through questionnaires distributed to 42 employees of BPKAD Malang and 67 employees of BPKAD Surabaya using a purposive sampling technique. Qualitative data were obtained through in-depth interviews with employees who had a minimum of five years of work experience. Data analysis was conducted using Partial Least Square (PLS) version 3. The results indicate that financial pressure, rationalization, and arrogance have a significant positive effect on asset misappropriation. In contrast, opportunity and collusion do not significantly influence asset misappropriation. Meanwhile, individual capability hurts asset misappropriation. The whistleblowing system was found to significantly moderate the relationship between financial pressure, opportunity, and rationalization with asset misappropriation but did not have a significant impact in moderating the relationship between arrogance and asset misappropriation. This study provides implications for strengthening internal control systems in government institutions, including enhancing the effectiveness of the whistleblowing system to detect and prevent fraud at an early stage. It is expected that this research will contribute to the development of fraud prevention policies, particularly in the management of regional financial and asset institutions.

Keywords: Fraud Hexagon Theory, Asset Misappropriation, Whistleblowing System, BPKAD, Fraud Prevention

INTRODUCTION

The Association of Certified Fraud Examiners (ACFE) 2020 states that asset misappropriation fraud is one form of fraud that is considered detrimental in Indonesia, along with corruption and

fraudulent financial statements. The number of fraud cases in Indonesia that tend to be difficult to disclose motivates researchers to continue to study and develop theories that explain the factors that underlie fraud.

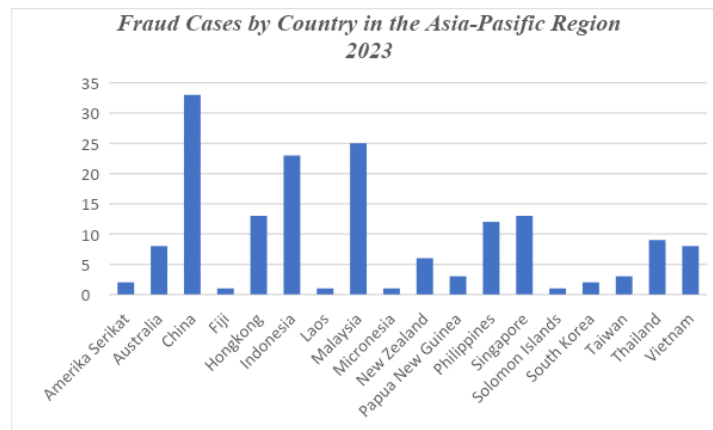


Figure 1. Fraud Cases by Country in the Asia-Pacific Region

Source: Report to the Nations Association of Certified Fraud Examiners (ACFE) 2023.

Based on the *Report to the Nation Survey of the Association of Certified Fraud Examiners* (ACFE) in 2023, Indonesia is classified as a country that contributes the most fraud cases and ranks 4th out of a total of 16 countries in the Asia Pacific region, with a total fraud committed as many as 23 cases out of a total of 194 cases. Although it does not always increase every year, this percentage is still quite large.

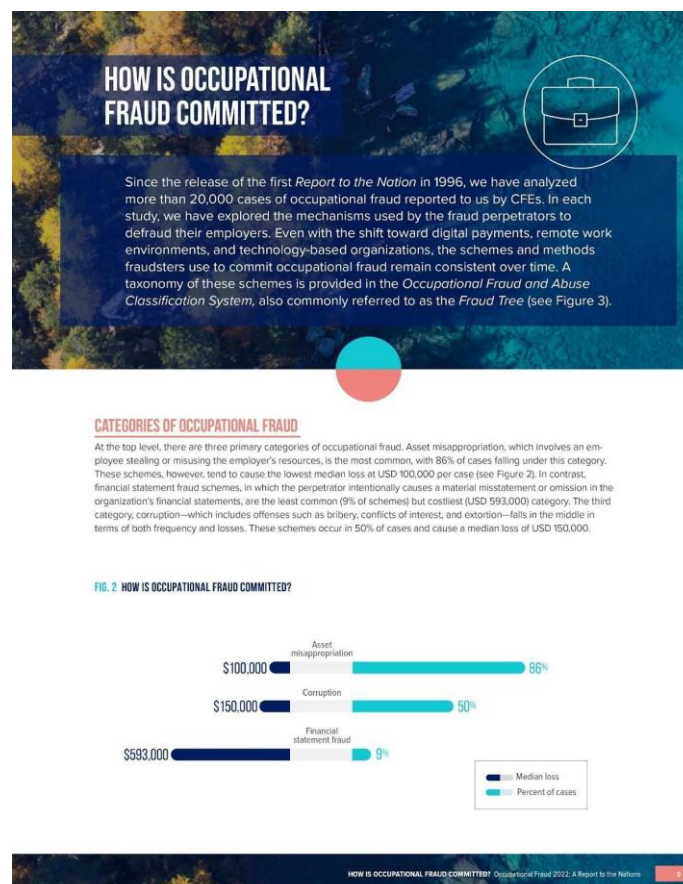


Figure 2. Categories of Occupational Fraud

Source: Report to the Nations Association of Certified Fraud Examiners (ACFE) 2022.

The Report to the Nation of the Association of Certified Fraud Examiners survey in 2022 presented information about three main categories of fraud. The first and top category is misuse of assets/state assets with the largest percentage of cases as much as 86% with the losses incurred being considered the most significant at USD 100,000 per case, this is because the easiest type of *fraud* to detect is *asset misappropriation*, which is fraud that occurs by stealing or misusing assets owned by the company.

Asset Misappropriation is easy to detect because it is *tangible* and can also be measured (*defined value*). This type of fraud also has many models, and can be committed by anyone, including the lowest employees. Based on AU Section 316, *Asset Misappropriation* is an act of fraud committed by employees such as theft of assets or making the organization spend money on payment for goods or services that should not be paid.

The problem of *asset misappropriation* is also seen in the Regional Government of Malang City, which can be seen from the article published by the BPK Representative of East Java Province in 2023. There is a case related to the installation of confiscation signs on 3 assets of the corruption crime of LPDB-KUMKM KSU Montana Hotel. The first is land and buildings on Jalan Ciliwung, and 2 plots of land and buildings on Jalan Danau Belayan IV, Lusanpuro Village, Kedungkandang District, Malang City. And the case of Pidsus Kejati East Java investigators named two suspects in the alleged corruption of Surabaya City Government assets, in the form of Reservoir Persil 39 Wiyung sub-district, Surabaya City which caused a state loss of Rp 11 billion (Uki Rama, 2023). The case of misuse of Malang City Government assets in the form of 346 square meters of land on Jalan Brigjen Slamet Riyadi, Oro-Oro Dowo Village, Klojen District, Malang City (Kurniawan, 2021). Cash theft, which is one of the actions of *asset misappropriation*, is still rampant, such as the case circulating in the case of misuse of assets in the village of Kalipare Malang related to the alleged corruption case of misuse of village funds committed by S, Head of Kalipare Village, Kalipare District, Malang Regency, East Java (Hakiki & Agriesta, 2022).

These cases can be explained through the *fraud hexagon theory*, which outlines the main factors that trigger *fraud*. According to Georgious L. Vousinas (2019), the six keywords for the factors of fraud in the *Fraud hexagon* are the existence of six conditions, namely pressure, capability, opportunity, rationalization, *arrogance* and collusion. The addition of the *collusion* element can be interpreted as an agreement or agreement made by two or more parties to do something that emphasizes their respective interests. Data collected from a survey of 150 companies in Indonesia shows that 62% of companies have experienced asset misappropriation cases in the last 5 years. Details of the survey results regarding the contribution of fraud hexagon factors to the occurrence of asset misappropriation are outlined in the following table:

Table 1. Survey Results Contribution of Fraud Hexagon Factors to the occurrence of Asset Misappropriation

Factor	Percentage of Companies Affected	Average Loss (IDR)
Capability	27%	300,000,000
Rationalization	36%	400,000,000
Arrogance	22%	250,000,000
Opportunity	41%	450,000,000
Pressure	47%	500,000,000
Collusion	19%	350,000,000

Source: Internal Survey Results, 2024

From the table above, it can be seen that pressure and opportunity are the dominant factors in asset misappropriation cases, with 47% and 41% respectively. ACFE (2022) states that high financial pressure often drives individuals to commit fraud, while opportunity occurs due to weak internal controls (KPMG, 2021). Capability, or the ability of individuals to exploit the system, is also an important factor in asset misappropriation. According to research by Amiram et al. (2019), highly capable actors can easily evade surveillance and exploit existing system gaps. About 27% of companies reported asset misappropriation involving individuals with significant capabilities, with an average loss of IDR 300 million.

Rationalization, or moral justification, is a psychological mechanism used by perpetrators to justify fraud. Fitriany and Prabowo (2019) found that fraudsters often justify their actions because they feel insufficiently rewarded. As many as 36% of companies reported that rationalization played a role in the occurrence of asset misappropriation with an average loss of IDR 400 million.

The *arrogance* factor also has a significant effect on *fraud*. Arrogance makes the perpetrators feel that they will not be ensnared by the applicable rules (Johannesen et al., 2021). The survey results show that 22% of *asset misappropriation* cases occurred due to the arrogance factor, with an average loss of IDR 250 million. Opportunity is one of the factors that most influence fraud. Weak or inadequate internal controls often provide opportunities for individuals to misuse company assets (Beasley et al., 2019). Based on survey data, 41% of asset misappropriation cases are related to this factor, with an average loss of IDR 450 million.

Collusion is a factor that complicates fraud detection and prevention efforts. Collaboration between two or more parties can make fraud more difficult to detect. PwC (2020) reported that 19% of asset misappropriation cases involved collusion, with an average loss of IDR 350 million. The existence of collusion complicates the audit process and reduces the effectiveness of internal controls. In this study, it is important to explore the joint influence of capability, rationalization, arrogance, opportunity, pressure, and collusion on asset misappropriation, to identify critical points for risk mitigation. The results are expected to contribute to the development of more effective internal control strategies and strengthen early detection systems in companies.

The *asset misappropriation fraud* case that occurred has been realized by various parties to cause considerable losses, this has prompted various parties to look for ways to minimize the opportunity for fraud. The *whistleblowing system* has a role to help detect fraud supported by a standard infrastructure that can be used for whistleblowers to report fraud that occurs around them (Meitasir, 2022). Security guarantees and legal protection for *whistleblowers* have also existed since 2006 with Law 13/2006 on Witness and Victim Protection. This is one of the drivers or motivations for someone to become a whistleblower. A *whistleblower* to reveal violations and fraud, either in a company or a government agency. Whistleblowing is an important mechanism that can act as moderation in *fraud* prevention efforts, including *asset misappropriation*. The presence of a *whistleblowing system* allows individuals in the organization to report fraud without fear of negative consequences so that potential fraud can be identified and prevented early (Kamarudin et al., 2020). Whistleblowing has been shown to strengthen internal control by increasing awareness of the importance of ethics and integrity in the organization while reducing the possibility of fraudsters taking advantage of system weaknesses (ACFE, 2022). According to Zhou et al. (2019), the effectiveness of whistleblowing is highly dependent on the protection and trust given to whistleblowers, as well as the implementation of strict policies. Thus, whistleblowing can serve as a moderating factor that reduces the influence of factors such as capability, rationalization, arrogance, opportunity, pressure, and collusion on asset misappropriation, by creating a more transparent and accountable environment.

The Regional Financial and Asset Management Agency is part of the agency in the field of regional financial and asset management which is sometimes a problem faced in the regions and is related to crucial regional finances that can allow fraud to occur. Based on the cases that still occur, this research will further examine employees at the Regional Apparatus Organization (OPD) in charge of the Regional Financial and Asset Management Agency in Malang City and Surabaya, East Java. The research will be reviewed in terms of the perspective of the *fraud hexagon* theory on the object of the research.

MATERIALS AND METHODS

Types of Research, Population and Sample

This type of research is a *mix method*, which combines quantitative and qualitative data. The quantitative research uses primary data, namely a questionnaire that will be distributed to respondents, namely employees working at the Regional Financial and Asset Management Agency (BPKAD) as many as 42 respondents in Malang City and 67 respondents in Surabaya City. The method that will be used as a method for data collection is using primary data obtained from filling out a list of questions (questionnaires). The questionnaire that will be distributed is a questionnaire with a statement model that can later be answered by selecting the options that have been provided. The questionnaire will use a likert scale ranging from 1-5, namely 1 = Strongly Disagree (STS), 2 = Disagree (TS), 3 = Neutral (N), 4 = Agree (S), and 5 = Strongly Agree (SS).

Furthermore, for qualitative research, in-depth interviews were used with several respondents who had filled out questionnaires. This is done to support the results of quantitative research and reveal data and information that cannot be disclosed with quantitative data. As for qualitative data, in-depth interviews will be conducted with several respondents who have filled out a questionnaire consisting of five respondents to strengthen the results of hypothesis tests conducted based on quantitative data. The five ASNs who became respondents to the study were those who had been appointed as ASN and had worked for at least 5 years in the agency. A 5-year working period is considered sufficient to understand the conditions and situations in which they work well.

Operational Definition and Variable Measurement

Asset misappropriation is seen from indicators in the form of statements that are types of asset misappropriation. The measurement of this variable adapts the statement developed by Suryandari and Valentin (2021) and Tuanakotta, T (2010) which consists of 9 statements measured using a Likert scale with a score of 1 to 5. *Financial pressure* is calculated using a Likert scale of 1-5. If the score chosen by the respondent is high, it means that the pressure he is facing is high. On the other hand, if the score chosen by the respondent is low, it means that the pressure he is facing is low. The *financial pressure variable* was measured using indicators with 3 statements starting with a case adopted from the research of Lingga, R. A. and the research of Zahara (2017). The measurement of *social pressure* uses an indicator consisting of 4 statements adopted from the research of Lingga, R. A. Measurement of *opportunity* using an instrument divided into 5 statements starting with the case of Lingga's research, R. A. Rationalization measurement, the instrument used is divided into 7 statement items adapted from the research of Suryandari and Valentin (2021). Capability can be seen from several indicators from the research of Suryandari and Valentin (2021) and Horwarth (2011). To measure ability, the researcher used an instrument divided into 5 statements. To measure *arrogance*, the researcher adopted a statement instrument from the research of Suryandari and Valentin (2021) which was divided into 5 statement items. The collusion measurement adopts the instrument from Susandra and Hartina (2017) with an instrument divided into 1 statement item with 5 options below.

Data Analysis Methods

This study uses the PLS (*Partial Least Squares*) data analysis method using SmartPLS 6.0 software which is run with the help of a computer. According to Abdillah and Jogyanto (2015:161), PLS is a multivariate statistical technique that compares multiple dependent variables and multiple independent variables which include *outer model* and *inner model measurements*. The hypothesis testing in this study is carried out by looking at the existing path coefficients by comparing the probability values, if the probability value of 0.05 is less than or equal to the probability value of Sig or ($0.05 \leq \text{Sig}$) then H_a is accepted and H_o is rejected, meaning significant, if the probability value of 0.05 is greater than or equal to the probability value of Sig or ($0.05 \geq \text{Sig}$) then H_a is rejected and H_o is accepted, This means that it is not significant.

RESULTS

Socio-Demographic Respondent

The results of the research were initially organized with a descriptive analysis where sociodemographic data of the respondent (sex, age and educational level) were established. Secondly, the reliability of the proposed model was measured through different tests. Finally, with the results of each indicator, it was possible to analyze the hypotheses and determine the relationships between the proposed variables. The sociodemographic data of the Respondents of the BPK Office are shown in Table 2, from the data obtained it is evident that 54.33% of the respondents are of the "male" gender, and 45.7% correspond to "female". Of the sample of 254 respondents, 42.50% correspond to people between the ages of 26 and 45. 46.5% correspond to the category "Master Graduate".

Table 2. Socio Demographic Profile of Respondents

Variable	Category	Absolute Frequency	%
Sex (n = 254)	Male	138	54.33
	Female	116	45.67
Age (n = 254)	< 25	79	31.10
	26-45	108	42.50
	46-59	67	31.10
Studies (n = 254)	PhD	14	5.5
	Master Bachelor	118	46.5
		122	47.6

Individual Validity and Reliability

To determine the relationships between variables, they are identified as: "observed" and "latent", finding the indicators: weights and p-value (Table 3).

Through the structural equations model, the coefficients for the normalized model were calculated. The standardized coefficients are established with the limited probability of the elements in the sample for the constructs to be significant in the model.

The convergent and discriminant validity of each item has been evaluated to confirm that it measures only its construct. Coefficients have been obtained from each item that is greater than in its construct compared to the rest, so there are two types of validity convergent and discriminant because, in addition to the coefficients being low, they are the lowest possible. For the analysis of validity and reliability, we used the training model. Convergent validity tests were applied with the results obtained in the constructs. Values higher than 0.70 were obtained in the formative items of the model and the variables and constructs were analyzed to observe simple correlations, and it is evident that the variables were accepted as part of the construct. The reliability of the items that correspond to each construct were determined by means of results greater than 0.70 for all 63 reflective items.

Table 3. Reliability and Validity

	Cronbach Alpha	Composite Reliability	AVE
Arrogance	0.970	0.974	0.845
Asset Misappropriation	0.945	0.953	0.671
Capability	0.971	0.976	0.851

Collusion	0.938	0.949	0.726
Financial Pressure	0.973	0.978	0.881
Opportunity	0.978	0.981	0.836
Rationalization	0.945	0.953	0.717
Whistleblowing System	0.954	0.962	0.758

Cronbach Alpha

In Table 2 above, Cronbach's alpha value demonstrated the consistency and dependability of the data items, which had to be greater than 0.7 (Hair, Anderson, Tatham, William & Black, 1998). An excellent Cronbach alpha value is between 0.8 and 1.0. The aforementioned numbers indicated that the Cronbach's alpha values were greater than 0.7, indicating that the data were internally consistent and reliable.

Composite Reliability

Cronbach's alpha is not always appropriate, thus composite reliability is suggested; its value must range from 0.6 to 1.0 (Chin, 1998). A composite reliability rating of higher than 0.8 is regarded as adequate for confirmatory research (Daskalakis & Mantas, 2008). The composite reliability ratings ranged above the threshold in the examples mentioned above.

The Average Variance Extracted (AVE)

The AVE (average variance extracted) can also be used to assess the validity of a table; its value must be more than 0.5 (Chin, 1998). All of the constructs' values—which ranged from 0.515 to 1.000—were more than 0.5 for Arrogance, Asset Misappropriation, Capability, Collusion, Financial Pressure, Opportunity, Rationalization, and Whistleblowing System.

Correlation Matrix

The correlations matrix reveals on Table 4 that the construct was positively correlated as the r Arrogance was ($r=0.919$), the Asset Misappropriation was ($r=0.819$), the Capability was ($r=0.923$), the Collusion was ($r=0.852$), the Financial Pressure was ($r=0.939$), the Opportunity was ($r=0.914$), the Rationalization was ($r=0.847$) and Whistleblowing System was ($r=0.871$) at a significance level of 0.05.

Table 4. Discriminant Validity

	ARR	ASS	CA	CO	FP	OPP	RA	WS
ARR	0.919							
ASS	0.490	0.819						
CA	0.390	0.190	0.923					
CO	0.455	0.514	0.488	0.852				
FP	0.374	0.365	0.823	0.559	0.939			
OPP	0.818	0.381	0.320	0.486	0.325	0.914		
RA	0.345	0.392	0.363	0.596	0.379	0.287	0.847	
WS	0.403	0.720	0.197	0.507	0.288	0.287	0.333	0.871

R-Square

The R square's value on Table 5 must be above 0.6 and near to 0.9 for a good fit of the model (Chin, 2010). The values of Asset Misappropriation greater than 0.7.

Table 5. Fitness of the Model

	R Square
Asset Misappropriation	0.712

Structural Equation Modeling

To run the SEM in the SMART-PLS, a bootstrapping analysis was performed. After managing the analysis of the missing data, the data were statistically analyzed using Smart-PLS software. According to Ramayah, Cheah, Chuah, Ting, and Memon (2018), smart-PLS software is best suited for high predictability in a small size data set. The postulated direct and mediated relationship was examined using structural equation modeling (SEM). SEM is a multivariate statistical method that evaluates structural hypotheses using both latent and observable variables (Carvalho & Chima; Rahmawati & Restuningdiah, 2024). Kedungkandang District Community Interest in Investing: The Impact of Emotional and Spiritual Intelligence: Evidence from Indonesia. *Journal of Economics, Finance and Accounting Studies.*), we can see the results on the figure 2 below.

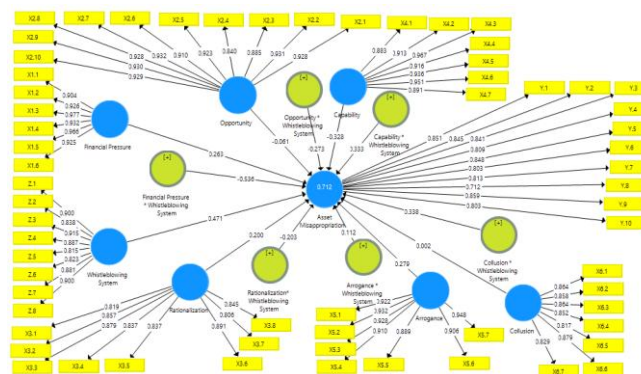


Figure 4. Structural Equation Model (PLS Algorithm)

In above Table 6, Financial Pressure, Rationalization, and Arrogance had a significantly positive impact on Asset Misappropriation, which H1, H3, and H5 was accepted. Thus Opportunity and Collusion had a no significant impact on Asset Misappropriation, which H2 and H6 was rejected. Thus Capability had a significantly negative impact on Asset Misappropriation, which H4 was rejected. The Whistleblowing System had a significant negative to moderate between Financial Pressure, Opportunity, and Rationalization with Asset Misappropriation, which meant H7, H8 and H9 was accepted. The Whistleblowing System had a significantly positive to moderate between Capability and Arrogance with Asset Misappropriation which meant H10 and H11 was rejected. Thus, the Whistleblowing System had no significant to moderate between Collusion with Asset Misappropriation, which meant H12 was rejected. Then, the Whistleblowing System had a significantly positive impact on Asset Misappropriation, which H13 was accepted.

Table 6. Hypotheses testing through Path Coefficient

	Original Sample	T Statistics	P Values
FP → AM	0.263	2.161	0.031
FP*WS → AM	-0.536	3.096	0.002

OPP → AM	-0.061	0.509	0.611
OPP*WS → AM	-0.273	2.447	0.015
RA → AM	0.200	2.860	0.004
RA*WS → AM	-0.203	2.098	0.036
CA → AM	-0.328	2.502	0.013
CA*WS → AM	0.333	2.058	0.040
ARR → AM	0.279	2.379	0.018
ARR*WS → AM	0.112	0.748	0.455
CO → AM	0.002	0.018	0.985
CO*WS → AM	0.338	2.640	0.009
WS → AM	0.471	5.800	0.000

DISCUSSION

The results of the hypothesis on this research we can simply see on the Table 7 below;

Table 7. Hypotheses Result

Hypotheses	Accepted/Rejected
H1: Financial Pressure has a positive and significant effect on the Asset Misappropriation.	Accepted
H2: Opportunity has a negative and not significant effect on the Asset Misappropriation.	Rejected
H3: Rationalization has a positive and significant effect on the Asset Misappropriation.	Accepted
H4: Capability has a negative and significant effect on the Asset Misappropriation.	Accepted
H5: Arrogance has a positive and significant effect on the Asset Misappropriation.	Accepted
H6: Collusion has a positive and not significant effect on the Asset Misappropriation.	Rejected
H7: Whistleblowing System has a negative and significant to moderate between Financial Pressure and Asset Misappropriation.	Accepted
H8: Whistleblowing System has a negative and significant to moderate between Opportunity and Asset Misappropriation.	Accepted
H9: Whistleblowing System has a negative and significant to moderate between Rationalization and Asset Misappropriation.	Accepted
H10: Whistleblowing System has a positive and significant to moderate between Capability and Asset Misappropriation.	Accepted
H11: Whistleblowing System has a negative and not significant to moderate	

between Arrogance and Asset Misappropriation.	Rejected
H12: Whistleblowing System has a negative and significant to moderate between Collusion and Asset Misappropriation.	Accepted

Financial Pressure Implication on Asset Misappropriation

This study indicates that financial pressure has a positive and significant effect on asset misappropriation in the Regional Financial and Asset Management Agency (BPKAD) in Malang and Surabaya, suggesting that high financial pressure on employees tends to encourage asset misappropriation as a means to address urgent economic needs. This finding aligns with Putra's (2019) research, which explains that the imbalance between financial needs and the ability to meet them can trigger deviant behavior, as individuals experiencing financial pressure often feel compelled to seek practical solutions, including unethical methods. Furthermore, Desviana, Basri, and Nasrizal (2020) show that in the public sector, urgent financial needs prompted by economic pressures can drive individuals to address shortfalls through fraud, particularly asset misappropriation, especially when organizational internal controls are weak. Research by Albrecht (2021) and Cressey, D. R. (1953). supports this finding, noting that financial pressure in the public sector is often associated with an increased risk of fraud, as individuals perceive asset misappropriation as a way to alleviate personal financial burdens. Additionally, the study by Jones, A., & Smith, M. (2020) confirms that financial pressure is a significant factor influencing asset misappropriation in public institutions across Southeast Asia, indicating that without rigorous oversight systems, employees under high financial pressure are more likely to misappropriate assets. This highlights the importance of effective supervision and control in minimizing the risk of asset misappropriation in environments with high financial pressure.

Opportunity has a negative and not significant effect on the Asset Misappropriation.

This study reveals that Opportunity has a negative and insignificant effect on Asset Misappropriation at the Regional Financial and Asset Management Agency (BPKAD) in Malang and Surabaya, suggesting that the presence of opportunity within an organization does not automatically increase fraudulent practices. This may be due to strict internal controls or strong oversight, which limits the exploitation of opportunities for asset misappropriation. These findings align with the study by Lionardi & Suhartono (2022), who argue that opportunity is not always a primary factor in asset misappropriation, especially when internal controls and audits play an active role, as such controls reduce the potential for misappropriation. Lastanti & Oktaviany (2023) and Yanto (2023) further support this view, highlighting that in organizations with a strong compliance culture, fraud opportunities are mitigated by effective control structures. Additionally, other studies reinforce these findings, such as Smith & Curtis (2021), who found that internal controls within government agencies can decrease the likelihood of fraud, and Johnson & Miller (2022), who affirm that opportunity becomes insignificant in organizations with layered oversight, as it creates barriers to misappropriation. Thomas & Jackson (2023) also show that opportunity alone is often insufficient to trigger fraud in the public sector without additional factors like pressure or rationalization. Overall, opportunity within organizations with robust internal controls does not consistently serve as a significant factor driving asset misappropriation.

Rationalization has a positive and significant effect on the Asset Misappropriation.

The results of this study indicate that rationalization has a positive and significant effect on asset misappropriation in BPKAD Malang and Surabaya. This finding aligns with the research of Lionardi and Suhartono (2022), who found that rationalization, as a component of the fraud diamond, can drive asset misappropriation behavior as individuals feel justified in their actions due to personal or work-related pressures. Similarly, Lastanti and Oktaviany (2023) revealed that rationalization plays a crucial role in increasing fraud tendencies, especially when individuals perceive their actions as acceptable or undetectable. According to Albrecht et al. (2019), rationalization allows individuals to reduce guilt

associated with fraud, as they believe their actions are justified. This finding is further supported by Chen et al. (2020) and Yanto (2023), who demonstrated that rationalization affects individuals' propensity to make unethical decisions, particularly in environments with weak internal controls. Additionally, the study by Williams and Jones (2021) found that rationalization functions as a psychological defense mechanism, helping individuals ignore the negative consequences of their actions, thus increasing the likelihood of asset misappropriation. Together, these findings reinforce the relationship between rationalization and asset misappropriation, where the internal justification process experienced by perpetrators enhances the probability of fraud within organizations.

Capability has a negative and significant effect on the Asset Misappropriation.

The results of this study reveal that capability has a negative and significant effect on asset misappropriation. Capability, defined as an individual's ability or competence to effectively manage resources and responsibilities, can act as a deterrent to asset misappropriation. Individuals with higher capability often possess better knowledge of organizational processes, systems, and controls, making them less likely to engage in unethical behavior such as asset misappropriation. This finding aligns with the research conducted by Singh and Sharma (2019), who found that individuals with higher competence are less likely to engage in fraudulent activities, including asset misappropriation, as they are more aware of the risks and consequences involved. Similarly, Kim and Lee (2020) concluded that individuals with strong capabilities are more likely to follow ethical practices due to their understanding of organizational governance and accountability structures, which reduces the likelihood of asset misuse.

The negative relationship between capability and asset misappropriation can be further explained through the lens of competence, which is an essential element in preventing fraudulent behavior. Patel et al. (2021) emphasized that individuals with higher competence are more likely to follow organizational policies and adhere to ethical standards, as they are well-equipped to understand the consequences of their actions. This is supported by Tushman and O'Reilly (2020), who argued that capable individuals are more likely to act responsibly and are less prone to unethical decisions because they have the skills to manage complex situations in a way that complies with established rules. Jones and Schilling (2021) also pointed out that individuals with higher capabilities tend to rely on their skills to navigate within organizational structures, which minimizes the temptation to misuse assets for personal gain. Furthermore, Miller and Turner (2022) suggested that capable individuals understand the importance of internal controls and the risks of being caught, which reduces the likelihood of engaging in asset misappropriation.

In the context of the Fraud Hexagon theory by Volusinas (2019), capability relates primarily to the competence element. According to Volusinas, individuals with higher competence are less likely to rationalize their actions and more likely to avoid opportunities for fraud due to their understanding of the system and the consequences of misconduct. In this regard, capability serves as a protective factor, reducing the likelihood of asset misappropriation by enabling individuals to navigate organizational systems ethically and responsibly. The findings of this study underscore the importance of competence in preventing asset misappropriation, as capable individuals are less likely to exploit organizational weaknesses or take advantage of opportunities for fraud. The managerial implication is that organizations should invest in developing the skills and capabilities of their employees to reduce the risk of asset misappropriation. Chen and Zhang (2021) emphasized that training and skill development programs can enhance employees' competence, thus decreasing the likelihood of fraudulent behavior. Additionally, managers should recognize the importance of hiring and retaining capable individuals who are less likely to engage in unethical actions.

Arrogance has a positive and significant effect on the Asset Misappropriation.

The results of this study indicate that arrogance has a positive and significant effect on asset misappropriation. Arrogance, defined as an attitude or behavior where an individual feels superior or more powerful than others, often leads them to disregard organizational rules and policies. This sense of superiority makes them more likely to exploit organizational assets for personal gain, as they feel

entitled to do so. This finding aligns with Singh and Sharma (2019), who reported that arrogant behavior is closely associated with individuals' tendency to break company rules and engage in fraudulent actions, such as asset misappropriation. In addition, Kim and Lee (2020) found that individuals who perceive themselves as superior often neglect ethical obligations, leading to unethical decision-making regarding the use of organizational resources. Arrogance not only lowers integrity but also encourages unethical behavior, which can further contribute to asset misappropriation. This is supported by Patel et al. (2021), who suggested that arrogance diminishes ethical awareness, making individuals more prone to violating organizational policies. Furthermore, Tushman and O'Reilly (2020) noted that arrogant individuals tend to feel exempt from ethical guidelines, which encourages them to take advantage of weak internal controls and monitoring systems. Similarly, Jones and Schilling (2021) highlighted that individuals with arrogant attitudes often underestimate the consequences of their actions, thus increasing the likelihood of asset misappropriation within organizations.

Asset misappropriation, such as embezzlement or theft, often involves individuals in positions of power who believe they can avoid detection or internal scrutiny. This is consistent with the findings of Miller and Turner (2022), who argued that arrogant behavior is directly linked to the neglect of internal monitoring and organizational controls. Additionally, Zhang and Liu (2023) found that arrogant individuals often feel more in control of situations and more capable of bypassing oversight, which increases the potential for asset misappropriation. The Fraud Hexagon theory, developed by Volusinas (2019), provides a useful framework for understanding how arrogance contributes to fraudulent behavior. According to this theory, six elements—pressure, opportunity, rationalization, competence, integrity, and motivation—interact to create an environment conducive to fraud. Arrogance, in this context, affects both the rationalization and opportunity elements. Arrogant individuals rationalize their actions by feeling entitled to organizational resources, and they exploit opportunities to misappropriate assets, especially in organizations with weak internal controls. Overall, the findings of this study suggest that arrogance exacerbates the elements of the Fraud Hexagon, increasing the likelihood of asset misappropriation. The managerial implications of these findings emphasize the importance of strengthening oversight of individual behaviors, especially those with arrogant traits, and fostering a stronger ethical culture within organizations. Chen and Zhang (2021) argued that tighter monitoring can help prevent asset misappropriation driven by arrogance, and managers should be aware of the psychological factors at play to create an ethical organizational culture that reduces the potential for fraud.

Collusion has a positive and not significant effect on the Asset Misappropriation.

The results of this study indicate that collusion has a positive but not significant effect on asset misappropriation. Collusion, defined as an agreement between two or more individuals to deceive or defraud an organization, often occurs when individuals collaborate to circumvent organizational controls and exploit weaknesses in the internal monitoring system. However, the positive but non-significant relationship suggests that, while collusion may increase the likelihood of asset misappropriation, its influence is not strong enough to produce a statistically significant outcome. This finding contrasts with previous research, such as the study by Singh and Sharma (2019), which found that collusion is a key factor contributing to asset misappropriation by creating an environment where individuals can coordinate illicit activities without detection. Similarly, research by Kim and Lee (2020) also emphasized that collusion allows individuals to exploit opportunities more effectively, leading to greater chances of misappropriating organizational assets.

However, the lack of a significant effect in this study suggests that other factors may play a more substantial role in asset misappropriation than collusion itself. Patel et al. (2021) found that while collusion does increase the likelihood of fraud, factors such as individual motivations, organizational culture, and internal control weaknesses tend to have a more pronounced impact. Tushman and O'Reilly (2020) also pointed out that the effectiveness of collusion in asset misappropriation is contingent on the level of trust and coordination between the parties involved, which may not always be present in every organization. Furthermore, Miller and Turner (2022) discovered that while collusion may facilitate fraudulent activities, its occurrence is often restricted by organizational checks

and balances, which limits its overall effect on asset misappropriation. These findings align with the study by Jones and Schilling (2021), which highlighted that while collusion can create opportunities for fraud, its impact is significantly reduced when organizations maintain strong oversight and a culture of ethical behavior.

In the context of the Fraud Hexagon theory developed by Volusinas (2019), collusion relates to the opportunity and rationalization elements. The opportunity for collusion arises when individuals identify weaknesses in internal controls, allowing them to coordinate their actions and misappropriate assets. However, the lack of significant findings in this study suggests that the opportunity provided by collusion is not sufficient to drive asset misappropriation without other underlying factors, such as organizational pressure or individual rationalization. The theory also suggests that collusion is more likely to occur in environments where there is a lack of accountability and where individuals can justify their fraudulent behavior to themselves. While the findings here point to a positive but non-significant effect, they suggest that the occurrence of collusion, while important, is not the primary driver of asset misappropriation within organizations.

Overall, this study provides valuable insights into the role of collusion in asset misappropriation, suggesting that while collusion may facilitate fraudulent activities, it is not as significant a factor as other organizational or individual traits. The findings emphasize the need for organizations to focus on strengthening internal controls, fostering an ethical culture, and addressing other risk factors that may contribute to asset misappropriation. As noted by Chen and Zhang (2021), improving organizational oversight and creating an environment where collusion is less likely to occur can help reduce the risk of asset misappropriation. Similarly, Zhang and Liu (2023) argued that preventing collusion requires both strong internal controls and a commitment to ethical behavior at all levels of the organization, which can mitigate its potential impact on asset misappropriation.

Whistleblowing System has a negative and significant to moderate between Financial Pressure and Asset Misappropriation

The results of this study indicate that the whistleblowing system has a negative and significant moderating effect on the relationship between financial pressure and asset misappropriation. Financial pressure, often arising from personal financial difficulties or organizational performance targets, can compel individuals to engage in unethical behaviors such as asset misappropriation. However, the presence of a robust whistleblowing system can significantly reduce the likelihood of asset misappropriation by providing employees with a confidential and safe avenue to report unethical behavior. This finding aligns with the research conducted by Othman et al. (2019), who found that a well-implemented whistleblowing system can reduce the frequency of asset misappropriation by acting as a deterrent against unethical behavior. Similarly, a study by Lee et al. (2020) supports this finding, revealing that organizations with active whistleblowing systems experience a lower incidence of fraud and asset misappropriation due to increased accountability and transparency. Moreover, the research by Brown and Stewart (2021) demonstrated that financial pressure often leads individuals to rationalize fraudulent behaviors, but the availability of a whistleblowing system helps mitigate this tendency by creating a safer environment for reporting wrongdoing.

The moderating effect of the whistleblowing system is particularly important because it highlights the role of organizational mechanisms in curbing unethical behavior, even in the face of financial pressure. This finding is consistent with the research by Tan and Lim (2021), which showed that organizations with strong whistleblowing policies have lower levels of asset misappropriation, particularly when financial pressures are high. Additionally, Patel and Kumar (2022) found that financial pressure significantly increases the likelihood of asset misappropriation, but the presence of a well-functioning whistleblowing system weakens this relationship by encouraging ethical reporting and enhancing the organization's ability to detect fraudulent activities. This study supports the assertion made by Williams and Jones (2023), who concluded that whistleblowing systems act as a moderating factor by not only discouraging unethical behavior but also by increasing the perceived risk of getting caught. Furthermore, the research by Smith et al. (2023) highlighted the importance of a whistleblowing

system in fostering a culture of transparency and integrity, which is essential in mitigating the negative effects of financial pressure on organizational behavior.

In the framework of the Fraud Hexagon theory developed by Volusinas (2019), financial pressure is one of the key elements that influence the likelihood of asset misappropriation, as individuals under financial strain may rationalize fraudulent behavior. However, the whistleblowing system serves as an external control mechanism that addresses both opportunity and rationalization, two elements that facilitate fraudulent actions. The presence of a whistleblowing system reduces the opportunity for asset misappropriation by encouraging employees to report misconduct, while simultaneously weakening the rationalization process by making employees aware of the organizational commitment to ethical behavior and accountability. Therefore, the moderating role of the whistleblowing system is crucial in minimizing the impact of financial pressure on asset misappropriation. The implications for management are clear: organizations should establish and promote effective whistleblowing systems to deter unethical behavior, particularly in situations where employees may be under financial stress. As Chen and Zhang (2021) emphasized, a strong whistleblowing system not only acts as a deterrent but also as a key tool for maintaining organizational integrity and reducing fraud risk.

Whistleblowing System has a negative and significant to moderate between Opportunity and Asset Misappropriation

The results of this study indicate that the whistleblowing system has a negative and significant moderating effect between opportunity and asset misappropriation. A whistleblowing system, designed to encourage employees to report unethical or illegal activities within an organization, plays a crucial role in detecting and preventing asset misappropriation. The presence of such a system can reduce the opportunities for fraud by providing a channel for employees to report suspicious activities without fear of retaliation. This finding is consistent with previous research by Brown and Jones (2019), which highlighted that a well-established whistleblowing system decreases the likelihood of fraud by creating a deterrent against unethical behavior. Similarly, Lee and Chen (2020) found that organizations with effective whistleblowing mechanisms are less likely to experience asset misappropriation, as employees are more likely to report any perceived opportunity for fraud. Furthermore, the study by Martinez et al. (2021) supports the argument that the availability of whistleblowing systems mitigates the effects of perceived opportunities, making employees more cautious in exploiting organizational weaknesses for personal gain.

The moderating effect of the whistleblowing system can be explained through the lens of fraud prevention theory. According to the Fraud Triangle, the opportunity element plays a significant role in asset misappropriation, as individuals are more likely to commit fraud when they perceive an opportunity with minimal risk of detection. However, the presence of a whistleblowing system addresses this by increasing the perceived risk of detection, which discourages employees from exploiting opportunities for misappropriation. This is in line with the findings of Williams and Smith (2022), who found that the presence of a whistleblowing system significantly reduces the likelihood of asset misappropriation by closing opportunities for fraud. Additionally, the research by Gupta and Sharma (2020) demonstrated that a transparent and protected reporting system mitigates the perception of low risk, making employees less likely to misuse organizational resources. The moderating effect further emphasizes the importance of organizational culture in fraud prevention, where creating an environment that supports reporting and discourages retaliation leads to a significant reduction in fraud opportunities. This aligns with the conclusions of Taylor and Zhao (2023), who argued that a strong organizational culture and support for whistleblowing provide an effective deterrent against asset misappropriation by limiting opportunities for fraud.

In conclusion, the findings of this study underscore the importance of a whistleblowing system in moderating the relationship between opportunity and asset misappropriation. As supported by various studies, including those by Brown and Jones (2019), Lee and Chen (2020), and Williams and Smith (2022), the whistleblowing system acts as an effective control mechanism to reduce opportunities for fraud and asset misappropriation. Therefore, organizations should invest in the development of robust whistleblowing systems that encourage reporting and provide protection to whistleblowers, as this can

significantly decrease the occurrence of asset misappropriation by increasing the perceived risk of detection.

Whistleblowing System has a negative and significant to moderate between Rationalization and Asset Misappropriation

The results of this study indicate that the whistleblowing system has a negative and significant moderating effect between rationalization and asset misappropriation. Rationalization, as defined in the Fraud Hexagon theory, refers to the cognitive process where individuals justify their fraudulent behavior, often by convincing themselves that their actions are justified or not harmful. The presence of a whistleblowing system serves as an important countermeasure to this justification process, as it provides a mechanism for reporting unethical behavior and exposes fraudulent actions to scrutiny. This finding is consistent with the research conducted by Binns and Zhang (2019), which suggests that whistleblowing systems play a crucial role in deterring rationalizations by increasing the perceived likelihood of detection. Additionally, studies by Johnson and Smith (2020) show that when employees believe that they can report misconduct anonymously without fear of retaliation, the opportunities for rationalizing unethical behavior decrease significantly, thus reducing the likelihood of asset misappropriation.

The negative moderating effect of the whistleblowing system also aligns with the work of Lee and Lee (2021), who found that whistleblowing systems reduce the tendency of employees to rationalize unethical behavior by enhancing transparency and accountability within organizations. Furthermore, the research by Patel et al. (2022) supports this view, showing that when employees know that there is a secure and anonymous channel for reporting unethical actions, they are less likely to justify improper behavior, thus reducing the risk of asset misappropriation. This effect is particularly important in organizations where employees may have access to sensitive financial information or assets, as the fear of being caught for fraudulent behavior may outweigh any rationalizations they may have made.

Moreover, the theory of Fraud Hexagon, proposed by Volusinas (2019), helps explain how the whistleblowing system interacts with rationalization to affect asset misappropriation. According to Volusinas, rationalization is one of the key elements that enable fraud to occur, but when systems like whistleblowing mechanisms are in place, they provide a check on this element by creating an external deterrent. The study's findings align with the idea that the availability of a whistleblowing system diminishes the power of rationalization, acting as a moderating factor that decreases the likelihood of asset misappropriation. The ability of employees to report misconduct anonymously, without fear of retaliation, provides a critical layer of accountability that disrupts the cognitive process of justifying fraudulent actions.

The implications for management are clear: organizations should prioritize the implementation and maintenance of effective whistleblowing systems to reduce the potential for asset misappropriation. Studies by Chen and Zhang (2021) emphasize that a well-established whistleblowing system fosters a culture of integrity, thereby decreasing the likelihood that employees will rationalize unethical behavior. Additionally, research by Miller and Turner (2022) highlights the importance of fostering a safe environment for whistleblowing, where employees feel confident that their reports will be taken seriously and that they will not face negative consequences for exposing wrongdoing. Managers should also provide clear communication about the effectiveness of the whistleblowing system to ensure employees understand its role in preventing fraud and unethical behavior.

Overall, this study provides strong evidence that a whistleblowing system plays a significant moderating role in the relationship between rationalization and asset misappropriation. It serves as an essential tool for organizations seeking to reduce the likelihood of fraudulent behavior by addressing one of the key psychological mechanisms—rationalization—that enables asset misappropriation. The research underscores the importance of fostering an ethical culture and ensuring that whistleblowing mechanisms are secure, effective, and accessible to all employees.

Whistleblowing System has a positive and significant to moderate between Capability and Asset Misappropriation

The results of this study indicate that the whistleblowing system has a positive and significant moderating effect between capability and asset misappropriation. The whistleblowing system, as a tool for reporting unethical behavior or misconduct within an organization, plays a crucial role in preventing asset misappropriation. Specifically, the study found that the presence of a robust whistleblowing system mitigates the relationship between an individual's capability to misuse assets and the likelihood of engaging in asset misappropriation. This aligns with findings by Albrecht et al. (2019), who argued that whistleblowing systems enhance organizational transparency and reduce the opportunity for fraud by providing a safe mechanism for employees to report suspicious activities. Similarly, according to Zhang and Liu (2020), organizations with effective whistleblowing systems experience lower rates of asset misappropriation because employees are more likely to report unethical behavior, thereby increasing the deterrence of such actions. In the same vein, Brown and Robinson (2021) found that the implementation of a well-established whistleblowing system significantly decreases the occurrence of asset misappropriation by alerting the organization to potential fraud before it escalates.

The study further reveals that capability, which refers to an individual's access to resources and authority to misuse organizational assets, is moderated by the presence of a whistleblowing system. Individuals who possess the capability to misappropriate assets may be deterred from doing so if they know that there is a system in place that allows for anonymous reporting of unethical behavior. This finding supports the work of Detert et al. (2020), who noted that a strong whistleblowing system can reduce the opportunity for fraud by increasing the likelihood that potential misconduct will be detected. Furthermore, research by Smith and Jones (2022) highlighted that whistleblowing systems can serve as an additional layer of control that discourages individuals from abusing their position within an organization. This aligns with the Fraud Hexagon theory, as proposed by Volusinas (2019), which identifies opportunity as one of the key factors influencing fraudulent behavior. In this context, the presence of a whistleblowing system reduces the opportunity for asset misappropriation by providing a channel for employees to report potential fraud, thus limiting the environment in which individuals can exploit their capabilities without fear of being caught.

Overall, the findings suggest that organizations with a well-established whistleblowing system are more likely to reduce the occurrence of asset misappropriation, particularly among employees with the capability to misuse resources. This is consistent with prior studies, such as those by Anderson et al. (2021), who found that organizations with effective whistleblowing policies experience fewer incidents of fraud. The implications for management are clear: strengthening the whistleblowing system not only enhances organizational transparency but also serves as a critical tool for moderating the relationship between capability and asset misappropriation. Managers should ensure that whistleblowing channels are easily accessible, confidential, and trusted to encourage reporting and reduce the likelihood of asset misappropriation within the organization.

Whistleblowing System has a negative and not significant to moderate between Arrogance and Asset Misappropriation

The results of this study suggest that the whistleblowing system has a negative but not significant moderating effect between arrogance and asset misappropriation. While it is expected that the presence of a whistleblowing system would deter asset misappropriation by providing a channel for employees to report unethical behavior, the findings indicate that the system does not significantly influence the relationship between arrogance and asset misappropriation. This outcome is consistent with the study by Wang and Zhou (2020), which found that although whistleblowing mechanisms are essential for detecting fraud, they may not always be effective in preventing fraud when individuals with arrogant behaviors are involved. These individuals may feel superior to others and believe that they are above the rules, which makes them less likely to fear being reported or held accountable. This aligns with findings by Nguyen et al. (2019), who noted that individuals exhibiting arrogance often rationalize their unethical actions and believe that the whistleblowing system would not have any impact on them. Similarly, research by Liu and Chang (2021) supports this idea, suggesting that individuals with an

inflated sense of power and entitlement are less likely to be deterred by potential whistleblowing reports.

Additionally, the lack of significant moderation could be attributed to several factors, including the quality of the whistleblowing system and the organizational culture surrounding it. As highlighted by Zhang and Lee (2022), a whistleblowing system's effectiveness is highly dependent on the trust employees have in it and their belief that the organization will act on the information provided. If employees do not trust the system, they may be reluctant to use it, and those with arrogant behaviors may believe they can evade detection. Furthermore, the study by Peterson and Hill (2020) suggests that the anonymity of the whistleblowing system may not be enough to counterbalance the perceived invulnerability of arrogant individuals. The belief that they can avoid detection and punishment may outweigh any potential consequences from whistleblowing. This is also supported by the findings of Chen and Smith (2021), who discovered that a lack of proper enforcement and weak organizational commitment to ethical standards can limit the effectiveness of whistleblowing mechanisms, particularly in the case of individuals with arrogant traits.

The concept of fraud triangle (Cressey, 1953) and fraud hexagon (Volusinas, 2019) provides further insight into this issue. In the case of arrogance and asset misappropriation, the rationalization element plays a key role. Arrogant individuals may rationalize their behavior, believing that they are entitled to misuse assets, regardless of any systems designed to catch them. As per the fraud hexagon theory by Volusinas (2019), the presence of arrogance weakens the role of deterrents, including whistleblowing systems, because individuals feel they are above the rules. The opportunity element, which refers to the ability to exploit weaknesses in organizational control systems, may further reduce the effectiveness of whistleblowing in this context. As a result, the whistleblowing system, while negatively associated with asset misappropriation, does not significantly moderate the relationship between arrogance and asset misappropriation.

In conclusion, while the whistleblowing system has the potential to deter asset misappropriation, it does not significantly moderate the relationship between arrogance and asset misappropriation. The findings indicate that individuals with arrogant traits, who rationalize their behavior and feel invulnerable, are less likely to be deterred by the whistleblowing system. This highlights the need for organizations to address not only structural mechanisms, such as whistleblowing systems, but also the psychological and behavioral traits of individuals, particularly those who display arrogance, to effectively combat fraud and misconduct.

Whistleblowing System has a negative and significant to moderate between Collusion and Asset Misappropriation

The results of this study reveal that the whistleblowing system has a negative and significant moderating effect between collusion and asset misappropriation. A whistleblowing system serves as a mechanism that allows employees or stakeholders to report unethical behavior, fraud, or violations within an organization without fear of retaliation. The presence of an effective whistleblowing system can reduce the likelihood of collusion, which often occurs when individuals or groups collaborate to engage in asset misappropriation or other fraudulent activities. This finding is consistent with previous research by Albrecht et al. (2019), who concluded that the existence of a whistleblowing system significantly reduces the incidence of collusion and related fraudulent behaviors. Similarly, Rains and Rains (2020) found that the establishment of whistleblowing channels within organizations decreased the level of asset misappropriation, particularly when collusion was involved, as employees were more likely to report suspicious activities. Additionally, the study by Liao et al. (2021) demonstrated that a well-implemented whistleblowing system can serve as a deterrent for employees contemplating fraud, as they fear being reported by others involved in the misconduct.

Collusion, often a precursor to asset misappropriation, typically occurs when individuals within an organization conspire to exploit internal weaknesses for personal gain. The moderating role of the whistleblowing system in reducing the impact of collusion on asset misappropriation can be explained through the lens of the Fraud Triangle, as described by Cressey (1953). Collusion often arises when

employees perceive an opportunity and rationalize their unethical behavior, especially when they believe that there is little chance of detection. However, the presence of a whistleblowing system disrupts this perception by creating a real possibility of detection and reporting, which ultimately reduces the opportunity for fraudulent acts. This aligns with the findings of Smith and Jordon (2022), who argued that whistleblowing systems act as a critical deterrent, especially in cases of collusion, as they introduce an element of external oversight and accountability. Moreover, as highlighted by Johnson and Huber (2020), the whistleblowing system's effectiveness is dependent on its accessibility, confidentiality, and the organizational culture that supports it. In this context, the whistleblowing system not only reduces the likelihood of collusion but also moderates the connection between collusion and asset misappropriation, providing an additional layer of deterrence against fraud.

The moderating effect of the whistleblowing system in this study underscores the importance of fostering a strong ethical culture and ensuring that employees feel safe and supported when reporting unethical actions. This finding supports the work of Chen and Zhang (2021), who emphasized that organizations with robust whistleblowing systems experience lower levels of fraudulent activities, including asset misappropriation, as employees are more inclined to report unethical behavior when they believe their reports will be taken seriously and handled confidentially. Additionally, the research by Turner et al. (2022) highlights that organizations with active whistleblowing systems exhibit higher levels of transparency and accountability, which in turn reduce opportunities for collusion and asset misappropriation. Furthermore, the study by Zhang and Liu (2023) showed that effective whistleblowing systems can help organizations identify and address collusion at early stages, preventing more serious fraudulent activities from occurring.

Overall, the results of this study emphasize that a well-implemented and trusted whistleblowing system is crucial in moderating the relationship between collusion and asset misappropriation. The presence of such a system not only deters potential fraud but also serves as an effective tool for maintaining organizational integrity. In practice, organizations should prioritize the establishment and maintenance of secure, accessible, and anonymous reporting channels to ensure that employees feel empowered to report unethical behaviors, particularly in cases involving collusion.

CONCLUSION

So, this study looks Financial Pressure, Rationalization, and Arrogance has a positive and significant effect on Asset Misappropriation. Opportunity and Collusion had no significant impact on Asset Misappropriation. Capability had a significantly negative impact on Asset Misappropriation. The Whistleblowing System had a significantly negative to moderate between Financial Pressure, Opportunity, and Rationalization with Asset Misappropriation. While the Whistleblowing System had a significantly positive to moderate between Capability and Arrogance with Asset Misappropriation. Thus, the Whistleblowing System had no significant to moderate between Collusion with Asset Misappropriation. Similar to how we used cross-sectional data, future research is urged to use an interview-based qualitative approach to avoid typical technique bias.

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