











“Understanding fraud risk: how legal ambiguity, work pressure, and rationality shape fraudulent behavior”

AUTHORS	Silviana Pebruary  Mohammad Yunies Edward  Eko Nur Fuad   Ardian Adhiatma   Widiyanto Widiyanto  Hadi Ismanto  
ARTICLE INFO	Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto and Hadi Ismanto (2025). Understanding fraud risk: how legal ambiguity, work pressure, and rationality shape fraudulent behavior. <i>Problems and Perspectives in Management</i> , 23(3), 427-441. doi: 10.21511/ppm.23(3).2025.31
DOI	http://dx.doi.org/10.21511/ppm.23(3).2025.31
RELEASED ON	Monday, 01 September 2025
RECEIVED ON	Friday, 02 May 2025
ACCEPTED ON	Tuesday, 05 August 2025
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

43



NUMBER OF FIGURES

0



NUMBER OF TABLES

6

© The author(s) 2025. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Type of the article: Research Article

Received on: 2nd of May, 2025

Accepted on: 5th of August, 2025

Published on: 1st of September, 2025

© Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto, 2025

Hadi Ismanto, Master, Associate Professor, Department of Management, Faculty of Economics and Business, Nahdlatul Ulama Islamic University, Indonesia. (Corresponding author)

Silviana Pebruary, Master, Assistant Professor, Department of Islamic Economy, Faculty of Economics and Business, Nahdlatul Ulama Islamic University, Indonesia.

Mohammad Edward, Master, Assistant Professor, Department of Management, Faculty of Economics and Business, Nahdlatul Ulama Islamic University, Indonesia.

Eko Fuad, Master, Assistant Professor, Department of Management, Faculty of Economics and Business, Nahdlatul Ulama Islamic University, Indonesia.

Ardian Adhiatma, Doctor, Associate Professor, Faculty of Economics and Business, Sultan Agung Islamic University, Indonesia.

Widiyanto Widiyanto, Doctor, Professor, Faculty of Economics and Business, Sultan Agung Islamic University, Indonesia.



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Conflict of interest statement:**

Author(s) reported no conflict of interest

Silviana Pebruary (Indonesia), Mohammad Yunies Edward (Indonesia), Eko Nur Fuad (Indonesia), Ardian Adhiatma (Indonesia), Widiyanto Widiyanto (Indonesia), Hadi Ismanto (Indonesia)

UNDERSTANDING FRAUD RISK: HOW LEGAL AMBIGUITY, WORK PRESSURE, AND RATIONALITY SHAPE FRAUDULENT BEHAVIOR

Abstract

Fraud remains a serious challenge for organizations because it can damage integrity, financial stability, and public trust. One of the main difficulties in overcoming fraud is understanding the factors that influence the occurrence of such actions, both from the individual and institutional side. This study aims to analyze the influence of factors that trigger fraud, both directly and through mediation and moderation mechanisms with a focus on legal ambiguity, rationalization, opportunity, and capability. The study was conducted on 333 managers of microfinance institutions in Central Java, Indonesia. Data were analyzed using SEM-PLS to test the direct and indirect relationships between variables. The results showed that legal ambiguity, rationalization, and work pressure had an effect on fraud. Rationalization mediation significantly strengthened the relationship between legal ambiguity and fraud, while mediation through opportunity and work pressure did not show a significant effect. Besides, moderation of capability on the relationship between rationalization and fraud was also significant, indicating that individuals with high capabilities tend to strengthen rationalization in committing fraud. Conversely, moderation of capability on work pressure and opportunity did not show significant results. These findings provide theoretical contributions to the development of risk management and organizational behavior literature, and offer practical insights for managers and policy makers to reduce fraud risks through improving regulatory structures, enforcing strict rules, and strengthening ethical values within organizations.

Keywords

fraud, legal ambiguity, opportunity, rationalization, work pressure, capability, MFI

JEL Classification

G30, K42, M14

INTRODUCTION

Microfinance institutions (MFIs) play a strategic role in expanding access to finance for low-income communities and small businesses, especially in developing countries like Indonesia. However, behind its noble role, this sector often faces serious challenges in the form of fraud or fraud committed by internal institutions, including employees and management. According to a report by the Financial Services Authority (OJK), there has been an increase in the number of fraud cases in the microfinance sector, especially those related to misuse of loan funds, fabrication of financial statements, and moral hazard by field officers (OJK, 2023).

This fraud phenomenon not only threatens the sustainability of MFI operations but also erodes public trust in financial inclusion. The level of public trust in financial institutions is closely correlated with the internal integrity of the institution (Schiantarelli et al., 2016). Unfortunately, many cases of fraud in MFIs are not detected early due to weak internal controls and a lack of understanding of the factors that cause fraud itself. Fraud in microfinance institutions (MFIs) is a

serious challenge that can undermine financial stability, hamper financial inclusion, and reduce public confidence in the financial system. Unlike large financial institutions, MFIs often face limitations in internal monitoring and control systems, making them more vulnerable to various forms of fraud, including financial statement manipulation, misuse of funds, and internal corruption.

Microfinance institutions often operate with limited resources and may have less robust internal control systems. Factors such as legal ambiguity, work pressure, and rationalization can increase the risk of fraud. These factors play an important role in encouraging individuals or groups within MFIs to commit fraud in order to achieve financial targets or maintain operations. Several studies show that rationalization is the most dominant factor in driving fraud in the financial sector in developing countries, but not many studies have examined whether similar findings also occur in the Indonesian MFI sector. Besides, research linking work pressure, personal rationalization, and individual capability to fraud tendency is fragmented.

1. LITERATURE REVIEW

This research is based on the Fraud Triangle Theory developed by Cressey (1953), which states that fraud occurs when three main elements are present simultaneously, namely:

- 1) pressure – internal or external pressure that encourages individuals to commit fraud;
- 2) opportunity – situation that allows individuals to commit fraud without being detected; and
- 3) rationalization – mental process in which individuals justify their actions as morally acceptable.

This theory is particularly relevant given that MFIs have distinctive institutional characteristics: weak internal control systems, personal relationships between officers and customers, and limited information technology and risk-based auditing. Pressure comes in the form of loan disbursement targets, low salaries, or personal economic needs, which encourage individuals to seek “shortcuts” through fraud (Shonhadji & Irwandi, 2024). Opportunities occur when internal control systems are inadequate, work procedures are not well documented, or there is excessive trust in certain staff. This is exacerbated by the loose organizational structure in many MFIs, which gives room for perpetrators to exploit loopholes without being detected (Butcher & Galbraith, 2019).

In addition, this research also adopts the Fraud Diamond Theory of Wolfe and Hermanson (2004),

which adds a fourth element, namely capability. This factor explains that not all individuals who have pressure, opportunity, and rationalization will commit fraud; only those who can (for example, intelligence, position, influence, and ego) manipulate the system and cover the traces of fraud effectively. A person’s ability to see weaknesses in an internal control system and have confidence that no one else can see the weaknesses of the system, so that it can encourage the person to commit fraud. Lack of empathy for the organization makes someone feel right when committing fraud (Bakri et al., 2017; Kassem & Higson, 2012). Fraud in an organization occurs because of the dishonesty of the perpetrator, the existence of intent or deliberation, which will ultimately harm other parties.

Preventing the possibility of fraud faced by microfinance institutions requires legal certainty to regulate all actions and policies in an organization. Previous research found that administrative penalties and strict supervision can reduce the likelihood of companies committing repeated fraud. In contrast, self-regulatory measures are not effective in reducing recidivism rates (Wang et al., 2023). Someone can commit fraud because of the imperfect laws that apply in the organization, the lack of execution of penalties, and penalties that are too light against fraudsters, so that the perpetrators are not deterred after committing fraud.

Legal ambiguity is defined as a condition in which legal regulations or rules are not clear enough, not firm, or open to various interpretations (Kaptein, 2011). This legal uncertainty creates a grey area in law enforcement that allows individuals to take de-

viant actions without fear of strict sanctions. In an organizational context, legal ambiguity weakens the deterrence effect of the internal legal system, thereby increasing the likelihood of fraud (Wang et al., 2023).

Previous research shows that legal ambiguity can weaken the control and supervisory functions that should act as fraud detection and prevention mechanisms (Murphy & Dacin, 2011). In environments such as microfinance institutions, where compliance systems are often immature, legal ambiguity allows gaps in internal control procedures that can be exploited by fraudsters.

One of the main elements in the Fraud Triangle Theory is opportunity, which is the chance or access to commit fraud without being detected. Legal ambiguity creates institutional, procedural, and structural loopholes that weaken oversight, thereby increasing the opportunity for someone to commit fraud (Afjal et al., 2023; Maulidi & Ansell, 2020). An organizational environment with unclear regulations increases an individual's perception that opportunities for misconduct are accessible at low risk (Murphy & Dacin, 2011). In this case, individuals in the organization not only respond to personal pressure or motives but also take advantage of the loopholes available in the system to commit fraud. The perception of low risk due to weak regulation or policy ambiguity can be an internal rationalization that strengthens the intention to commit fraud.

Legal ambiguity can also exacerbate the imbalance between formal structures and informal practices in organizations. When administrative procedures are not supported by clear controls, individuals or groups with access to organizational resources can manipulate processes for personal gain. This gap does not only arise at the operational level but can also occur at the strategic level, such as in financial decision-making, procurement of goods and services, and management of public funds. Conditions that have regulations that are not firm or have multiple interpretations make supervision not run optimally and open up space for abuse of authority. An organizational environment shaped by an unclear legal or regulatory system can create the perception that acts of misconduct are easier to commit with a low likelihood of risk (Cooper et al., 2013; Scalpello, 2024).

Previous studies have also shown that in the context of public sector organizations and financial institutions, legal uncertainty is often associated with weak accountability and a lack of transparency (Cooper et al., 2013; Murphy & Dacin, 2011). This reinforces the finding that fraud is not only an individual problem but also a product of systemic weaknesses that facilitate opportunistic behavior. Thus, legal ambiguity is not just an administrative barrier, but is one of the institutional conditions that allow fraud to occur. To overcome this problem, regulatory reforms are needed that not only clarify formal rules but also strengthen supervisory mechanisms and build an organizational culture that upholds ethics and compliance with the law.

Legal ambiguity also affects rationalization, the cognitive process by which perpetrators justify their fraudulent actions. When legal norms are ambiguous, perpetrators tend to feel that their actions are not morally wrong because they are not explicitly prohibited or punished (Kassem & Higson, 2012). This is reinforced by the perception that organizations do not value integrity enough, which encourages personal justification for fraud. Legal ambiguity not only creates structural gaps that allow fraud to occur but also plays an important role in shaping rationalization, a cognitive process in which individuals try to justify their fraudulent actions to make them feel morally or socially acceptable. This rationalization is one of the main elements in the Fraud Triangle, which states that pressure, opportunity, and rationalization are the three main factors that cause fraud (Cressey, 1953).

When legal norms in organizations are not explicit or are subject to multiple interpretations, perpetrators tend to feel that their actions are not really ethically wrong. This is because the absence of explicit prohibitions or clear sanctions provides a grey area in assessing the morality of actions. In this case, legal ambiguity can reduce the moral sensitivity of individuals to violations, so that fraud is perceived as an "understandable" act (Kassem & Higson, 2012).

Furthermore, legal weaknesses and weak control systems can also shape an organizational culture that is permissive of ethical violations. When organizations do not show a strong commitment to the values of integrity and accountability, it is easier

for individuals to find justifications for their fraud. These justifications can take the form of the notion that the actions were taken to “help themselves in a pinch,” or that “everyone else is doing it too,” further weakening internal moral filters (Murphy & Dacin, 2011). Individuals who commit fraud often do not feel guilty because they believe it is an acceptable response to an unfair or legally uncertain organizational situation (Mackevičius & Giriūnas, 2013; Persulesy et al., 2022). This explains why, in an environment of legal ambiguity, the potential for rationalizing fraud increases significantly.

Legal ambiguity can also exacerbate work pressure, especially in the context of high work achievement targets without clear legal or procedural guidelines. When high work pressure is not balanced with strict and fair policies, individuals may be encouraged to look for shortcuts, including committing fraud (Maulidi & Ansell, 2020; Sudarwanto & Kharisma, 2023). Work pressure becomes more complex when the punishment for fraud is perceived as ineffective or inconsistent.

The research by Mwakyusa and Mcharo (2024) suggests that role ambiguity may strengthen the relationship between job stress and poor psychological well-being, such as job dissatisfaction and psychological distress. In this context, role ambiguity exacerbates the negative impact of job stress on employee well-being. Other research shows that role ambiguity and role conflict significantly contribute to dysfunctional audit behavior, such as premature signing of audit reports, which is a form of fraud in the audit context (Alzoubi et al., 2025; Zhang et al., 2024). Furthermore, role ambiguity and role conflict have a positive and significant effect on internal auditor job stress. High job stress can reduce the quality of audit recommendations, which in turn can open up opportunities for fraud (Cooper et al., 2013).

When high work pressure is not balanced with strict and fair policies, individuals may be encouraged to look for shortcuts, including committing fraud. Work pressures become more complex when penalties for fraud are perceived to be ineffective or inconsistent, which can lower risk perceptions and increase individuals' propensity to commit fraudulent acts.

Although the influence of the fraud triangle on fraud has been widely studied, the relationship between legal ambiguity as a structural factor and how it triggers the elements of the fraud triangle is still minimal in the literature. Most studies are still isolated (e.g., only examining the influence of work pressure or weak internal controls), even though legal ambiguity can act as a root cause that extends to all three aspects of the fraud triangle (Albrecht et al., 2019).

Based on the description above, it appears that fraud does not only originate from individual factors, but is also triggered by systemic weaknesses such as legal ambiguity and weak structural supervision. The Fraud Triangle and Fraud Diamond provide a basic framework for understanding the causes of fraud, but legal ambiguity strengthens the three elements of fraud – pressure, opportunity, and rationalization. Legal ambiguity also exacerbates work pressure and encourages an organizational culture that is permissive of fraud.

2. METHODOLOGY

This study uses a quantitative approach to examine how legal ambiguity, work pressure, and rationality influence fraudulent behavior in Microfinance Institutions (MFIs) in Central Java Province, Indonesia. Data were collected through questionnaires distributed to 333 MFI managers who were the main respondents in this study. Respondents were specifically selected because they have managerial and decision-making responsibilities in MFI operations, so they are considered to have relevant insights into the risks of fraud that may occur in their institutions. This selection allows the data collected to be more representative of the actual conditions and complexity of fraud risks at the institutional level.

The total population of 833 registered MFIs in Central Java, the sample was selected using random sampling techniques with stratification based on geographical representation of each district. The selected MFIs must also meet additional criteria, namely having been actively operating for at least three years. This is intended so that respondents come from institutions that have sufficient institutional experience in dealing with regulato-

ry dynamics, work pressures, and decision-making, so that they are able to provide valid answers and reflect the reality in the field.

Data analysis was conducted using the Structural Equation Modeling method with the Partial Least Squares (SEM-PLS) approach. This method was chosen because it can handle complex models and test direct and indirect relationships between variables. Instrument validity and reliability tests were conducted first to ensure that the data obtained met the criteria for reliability and measurement accuracy.

This study uses a Likert scale of 1 “strongly disagree” to 5 “strongly agree”. Indicator fraud based on the development of Cressey (1953), Mackevičius and Giriūnas (2013), Saluja et al. (2022), where there are 9 question items. The Legal Ambiguity (LA) variable uses indicators based on the studies by Afjal et al. (2023), Maulidi and Ansell (2020), Murphy and Dacin (2011) using 8 question items. Indicator opportunity (Ot) based on development from the studies by Butcher and Galbraith (2019), Cressey (1953), Rahman and Jie (2024) using 7 question items. Measurement of Rationalization (RS) uses indicators developed from the studies by Albrecht et al. (2019), Cressey (1953), Kassem and Higson (2012), Murphy and Dacin (2011) using 5 question items. Measurement of Work Pressure (WP) using indicators developed from the studies by Kassem and Higson (2012), Murphy and Dacin (2011), Rahman and Jie (2024) using 12 question items. While measuring the Capability (Cp) variable (Chatterjee et al., 2024; Shonhadji & Irwandi, 2024; Wolfe & Hermanson, 2004) using 6 question items. The rest of the research indicators are presented in Table A1.

3. RESULTS AND DISCUSSION

Table 1 presents descriptive data of the respondents, where the majority of respondents are male (70%), while females account for 30% of the total respondents. In terms of age, the most numerous age group is those over 40 years old, reaching 28%, followed by the 31-35 years age group with a percentage of 24%. The 25-30 age group accounts for 19%, while those under 25 years old make up only 8% of the total respondents. Regarding the period

of work, most respondents have work experience between 6 and 10 years (36%), with 23% of respondents having work experience between 2 and 5 years. Around 18% of respondents have work experience between 11 and 15 years, while 16% have more than 15 years of work experience. Regarding education, most respondents have a Bachelor's degree (48%), followed by high school graduates (32%), and only 12% have a Diploma. Meanwhile, 8% of respondents have a Master's degree. For income, most respondents have an income above 2.5 million rupiah per month (54%), while 40% are in the income range of 1.5 to 2.5 million rupiah, and only 6% of respondents have an income of less than 1.5 million rupiah.

Table 1. Respondent characteristics

Variable	Total	Percentage
Gender		
Male	234	70%
Female	99	30%
Age		
< 25	26	8%
25-30	63	19%
31-35	80	24%
36-40	71	21%
> 40	93	28%
Working period (years)		
< 2	25	8%
2-5	76	23%
6-10	119	36%
11-15	59	18%
> 15	54	16%
Education		
Senior high school	109	32%
Associate	39	12%
Bachelor	160	48%
Master	25	8%
Income (million rupiah)		
< 1.5	20	6%
1.5-2.5	132	40%
> 2.5	181	54%

Table 2 presents the results of the discriminant validity test using the Fornell-Larcker Criterion. Based on the results, each construct in the research model has good discriminant validity. The Average Variance Extracted (AVE) value for each construct is greater than the correlation between that construct and other constructs. Capability (AVE = 0.770) has higher value than the correlation value between other constructs, which indicates that this construct has strong convergent va-

lidity and does not overlap with other constructs in the model. Similarly, Fraud (AVE = 0.851), Legal Ambiguity (AVE = 0.780), and Opportunity (AVE = 0.753), each of which has an AVE value greater than the correlation value between other constructs, indicating that these constructs have good discriminant validity.

Table 3 presents the composite reliability and validity test results, which include Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), Variance Inflation Factor (VIF), and adjusted R-squared. The results shown in Table 3 indicate that the research model is reliable and valid. The Cronbach's Alpha value of almost all constructs is above the 0.7 threshold, which indicates good internal consistency. Although Rationalization has a Cronbach's Alpha value below 0.7, this value is still acceptable in the context of exploratory research. Meanwhile, composite reliability for all constructs is above 0.7, which also indicates strong reliability for the constructs. The AVE for each construct is above the 0.5 threshold,

with Fraud having the highest AVE value (0.724), indicating excellent convergent validity. The VIFs for all constructs were within a reasonable range (between 1.190 and 3.004), indicating the absence of significant multicollinearity issues in this model.

Table 4 presents the results of hypothesis testing that examines the relationship between the various variables in the model with fraud as the dependent variable. The results obtained show that Capability has a significant negative effect on fraud. This indicates that higher Capability will reduce the likelihood of fraud. These results support the hypothesis that individuals or organizations with better capabilities will be better able to prevent or reduce fraud, which aligns with the theory that skills and expertise in managing risk can reduce the chance of fraud.

The results of this study indicate that Capability has a significant negative effect on the occurrence of fraud, which means that the higher the ability

Table 2. Fornell-Larcker criterion

Variable	Cp	Fr	LA	Ot	Rs	WP
Cp	0.770	–	–	–	–	–
Fr	–0.212	0.851	–	–	–	–
LA	–0.321	0.280	0.780	–	–	–
Ot	–0.275	0.233	0.668	0.753	–	–
Rs	–0.114	0.430	0.303	0.380	0.765	–
WP	–0.045	0.157	0.059	0.156	0.229	0.730

Table 3. Construct reliability and validity

Variable	Cronbach's Alpha	Composite reliability	Average Variance Extracted (AVE)	VIF	Adjusted R-squared
Capability	0.772	0.801	0.593	1.333-2.029	–
Fraud	0.904	0.908	0.724	2.158-3.004	0.252
Legal Ambiguity	0.838	0.853	0.609	1.502-2.125	–
Opportunity	0.847	0.848	0.567	2.089-2.438	0.445
Rationalization	0.654	0.727	0.585	1.190-1.364	0.089
Work Pressure	0.728	0.814	0.533	1.274-1.547	0.004

Table 4. Hypothesis test results on fraud

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	t-statistics (O/STDEV)	p-values
Cp → Fr	–0.187	–0.197	0.054	3.440	0.001
LA → Ot	0.668	0.672	0.036	18.786	0.000
LA → Rs	0.303	0.308	0.057	5.299	0.000
LA → WP	0.059	0.064	0.072	0.822	0.411
Ot → Fr	0.053	0.052	0.049	1.082	0.279
Rs → Fr	0.416	0.425	0.055	7.577	0.000
WP → Fr	0.073	0.075	0.057	1.291	0.197

of individuals or organizations to manage risk, the less likely fraud is to occur. This finding aligns with previous findings in the literature, which show that skills and expertise in risk management play a key role in reducing the chances of fraud (Imjai et al., 2025; Jeyachandran et al., 2025). Based on the Fraud Triangle Theory, it emphasizes three main factors that encourage individuals to commit fraud: pressure, opportunity, and rationalization (Cressey, 1953). The ability to manage risk, as measured in this study by Capability, plays a role in reducing fraud opportunities by providing a tighter framework and better control procedures.

In addition, higher capabilities in organizations or individuals can strengthen effective internal control systems, which are a major inhibiting factor against fraud. Previous research shows that a strong internal control system, which often reflects an organization's level of capability or capacity, has a significant influence in preventing fraud (Alayli, 2022; Gunasegaran et al., 2018). In this context, organizations with high capability invest not only in more competent human resources but also in the development of more stringent policies and procedures, reducing the chances of fraud. The research on fraud control also underlines that the ability of individuals or teams to identify risks and implement risk mitigation measures is one of the main deterrents to fraud in organizations (Azizan & Ali, 2024). Thus, increasing capability can increase awareness of potential fraud and strengthen internal controls, which are important to maintaining organizational integrity. The results of this study also support the view that fraud prevention not only depends on existing controls but also on the ability of individuals or organizations to detect and respond to potential fraud proactively. Therefore, ongoing training and investment in improving professional skills can effectively reduce fraud rates in organizations (Albrecht et al., 2019).

Table 4 shows that legal ambiguity can influence opportunity and rationalization, which means that legal ambiguity can increase the opportunity for fraud by allowing individuals to rationalize the fraudulent act. This finding aligns with the Fraud Triangle Theory, which states that three main factors – pressure, opportunity, and rationalization – drive individuals to commit fraud (Cressey, 1953). Legal ambiguity plays an important role in

creating opportunities to commit fraud because individuals feel there are loopholes or uncertainties in the rules that govern their behavior. This study also strengthens the findings of previous studies, which state that regulatory ambiguity increases the scope for perpetrators' interpretation of the legality of an action, thereby increasing the predisposition to illegal actions (Baucus, 1994). In the context of fraud, legal ambiguity allows perpetrators to view their actions as 'not a real violation', or at least 'justifiable', thus facilitating rationalization. The likelihood of violations increases significantly when pressure and opportunity are present with legal ambiguity (Baucus, 1994). This view is also reinforced by Wittmann (2022), who, in his three-factor ethical reasoning model, explains that professional values, roles, and services are strongly influenced by the legal structure that governs them. When legal norms are ambiguous, professionals, including those in managerial or corporate contexts, tend to build internal justifications for their actions based on personal values or cognitive biases, rather than clear legal norms. This creates conditions in which rationalization becomes an adaptive response to the blurring of the lines between right and wrong, increasing the likelihood of fraud as a behavior considered socially acceptable in that environment.

This finding also aligns with the analysis by Sudarwanto and Kharisma (2023), which compares law enforcement against investment fraud in Indonesia, the United States, and Canada. They state that weaknesses in the Indonesian legal system, especially in the supervision and enforcement of investment instruments such as binary options, are caused by legal ambiguity that allows perpetrators to exploit regulatory loopholes. This study emphasizes that clarity and firmness of regulations are crucial in preventing fraud and limiting the space for rationalization perpetrators use. Besides, the results of this study also support the argument that legal ambiguity can increase the opportunity for rationalization, where individuals rationalize their fraudulent actions because the actions are not entirely illegal or not entirely wrong in an unclear legal context. This uncertainty allows individuals to convince themselves that the behavior is not entirely wrong or cannot be punished, even if the actions are detrimental to others or violate ethical principles.

In contrast, Legal Ambiguity does not significantly affect Work Pressure, indicating that legal ambiguity does not contribute directly to work pressure in this context. While Opportunity has a positive relationship with fraud, the test results show its insignificant effect. This suggests that even though there is an opportunity to commit fraud, the opportunity is not strong enough to influence fraudulent behavior significantly in the sample used.

These findings suggest that legal ambiguity is not necessarily a source of work stress for individuals in organizations. In this context, work stress is more likely influenced by internal organizational factors such as job demands, burden of responsibility, and managerial expectations, rather than external factors such as uncertain regulations. These findings support previous findings that stress in professional environments arises more from value conflicts, roles, and service demands, rather than explicit legal uncertainty (Wittmann, 2022).

Besides, the study's results also show that although Opportunity (Ot) has a positive relationship with fraud, the relationship is not statistically significant. This means that even though individuals or organizations have access to opportunities to commit fraud, these opportunities are not strong enough to encourage fraudulent behavior in the context of this sample. This finding is in line with previous studies, which state that opportunity is only one component in a multivariate model of illegal behavior, and that pressure and predisposition (e.g., rationalization or personal values) often play a more dominant role in triggering deviant actions (Baucus, 1994; Villaescusa & Amat, 2022).

These results contribute to the literature on organizational behavior and fraud, namely that not all elements in the fraud triangle or fraud diamond always operate linearly and deterministically. The insignificant influence of opportunity on fraud indicates the need for a more contextual and integrative approach to understanding how fraud emerges and develops in an organizational environment. This study also recommends strengthening the culture of integrity and internal supervision as a barrier when the regulatory system cannot yet provide optimal certainty.

Table 4 also shows that Rationalization has a significant positive effect on fraud. These results support the theory that individuals who can rationalize their behavior are more likely to engage in fraud. Rationalization plays an important role in the psychological process that allows individuals to ignore their ethical and moral norms in the context of fraud. The study results show that Rationalization has a significant positive effect on fraud, emphasizing the importance of the psychological dimension in understanding this deviant behavior. Rationalization allows individuals to justify their unethical actions, thereby reducing feelings of guilt and creating internal justification for actions that are contrary to social and moral norms.

Previous research has shown that rationalization of workplace fraud can be measured through eight dimensions reflecting how individuals justify their actions. They found that rationalization was positively correlated with Machiavellian traits, and negatively with empathy, indicating that manipulative and less empathetic individuals are more likely to rationalize fraudulent acts (Yang & Chen, 2023).

Other studies also support this finding, stating that rationalization is an important predictor of fraudulent behavior based on legal case analysis. They identified that fraudsters often use moral justifications such as "for the sake of others" or "because of the force of the situation" to reduce the moral burden of their actions (Ameer & Othman, 2021). These findings suggest that rationalization is not just a supporting aspect but a major component in the psychological constructs that enable fraud. Therefore, fraud prevention strategies should focus not only on supervision and punishment but also on ethical education and developing a strong moral character to reduce the potential for rationalizing deviant behavior.

However, Work Pressure does not have a significant effect on fraud. The results of this study indicate that work pressure has no significant effect on fraud behavior. Judging from the complexity of psychological and contextual factors that influence individual decisions to commit deviant acts. This finding suggests that work pressure, although often assumed to be the main trigger for fraud

behavior in the fraud triangle model, may not be strong enough to encourage someone to commit fraud without the presence of other supporting factors.

This study reinforces previous research, which concluded that workplace pressure does not significantly influence fraud behavior. Although employees face pressure, it does not automatically encourage fraud, because other factors such as rationalization and opportunity have a more decisive role (Sham et al., 2023). Similar findings also found that internal individual factors, such as moral values and personal integrity, played a greater role in inhibiting fraud despite being in a stressful work environment (Sham et al., 2023). Other studies have also shown that incentives have a stronger influence than work pressure in driving the intention to commit fraud. They explicitly distinguish between pressures and incentives, and find that incentives are more effective in influencing a person's intention to commit deviant acts (Knisley & Lin, 2022). Thus, these results indicate that work pressure is not the dominant factor in encouraging individuals to commit fraud. Instead, other variables such as rationalization, opportunity, and personality factors significantly influence shaping fraud behavior. Therefore, fraud prevention efforts must focus on strengthening ethical values and internal controls, instead of focusing solely on work pressure management.

The mediation effect in the Legal Ambiguity (LA) → Opportunity (Ot) → Fraud (Fr) model presented in Table 5 shows that the relationship is not significant, which means that although Legal Ambiguity can affect Opportunity, this mediation path does not have a significant effect on the occurrence of fraud. The study results show that the mediating relationship of Legal Ambiguity to fraud behavior

through the Opportunity variable is not significant, providing a new understanding of the complexity of legal dynamics and their effect on fraud. This finding implies that although vagueness in legal regulations can create gray spaces that theoretically open up opportunities for fraud, not all conditions of legal ambiguity are directly translated by individuals into deviant actions.

Legal ambiguity may serve as a deterrence tool in some contexts, as individuals avoid risk in uncertain situations. In this context, increased ambiguity can reduce lawless behavior, especially when the level of certainty of law enforcement is low (Barnum & Nagin, 2021). Other studies have also shown that legal ambiguity in the US tort system creates significant uncertainty for businesses and insurers. However, this uncertainty has more of an impact on costs and market volatility, rather than directly on the increased propensity for fraud by individuals (Geistfeld, 2011).

Other research also reinforces that although ambiguity in financial and accounting systems can create structural opportunities for fraud, its realization is highly dependent on trust and social control elements. Not all ambiguity automatically encourages fraud if no other mechanisms reinforce individuals' intentions and opportunities to violate them (Haines, 2011). This result shows that legal ambiguity is not always a direct trigger for fraud behavior through the opportunity path. The absence of a significant effect of this mediation path confirms that the effect of legal ambiguity on fraud is highly dependent on the social context, the level of law enforcement, and other accompanying psychological and organizational factors.

Legal Ambiguity (LA) → Rationalization (Rs) → Fraud (Fr) shows a significant effect. This shows

Table 5. Mediation and moderation test results

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	t-statistics (O/STDEV)	p-values
LA → Ot → Fr	0.036	0.035	0.033	1.072	0.284
LA → Rs → Fr	0.126	0.130	0.028	4.562	0.000
LA → WP → Fr	0.004	0.004	0.007	0.598	0.550
Cp × WP → Fr	-0.083	-0.080	0.065	1.270	0.204
Cp × Rs → Fr	-0.171	-0.180	0.060	2.822	0.005
Cp × Ot → Fr	-0.020	-0.022	0.038	0.517	0.605

that rationalization is a significant mediator between legal ambiguity and fraud, supporting the hypothesis that individuals who rationalize legal ambiguity are more likely to engage in fraud. This finding suggests that psychological factors are important in linking legal ambiguity with the tendency of individuals to commit fraud. Legal vagueness creates interpretive space in this context, allowing individuals to justify their deviant behavior. When the law does not provide firm boundaries, individuals use moral or cognitive justifications to calm the internal dissonance arising from unethical actions, thereby increasing the risk of fraud.

Previous research has found that individuals who rationalize their behavior, especially in legally or ethically grey environments, are more likely to commit fraud (de Oliveira et al., 2020). Rationalization in this context appears as an attempt to distort or shift moral norms to fit the actions taken, such as considering the behavior not wrong because “everyone does it too” or because they feel “entitled” under certain conditions. Besides, other studies have developed a rationalization scale in the context of occupational fraud. They show that individuals with a high ability to rationalize deviant actions are more prone to fraudulent behavior, especially when faced with weak moral pressure or unclear rules. Legal ambiguity, in this case, provides space for the rationalization process to develop without substantial normative barriers (Yang & Chen, 2023).

Furthermore, the vagueness of legal and moral norms (referred to as normative ambiguity) creates psychological conditions that encourage middle-class people to accept or even engage in investments that are proven to be fraudulent. In this study, legal ambiguity creates uncertainty and provides moral justification for unlawful actions, as the line between legal and illegal becomes blurred (Leslie, 2022). This finding confirms that rationalization acts as a cognitive bridge that allows individuals to transform legal doubts into moral justification for fraud in legal uncertainty. Therefore, fraud prevention strategies need to focus not only on improving the legal system to be more precise and consistent but also on ethics education and character building to reduce the tendency to rationalize deviant behavior.

Legal Ambiguity (LA) → Work Pressure (WP) → Fraud (Fr) also does not show a significant effect, which indicates that although there is a relationship between Legal Ambiguity and Work Pressure, this path does not contribute to increasing the likelihood of fraud. This finding implies that although legal ambiguity may trigger psychological or work pressure due to uncertainty of roles and responsibilities, such pressure does not necessarily increase the tendency of individuals to commit fraud.

Previous research has shown that psychological distress can trigger automatic emotional responses, but does not necessarily lead to risky or deviant actions. They note that only individuals with high levels of anxiety tend to show more impulsive decision-making under ambiguous conditions. In contrast, most individuals do not consistently respond to pressure in a way that increases deviant behavior (Soshi et al., 2021). These results are consistent with the fraud triangle theory framework, where pressure is considered one of the fraud drivers. However, as shown in the research (Sham et al., 2023), work pressure is not the main predictor of fraud behavior without accompanying rationalization or opportunity, in the context of legal uncertainty, the pressure that arises can be dampened by other factors such as organizational culture, personal integrity, or a strong internal control system. These results show that legal uncertainty can indeed create work pressure, but not all forms of pressure lead to fraud. Psychological mediation factors, such as rationalization and moral disengagement, are more appropriate to explain the transformation of legal uncertainty conditions into fraud behavior.

Table 5 also shows the results of the capability moderation test on the three driving variables of fraud. The results in the $C_p \times$ Work Pressure (WP) → Fraud (Fr) model show an insignificant effect, which means that the interaction between Capability and Work Pressure has no direct effect on fraud. This finding shows the limitations of the role of individual abilities in strengthening the impact of work pressure on fraud. In the framework of fraud diamond theory, capability is considered an important element that enables individuals to execute fraud effectively. However, these results suggest that while individuals may be able to com-

mit fraud, work pressure alone is not enough to trigger such behavior, even when the individual is competent. The insignificance of the moderating effect between capability and work pressure on fraud suggests that not all combinations of personal and situational factors can strengthen fraud tendencies. Factors such as financial pressure, moral disengagement, and clear opportunities seem to have a stronger role in enhancing the role of capability.

$Cp \times Rationalization (Rs) \rightarrow Fraud (Fr)$ shows a significant negative effect, which means that the interaction between Capability and Rationalization can reduce the possibility of fraud. This suggests that an increase in capability, accompanied by the ability to rationalize, can deter fraud. This finding makes an important contribution to the fraud diamond literature by highlighting that individual capabilities do not solely function as fraud facilitators but can act as cognitive and moral filters, especially when combined with a more reflective awareness of rationalization. The findings emphasize the importance of strengthening positive rationalization dimensions and ethical values in high-capability individuals. This can translate to integrity training, professional ethics, and strengthening organizational cultures that encourage moral accountability in organizations.

Thus, a person's ability is not only seen in terms of potential risk, but also from their role as a protector against deviant behavior.

While $Cp \times Opportunity (Ot) \rightarrow Fraud (Fr)$ does not show a significant effect, which means that the interaction between Capability and Opportunity has no significant impact on fraud, this finding shows that even though individuals have the technical and psychological ability to commit fraud, the available opportunities are not always utilized if a strong internal drive or justification does not accompany them. Within the framework of fraud diamond theory, capability serves as a prerequisite for individuals to commit fraud effectively. However, these results show that capability does not necessarily lead to fraud when the opportunity is not considered attractive, safe, or in line with personal values. This finding implies that fraud prevention is insufficient to limit opportunities or evaluate individual capabilities. However, a more holistic approach is needed that includes ethical aspects, organizational culture, and internal control systems that can mitigate opportunities and suppress internal motivation. The interaction between ability and opportunity only becomes significant when individuals have moral justification or strong pressure to act deviantly.

CONCLUSION

This study aims to examine the influence of legal ambiguity on fraud through rationalization, opportunity and work pressure. The results of the study show that legal ambiguity, rationalization, and work pressure affect fraud, both directly and through mediation and moderation paths. In particular, the mediation path between LA and fraud through rationalization shows a significant effect, which indicates that rationalization can strengthen the effect of legal ambiguity on fraud. In contrast, mediation through opportunity and work pressure did not show a significant effect, meaning these two factors do not mediate the effect between legal ambiguity and fraud. In terms of moderation, the moderation between ability and rationalization shows a significant effect, which indicates that ability can strengthen the effect of rationalization on fraud. However, the moderation between ability and work pressure and the moderation between ability and opportunity on fraud did not show a significant effect.

This research contributes to the development of theory in risk management and organizational behavior, especially in the context of fraud. The results confirm the importance of legal ambiguity and rationalization as significant factors in increasing the tendency of fraud, and provide a new understanding of the interaction between these factors. This study also expands insights into the mediating and moderating effects in the relationship between fraud-related factors. Academically, these results open up opportunities for further research into the role of psychological and social factors in fraud behavior, as well as how external elements such as organizational policies and legal systems may interact with individual factors to influence fraud propensity.

The results of this study have important implications for managers, policy makers, and practitioners in the fields of risk management and corporate governance. The findings that legal ambiguity and rationalization play a significant role in increasing fraud risk suggest that organizations must reduce ambiguity in their legal policies and regulations to prevent potential fraud. Clear and transparent management of legal regulations, as well as training and development that focuses on ethics and awareness of the negative impacts of fraud, can help reduce the tendency of individuals to rationalize fraudulent actions.

AUTHOR CONTRIBUTIONS

Conceptualization: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto. Data curation: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto. Formal analysis: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Hadi Ismanto. Funding acquisition: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma. Investigation: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto. Methodology: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Hadi Ismanto. Project administration: Silviana Pebruary, Eko Nur Fuad, Widiyanto Widiyanto, Hadi Ismanto. Resources: Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto. Software: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto. Supervision: Silviana Pebruary, Eko Nur Fuad. Validation: Silviana Pebruary, Mohammad Yunies Edward, Ardian Adhiatma, Hadi Ismanto. Visualization: Silviana Pebruary, Mohammad Yunies Edward, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto. Writing – original draft: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto. Writing – review & editing: Silviana Pebruary, Mohammad Yunies Edward, Eko Nur Fuad, Ardian Adhiatma, Widiyanto Widiyanto, Hadi Ismanto.

ACKNOWLEDGMENT

Thanks are expressed to the Directorate General of Higher Education, Research and Technology, Ministry of Education, Culture, Research and Technology for supporting this research. Thanks also go to the Institute for Research and Community Service (LPPM) of Unisnu Jepara Indonesia.

REFERENCES

1. Afjal, M., Salamzadeh, A., & Dana, L. P. (2023). Financial Fraud and Credit Risk: Illicit Practices and Their Impact on Banking Stability. *Journal of Risk and Financial Management*, 16(9), 386. <https://doi.org/10.3390/jrfm16090386>
2. Alayli, S. (2022). The Impact of Internal Control Practices on Fraud Prevention: The Case of Lebanese Small-Medium Enterprises. *European Journal of Business and Management Research*, 7(5), 141-147. <https://doi.org/10.24018/ejbmr.2022.7.5.1671>
3. Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2019). *Fraud Examination* (6th ed.). Cengage Learning.
4. Alzoubi, A. B., Alshurafat, H., & Dahmash, F. (2025). Work overload, toxic leadership and internal auditors' turnover intention: evidence from Jordan. *International Journal of Services and Operations Management*, 50(3), 374-388. <https://doi.org/10.1504/IJSOM.2025.144762>
5. Ameer, R., & Othman, R. (2021). Gender, fraud opportunity, and rationalisation. *Journal of Criminology*, 55(1), 81-105. <https://doi.org/10.1177/26338076211065180>
6. Azizan, A. F. & Ali, M. M. (2024). The Effect of Internal Control Mechanism Towards Fraud Prevention in Small and Medium Enterprises. *Indonesian Journal of Sustainability Accounting and Management*, 8(1), 178-188. Retrieved from <https://www.asianonlinejournals.com/index.php/ijSAM/article/download/7022/3056/10682>
7. Bakri, H. H. M., Mohamed, N., & Said, J. (2017). Mitigating asset misappropriation through integrity and fraud risk elements: Evidence emerging economies. *Journal of Financial Crime*, 24(2), 242-255. <https://doi.org/10.1108/JFC-04-2016-0024>

8. Barnum, T. C., & Nagin, D. S. (2021). Ambiguity and legal compliance. *Criminology & Public Policy*, 20(4), 621-643. <https://doi.org/10.1111/1745-9133.12565>
9. Baucus, M. S. (1994). Pressure, Opportunity and Predisposition: A Multivariate Model of Corporate Illegality. *Journal of Management*, 20(4), 699-721. <https://doi.org/10.1177/014920639402000401>
10. Butcher, W., & Galbraith, J. (2019). Microfinance Control Fraud in Latin America. *Forum for Social Economics*, 48(1), 98-120. <https://doi.org/10.1080/07360932.2015.1056203>
11. Chatterjee, P., Das, D., & Rawat, D. B. (2024). Digital twin for credit card fraud detection: opportunities, challenges, and fraud detection advancements. *Future Generation Computer Systems*, 158, 410-426. <https://doi.org/10.1016/j.future.2024.04.057>
12. Cooper, D. J., Dacin, T., & Palmer, D. (2013). Fraud in accounting, organizations and society: Extending the boundaries of research. *Accounting, Organizations and Society*, 38(6-7), 440-457. <https://doi.org/10.1016/j.aos.2013.11.001>
13. Cressey, D. R. (1953). *Other people's money; a study of the social psychology of embezzlement*. Free Press.
14. de Oliveira, E. D., Morais, C., Passion, R., & Hodgson, J. (2020). "It is no big deal!": Fraud Diamond theory as an explanatory model to understand students' prevalence and perceptions of severity of academic fraudulent behavior. <https://doi.org/10.31219/osf.io/tz4wj>
15. Geistfeld, M. A. (2011). Legal Ambiguity, Liability Insurance, and Tort Reform. *DePaul Law Review*, 60, 539-572. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1884248
16. Gunasegaran, M., Basiruddin, R., Abdul Rasid, S. Z., & Mohd Rizal, A. (2018). The case studies of fraud prevention mechanisms in the Malaysian medium enterprises. *Journal of Financial Crime*, 25(4), 1024-1038. <https://doi.org/10.1108/JFC-05-2017-0034>
17. Haines, F. (2011). *Ambiguity, confidence and fraud: A critical account of the materiality of money* (RegNet Research Paper No. 2013/1). <https://doi.org/10.2139/ssrn.2257620>
18. Imjai, N., Promma, W., Visedsun, N., Usman, B., & Aujirapongpan, S. (2025). Fraud detection skills of Thai Gen Z accountants: The roles of digital competency, data science literacy and diagnostic skills. *International Journal of Information Management Data Insights*, 5(1), 100308. <https://doi.org/10.1016/j.ijimei.2024.100308>
19. Jeyachandran, P., Bhat, S. R., Mane, H. R., Pandey, P., Singh, S. P., & Goel, P. (2025). Balancing Fraud Risk Management with Customer Experience in Financial Services. *SSRN Electronic Journal*, 1(4), 345-369. <https://doi.org/10.2139/ssrn.5076795>
20. Kaptein, M. (2011). Understanding unethical behavior by unraveling ethical culture. *Human Relations*, 64(6), 843-869. <https://doi.org/10.1177/0018726710390536>
21. Kassem, R., & Higson, A. (2012). The New Froud Triangle Model. *Journal of Emerging Trends in Economics and Management Sciences*, 3(3), 191-195. Retrieved from <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=fe1a782d11ce64537763eeb60c3a2721ba5fc3ab>
22. Knisley, R. J., & Lin, H. (2022). A Review of Literature and Experimental Evidence on Fraud Motivation: Differentiating Incentive and Pressure. *Journal of Forensic Accounting Research*, 7(1), 184-209. <https://doi.org/10.2308/JFAR-2020-024>
23. Leslie, C. A. (2022). Hope Amid Crisis: Normative Ambiguity, the Middle Class, and Investment Fraud in 2000s Venezuela. *Latin American Politics and Society*, 64(4), 70-93. <https://doi.org/10.1017/lap.2022.28>
24. Mackevičius, J., & Giriūnas, L. (2013). Transformational Research of the Fraud Triangle. *Ekonomika*, 92(4), 150-163. <https://doi.org/10.15388/ekon.2013.0.2336>
25. Maulidi, A., & Ansell, J. (2020). The conception of organisational fraud: the need for rejuvenation of fraud theory. *Journal of Financial Crime*, 28(3), 784-796. <https://doi.org/10.1108/JFC-09-2020-0180>
26. Murphy, P. R., & Dacin, M. T. (2011). Psychological Pathways to Fraud: Understanding and Preventing Fraud in Organizations. *Journal of Business Ethics*, 101(4), 601-618. <https://doi.org/10.1007/s10551-011-0741-0>
27. Mwakyusa, J. R. P., & Mcharo, E. W. (2024). Role ambiguity and role conflict effects on employees' emotional exhaustion in health-care services in Tanzania. *Cogent Business & Management*, 11(1), 1-12. <https://doi.org/10.1080/23311975.2024.2326237>
28. OJK. (2023). *Laporan Tahunan OJK 2023: Stabilitas Sistem Keuangan dan Perlindungan Konsumen [OJK Annual Report 2023: Financial System Stability and Consumer Protection]*. (In Indonesian).
29. Persulesy, G., Mediaty, M., & Pontoh, G. T. (2022). Triangle's Fraud Theory on Academic Fraud Behavior When Online Learning. *International Journal of Professional Business Review*, 7(6), 1-13. <https://doi.org/10.26668/business-review/2022.v7i6.e768>
30. Rahman, M. J., & Jie, X. (2024). Fraud detection using fraud triangle theory: evidence from China. *Journal of Financial Crime*, 31(1), 101-118. <https://doi.org/10.1108/JFC-09-2022-0219>
31. Saluja, S., Aggarwal, A., & Mittal, A. (2022). Understanding the fraud theories and advancing with integrity model. *Journal of Financial Crime*, 29(4), 1318-1328. <https://doi.org/10.1108/JFC-07-2021-0163>
32. Scalpello, M. (2024). Malta: The use of ambiguity for corruption and (mis)rule of law. *Journal of Economic Criminology*, 5, 100088. <https://doi.org/10.1016/j.jeconc.2024.100088>
33. Schiantarelli, F., Stacchini, M., & Strahan, P. E. (2016). *Bank Quality, Judicial Efficiency and Borrower Runs: Loan Repayment Delays in Italy* (NBER Working Paper No.

- 22034). Retrieved from https://www.nber.org/system/files/working_papers/w22034/w22034.pdf
34. Sham, A. M., Muhammad, K., Ghani, E. K., & Sukmadilaga, C. (2023). Determinants of Employee Fraud in Workplace: A Fraud Triangle Perspective. *Economic Affairs*, 68(2), 1015-1025. <https://doi.org/10.46852/0424-2513.2.2023.5>
35. Shonhadji, N., & Irwandi, S. A. (2024). Fraud prevention in the Indonesian banking sector using anti-fraud strategy. *Banks and Bank Systems*, 19(1), 12-23. [https://doi.org/10.21511/bbs.19\(1\).2024.02](https://doi.org/10.21511/bbs.19(1).2024.02)
36. Soshi, T., Nagamine, M., Fukuda, E., & Takeuchi, A. (2021). Modeling skin conductance response time series during consecutive rapid decision-making under concurrent temporal pressure and information ambiguity. *Brain Sciences*, 11(9). <https://doi.org/10.3390/brainsci11091122>
37. Sudarwanto, A. S., & Kharisma, D. B. (2023). Law enforcement against investment fraud: a comparison study from the USA and Canada with a case study on binary options in Indonesia. *Safer Communities*, 22(4), 235-253. <https://doi.org/10.1108/SC-11-2022-0047>
38. Villaescusa, N., & Amat, O. (2022). When collusion meets the fraud triangle: a case study approach. *Journal of Financial Crime*, 29(3), 805-815. <https://doi.org/10.1108/JFC-05-2021-0111>
39. Wang, Y., Ashton, J. K., & Jaafar, A. (2023). Financial statement fraud, recidivism and punishment. *Emerging Markets Review*, 56, 101033. <https://doi.org/10.1016/j.ememar.2023.101033>
40. Wittmann, J. P. (2022). A three-factor ethical reasoning model for court-involved practitioners: Services, roles, and values. *Family Court Review*, 60(3), 507-529. <https://doi.org/10.1111/fcre.12656>
41. Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. *The CPA Journal*, 74(12), 38-42. Retrieved from <https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=2546&context=facpubs>
42. Yang, M., & Chen, Y. (2023). Cognitive rationalization in occupational fraud: structure exploration and scale development. *Frontiers in Psychology*, 14, 1-18. <https://doi.org/10.3389/fpsyg.2023.1112127>
43. Zhang, H.-li, Liu, F., & Lang, H.-J. (2024). The relationship between role ambiguity and anxiety in intensive care unit nurses: The mediating role of emotional intelligence. *Intensive and Critical Care Nursing*, 81, 103597. <https://doi.org/10.1016/j.iccn.2023.103597>

APPENDIX A

Table A1. Research variable instrument

Variable	Measurement
Fraud (Fr)	Misappropriation of assets due to the pressure of need Welfare dissatisfaction Delay in reports Fictitious applications Delay in recording Borrowing funds on behalf of members Self-interest Request for kickbacks on financing assistance Preference for assistance due to gifts
Legal Ambiguity (LA)	Non-compliance with internal rules Lack of strict sanctions Reward and punishment are not applied Violations are not dealt with firmly Fear of reporting due to social relations Unfair rule enforcement Rules do not support discipline Lack of leadership commitment in enforcing the rules
Opportunity (Ot)	Performance evaluation is not routine Lack of clarity of authority and responsibility Weak financing supervision Lack of operational supervision Low fraud detection capability The supervision system does not require reporting Absence of clear financing SOPs
Rationalization (RS)	Justification of the utilization of company assets Justification of the temporary use of company money Perceived entitlement to personal bonuses Demand for better work facilities Justification for use of company facilities
Work Pressure (WP)	Pressure due to lifestyle Pressure to own personal assets Pressure due to fear of being fired Pressure to be the best Pressure to achieve high performance Pressure due to job competition Pressure due to reward motivation Insufficient compensation Pressure from leaders regarding targets Pressure to maintain performance to be recognized Pressure to achieve personal success Pressure for career advancement
Capability (Cp)	Influence of position on financial decisions Understanding of the company system My ability to make people feel safe and comfortable Confidence in high competence Mastery of the company's financing system Ability to analyze the financing system