

Review Article

Exploring Internal Control System as Deterrent to Occupational Fraud in Local Government

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Abstract - This paper pursues to investigate the efficacy of the system of internal control to fight against occupational fraud in local governments. To answer the proposed research question, this study employs a quantitative method style. The adoption of a quantitative methodology is to test the relationships between the constituents of an internal control system and fight against occupational fraud. The empirical results suggest that the constituents of inner control, consisting of the control environment, risk assessment, control activities, information and communication, and monitoring activities, significantly can contribute positively to fighting against occupational fraud in local governments. However, the discretion of the control system that empowers apparatus to blow concerns, in this study, is considered as a springboard for fraud deterrence. Furthermore, another important point to improve the effectiveness of the use of public resources or to reduce black public expenditures is the form of numerous initiatives, through the hierarchical and functional composition of the organization, energizing usefully upon erroneous public administration.

Keywords - Occupational Fraud, Local Government, Internal Control System

I. INTRODUCTION

Occupational fraud has been on the rise, and it is predicted that it will continue rising over the next few years. The best and most widely accepted model for explaining why people commit fraud is the Fraud Triangle. Dr. Donald Cressey, a criminologist whose research focused on embezzlers (whom he called trust violators), developed this model. However, when we think about fraud in the local governments of Indonesia, the image that frequently comes to mind is some of the triggering factors which are not covered by the original work of Donald Cressey (1953). Those are political and cultural factors. It becomes clear that the opaque nature of corruption driven by political aspects is likely difficult to assess and detect. Lambsdorff (2001) argues that an amalgam of vicious regulations (cumbersome regulations) leading to corruption actually is a consequence of politicians and bureaucrats who are primarily motivated to be bribed. Even though many scholars (e.g., Cressey, 1953; Buckhoff, 2001; Ashforth and Anand, 2003; Choo and Tan, 2007; Dellaportas, 2013) and professionals (ACFE, 2018) speak

that poor institutional conditions and weak internal controls can provide fertile ground for corruption and other fraudulent acts to flourish; however they are basically not the fundamental triggers, but they are a consequence of corrupt agreements and regulators (Lambsdorff, 2002).

Many studies attempt to tackle occupational fraud, but they are in private sectors, for example, studies conducted by Holtfreter (2005); Peltier-Rivest and Lanoue (2009, 2011). At the same time, occupational fraud in sector public (local government) has little attention in auditing and fraud studies. As such, statistics from ACFE's current study (2018) show that no governmental organization is immune to occupational fraud and that the cost of fraud is significant. There are 88% of cases in misappropriation of assets, causing a median loss of USD 100,000. Then, financial statement fraud schemes accounted for 6% of government cases with a median loss of USD 315,000, while corruption schemes occurred in 47% of cases and caused a median loss of USD 400,000. This study brings warning signs for every country since fraud is not limited to a specific industry, type of company, or employee. Therefore, this study contributes to this serious concern by proposing internal control as a fraud deterrent in local government.

A. Literature Review and Hypothesis Development Occupational fraud

Occupational fraud is a sub-type of an offense related to the workstation, referring to an assortment of wrongdoings that comprises both non-criminal and criminal infractions (Coenen, 2008). It might also be defined as embezzlement, employee fraud, internal fraud, and workstation wrongdoing /or fraud in which the workforce employs his or her "occupation" to steal from the organization (Albrecht et al., 2014). However, for the purpose of this study, the author will adopt a definition of occupational fraud disseminated by the Association of Certified Fraud Examiners/ ACFE because it is internationally broad, intended to cover a wide range of wrongdoing perpetrated by staff at any level in the organization. Apart from that view, it encompasses everything that includes stealing objects out of the workplace supply cabinet for personal use, especially to falsifying timesheets or work orders to intricate forms of



embezzlement, overcharging, and debt concealment (Turvey, 2013). The ACFE defines occupational fraud, stated in its comprehensive study (p.6) ‘*Report to The Nations on Occupational Fraud and Abuse 2018*, as:

“*The use of one’s occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization’s resources or assets*”

In its continuing exertions to examine profit-motivated scenes, the ACFE has already broken down occupational fraud into three categories, *corruption*, *asset misappropriation*, and *financial statement fraud*, and every category has a sub-type to account for the variety of misconduct that is usually encountered in association with the workplace.

B. Asset Misappropriation

The ACFE (2018) defines asset misappropriation as a wrongdoing scheme in which a perpetrator abuses the employing organization’s assets, either tangible or intangible assets, by employing trickery. This fraud taxonomy developed by the ACFE has two major categories such as cash fraud scheme including disbursement fraud, and Non-cash fraud scheme. Most organizations have some precaution programs in place; however, a particular study realizes that even the best preventive controls cannot perfectly prevent this kind of fraud (Albrecht et al., 2014). It can be accepted that Albrecht et al., (2014) argument is very reasonable because data are shown by the ACFE’s (2018) study revealing that assets misappropriations are by far the most common form of occupational fraud consistently happening in more than 83% of all scandals.

C. Corruption

Corruption is a fraud scheme in which an individual abuses his or her power and influence in economic transactions in a way that, in order to procure a direct or indirect gain, abuse his or her occupation to the employer or the rights of another (ACFE, 2018). Albrecht et al. (2016) noted that this kind of financial crime is one of the eldest white-collar offenses known to mankind, and they also mentioned that the tradition of “paying off” a public official for preferential treatment is rooted in the crudest system of business developed. According to the ACFE’s (2018) report, this financial crime can be broken down into four scheme types, namely conflicts of interest, bribery, illegal gratuities, and economic extortion. This kind of financial crime is very difficult to detect due to its nature (sensitive and hidden natures), and it is, in most cases, only known about after its public exposure.

D. Financial Statement Fraud

Financial statement fraud constitutes a fraud scheme in which a fraud perpetrator deliberately makes an omission or a false representation of material financial information records or the organization’s financial reports (ACFE, 2018). This kind of crime commonly starts with a small misstatement of earnings on quarterly financial

reports that assumes not to be material nevertheless ultimately grow into full-blown wrongdoing and manufactures substantially misleading annual financial reporting (Rezaee and Riley, 2010). A large majority of individuals who are getting involved in the scandals of fraudulent financial fraud come from an ingenious squad of knowledgeable fraudsters (e.g., top executive) with a set of well-designed fraud arrangements and considerable gamesmanship (Rezaee, 2005). It is possible to opine that ineffective audit committees and board directors, financial pressure, and lack of effective and adequate internal control structure might be cited as important contributing factors that enhance the likelihood of the occurrence of fraudulent financial reporting. If it does occur, the extent and magnitude of alleged fraudulent financial reporting will threaten the reliability, integrity, and quality of the financial reporting process and finally trigger material economic losses. As a consequence, the public’s confidence and trust are eroded.

E. Hypotheses Development

a) Control Environment and Fighting Against Occupational Fraud

The control environment constitutes a part of the interconnected components of an internal control system, and it is an essential factor in creating an operative fraud-prevention atmosphere in the workplace because it is regarded as the underpinning factor for other mechanisms of internal control system (COSO, 1992). Henry (2016) noted that a controlled environment could play an important role in deterring or minimizing the occurrence of fraudulent activities if no single employee within a business function has the authority to establish, carry out, and supervise activities. Local government entities with a strong ethical environment and managers who are aggressive in investigating red flags would be expected to have a lower incidence of fraud than others that have a weaker ethical environment and managers who do not follow up red flags (Ziegenfuss, 2001).

By considering the second component of the fraud triangle, a perceived opportunity to perpetrate fraud and obscure it, the most important factor in dealing with that concern is management’s role and example, because management’s untruthful or incongruous behaviors, in numerous instances, has been learned and mimicked by workforces, according to COSO, (1992) and Indonesia internal control regulation, (2008). It is consistent with the statement noted by Albrecht et al. (2014) that the growing duration of fraudulent activity is not primarily triggered by an absence of adequate communication, deficiency of better-documented procedure, or insufficient monitoring, but it is obviously the outcome of the individuals who are in charge of an organization fail to ensure managements execute their duties effectively. The fraud triangle theory outlines the three aspects (pressure, opportunity, and rationalization) which are strongly motivating an individual to perpetrate occupational fraud, according to Cressey (1953). However, Cendrowski et al. (2007) and Henry (2016) believe that a controlled environment can

help to diminish the intentional motive for unlawful activities and neutralize/ prevent the reasoning of committing improper acts, as well as to reduce opportunistic triggers.

Accordingly, it is reasonable to conclude that a controlled environment acts as a contingency variable in fighting against occupational fraud. Another example to support that argument is a recent study expressing Malaysia's local government to mitigate malicious behaviors is contingent upon the effectiveness of control environment (Badara and Saidin, 2013). Even though, prior studies astonishingly documented that the strength of local government's control environment is negatively associated with its incidence of fraud (Ziegenfuss, 2001). But the most recent empirical studies carried out by Aramide and Bashir (2015) against those prior findings in which they found that a well-established control environment is the only approach to enhance accountability and transparency as well as examination wrongdoings and indiscretions in allocation and disbursement of the public fund at local government level. Based on the discussion above, therefore, the first hypothesis of this study is: (H1) an effective control environment has a positive contribution to fighting against occupational fraud in local government.

b) Risk Assessment and Fighting Against Occupational Fraud

Risk assessment is a progressive observation of the organization environment which is intended to diagnose potential fraud risks that could frighten the achievement of organizational aims. Ideally, it is performed on a continuous basis in which the activities of this aspect are to identify as numerous potential menaces as possible and evaluate them in the proper way to decide the appropriate measures for those risks (Cendrowski et al., 2007). If an organization fails to carry out risk assessment correctly, it will result in the unidentified possibility of fraud risks (Shelton et al. 2001) because the more explicit risk assessment, the more effective detection of the presence of fraud is (Carol and Michale, 2001). Separately, Kranacher et al. (2011) noted that the use of risk assessment tools appropriately would enable public authorities to make better decisions based on calculated risk.

Initiatives of private sector organizations to enhance risk assessment and system of internal control has been undoubtedly reflected by similar promptings for change in public sector ones, where risks assessment and management are also realized as a crucial dimension of good governance as well tools to assist the accomplishment of organizational goals. It substantially evidenced by the *Australian Public Sector Governance and Risk Forum*, as cited by Wood (2009), argued that risk management and risk assessment claim as a cornerstone of good governance resulting in more well-organized usage of assets, better service delivery, and better project management, and it is also certainly mentioned by Albrecht et al., (2014), that an authority's system of

internal control encompassing risk management and risk assessment has a vital part in terms of lessening the likelihood of misconduct risks and accomplishing the organizational objectives.

Anecdotal evidence suggested that the identification of malevolent risks in public sector organizations is distinct and different from the opposite ones (Wood, 2009; Yuhua, 2007), even though the existing literature (Dorrell and Gadawski, 2012; Taylor, 2011; Kranacher et al., 2011) and the recent studies (Altheebah and Sulaiman, 2016; Abiola and Oyewole, 2013), discussed the link between the existence of a potential source of fraudulent concealment and system of internal control consisting of risk assessment, but they do not provide an understandable framework to explain them. The framework of risks assessment and identified risk management defined as one of the good governance principles should be performed correctly by the local authority, and it should be complemented by establishing precise systems for the diagnosis, assessment, and supervision of material risk. It is due to studies carried out by Armando (2008), pointed out that the success of identifying fraud risk in Indonesia local governments, and Malaysia local governments (Badara and Saidin, 2013), depend on the effectiveness of prevailing risk assessment in those institutions. According to the discussion above, therefore, the second hypothesis of this study is: (H2) an effective risk assessment has a positive contribution of fighting against occupational fraud in local government.

c) Control Activities and Fighting Against Occupational Fraud

Wrongdoing is an individual exertion comprising purposeful intent, dishonesty, risk of apprehension, rationalization, and desecration of trust (Ramamoorti, 2008). According to a criminology standpoint, white-collar offending, like other exclusive criminal syndicates, might finest be clarified by three points of view such as the absence of capable guardians, the availability of suitable targets, and a supply of motivated offenders (Cohen and Felson 1979). It is similar to the universal elucidation of (white-collar) crime as a choice, positing that disparity in crime is manufactured by the disparity in motivation and opportunities (Shover and Bryant 1993). Thus, it can be argued that the aggregate rate of white-collar crime varies directly with the source of criminal chances and the source of persons and organizations motivated or predisposed to exploit the vulnerable environments within the organization. As a result, organizations that employ many staffs must have effective internal control activities to help ensure that the activities of staff are congruent with the interest of the stakeholders.

As noted by Albrecht et al. (2014), good fraud detection and prevention endeavors involve matching the most appropriate control activities with a variety of fraud risks. Public organizations, including governmental institutions, risks may encompass a variety of risks from engineering, natural threats, financial (financial fraud

risks), and social spheres: everything which is in perspective will have a significant or not significant impression on those institutions. Every domain might be considered as discrete, as termed as '*Archipelagos of risk*' (The Royal Society, 1992). This has delivered a rich set of methodologies for dealing with and preventing those harmful risks. Generally, lack of or poor implementation of control activities (procedures) can be considered as the miscarriage of risk governance which might lead to unpreventable risks caused by many unexpected interventions (Annukka et al., 2014). A key dilemma for governments at this point is how to advance a proper method of governance that can tackle both the specificity and the generality of the material threats.

Control activities, one of the five elements of internal control disseminated by COSO, are documented strategic organizational guidance and procedure that can help ensure that all employees' directives are carried out correctly, and it is a principal emphasis for fraud deterrence engagements (Kranacher et al., 2011). Existing literature synthesized from empirical study proves that more effective control activities within an organization will be to allow the staff who arranged the transactions records to reconcile the account and equip supplementary management omission of the reconciliation process through additional checking process (Hopwood et al., 2009). In addition, with appropriate control activities, chances to perpetrate or conceal frauds can be eliminated. Those arguments are consistent with the current study undertaken in Malaysian local governments by Badara and Saidin (2013), who suggested that control activities have an impact on identifying fraudulent activities in local governments.

According to the discussion above, therefore, the fourth hypothesis of this study is: (H3) effective control activities have a positive contribution to fighting against occupational fraud in local government.

d) Information and Communication and Fighting Against Occupational Fraud

Internal control unquestionably is considered as an organization process monitoring, effected by management, board of directors, and other workforces planned to eliminate risk exposure to a tolerable level given the organization's strategic aims and appetite for risk. All information related to risks, including accountability and transparency risks due to wrongdoing, with a great effect and significant likelihood, should be automatically escalated up to the higher level in the organizational hierarchy, or it might be possible if those severe risks become the theme of weekly assemblies and action strategies within the relevant directorate. Cendrowski et al. (2007) opined that the availability of accurate information and open communication are essential elements for fraud deterrence. In other words, the reduction of fraudulent misconduct is implicitly contingent upon the term of information and communication. Evidence pointed out that the practical governance arrangements for material risks

are directly contingent upon the flow of comprehensive and correct information in the entire organizational inspectors (Hood, 1991).

Comprehensive performance assessment employed by an organization should ask every individual directorate to monitor the complexity and diversity of fraud risks which deter the attainment of inspectorate aims and require senior management to access to up to date information regarding recent levels of risk exposure across the whole council. It is because of the gaps in-laws and regulations commonly utilized by public officials and their fellows to take financial and non-financial benefits (Kongrunchok and Stanton, 2014), and misuse or abuse of position, conflict of interest, and illegal gratuities that are rampant in Indonesia local governments. The effective flow of information coalesced with open communication to raise concerns, of course, can arouse strong and varied emotions among bureaucrats, and it is one of the ways to correct the irretrievable catastrophes and even moral impoverishment in the public officers.

For those individuals who form a skeptical interpretation of managerial transformation as a series of evanescent fads and fashions, caused by public officials that ostensibly comply with the prevailing regulation when fulfilling their duties, many commentators, as an example, Aucoin (1990), associate it with euphoria and disillusion in the promulgation of simplistic and stereotyped recipes for better public management. The implication of governmental managements' initiatives to empower every employee for rising unlawful activities believed can help to identify dishonest conducts frequently creating wastes and sometimes trigger to catastrophe. Gunsteren (1976) argued that a control framework that promotes cohesion without punishing unorthodox ideas intended to mitigate the duration of misconduct occurrences would be well features of internal control structure design. That statement thereby can be assumed that the degree of loose coupling and an emphasis on information as a combined asset within the management process can avoid authorization berries to the lateral or systemic system and minimize miscommunication between employees, in which such measures definitely contribute to fraud deterrence in that organization.

According to the discussion above, therefore, the third hypothesis of this study is: (H4) effective information and communication have a positive contribution to fighting against occupational fraud in local government.

e) Monitoring and Fighting Against Occupational Fraud

Managements, on a continuous basis, have sufficiently to preserve and monitor the system of internal control. It is because routine frauds committed by organizational insiders are viewed as normalized and egregious behaviors by outsiders, in which those perceptions signify incidence of corrupt practices or managerial fraud regarded as a common phenomenon.

Monitoring of control provided it is a truly independent, well-resourced, and well-staffed objective function in the organization, is a significant component of an internal control system and can act as a noteworthy deterrent to dysfunctional behavior. Empirical evidence informs that the prevention of corruption scandals and public fund misappropriation in Imo state is not solely dependent on the independence of the internal audit, but monitoring factor put in place strongly contributes to enhancing the detection of fraud occurrence in that public administration (Gerard, 2005).

Local government witnessing misconducts still remain one of the core constituents, even though those potential accountability and transparency risks are progressively understood as generic societal concerns which require to be coped with by central government (Baltaci and Yilmaz, 2006). However, almost all of the East Asian governments no longer have sole control of the orchestration of fraud risk governance, focusing mainly on inhibiting fraud (Woods, 2009). The monitoring process, whether it is profit organizations or non-profit organizations, should encompass both detection activities and fraud deterrence (Taylor, 2011). Many government entities would be expected to have properly designed controls or an adequate number of local government managements to have appropriate segregation of duties and independent check for identifying the deficiencies of internal control performance and correcting them to form a strong deterrence of fraud.

A study confirms that well-performed monitoring of internal control activities in Indonesian local governments can positively and significantly link with the value of local's financial statement to be free from material misstatement whether caused by fraud or error (Armando, 2013). This is consistent with a study produced by Badara and Saidin (2013), who suggested that proper monitoring

is positively associated with the effectiveness of internal audits in Malaysia's local government to prevent fraudulent activities. According to the discussion above, therefore, the fifth hypothesis of this study is: (H5) effective monitoring of controls has a positive contribution to fighting against occupational fraud in local government.

II. METHODOLOGY

This study collected data from the Indonesian Supreme Audit Institution (BPK) and State Development Audit Agency. All of the participants were informed that their answers were confidential. Exploratory factor analysis was performed on each of the items used in the questionnaire to identify errors of measurement. For all of the multiple-item scales in this study, the participants rated each item using a 5-point Likert scale where 1 = strongly disagree, and 5 = strongly agree. Measurements in this study are adapted and modified from prior studies, as shown in table 1.

III. FINDINGS

A. Demographic profile of respondents

Table 2 displays the background of education, professional certificate, and short courses/ training in this sample. It also contains summary statistics regarding participant gender, age, work experience, and education level. As specified by Table 2, the sample is quite heterogeneous. Multiple types of the demographic profile of respondents are represented within the sample.

B. Descriptive statistics of main variables

The primary aim of descriptive statistics is merely to convey and describe large sets of quantitative characteristics (Bryman and Bell, 2011). Table 3 below suggests the properties of data samples and measurements (both dependent and independent variables) that are used in this study.

Table 1. The operational definition of variables

Variables	Indicators or Measurements	Previous study
<p>The control environment is the set of standards, processes, and structures that provide the basis for carrying out internal control across the organization (COSO, 2013)</p>	<p>a. commitment to integrity and ethical values; b. tone at the top; c. basis for determining how the risk should be managed; d. identification of the potential for fraud in assessing risks; e. assessment of changes in the internal and external environment; f. identification of oversight for the development and performance of internal control.</p>	<p>Yurniwati and Riza; Janvrin, et al., (2012); Afiah and Azwari (2015); Hindriani et al., (2012); Aramide and Bashir, (2015); and Badara and Saidin, (2013); Cosserat and Rodda (2010)</p>
<p>Risk assessment involves a dynamic and iterative process for identifying and analyzing risks to achieving the entity's objectives, forming a basis for determining how risks should be managed (COSO, 2013)</p>	<p>a. assessment of risks relating to objectives; b. Identification of the potential for fraud; c. assessment of incentive and pressures, opportunities, and attitudes and rationalizations; d. toleration for risk/ materiality; e. assessment of changes in the organization model</p>	<p>Janvrin, et al., (2012); Afiah and Azwari (2015); Hindriani et al., (2012); Aramide and Bashir, (2015); and Badara and Saidin, (2013); Cosserat and Rodda (2010)</p>
<p>Control activities are the actions established by the policies and procedures to help ensure that management directives to mitigate fraud risks to the achievement of objectives are carried out (COSO, 2013).</p>	<p>a. evaluation at what level activities are applied; b. segregation of duties; c. authorization and approval; d. Supervision; e. management control; f. corrective action</p>	<p>Janvrin, et al., (2012); Afiah and Azwari (2015); Hindriani et al., (2012); Aramide and Bashir, (2015); and Badara and Saidin, (2013); Cosserat and Rodda (2010)</p>
<p>Information and Communication relates to the flow information in two directions (downward and upward) within organization for fraud deterrence, both in terms of internal and external fraud (Cendrowski et al, 2010)</p>	<p>a. effectiveness; b. confidentiality; c. integrity; d. availability; e. Reliability; f. method of communication</p>	<p>Abayomi, (2016); Afiah and Azwari (2015); Hindriani et al., (2012); Aramide and Bashir, (2015); and Badara and Saidin, (2013); Cosserat and Rodda (2010)</p>
<p>Monitoring Activities is ongoing evaluations, separate evaluations, or some combination of the two are used to ascertain whether each of the five components of internal control, including controls to effect the principles within each component, are present and functioning (COSO, 2013).</p>	<p>a. evaluation of internal control deficiencies; b. separate evaluation; c. establishment of baseline understanding; d. assessment of results; e. independent audit and assurance; f. corrective action</p>	<p>Cendrowski et al, (2010); Abayomi, (2016); Afiah and Azwari (2015); Hindriani et al., (2012); Aramide and Bashir, (2015); and Badara and Saidin, (2013); Cosserat and Rodda (2010)</p>
<p>Fight against occupational fraud is proactive measures to tackle employees who are deliberately misuse or misapplication of the employing organization's resources or assets (ACFE, 2016).</p>	<p>a. organizational culture and structure; b. transaction verification; c. fraud risk identification; d. fraud risk evaluation; e. integrated governance participants.</p>	<p>Cendrowski et al, (2010); Afiah and Azwari (2015); Hindriani et al., (2012); Aramide and Bashir, (2015); and Badara and Saidin, (2013)</p>

Table 2. Demographic characteristics

Characteristics	N= 113	Percentage (%)
Gender		
Male	74	65.49
Female	39	34.51
Age		
< 25	23	20.35
26-30	46	40.72
31-40	35	30.97
41-50	7	6.19
>50	2	1.77
Work experience		
1-5	16	14.16
6-10	43	38.06

Table 3. Descriptive statistics

	Conan	RiskAss	ConAct	InfrmComm	MonAct	FigOccFraud
N Valid	113	113	113	113	113	113
Missing	0	0	0	0	0	0
Mean	29.49	29.01	25.67	25.67	27.86	29.43
Std. Deviation	5.075	6.809	5.317	5.317	3.759	5.519
Skewness	.014	.023	.014	.014	0.77	.115
Std. Error of Skewness	.209	.209	.209	.209	.209	.209
Kurtosis	-.007	-.006	-.644	-.213	-.740	-.213
Std. Error of Kurtosis	.416	.416	.416	.416	.416	.416
Minimum	20	16	16	27	21	19
Maximum	38	40	35	43	35	38

According to the table above, it can be noticed that measurements of all variables to replicate the reality of conditions (practice worlds) place ranges from a minimum of 16 to a maximum of 43, with a tendency scale (mean) of 25.67 to 35.72. Such a wide range of values signifies that they are closely tied to and would be lopsided towards the proportion of observed characteristics imitated by the models. Furthermore, the skewness of 0.014 to 0.115, with a value range of standard deviation from 1.075 to 2.809, indicates that the distributions of the data-set are slightly right-skewed and peaked (leptokurtic), but it is close to being symmetrical and normal distribution. It means that the measurements implanted in this model can be proceeded with the next statistical analyses and specifically used to deal with the proposed research questions since they do augment a tendency to avoid over-simplify the uncertainty disturbing outcomes achieved.

a) Validity test

The notion of validity test is widely used to check unwanted instrument measures that may interfere in results or designs of study (Metzler, 2014). In the following table shows the summary of the validity test for both independent and dependent variables.

All variables, according to criteria given by Hair et al. (2010) and Johnson and Wichern (2007), are excellent figures as they approach 1.00 high, indicating consistency.

In accordance with the statistical summary above, it can be seen that the constructed instruments to measure the intended variables have met the criteria of validity test, as cited by Hair et al. (2010) since the value of Pearson correlation are higher than the table of critical values for Pearson’s r. In addition, to judge whether the content of items and questions reflects the envisioned variable or not, in which the concept of validity assessment is primarily claimed as the attainment of a preset accept or reject level on the test, and success or failure on an ensuing test, the decision-makers should identify the value of Pearson correlation and table of critical values for Pearson’s r. All instruments used by the researcher, therefore, can be postulated valid and are free from unexpected barriers.

b) Reliability test

In general, the reliability test is aimed to examine the amount of consistency of internal information or the measure of item homogeneity. It provides a measure of the extent to which an examinee’s score reflects random measurement errors that are caused by poor direction, tricky items or ambiguous, and carelessness in making an answer (Hair et al., 2010). The widely applied index in testing and appraisal’s item analysis for the concept of reliability is Cronbach’s Alpha. Based on table 5, the values of Cronbach’s Alpha for Therefore, the measurement models of this study, which specify the measurement scale and the structure of the measurement, and represent a realization of the theoretical

notions, implicitly have high-standardized internal consistency.

c) Normality test

An appraisal of the normality of data is a prerequisite for many arithmetical tests, as normal data is an underpinning assumption in the parametric test. To test or check whether the sample data are a normally-distributed population or not, this study will use the Kolmogorov-Smirnov test since it is one of the most popular statistical tests of the assumption of data distribution (normality) (Cohen and Cohen, 1983) and an exact test (Pallant, 2013). Table 5 demonstrates that the Sig. value of Kolmogorov-Smirnov (0.994) and Asymp.Sig. (0.277) are higher than 0.05, meaning that the sample population is normally distributed. This is based on a consideration cited by Johnson and Wichern (2007) that “in a normal distribution, the significant value must be higher than 0.05 (Sig.>0.05)”. The result of the normality test can be strengthened by

descriptive statistics above (Table 3) by looking at the values of skewness and kurtosis that show those values are equal or approximate zero, meaning the sample distribution is normally shaped and distributed.

d) Result of hypothesis tests

Test Coefficient of Determination (R²) Table 6 below demonstrates that the proportion of observed outcomes replicated by the models is considered as an excellent figure, with the value of adjusted R square 0.946 or 94.6% and Std. The error of the Estimate 1.281. It means that the proportion of those models employed in this study can contribute effectively to fighting against occupational fraud in Indonesian local governments. In other words, only 5.4 percent, other variables can explain occupational fraud reduction in local governments. Therefore, theoretically, the percentage of the response variables explained by a linear model in this study fits the observed values on the fitted regression line by a value of 94.6%.

Table 4. Summary of Validity Tests

Independent Variables	items	N	Sig. (2-tailed)	Pearson Correlation	Tabel r Product Moment
Control environment (X1)	Commitment	113	0.001	0.996**	0.183
	Tone at the top	113	0.008	0.890**	0.183
	Manage the risks	113	0.000	0.900**	0.183
	Identify fraud	113	0.000	0.908**	0.183
	Assess changes	113	0.000	0.818**	0.183
	Evaluate system	113	0.000	0.923**	0.183
	Independent boards	113	0.000	0.892**	0.183
	Evaluate standards	113	0.000	0.889**	0.183
Risk Assessment (X2)	Assess behaviour	113	0.000	0.947**	0.183
	Materiality	113	0.000	0.746**	0.183
	Potential fraud	113	0.000	0.813**	0.183
	Separate assessment	113	0.000	0.853**	0.183
	Risk factors	113	0.000	0.797**	0.183
	Organisation model	113	0.000	0.907**	0.183
	Sustainable correction	113	0.000	0.772**	0.183
	Ways to fraud	113	0.000	0.947**	0.183
Control Activities (X3)	Activities applied	113	0.000	0.747**	0.183
	Segregation of duties	113	0.000	0.786**	0.183
	Control procedures	113	0.000	0.673**	0.183
	Supervision	113	0.000	0.890**	0.183
	Fraud response	113	0.000	0.667**	0.183
	Corrective action	113	0.000	0.962**	0.183
	Authorisation	113	0.000	0.794**	0.183
	Information and Communication (X4)	Separate communication lines	113	0.000	0.833**
Clear communication		113	0.000	0.817**	0.183
Information governance		113	0.000	0.617**	0.183
Information validation		113	0.001	0.771**	0.183
Open communication		113	0.000	0.650**	0.183
Confidential reporting		113	0.000	0.634**	0.183
Relevant method of communication		113	0.000	0.913**	0.183
Information technology system		113	0.000	0.708**	0.183
Monitoring Activities (X5)	Accessibility	113	0.00	0.822**	0.183
	Control deficiencies	113	0.000	0.653**	0.183
	A timely basis	113	0.000	0.880**	0.183

	Baseline understanding	113	0.000	0.847**	0.183
	Assessment of results	113	0.030	0.681**	0.183
	Independent audit	113	0.000	0.830**	0.183
	Corrective action	113	0.000	0.839**	0.183
	Separate evaluation	113	0.000	0.753**	0.183
Dependent Variables	Items	N	Sig. (2-tailed)	Pearson Correlation	Tabel r Product Moment
Fight against occupational fraud (Y)	Organizational culture	113	0.000	0.947**	0.183
	Transaction	113	0.000	0.960**	0.183
	Risk identification	113	0.000	0.915**	0.183
	Misrepresentation	113	0.000	0.832**	0.183
	Integrated governance	113	0.000	0.906**	0.183
	modus operandi forms	113	0.000	0.764**	0.183
	Development of the fraud profile	113	0.000	0.713**	0.183
	A wide range of fraud	113	0.000	0.964**	0.183

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Table 5. Summary of Reliability Statistics and Normality Test

	Conan	RiskAss	ConAct	InfmCom	MonAct	FigOccFraud
Case Valid	113	113	113	113	113	113
Excluded	0	0	0	0	0	0
N of Items	8	8	7	9	7	8
Cronbach's Alpha	0.802	0.923	0.841	0.838	0.864	0.967
	Kolmogorov-Smirnov Z		.994			
	Asymp. Sig. (2-tailed)		.277			

Table 6. Individual Parameter Significance Test

Model	Unstandardized Coefficients		Standardized Coefficients	T statistics	T Critical value	Sig
	B	Std. Error	Beta			
(Constant)	4.319	1.382		3.125		.004
ConEnv	.340	.051	.312	6.642	1.6585	.000
RiskAss	.370	.047	.457	7.946	1.6585	.000
ConAct	.285	.068	.275	4.198	1.6585	.010
InfmComm	.085	.065	.050	5.299	1.6585	.002
MonAct	.002	.061	.002	5.037	1.6585	.001
R	.977 ^a					
R square	.946					
Adjusted R square	.946					
Std. Error of the Estimate	1.281					

a. Predictors: (Constant), ConEnv, RiskAss, ConAct, InfComm, MonAct

That table shows that *all of the hypotheses are accepted*, as explained below:

1. The value of the t statistic for the variable of control environment is 6.642 in which is higher than the t critical value (1.6585), and its significant value (0.000) is smaller than alpha (0.05). Thus, it means that Indonesian local governments, as long as they have an effective and adequate control environment, arguably can fight or mitigate occupational fraud, which have adverse consequences for the sphere of the governance and accountability of organization specifically, and the expected fraction of public trustworthiness generally.
2. The value of the t statistic for the variable of risk assessment is 7.946 in which is higher than the t critical value (1.6585), and its significant value (0.000) is smaller than alpha (0.05). It means that the component of risk assessment has a significant contribution to identifying and fighting against malevolent risks that may affect the success of accomplishing organizational objectives.
3. The value of the t statistic for the variable of control activities is 4.198 in which is higher than the t critical value (1.6585), and its significant value (0.010) is smaller than alpha (0.05). It signifies that the probability of anathema fraud risks existences will significantly be narrow if the concept of providing an organization-wide overview of financial (fraud) risks coexists with the knowledgeable supervision and the ambitious front line responsibility for fraud risks assessment and governance.
4. The value of the t statistic for the variable of information and communication is 5.299 in which is higher than the t critical value (1.6585), and its significant value (0.002) is smaller than alpha (0.05). It means that the appropriate multifaceted nature of exchange and communication of intra-organizational dynamics information crossing departments in both upward and downward directions or necessarily external entities significantly contribute to occupational fraud minimization.
5. The value of the t statistic for the variable of monitoring activities is 5.037 in which is higher than the t critical value (1.6585), and its significant value (0.001) is smaller than alpha (0.05). It can be argued that incongruous internal activities as the ultimate bearers of blame in case something goes wrong can be repressed by addressing the unrealistic view of an organization and improving the scrutinized performance of monitoring activities.

IV. MAIN DISCUSSION AND CONCLUSION

The objective of this study is primarily to test and investigate the relationships of internal control system components with fighting against occupational fraud in the Indonesian local government. This study found that the components of internal control, comprising control environment, risk assessment, control activities, information and communication, and monitoring activities, after running hypotheses tests, significantly contribute positively to the fight against occupational fraud in Indonesian local governments. In this fraud-fighting model, the greatest impetus of strategy formulation for identifying and configuring the potential fraud risks juxtaposed with a legitimate corrective force is likely to be the best approach to impoverish aggressive, irresponsible conduct. In relation to this, a high-process-control procedure coalesced with a solid grasp of the active responsibilities in fraud deterrence also can fight against erratic and evasive behaviors and unscrupulous administrative apparatus.

The thing that should be considered is that if bureaucratic apparatus override internal controls, there is no excuse for the highest bureaucratic authorities and internal auditors to avoid revision on their evaluation of management integrity and operational procedures because individuals may perpetuate and conceal malicious wrongdoings. The design of the control environment put in place constitutes a fundamental plank of most bureaucracies' control mechanisms since it is one of the ways that is extensively capable of integrating the whole gamut of bureaucratic activities into a single coherent practice. However, the model of a spiraling process of surveillance and the assessment framework of fraud cues are also the most promising guardians that are closely interlinked. Inevitably, the concept of information and communication flows, in this point, also cannot be overridden, as it potentially can mitigate the manifestations of pandemic dysfunctional short-term and long-term behaviors.

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