

## **SOCIAL SCIENCES & HUMANITIES**

Journal homepage: http://www.pertanika.upm.edu.my/

# Transactional Accountability Watch: A Fraud Detection Tool to Eradicate Corrupt Practices in Public-Private-Partnership in Indonesia

Samuel Anindyo Widhoyoko<sup>1\*</sup>, Sasmoko<sup>2</sup> and Dheny Biantara<sup>3</sup>

<sup>1,3</sup>Podomoro University, Podomoro City, Jakarta Barat 11470, Indonesia.

<sup>2</sup>Primary Teacher Education Department, Faculty of Humanities, Bina Nusantara University, Jakarta Barat 11480, Indonesia

## **ABSTRACT**

This research assesses fraud detection systems using governance risk compliance (GRC) framework looking at two surveillance areas: national and independent. The target was public-private-partnership (PPP) agreements. Thirty samples for each national and independent examiner were collected to be analysed using neuroresearch. Using the GRC framework as basic elements of assessment, the results showed first, "a likelihood to engage in corrupt behaviour if policies are lenient" (significant at  $\alpha$ <0.05), Second, "a likelihood to engage in corrupt acts if policies are lenient in the aspect of compliance and governance, along with "obvious symptoms of policies' partiality which have been used in companies' misbehaviour exists" in the aspect of risk. Third, it is possible for a company to commit infringements to smooth out the PPP process and the likelihood of public officers as policy makers in facilitating and accommodating PPP agreements.

*Keywords:* Compliance, Corrupt Acts, detection, governance, Public Private Partnership (PPP), risk

#### ARTICLE INFO

Article history: Received: 6 October 2017 Accepted: 2 April 2018 Published: 30 August 2018

E-mail addresses:
samuel.anindyo@podomorouniversity.ac.id
(Samuel Anindyo Widhoyoko)
sasmoko@binus.edu (Sasmoko)
dheny.biantara@podomorouniversity.ac.id (Dheny Biantara)
\* Corresponding author

INTRODUCTION

Combating corruption is currently at the top of the list of the sustainable development goals of the World Bank Group (WBG). Therefore, the Development Committee was set up on 22 April 2017 in Washington, D.C., by both the World Bank and the International Monetary Fund (IMF) to address problems in world economic development, especially in developing countries because the financial market there is a dynamic (Triady, Kurniasari, Utami,

ISSN: 0128-7702 e-ISSN: 2231-8534 & Sofyan, 2016). Two points are vital to achieve sustainable economic development: infrastructure prioritisation by the private sector and (2) flexibility in working across the public and private sectors or between both.

Emphasising these factors would be a fruitless effort if there is an absence of sophisticated management evaluation and rigorous internal control (Adewale, 2014; Moeller, 2007). These initiatives are important for sustainable economic activity but are threatened by corruption. In this context, Olken and Pande (2012) clearly stated that corruption is an obstacle to foreign direct investment from developed countries to developing countries. The problem of corruption is mainly a "corporate governmental" problem that can be solved through independent surveillance towards both public and private personnel (Nurlis, 2016). In recent times, many governmental contracts have been found to be a product of 'corrupt agreements' with third parties (private companies).

Several frameworks in a form of IT instruments have been developed in response to this situation. Indonesia Corruption Watch (ICW) is an instrument to detect and prevent corruption involving government bodies. Another framework is Corruption Early Prevention (CEP) that has its sources of information from three different parties (governmental, independent and social response) and aims at minimising corruption among public officers (Widhoyoko, Ariyanto, Indrianti, Muqsith, & Alamsyah, 2017). Therefore, the

uniqueness of Transactional Accountability Watch (TAW) is its ability to detect corrupt acts by either public or private parties using (1) a framework that encompasses good governance practices and (2) parameters that have been significantly proven through research and in accordance with common internal control practices. Hence, a specific system is necessary to detect corruption in public-private-partnership (PPP) agreements in Indonesia.

# LITERATURE REVIEW Corruption Detection Tool Based on GRC Framework

Corruption is broadly defined as misuse of power and trust (Akbar & Vujić, 2014). The subject of corruption detection and deterrence has been in the limelight since the formation of Sarbanes Oxley in response to the extraordinary financial losses due to freefall of shares of public companies in US and across the globe (Jain, Pankaj, & Rezaee, 2006). Many scholars noted those scandals as public companies' breaching certain standards and statutes (Groenendijk, 1997). Others admitted that all previous accounting scandals involved dishonest personnel involved in related-party transactions and financial document alterations (Perols & Lougee, 2011).

In developing countries, corruption eradication is mainly focused on enhancing the law to combat it rather than management transformation. For instance, Rendon and Rendon (2016) in tackling corruption in the US Department of Defense recommended developing contracting processes and

internal controls as approaches to deterring and detecting procurement fraud (Rendon & Rendon, 2016). Shanikat, Al-Farh and Dorgham (2014) concluded that effective fraud prevention mechanisms should be done by involving all managerial elements including auditors and anti-fraud specialists (Shanikat et al., 2014).

The value of good governance is centred on its surveillance system grounded in two main arguments. First, Kaswell and Johnson (2013) exposed one of the deficiencies of the development of the NYSE (New York Stock Exchange) governance model as the inconsistencies of policy amendments across the periods that require exact parameters to assess the transactional accountability (Kaswell & Johnson, 2013). Second, the efficiency and effectiveness of auditors is imperilled by either incentive or agency problems that cause market instability due to investor and creditor incredulity (Coffee, 2001). Based on these arguments, a detection tool must be developed to handle these issues.

The detection tool is built on good corporate governance, risk management and compliance (GRC) that reflect the overall business process including top-level management value (Papazafeiropoulou & Spanaki, 2016). There are at least three arguments showing how all components of GRC model are significantly improving sustainable economic development:

### Governance

The company's good reputation depends on the degree of investors' trust

in terms of the company's transparency. Its accountability depends on the company's treatment related to third-party transactions (Brennan & Solomon, 2008; Magdalena & Dananjaya, 2015).

#### Risk

It was found that significant knowledge and skills possessed by auditors affect the ability of auditors to prevent and detect occupational frauds (Kiel, 2005).

## Compliance

It was found that symptoms of poor corporate value are shown by the violation of internal control policies, standard operational procedures, and law and statutes (Nkama & Onoh, 2016). This requires internal audit to depict all information for the purpose of accurate decision support systems (Rusmin, Scully, & Tower, 2013; Prawitt, Smith, & Wood, 2009).

Therefore, the framework is designed to accommodate both national and independent perspectives based on GRC elements' specific outputs.

## Theoretical Framework for TAW Assessment

The TAW theoretical framework is designed based on: (1) Indonesian statutes, (2) GRC components consisting of political and procedural orientation and (3) formation of assessment indicators based on specific outputs of GRC components.

Stage 1. Categorisation according to Surveillance Body

The categorisation is based on two

Table 1 GRC components (Bedard & Johnstone, 2004)

GRC Elements	Specific Output	Independent Perspective	National Perspective
Governance	Good governance	Management control system	Credibility of company
Risk	Control upon fraud	Stakeholders' confidence	Probability of corruption
Compliance	Suitability of policies	Company's common practices	Accountability of policies

Indonesian statutes: (1) *Undang-Undang no.40 tahun 2007* requires every private enterprise to be audited by

credible and independent external audit and (2) *Undang-Undang no.14 tahun 2004* requires all governmental bodies to be audited by the higher financial inspectorate

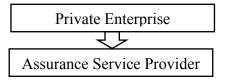
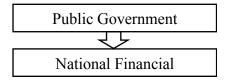


Figure 1. The alignment of PPP parties with its authorities

good policy. However, the presence of certain personnel in a lower position may influence the higher policy makers when that politician controls resources. Such influence is also called "legal corruption" that causes political distortion (Kaufmann & Vicente, 2011; Thompson, 1980). Furthermore, risk management emphasises an assumption that the policies made by the public officers can smooth out the corruption scheme between personnel from both parties for the purpose of personal benefit (Dorminey, Scott Fleming, Kranacher & Riley, 2012; Olken & Pande, 2012).

## Stage 2. Formation of Each Orientation towards GRC Components

The orientation of each group of parameters is in accordance with its organisational nature. First, national surveillance overview is assumed to have a political orientation for its assessment towards PPP transactions. Thompson (1980) described that public officials held moral responsibility to propose a



In the second model of assessment, independent surveillance embraces assurance by service providers of the private company's transparency and accountability value as an investment object for potential investors. At this stage, the parameter simply points out the governance aspect of overall GRC components to be the first priority. For example, the aspect of board transparency regarding the practices of good governance practices has been an investors' consideration for long-term investment (Tsay, 2010). To many potential investors, it refers to numerous bankruptcy cases during

1987-1997 in the US that were triggered by both unethical or ineffective boards of directors at the top (Beasley, Carcello, & Hermanson, 1999).

Another point is that the existence of sophisticated control environments shall bridge the information gap between departments and systems due to the safeguarded information flow chain that protects the enterprise from information leakage (Hayne & Free, 2014; Kolk, 2010). Meanwhile, fraud risk assessment is inevitably a compulsion for private enterprises for broader stakeholder protection from unnecessary losses (Popoola, Ahmad, & Samsudin, 2014), misappropriation of assets and misuse of trust (Alexander, 2005;

Jayaraman & Milbourn, 2012) and from the piracy of enterprise data (Lookman & Nurcan, 2015). Furthermore, the third aspect (compliance) is supporting information that has been assessed mainly in the previous model by different authorities.

Public accountability is politically defined as the involvement of the policy stakeholders in forming unbiased and impartial policies. Accordingly, there are many stakeholders who need to embrace policies, such as opinion from experts and practitioners regarding social impact, law enforcement and economic stability (Sanderson et al., 2014), the political parties as the policies' certifier and the private company as the executor of PPP (Gilbert

Table 2

Priority setting for both surveillance parameters

Components	National Surveillance	Priority	Independent Surveillance	Priority
Governance	Private parties	1	Private parties	3
Risk	Private and public parties	2	Private and public parties	2
Compliance	Public parties	3	Public parties	1

Stage 3. Formation of the Unit of Assessment for Each Component

& Allen, 2014) and independent scholars. In structuring the policies, preliminary observation must be conducted by the policy makers to direct the process in alignment with other policies, law, standards and even common social value (Schaff & Schaff, 2016). Furthermore, monitoring the likelihood of corruption is the result of fraud control according to national perspective.

Two main fraud schemes detection are included: (1) bid rigging (through budget analysis and goods inspection) (Dastidar & Mukherjee, 2014) and (2) conflict of interest (through background check techniques and notes of disclosure examination) (Yang & Tan, 2012). Finally, board ethics is always a standard parameter for the business behaviour related to a company's

governance (Tsay, 2010), which is reflected by the company's internal control policies assessed by external auditors (Sasmoko et al., 2017).

In the context of companies' corporate governance, internal control is based on three basic perspectives: (1) control environment emphasising transparency of the board of directors (e.g. independent board and accountable disclosures for executive compensation) (Beasley et al., 1999); (2) risk assessment application through control activity (Tsay, 2010); and (3) communication procedures (e.g. whistle-blower protection policies) (Bastin & Townsend, 1996) and periodical internal

Table 3
Unit of assessment for national surveillance parameters

Priority 1 – Compliance	Priority 2 – Risk	Priority 3 - Governance
Quota of professional associations and experts. Quota of interested and independent parties involved. Compatibility of policies made by the government.	Likelihood of committing bid rigging. Likelihood of committing conflict of interest.	Opinion regarding to board ethics. Opinion regarding to financial transparency and reporting.

audit as a common monitoring function (Badara & Saidin, 2013). Furthermore, true representation of financial conditions provided by stock brokers are usually more trustworthy to convince investors and creditors (Hansen & Trego, 2015) due to fair value and full disclosure principles as the key aspects of companies' financial risk indicators (Repousis, 2013). Finally, the scope of independent assessment emphasises merely the compliance of the company to the policies (Robertson-Snape, 1999). This can be further expanded to cover laws, statutes and other government regulations such as ensuring contracts and agreements are done in accordance with local government policies (Financial Accounting Standard Boards, 2014).

## **MATERIALS AND METHODS**

This study used neuroresearch by combining qualitative and quantitative methods. For exploratory (qualitative) method, compiled data as a result of questionnaires gathered from surveys were used to find the trends and differences in each aspect on each surveillance. Furthermore, for explanatory and confirmatory (quantitative method), this research used descriptive analysis and homogeneity testing to measure trends for each GRC component towards each surveillance.

The questionnaires were designed based on the elements of each surveillance's parameters that contains more than one question. Furthermore, the questionnaires were measured using ordinal scale consisting

Table 4
Unit of assessment for independent surveillance parameter

Priority 1 – Governance	Priority 2 – Risk	Priority 3 – Compliance
Board transparency and	Financial reporting	Companies policies
accountability	quality	according to standards
Fraud risk	Responses from	Company's reporting
Operational risk	potential stakeholders	according to local
		agreement

of: (1) highly corrupted, (2) probably corrupted and (3) asymptomatically corrupted.

The samples of this research were 30 samples from an independent surveillance group consisting of the company's auditors (i.e. internal auditors, external auditors, and anti-fraud specialists) who possess knowledge to the event related to fraudulent PPP transactions, along with 30 samples from national financial inspectorial bodies (i.e. a group of auditors from *Komisi Pemberantasan Korupsi (KPK)* and *Badan Pemeriksa Keuangan (BPK)*) who possess

relevant information related to fraudulent PPP transactions.

## **RESULTS AND DISCUSSIONS**

## First stage (exploratory research)

The priority setting for national surveillance parameters is Governance – Risk – Compliance

The priority setting for independence surveillance parameters is Compliance – Risk – Governance

## Second stage (explanatory & confirmatory research)

Overall Trends

			Statistic	Std. Error
Surveilance	Mean		12.4000	.27740
	95% Confidence Interval	Lower Bound	11.8449	
	for Mean	Upper Bound	12.9551	
	5% Trimmed Mean		12.3333	
	Median		12.0000	
	Variance		4.617	
	Std. Deviation		2.14871	
	Minimum		8.00	
	Maximum		19.00	
	Range		11.00	
	Interquartile Range		2.00	
	Skewness		.561	.309
	Kurtosis		.573	.608

Figure 2. Descriptive statistics of surveillance

Table 5
Results of overall trends

Interval	Meaning	Conclusion
8 – 11	Highly possible	The table shows that the value of $\mu$ is in the range
12 - 15	Possible	between 11.8449 and 12.9551. This figure indicates that
16 - 19	Almost impossible	there are possibilities of fraud and violations shown by $\alpha$ <0.05.

## **Three GRC Component Trends**

Aspect of Governance

### Descriptives

			Statistic	Std. Error
Governance	Mean		4.7500	.25669
	95% Confidence Interval	Lower Bound	4.2364	
	for Mean	Upper Bound	5.2636	
	5% Trimmed Mean		4.6667	
	Median		4.0000	
	Variance		3.953	
	Std. Deviation		1.98831	
	Minimum		2.00	
	Maximum		9.00	
	Range		7.00	
	Interquartile Range		3.00	
	Skewness		.627	.309
	Kurtosis		453	.608

Figure 3. Descriptive statistics of governance

Table 6
Results of governance aspect

Interval	Meaning	Conclusion
2 - 4	Highly possible	The table shows that the value of $\mu$ is in the range
5 – 7	Possible	between 4.2364 and 5.2636. This figure indicates there are possibilities of fraud and violations shown by
8 - 10	Almost impossible	significant α<0.05

## Aspect of Risk

### Descriptives

			Statistic	Std. Error
Risk	Mean		3.1333	.12457
	95% Confidence Interval	Lower Bound	2.8841	
	for Mean	Upper Bound	3.3826	
	5% Trimmed Mean		3.0741	
	Median		3.0000	
	Variance		.931	
	Std. Deviation		.96492	
	Minimum		2.00	
	Maximum		6.00	
	Range		4.00	
	Interquartile Range		2.00	
	Skewness		.661	.309
	Kurtosis		.132	.608

Figure 4. Descriptive statistics of risk

Table 7
Results of risk aspect

Interval	Meaning	Conclusion
2 – 3	Highly possible	The table shows that the value of $\mu$ is in
4 - 5	Possible	the range between 2.8841 and 3.3826. This indicates <b>greater possibilities of fraud</b>
6 - 7	Almost impossible	and violations at $\alpha$ <0.05.

## Aspect of Compliance

## Descriptives

			Statistic	Std. Error
Compliance	Mean		4.5167	.19671
	95% Confidence Interval	Lower Bound	4.1230	
	for Mean	Upper Bound	4.9103	
	5% Trimmed Mean		4.5000	
	Median		5.0000	
	Variance		2.322	
	Std. Deviation		1.52373	
N F Ir	Minimum		2.00	
	Maximum		8.00	
	Range		6.00	
	Interquartile Range		2.75	
	Skewness		.012	.309
	Kurtosis		665	.608

Figure 5. Descriptive statistics of compliance

Table 8 Results of compliance aspect

Interval	Meaning	Conclusion
1 – 3	Highly possible	The table shows that the value of $\mu$ is in the range
4 - 6	Possible	between 4.1230 and 4.9103. This figure indicates that
7 - 9	Almost impossible	there are possibilities of fraud and violations shown by significant $\alpha$ <0.05.

## **Analysis of Surveillance Types**

Type of Surveillance

#### Group Statistics

	TypeSurveilance	N	Mean	Std. Deviation	Std. Error Mean
Surveilance	NationalSurveilance	30	11.3667	1.62912	.29743
	IndependentSurveilance	30	13.4333	2.12835	.38858

	Independent Samples Test									
Levene's Test for Equality of Variances					t-test for Equality of Means					
							Mean	Std. Error	95% Confidenc Differ	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
Surveilance	Equal variances assumed	1.404	.241	-4.223	58	.000	-2.06667	.48935	-3.04621	-1.08713
	Equal variances not assumed			-4.223	54.298	.000	-2.06667	.48935	-3.04763	-1.08570

Figure 6. Differences analysis of compliance

Using the Levene test for homogeneity of variances, the analysis results in F=1.404 with significance for 0.241 shows the non-significant value would be at  $\alpha$ >0.05. Therefore, national surveillance possesses a homogeneous variance towards independent surveillance. However, T-test shows the figure 4.223 with a significant value for

0.0000, which is very significant at  $\alpha < 0.01$ . Hence, there is still a difference in terms of fraud probabilities. Based on this figure, there are probabilities of transactional fraud in independent surveillance area (private companies) and highly possible in the area of national surveillance (public officers).

Aspect of Compliance based on Surveillance

#### **Group Statistics**

	TypeSurveilance	N	Mean	Std. Deviation	Std. Error Mean
Compliance	NationalSurveilance	30	5.3667	1.21721	.22223
	IndependentSurveilance	30	3.6667	1.32179	.24132

#### Independent Samples Te

		Levene's Test Varia		t-test for Equality of Means						
							Mean	Std. Error	95% Confidenc Differ	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
Compliance	Equal variances assumed	.835	.365	5.182	58	.000	1.70000	.32806	1.04331	2.35669
	Equal variances not assumed			5.182	57.610	.000	1.70000	.32806	1.04322	2.35678

Figure 7. Differences analysis of compliance

Using the Levene test, the analysis results in F=0.835 with significance for 0.365 shows the non-significant value would be at  $\alpha$ >0.05. Therefore, national surveillance possesses a homogeneous variance towards independent surveillance in terms of compliance. However, T-test shows the figure 5.182 with a significant

value for 0.0000, which is very significant at <0.01. Hence, there is still a difference in terms of compliance as the assessment component for both surveillance types. Based on this figure, there are probabilities of transactional fraud in the aspect of private companies' compliance and

highly possible in the government.

## Aspect of Risk based on Surveillance

#### **Group Statistics**

	TypeSurveilance	N	Mean	Std. Deviation	Std. Error Mean
Risk	NationalSurveilance	30	2.8000	.76112	.13896
	IndependentSurveilance	30	3.4667	1.04166	.19018

	Independent Samples Test									
Levene's Test for Equality of  Variances I-test for Equality of Means										
							Mean	Std. Error	95% Confidenc Differ	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
Risk	Equal variances assumed	3.142	.082	-2.830	58	.006	66667	.23554	-1.13815	19518
	Equal variances not			-2.830	53.097	.007	66667	.23554	-1.13908	19425

Figure 8. Analysis of risk

## Aspect of Risk based on Surveillance

Using the Levene test, the analysis results in F=3.142 with significance for 0.082 show the non-significant value would be at  $\alpha$ >0.05. Therefore, national surveillance possesses a homogeneous variance towards independent surveillance in terms of risk. However, T-test shows the figure 2.830 with

a significant value for 0.006, which is very significant at <0.05. Hence, there is still a difference in terms of risk as the assessment component for both surveillance types. In this area, it is highly possible for private companies to commit transactional fraud; moreover, the government is statistically more vulnerable to commit fraud.

Aspect of Governance based on Surveillance

Group Statistics

	TypeSurveilance	Ν	Mean	Std. Deviation	Std. Error Mean
Governand	e NationalSurveilance	30	3.2000	.76112	.13896
	IndependentSurveilance	30	6.3000	1.57896	.28828

	independent Samples Test									
		Levene's Test Varia	for Equality of inces	t-test for Equality of Means						
							Mean	Std. Error	95% Confidence Differ	
		F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower	Upper
Governance	Equal variances assumed	13.945	.000	-9.687	58	.000	-3.10000	.32002	-3.74059	-2.45941
	Equal variances not			-9.687	41.787	.000	-3.10000	.32002	-3.74593	-2.45407

Figure 9. Analysis of governance

Using the Levene test, F=13.945 with significance for 0.000 shows the non-significant value would be at  $\alpha$ <0.01. Therefore, national surveillance possesses a homogeneous variance towards independent surveillance in terms of risk. However, the T-test shows the figure 9.687 with a significant value for 0.000, which is very

significant at  $\alpha$  <0.01. Hence, there is still a difference in terms of risk as the assessment component for both surveillance types. Based on this figure, there are probabilities of transactional fraud in the aspect of private companies' governance and highly probable in government.

## **Findings**

Table 9
Overall surveillance trends based on GRC aspects

	Scale of Transactional Fraud Probability							
Sources	Highly Possible	Moderately Possible	Unsymptomatically Possible					
National and Independent Surveillances	-	V	-					
Compliance	-	V	_					
Risk	V	-	-					
Governance	-	V	-					

Table 10 Surveillance trends for each surveillance type

	Scale of Transactional Fraud Probability						
Sources	Highly Possible	Moderately Possible	Unsymptomatically Possible				
National Surveillance	-	V	-				
Independent Surveillance	-	V	-				

Table 11 Trends of national and independent surveillances based on each component

			I/S	
		С	R	G
	С	2/1		
N/S	R		<1/1	
	G			2/1

Below are the explanations related to the figures in this table:

2/1: In the aspect of compliance and governance, there is a moderate probability for transactional fraud to occur in national surveillance (government). However, it is highly probable in the area of independent

surveillance (private company).

<1/1: In the aspect of risk, there is a high probability for private companies to commit transactional fraud; moreover, the government has a higher probability in committing transactional fraud as a policy maker.

#### CONCLUSION

This research attempted to build a transactional accountability watch (TAW) as a detection tool to assist fraud investigators to eradicate corrupt practices in publicprivate-partnership (PPP) agreements in Indonesia. In summary, the results confirmed TAW assessment model is fit to determine the probability of transactional fraud in the context of PPP agreements. The research found (1) overall trends for three aspects of GRC components towards the overall surveillances are proven to be significantly in the same trends; and (2) the homogeneity tests done in four areas of analysis proved that national surveillance (government) statistically possessed a higher probability to commit transactional fraud. To conclude, the TAW assessment model is shown to be relevant for measuring probabilities of transactional fraud in PPP agreements.

## REFERENCES

- Adewale, O. H. (2014). Internal control system: A managerial tool for proper accountability a case study of Nigeria customs. *European Scientific Journal*, 10(13), 252-267.
- Akbar, Y. H., & Vujić, V. (2014). Explaining corruption. *Cross Cultural Management*. 21, 191-218.
- Alexander, R. (2005). The role of whistleblower in the fight against economic crime. *Journal of Financial Crime*, *12*(2), 131-138.
- Badara, M., & Saidin, S. (2013). Impact of the effective internal control system on the internal audit effectiveness at local government level. *Journal of Social and Development Sciences*, 4(1), 16-23. https://doi.org/10.5923/j.ijfa.20130202.05.

- Badara, M., & Saidin, S. (2013). Impact of the effective internal control system on the internal audit effectiveness at local government level. *Journal of Social and Development Sciences*, 4(1), 16-23. https://doi.org/10.5923/j.ijfa.20130202.05.
- Bastin, G., & Townsend, P. (1996). Whistleblowers A legitimate role in corporate life? *Journal of Financial Crime*, 4(2), 179-182. https://doi.org/10.1108/eb025774.
- Beasley, M. S., Carcello, J. V., & Hermanson, D. R. (1999). Fraudulent financial reporting: 1987-1997 An analysis of U.S. Public Companies Research. *Dana*, 1-67. Retrieved October 20, 2016, from https://www.coso.org/Documents/FFR-1987-1997-Analysis-of-US-Public-Companies-Executive-Summary.pdf
- Bedard, J. C., & Johnstone, K. M. (2004). Earnings manipulation risk, corporate governance risk, and auditors â€<sup>tm</sup> planning. *The Accounting Review*, 79, 277-304.
- Brennan, N., & Solomon, J. (2008). Title corporate governance, accountability and mechanisms of accountability: An overview. *Accounting, Auditing and Accountability Journal*, 21(7), 885-906.
- Coffee, J. C. (2001). The acquiescent gatekeeper: Reputational intermediaries, auditor independence the governance of accounting. *The* Center for Law and Economic Studies, 191, 1-60.
- Dastidar, K. G., & Mukherjee, D. (2014). Corruption in delegated public procurement auctions. European Journal of Political Economy, 35, 122-127.
- Dorminey, J., Scott Fleming, A., Kranacher, M. J., & Riley, R. A. (2012). The evolution of fraud theory. *Issues in Accounting Education*, *27*(2), 555-579. https://doi.org/10.2308/iace-50131.
- Financial Accounting Standard Boards. ASC 605 Revenue from Contracts with Customers (Topic 606) (2014).

- Gilbert, L. D., & Allen, F. (2014). Democracy and good governance: The missing link in Nigeria. *Mediterranean Journal of Social Sciences*, *5*(16), 524-531. https://doi.org/10.5901/mjss.2014. v5n16p524.
- Groenendijk, N. (1997). A principal-agent model of corruption. *Crime, Law and Social Change*, 27, 207-229. https://doi.org/Doi 10.1023/A:1008267601329.
- Hansen, M. P., & Trego, G. (2015). SEC "claws back" bonuses and stock sale profits from CFOs of public company charged with accounting fraud. *Journal of Investment Compliance*, 16(2), 38-40. https://doi.org/10.1108/JOIC-04-2015-0020.
- Hayne, C., & Free, C. (2014). Hybridized professional groups and institutional work: COSO and the rise of enterprise risk management. *Accounting, Organizations and Society*, 39(5), 309-330. https://doi.org/10.1016/j.aos.2014.05.002.
- Jain, P. K., & Rezaee, Z. (2006). The Sarbanes-Oxley Act of 2002 and security market behavior: Early evidence. *Contemporary Accounting Research*, 23(3), 629-654
- Jayaraman, S., & Milbourn, T. (2012). The effect of auditor expertise on executive compensation. Social Science Research Network, (January), 1-52.
- Kaswell, S. J., & Johnson, M. C. (2013). Regulatory reform redux: Corporate governance and the New York stock exchange. *Journal of Investment Compliance*, 4(4), 62-72. https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216.
- Kaufmann, D., & Vicente, P. C. (2011). Legal corruption. *Economics and Politics*, 23(2), 195-219. https://doi.org/10.1111/j.1468-0343.2010.00377.x.
- Kiel, G. C. (2005). Evaluating boards and directors. Corporate Governance: An International Review, 13, 613-631.

- Kolk, A. (2008). Sustainability, accountability and corporate governance: Exploring multinationals' reporting practices. *Business strategy and the environment*, 17(1), 1-15.
- Lookman, S., & Nurcan, S. (2015). A framework for occupational fraud detection by social network analysis. CEUR Workshop Proceedings, 1367, 221-228.
- Magdalena, R., & Dananjaya, Y. (2015). Effect of related parties' transactions to the value of enterprises listed on Indonesian stock exchange. *European Journal of Business and Management*, 7(6), 47-57.
- Moeller, R. (2007). COSO enterprise risk management. *Rechnungswesen Controlling*, 367. https://doi.org/10.1002/9781118269145.
- Nkama, N., & Onoh, J. O. (2016). Forensic accounting and board performance in the Nigerian banking industry. *Journal of Accounting and Financial Management*, 2(2), 29-43.
- Nurlis. (2016). The effect of mechanism of good corporate governance and investment opportunity set on the earning management: Study on property and real estate companies are listed in Indonesia stock exchange. *European Journal of Business and Management*, 8(2), 173-182.
- Olken, B. A., & Pande, R. (2012). Corruption in developing countries. *Annual Review of Economics*, 4(1), 479-509. https://doi.org/10.1146/annurev-economics-080511-110917.
- Papazafeiropoulou, A., & Spanaki, K. (2016). Understanding governance, risk and compliance information systems (GRC IS): The experts view. *Information Systems Frontiers*, 18(6), 1251-1263.
- Perols, J. L., & Lougee, B. A. (2011). The relation between earnings management and financial statement fraud. *Advances in Accounting*, 27(1), 39-53. https://doi.org/10.1016/j. adiac.2010.10.004.

- Popoola, O. M. J., Ahmad, A. C., & Samsudin, R. S. (2014). Forensic accounting auditors and fraud: Capability and competence requirements in Malaysia. *Journal of Modern Accounting & Auditing*, 10(8), 825-834.
- Prawitt, D. F., Smith, J. L., & Wood, D. A. (2009). Internal audit quality and earnings management. *The Accounting Review*, 84(4), 1255-1280.
- Rendon, J. M., & Rendon, R. G. (2016). Procurement fraud in the US department of defense. *Managerial Auditing Journal*, 31(6/7), 748-767. https://doi.org/10.1108/MAJ-11-2015-1267.
- Repousis, S. (2013). Using beneish model to detect corporate financial statement fraud in Greece. *Journal of Financial Crime*, 31(6/7), 748-767. https://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216.
- Robertson-Snape, F. (1999). Corruption, collusion and nepotism in Indonesia. *Third World Quarterly*, 20(3), 589-602. https://doi.org/10.1080/01436599913703.
- Rusmin, R., Scully, G., & Tower, G. (2013). Income smoothing behaviour by Asian transportation firms. *Managerial Auditing Journal*, 28(1), 23-44. https://doi.org/10.1108/02686901311282489.
- Sanderson, I. a N., Policy, D., Book, M., Evans, M., Azwan, K., Kamal, M., & Hezri, A. a. (2014). What is the policy problem? Methodological challenges in policy evaluation. *Evaluation*, *30*(4), 1-22. https://doi.org/10.1177/0095399713513140.
- Schaff, J. E., & Schaff, M. L. (2016). "Best interest" of whom? *Journal of Investment Compliance*, 17(1), 83-100. https://doi.org/10.1108/JOIC-08-2015-0051.
- Shanikat, M., Al-Farh, A., & Dorgham, T. H. (2014).
  Occupational fraud prevention mechanisms:
  Jordanian companies experience. Research
  Journal of Finance and Accounting, 5(1), 84-92.

- Thompson, D. F. (1980). Moral responsibility of public officials: The problem of many hands. *American Political Science Review*, 74(4), 905-916. https://doi.org/10.2307/1954312. org/10.1108/02686901311282489.
- Triady, M. S., Kurniasari, R., Utami, A. F., & Sofyan, M. I. (2016). Investigation of leverage effect in Indonesian stock market. *International Journal* of *Economics and Management*, 10, 1-17.
- Tsay, B.-Y. (2010). Designing an internal control assessment program using COSO's guidance on monitoring. *CPA Journal*, *May*, 52-57.
- Widhoyoko, S. A., Ariyanto, S., Indrianti, Y., Muqsith, A. M., & Alamsyah, M. (2017). Corruption Early Prevention: Decision Support System for President of the Republic of Indonesia. *International Conference on Computing and Applied Informatics*, 801, 1-8. https://doi. org/10.1088/1742-6596/755/1/011001.
- Yang, C., & Tan, B. L. (2012). Corporate governance and income smoothing in China. *Journal of Financial Reporting an Accounting*, 10(2), 120-139. https:// doi.org/10.1108/19852511211273688.

