Kamaliah Kamaliah, Noor-Syazana Marjuni, Norhayati Mohamed, Zuraidah Mohd-Sanusi, Rita Anugerah (2018). Effectiveness of monitoring mechanisms and mitigation of fraud incidents in the public sector. *Administratie si Management Public,* (30), pp. 82-95. DOI: 10.24818/amp/2018.30-06

Effectiveness of monitoring mechanisms and mitigation of fraud incidents in the public sector

Kamaliah KAMALIAH[1], Noor-Syazana MARJUNI[2], Norhayati MOHAMED[3], Zuraidah MOHD-SANUSI[4], RitaANUGERAH[5]

Abstract: *Fraud in the public sector continues to be the major issue for the governments worldwide. Thus, this study examines the extent of monitoring mechanisms within public systems curbing fraud incidents. The authors' survey concerned three dimensions of monitoring mechanisms: good governance, internal control procedures and fraud prevention programs. This survey has been conducted among various Malaysian government officers. The results show that, generally, misappropriation of assets is ranked as the most frequent fraudulent case in government agencies. Based on regression analysis, internal procedures or policies were significant in reducing fraud incidents. Additionally, both good governance and fraud prevention programs were proven to have a significant relationship with the occurrences of fraud within government agencies. In terms of the practical aspect, the study provides important information for public servants on the effectiveness and usefulness of good governance, internal control procedures, and fraud prevention program in the public sector. This paper provides an interesting contribution to the understanding of fraud incidents inside government agencies.*

Keywords: *fraud incidents; good governance; internal control procedures; fraud prevention programs; monitoring mechanisms.*

JEL: M4, M40, M42, M49
DOI: 10.24818/amp/2018.30-06

[1]Faculty of Economics; Universitas Riau; Indonesia; kamaliah@lecturer.unri.ac.id
[2]Faculty of Accountancy; UniversitiTeknologi MARA; Malaysia; syazana.n@gmail.com
[3]Faculty of Accountancy; UniversitiTeknologi MARA; Malaysia; norha614@gmail.com
[4]Accounting Research Institute & Faculty of Accountancy; UniversitiTeknologi MARA; Malaysia; zuraidahms@salam.uitm.edu.my
[5]Faculty of Economics; Universitas Riau; Indonesia; ritaanugerah@gmail.com

Introduction

Occurrence of fraud in the public sector is not a new scenario, and for surely will continue to affect governments into the future. As any other nation, Malaysia experiences unethical practices, financial fraud, and scandals in the public sector. Such cases were said to be one of the primary causes of the 1997 Asian financial crisis (Haron, 2010). The scandal cases of the National Youth Skills Institute, Royal Malaysian Customs, Federal Territory Islamic Affairs Department, and Port Klang Free Zone (PKFZ) are some of the suspected occurrences of public sector fraud of greater magnitude. Considering that citizens pay taxes in exchange for services rendered by the government, constituents may lose faith in the ability of government leadership if fraud occurs this often.

Numerous studies have examined the occurrences of fraud, many of which have addressed, the effectiveness of monitoring mechanisms such as good governance, sound internal control procedures, and fraud prevention programs. These factors were regarded as the most influential factors in mitigating fraud incidences. However, they have mainly focused on the private sector. Although statistics indicate that the public sector is trailing the private sector in the number of fraud instances detected by internal audit or risk management (PwC, 2011), less attention has been paid to this problem. Therefore, minimal research results could be used to fully understand how these factors contribute to fraud incidences within government agencies. In addition, the private sector incentives to reduce or prevent fraud do not universally apply to the public sector. The private sector works in this regard using the upstream method; the public sector is more downstream and would address fraudulent behavior only once it occurs.

The objectives of this particular study are as follows: (a) to identify the types of fraud that occurred within Malaysian government; (b) to identify the relationship between good governance and fraud incidents; (c) to investigate the relationship between internal control procedures in terms of practices and policies towards fraud incidents; and (d) to examine the effectiveness of fraud prevention programs. The study contributes to our understanding of preventing fraud incidences in the public sector, specifically in Malaysia. It highlights the monitoring mechanisms that may enable governments to assess the problems encountered and make amendments where necessary, by providing new information in relation to good governance and strong internal control systems.

1. Literature Review and Hypotheses Development

1.1 Fraud incidents

Fraud is defined as “deliberate deception, trickery or cheating in order to gain an advantage; an act or instance of such deception” or “an intentional act by one or more individuals among management, employees, or third parties, which results in a misrepresentation of financial statements” (Malaysian Approved Standards on Auditing 2001, AI No. 240). Fraud is a serious problem; its occurrence not only causes direct financial losses, but also jeopardizes a nation’s reputation, international linkages, and relationships with external stakeholders. Considering the lack of a performance indicator of profit in the public sector, much of the focus has been on the cost of the delivery of goods and services, as well as the value for money that it represents (Doig, 2007).

The true extent of fraud is unknown, but reports indicated the ever-increasing trend in the number and size of incidents (ACFE Report, 2012). Based on statistics reported by the Malaysian Anti-Corruption Commission in 2011, 35% of fraudsters arrested emerged from the public sector. The findings further indicated an increase of 5% compared to the fraud incidents that occurred in 2010. Recent statistics from the Global Economic Crime Survey 2011 by PricewaterhouseCoopers finds that economic crime in Malaysia continues to increase. The report highlights that 44% of Malaysian organizations reported being victims of economic crime in the last 12 months, a 57% increase from the 28% reported in the fifth installment of the survey in 2009. In Malaysia, theft or asset misappropriation (83%) was the most common type of economic crime reported, followed by bribery and corruption (34%) and accounting fraud (27%).

In addition to the identified factors in fraud theory, poor internal control (KPMG, 2009) and weaknesses in corporate governance practices (Beasley, 1996; ACFE, 2008) were also claimed as factors that could contribute to fraud incidents. Therefore, limiting an individual's opportunity to commit fraud is where fraud prevention measures, such as good governance, anti-fraud programs, and internal controls, are vital.

Economic crime in Malaysia has continued to increase (PwC, 2011). Therefore, the Government of Malaysia has undertaken certain initiatives to fight fraud, such as improving financial management, accountability and efficiency, performance management, introducing e-government, and drafting a plan to fraud, waste and abuse. As discussed by Salleh, Rani, Abdul Razak and Baharim (2010), the most typical incidences of fraud in the Malaysian public sector are bribery, false statements and false claims, embezzlement, conflicts of interest, phantom contractors, collusive bidding, progress payment fraud, over or under invoicing, extortion, nepotism and favoritism, loss of revenues on account of tax or duty evasion, unfair recruitment, and computer fraud.

1.2 Good governance

Good governance has emerged as a high profile issue and is of critical interest for managers, regulators of various countries, investors and academicians (Parker, Peters, and Turetsky, 2002). All corporate governance parties have an interest, whether direct or indirect, in the effective performance of the organization. The Sarbanes-Oxley Act contains mechanisms that were designed to reduce the occurrence of fraud by strengthening potential sanctions via increased sentencing guidelines and improving corporate governance. Therefore, the effort to promote good governance must be broader not only in the private sector, but in the public sector as well.

Ramaswamy (2005) states that poor governance and accounting failure may explain the emergence of fraud cases. This is because weak governance will encourage certain individuals or a group of people with the same interests to commit fraudulent activities in the company (Clarke, 2004). As such, people have started to acknowledge the importance of governance not only in the private sector, but also in the public sector (George, 2005). Ramaswamy (2005) also states that one of the reasons for problems within the corporate reporting system is lack of a well-implemented policy for corporate governance.

Good governance is an essential part of the framework for economic and financial management, which also includes macroeconomic stability, commitment to social and economic equity, and the promotion of efficient institutions by structural reforms such as trade liberalization and domestic deregulation. Shaikh and Talha (2003) stated that management at all levels should ensure that effective internal control systems are in place and operational to minimize potential fraud and corruption. According to Cain (1999), anti-fraud policies and procedures assist in demonstrating the effectiveness of corporate governance within an organization.

Prior studies on the effectiveness of governance are highly focused on the private sector (CheHaat, Abdul Rahman and Mahenthiran, 2008; Law, 2011). Good governance is crucial to reduce the likelihood of fraud occurrence and accomplish better performance in terms of public delivery systems. Therefore, by implementing good public governance in public organization, fraud incidents are expected to decrease (Popescu Ljungholm, 2017a). Thus, this study proposes the following hypothesis:

H1. A significant relationship between good governance and fraud incidents exists in the Malaysian public sector.

1.3 Internal control

Internal control is a major part of managing an organization. Internal control, as a process effected by an board of directors, management and other personnel, is designed to provide reasonable assurance in the achievement of objectives for effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations (COSO, 1992). It comprises the plans, goals, objectives, methods and procedures used to meet missions. Internal control also serves as the first line of defense in safeguarding assets, as well as preventing and detecting errors and fraud. In short, internal control, which is synonymous with management control, helps government program managers achieve desired results by effective stewardship of public resources.

In the literature, effective internal controls have been suggested to ensure business process integrity, continuity and adequate security governance (Whitman 2003; Warkentin and Johnston 2006). Lack of effective controls can lead to various issues, including security breaches, subversion of employees and fraudulent activities. The definition of internal control has evolved as different internal control models have been developed. Internal control is defined by Cahill (2006) as the system of internal administrative and financial checks and balances designed by management and supported by corrective actions to ensure that the goals and responsibilities of the organization are achieved.

Research has shown that an effective internal control can provide advance notice of fraud risk, thereby helping to detect and prevent fraud (Gramling and Myers, 2003). In previous literature, lack of effective controls can lead to various issues, including security breaches, subversion of employees and fraudulent activities (Warkentin and Johnston, 2006). In view of the demonstrated significance of internal control procedures, the following hypothesis is proposed:

H2. A significant relationship exists between internal control procedures and fraud incidents in terms of practices and policies.

1.4 Fraud prevention programs

Strong emphasis should be placed on fraud prevention, which may reduce opportunities for fraud, and fraud deterrence, which could persuade individuals to not commit fraud because of the likelihood of detection and punishment. Moreover, prevention and deterrence measures are much less costly than the time and expense required for fraud detection and investigation (ACFE, 2012). According to Adams, Campbell, Campbell, and Rose (2006) the most effective way to avoid or mitigate fraud, as well as to address financial losses from fraud, is by developing a fraud prevention program.

Fraud prevention is a defined program of proactive measures to avoid or mitigate fraud, such as anti-fraud policy. An anti-fraud policy, also known as the fraud policy statement, outlines an organization's attitude towards and position on fraud, and sets out the responsibilities for its prevention and detection. It also communicates important messages of deterrence to staff and third parties that fraudulent conduct will not be tolerated by the organization and that the fight against fraud is endorsed and supported at the most senior level (Fraud Advisory Panel, 2010).

The efforts to enhance integrity holistically in Malaysia began on April 2004 with the introduction of the National Integrity Plan and the establishment of the Malaysian Institute of Integrity. The aim of such a plan is to establish a fully moral and ethical society whose citizens possess strong religious and spiritual values and are imbued with the highest ethical standards (De Gregorio Hurtado, 2017). The National Integrity Plan was accepted by the Government and by various sectors of society as a plan of action to enhance ethics and integrity. As part of this plan, the government has outlined key strategic objectives to be achieved within the next five years. Among the objectives is to reduce corruption, mismanagement, and abuse of power, and consequently improve efficiency in the public delivery system (Ismail, Ngah, Abdullah, Zin, Ibrahim, Tajuddin, Jusoff and Salleh, 2011).

An anti-fraud policy, such as whistle-blowing policy, ethics policy, and fraud prevention programs, is an important document in every organization (Hite, Bellizzi and Cynthia, 1988). Previous studies indicate that fraud prevention program is effective in detecting and preventing fraud in organizations (Adams et. al 2006, Carpenter and Mahoney, 2001; Coderre, 1999; Albrecht and Albrecht, 2002). However, most of the studies were heavily focused on private organizations. Although research on the correlation between fraud prevention program and fraud occurrence is lacking in the context of public sector, the following hypothesis is put forward (Ionescu, 2017):

H3. A significant relationship exists between fraud prevention program and fraud incidents in the Malaysian public sector.

2. Methodology

2.1 Sample and data collection

The sample for the study was drawn from departments in all levels of the government, comprises of 233 various government agencies from ministries, departments, and public enterprises such as statutory bodies.The questionnaire was randomly distributed only to respondents that would yield the information that would meet the purpose of the study. From the 233 samples selected, only 91 responses were received. The majority of the respondents were from the federal government (53%), followed by local authorities (21%) and finally the combination of state government and the statutory bodies (26%).The response rate was 39 percent. Sekaran (2007) stated that a sample size that was larger than 30 and less than 500 was appropriate for most research. Therefore, the size was considered acceptable for this study.

The method chosen to collect data was a twelve-page questionnaire to be electronically (email) distributed to the internal auditor, accountant, and the disciplinary board. Each questionnaire was accompanied by a cover letter, which stated a brief explanation on the purpose of the study, request for cooperation, guarantee of confidentiality and anonymity, the benefits of participation, and the questionnaire instructions. The questionnaires were written in two languages, English and Bahasa Malaysia. Also attached to the booklet was a set of self-addressed, stamped envelopes.

A pilot study was carried out by the accountant and internal auditor of three state education departments to ensure the reliability and the validity of the elements used. In addition, the pilot study was also conducted to foresee the obstacles and make corrections in the data collection method.

2.2 Variable and Measurement

This study outlined one dependent and three independent variables to be measured. The study focused on fraud incidents as the dependent variable. It was measured based on the respondents' feedback, gathered in section five of the questionnaire, regarding the number of fraud incidents that occurred in the last three years.

The three independent variables, which refer to the monitoring mechanisms that influence fraud incidents in the public sector, were determined as: (1) good governance; (2) internal control procedures and policies; and (3) fraud prevention programs. The elements covered under good governance were leadership, stakeholder relationship, accountability, planning, and evaluation. Good governance consists of 11 questions that cover both elements of conformance and performance required (Smith et al., 2005; Abdolmohammadi, Read and Asare, 2010).

Meanwhile, according to Hurley and Boyd (2007) and Smith et al. (2005), internal control procedures were divided into two elements, namely, policies and practices. Internal control procedures comprise 13 questions concerning these two aspects. Finally, the fraud prevention program, which is known as the Organizational Integrity Plan (OIP), assesses the effectiveness and the awareness of its establishment. The fraud prevention program is represented by the OIP. This variable consists of 10 questions that cover the implementation, awareness, and the effectiveness of such a program. Each variable was evaluated based on a seven-point Likert scale (1- strongly disagree and 7-strongly agree) (Turpen and Messina, 1997; Bierstaker et al., 2006).

3. Empirical Results and Discussion

3.1 Descriptive analysis

Descriptive statistics indicated that the majority of respondents were of the federal government (52.75%) followed by state government and other statutory bodies (26.37%) and finally, the local authority (20.88%). Most of these respondents have an average working tenure (between 1 to 10 years) with their current organizations (a total of 60.4%). The largest representation of respondents (40.7%) worked in medium size organizations (having between 401 – 600 employees).

3.2 Goodness of data

This study utilizes several statistical analyses to check the validity and reliability of the measures and to test the proposed hypotheses. The study performed factor analysis to examine the validation of the questionable items that belong to specific variables. Then, a reliability test was performed to measure the reliability of each of the constructs identified from the factor analysis(Friedman and Gerstein, 2017).

Exploratory factor analysis, using varimax rotations, was performed to understand the structure of correlations of each variable. The Kaiser-Meyer-Olkin coefficient for these data sets is 0.862 for good governance, 0.717 for internal control, 0.936 for fraud prevention, and 0.859 for fraud incidents, indicating that the data could be used to proceed with the exploratory factor analysis (Hair et al., 2010). In addition, the Bartlett test of Sphericity for good governance (Chi-Square = 678.20, d.f. = 55, $p < 0.01$), internal control (Chi-Square = 500.01, d.f. = 78, p <

0.01), fraud prevention (Chi-Square = 1427.90, d.f. = 45, $p < 0.01$) and fraud incidents (Chi-Square = 977.44, d.f. = 66, $p < 0.01$) are statistically significant.

The result of the Cronbach's alpha reliability coefficient for good governance is 0.906 and the standardized item alpha is 0.913. The Cronbach's alpha reliability coefficient for practices and policies are 0.784 and 0.787, respectively. On the other hand, the fraud prevention program, which is the OIP, had a Cronbach's alpha reliability coefficient of 0.980 and a standardized item alpha of 0.980 as well. This indicates that the internal consistency for reliability for all items is excellent and reliable.

3.3 Fraud cases according to government agencies

Table 1 presents the percentages of fraud cases based on the different numbers of government agencies.

Table 1. Percentages of fraud cases based on the type of government agencies

Fraud cases	Federal (%)	Local (%)	Others (%)
Bribery/kickbacks	24.18	10.99	12.09
Theft	36.26	14.29	17.58
Misappropriation of assets	37.36	16.48	17.58
Procurement fraud	35.16	14.29	15.38
Payroll fraud	14.29	4.40	8.79
Financial statement fraud	7.69	0.00	2.20

First, in federal government agencies, the highest percentage of fraud cases are indicated by misappropriation of assets (37.36%), followed by theft (36.26%), procurement fraud (35.16%), bribes (24.18%), and payroll fraud (14.29%). Meanwhile, financial statement fraud shows the least percentage of fraud cases (7.69%). Next, in local government agencies, the highest percentage of fraud case is the misappropriation of assets as well (16.48%). Theft and fraud in procurement comprise the same percentage at 14.29%. The percentage of cases of bribery and payroll fraud are 10.99% and 4.40%, respectively. However, from the questionnaire, no financial statement fraud is indicated in the local government agencies. Therefore, misappropriation of assets was ranked as the highest percentage of fraud cases in each type of government agency, whereas financial statement fraud was identified as having the lowest percentage.

3.4 Hypotheses testing

3.4.1 Correlation analysis

Table 2 describes the analysis of Pearson correlation between variables. The results showed that the correlation values among the variables ranged between 0.028 and 0.677. This finding indicated no multi-collinearity problem among the variables because none of the correlation was more than 0.7.

Table 2. Pearson correlation matrix among variables

	Fraud incidents	Good governance	Internal control practices	Internal control procedures policies	Organizational Integrity Plan
Fraud incidents	1				
Good governance	-0.298**	1			
Internal control practices	-0.028	0.574**	1		
Internal control policies	-0.521**	0.183	0.010	1	
Organizational Integrity Plan	-0.565**	0.213*	0.059	0.677**	1

Notes:1) ** Correlation is significant at the 0.01 level * Correlation is significant at the 0.05 level

3.4.2 Regression analysis

Table 3 presents the result of regression analysis for the independent variables, comprising good governance, internal control policies and practices, and fraud prevention program on the dependent variable, fraud incidents in the Malaysian government.

The significant inverse relationship between good governance and the perception of fraud incidents in Malaysian government with the p-value of 0.013 explained that an increase in good governance is related to the decrease in the level of fraud incidents. This shows that the implementation of good governance in the public sector may help in preventing and deterring fraud. Therefore, H1 is supported, and good governance is associated with fraud incident reduction.

On the other hand, an internal control procedure in terms of practice is not significant with fraud incidents (p-value = 0.167). This indicates that the internal control procedure does not influence the level of fraud incidents. The insignificant result may point out the possibility that management overrides internal controls or collusion between employees and third-party practice. For instance, even though good practice of internal control occurs, the likelihood of fraud occurrence persists if insider and outsider parties are involved, such as top management and politicians. However, in terms of policies (p-value = 0.041), the result of internal control procedure is inversely significant with fraud incidents. This indicates that a good internal control policy is more likely to reduce the incidence of fraud in the organization. Therefore, this result only supported H2b but not H2a.

Meanwhile, a significant inverse relationship exists between fraud prevention program and fraud incidents with a p-value of 0.008. In this study, the fraud prevention program is drawn by the OIP. The result indicates that an increase in fraud prevention programs could lead to a decrease in fraud incidents. It also demonstrates that the fraud prevention program is effective in curbing the fraud problem. Thus, it supports the last hypothesis, H3.

Table 3. Regression analysis

Variables	Standardized Coefficients	Std. Error	p-value
Constant		0.503	0.000**
Good governance	-0.263	0.164	0.013**
Internal control practices	0.147	0.179	0.167
Internal control policies	-0.228	0.134	0.041**
Organizational Integrity Plan	-0.363	0.102	0.008**

R^2 = 39.8%; Dependent Variable: Fraud Incidents; ** Significant at the 0.01 level; * Significant at the 0.05 level

For the overall model, the regression was statistically significant at 5% (F = 14.049, p = 0.000). The multiple R (R= 0.631) showed a high substantial correlation between predictor variables and the dependent variables, thus indicating that linear regression predicted high respectable results. The R^2 value indicated that approximately 39.8 percent of the variance in the level of fraud incidents was explained by the four predictor variables.

4. Conclusions

The study of fraud is relatively new in Malaysia especially in the public sector context. The purpose of this study is to determine the fraud issues faced by the Malaysian public sector, and to provide insights on the factors that would influence the level of fraud incidents. Much prior research pertaining to fraud detection and prevention emphasizes the audit procedures (Moyes and Hasan, 1996; Moyes and Lavine, 1997) and addressing ‘red flags’. This study found that misappropriation of assets tops the list of the most common types of fraud. The findings are consistent with the survey reported to the Nation on Occupational Fraud and Abuse by the ACFE (2012) and in the study conducted by Turpen and Messina (1997).

Results show that good governance had a significant effect on the level of fraud incidents. Good governance may help reduce the likelihood of fraud occurrence. This result is consistent with the study done by Ramaswamy (2005) and Abdolmohammadi et al. (2010), which found that good corporate governance is associated with fraud reduction. Although these studies were conducted on private organizations, the results may apply to the public sector as well, because the government is implementing the same code of governance. This is supported by the study of Riahi-Belkaoui (2000). For instance, Enron had effective internal controls and mostly correct financial reporting, but management overrode internal controls to create periodic and selective financial statement falsifications (Hurley and Boyd, 2007). As such, management may override internal controls in the Malaysian public sector. The study indicates a significant inverse relationship between fraud prevention programs and fraud. An increase in fraud prevention programs could lead to a decrease in fraud incidents. The result is consistent with the study conducted by Adams et al. (2006).

This study can contribute to the academia and practitioners in theoretical and practical aspects. Theoretically, this study can strengthen previous findings on how monitoring mechanisms affect fraud incidents, especially in the public sector organization. This study supports the fact that the framework is relevant, valid, and applicable to the Malaysian public sector. Organizations that apply good governance systems attained improved organizational performance (Popescu Ljungholm, 2017b). Practically, this study can provide important information to public servants on the effectiveness and usefulness of good governance, internal control procedures, and fraud prevention programs in the public sector. The information collected can be used as a point of reference for regulatory bodies and researchers to formulate appropriate guidelines on detecting and preventing fraud in Malaysia.

Although this research has achieved its objectives, certain limitations are to be noted. This study is not strongly grounded because of a lack of prior research. Most of the respondents to the questionnaire were from the federal government, and a low response rate characterized those from the state government as well as those from local government. The lack of response may have resulted from the limited time available to answer the questionnaire because of work commitments and time constraints. Therefore, a generalization of the findings cannot be made for the entire sample. Future studies should examine other factors that may influence the occurrence of fraud, such as the role of the auditor and technology implementation in the government procurement.

References

Abdolmohammadi, M.J., Read, W.J. andAsare, K.N. (2010). Corporate governance factors associated with financial fraud, *Journal of Forensic and Investigative Accounting*, 2(*2*), pp. 1-29.

Adams, G.W., Campbell, D.R., Campbell, M. and Rose, M.P. (2006). Fraud prevention an investment no one can afford to forego. *The CPA Journal*, January, pp. 56.

Albrecht, W.S. and Albrecht, C.C. (2002). Root out financial deception: detect and eliminate fraud or suffer the consequences. *Journal of Accountancy*, pp. 30-34.

Albrecht, W.S., Hill, N.C., and Albrecht, C.C. (2006). The ethics development model applied to declining ethics in accounting, *Australian Accounting Review*, March, 16(*1*), pp. 30-40.

American Institute of Certified Public Accountants (AICPA) (2002). *Consideration of fraud in a financial statement audit*, Retrieved April 25, 2012. Available at: http://www.aicpa.org/download/members/div/auditstd/AU-00316.PDF

Association of Certified Fraud Examiners (2008). *Report to the nation on occupational fraud and abuse* Austin. Texas: ACFE.

Association of Certified Fraud Examiners (2012). *Report to the nation on occupational fraud and abuse* Austin, Texas: ACFE.

Beasley M.S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71, pp. 443-465.

Bierstaker, J., Brody, R. and Pacini, C. (2006). Accountants' perceptions regarding fraud detection and prevention methods. *Managerial Auditing Journal*,21(*5*), pp. 520-535.

Cahill, E. (2006). Audit committee and internal audit effectiveness in a multinational bank subsidiary: a case study. *Journal of Banking Regulation*, 7(½), pp. 160-179.

Cain, S. (1999). Fraud in the workplace.*Orange County Business Journal*, 22(16), pp. 78.

Carpenter, B.W. and Mahoney, D.P. (2001). Analyzing organizational fraud. *Internal Auditor*, April, pp. 33-38.

CheHaat, M.H., Abdul Rahman, R. and Mahenthiran, S. (2008). Corporate governance, transparency and performance of Malaysian companies. *Managerial Auditing Journal*, 23(*8*), pp. 744-778.

Clarke, T. (2004). Cycles of crisis and regulation: the enduring agency and stewardship problems of corporate governance. *An International Review*, 12(*2*), pp. 153-161.

Coderre, D. (1999). Computer-assisted techniques for fraud detection.*The CPA Journal*, pp. 57-63.

Committee of Sponsoring Organizations of the Treadway Commission (COSO). (1992). *Internal control-integrated framework*, New York: AICPA.

De Gregorio Hurtado, S. (2017). A criticalapproachto EU urban policyfromtheviewpoint of gender. *Journal of Research in Gender Studies*, 7(*1*), pp. 200–217.

Doig, A. (2007). Someone else's money: learning from economic crime in the public sector. *The Journal of Asset Protection and Financial Crime*,1(*2*), pp. 147-155.

Fraud Advisory Panel, (2010). Anti-fraud policy statements. *Fraud Facts*. 6, April.

Friedman, H. H., and M. Gerstein (2017). Leading with compassion: The key to changing the organizational culture and achieving success. *Psychosociological Issues in Human Resource Management, 5*(1), pp. 160-175.

George, N. (2005), The role of audit committees in the public sector, *The CPA Journal*, p. 42.

Gramling, A. and Myers, P. (2003). Internal auditors' assessment of fraud warning signs, *The CPA Journal*, 73(*6*), pp. 20-27.

Hair, J.F., Money, A., Page, M. and Samouel, P. (2007). *Research methods for business*. John Wiley & Sons, West Sussex, England

Haron, H. (2010). Strengthening Malaysia's whistle-blowing provisions. *Business Times* Retrieved 30 April 2012, available at: http://www.nib. com.my/archives/text/view/37193663?pos=7&hide_header=1&resultset=nst pec%3Awww/cross-search/search.php%3A_13367890 37%3Aresultset

Hite, R., Bellizzi, J. and Cynthia, F. (1988). A content analysis of ethical policy statements regarding marketing activities. *Journal of Business Ethics*, 7(*10*), pp. 771-787.

Hurley, D.A. and Boyd, D. (2007). Sarbanes-Oxley act section 404: effective internal controls or overriding internal controls? *Forensic Examiner*, 16(*2*), pp. 19-21.

Ionescu, L. (2017). Public perceptions of government corruption: An empirical investigation. *Journal of Self-Governance and Management Economics*, *5*(4), pp. 81-86.

Ismail, R., Ngah, N.E., Abdullah, I.H.T., Zin, S.M., Ibrahim, N., Tajuddin, N.A., Jusoff, K. and Salleh, A. (2011). Knowledge and perception of integrity among Penang civil servants. *World Applied Sciences Journal,*12, pp. 15-20.

KPMG (2009), "KPMG fraud survey 2009 report", KPMG: Kuala Lumpur, Malaysia.

Law, P. (2011), Corporate governance and no fraud occurrence in organizations: Hong Kong evidence, *Managerial Auditing Journal*, 26(*6*), pp. 501-518.

Loebbecke, J.K., Eining, M.M. and Willingham, J.J. (1989). Auditor's experience with material irregularities: frequency, nature, and delectability. *A Journal of Practice & Theory,* pp. 1-28.

Malaysian Approved Standards on Auditing (2001). AI 240 frauds and error, Malaysian Institute of Accountants, Kuala Lumpur.

Moyes, D.G. and Hasan, I. (1996). An empirical analysis of fraud detection likelihood. *Managerial Auditing Journal*, 11(3) pp. 41-46.

Moyes, D.G. and Lavine, M. (1997). Which audit techniques work in detecting fraud? (acquisition and payment audit cycle).*Corporate Controller,* 6th ed., Vol. 10.

National Fraud Indicator, NFA (2011). Annual fraud indicator, National Fraud Authority, available at: http://www.homeoffice.gov.uk/publications/agencies -public-bodies/nfa/annual-fraud-indicator/2011 (assessed 10th May 2012).

Parker, S., Peters, G.F. and Turetsky H.F. (2002). Corporate governance and corporate failure: a survival analysis. *Corporate Governance*, 2(2), pp.4-12.

Popescu Ljungholm, D. (2017a). The social ontology of institutions: A reassessment. *Contemporary Readings in Law and Social Justice*, *9*(1), pp. 132-138.

Popescu Ljungholm, D. (2017b). Global policy mechanisms, intergovernmental power politics, and democratic decision-making modes of transnational public administration. *Geopolitics, History, and International Relations*, *9*(2), pp. 199–205.

PriceWaterhouseCoopers (PWC) (2011). *Global economic crime survey 2011*.available at: www.pwcglobal.com/extweb/ncsurvers.nsf (assessed 10th May 2012).

Ramaswamy, V. (2005). *Corporate governance and the forensic accountant*, Available at: http://www.nysscpa.org/cpajournal/2005/305/essentials/p68.htm (assessed 12th April 2012).

Riahi-Belkauoi A. and Picur R.D. (2000). Understanding fraud in the accounting environment.*Managerial Finance*, 26(11), pp. 33-41.

Salleh, K., Rani, U., Abdul Razak, N. and Baharim, S. (2010). Traits and relevant skills of the forensic accountant: empirical survey of public sector. *Journal of Research and Practice in Public Sector Accounting and Management*, 1(*1*), pp. 1-8.

Sekaran, U. (2007). *Research methods for business*, Wiley-India Edition.

Shaikh, J.M. and Talha, M. (2003). Credibility and expectation gap in reporting on uncertainties. *Managerial Auditing Journal*, 18(6/7), pp. 517-529.

Smith, M., Omar, N.H., Idris, S.I.Z.S. and Baharuddin, I. (2005). Auditors' perception of fraud risk indicators. *Managerial Auditing Journal*, 20(1), pp. 73-85.

Turpen, R.A. and Messina, F.M. (1997). Fraud prevention and the management accountant. *Management Accounting* (February), pp. 34-37.

Warkentin, M. and Johnston, A. (2006). *IT security governance and centralized security controls*. Idea Group Publishing, Hershey, P.A.

Whitman, M. (2003). Enemy at the gate: threats to information security. *Communications of the ACM*, 46(8), pp. 91-95.

Ziegenfuss, D.E. (1996). State and local government fraud survey for 1995. *Managerial Auditing Journal*,11(9), pp. 50-55.