# The Role of Forensic Accounting in Reducing Financial Corruption: A Study in Iraq

Tariq Tawfeeq Yousif Alabdullah<sup>1</sup>, Moayad Mohammad Ali Alfadhl<sup>2</sup>, Sofri Yahya<sup>3</sup> & Ala Mohammad A. Rabi<sup>4</sup>

Correspondence: Tariq Tawfeeq Yousif Alabdullah, School of Management, University Sains Malaysia, 11800 USM, Penang, Malaysia. E-mail: tariqtariq1984@gmail.com

Received: October 25, 2013 Accepted: November 26, 2013 Online Published: December 18, 2013

#### Abstract

Since forensic accounting arose in America, it has become a very important issue by the researchers and scholars in several countries in the whole world. Financial corruption is the most dangerous factor on the present and future of Iraq. Perhaps it's no less dangerous than the terrorist operations accompanied the Iraqi political change started in 2003. Thus, such corruption slows down the economic development process and prevents the welfare and the prosperity of the community, which may lead to lose confidence in both the political class and state institutions.

While this corruption requires sophisticated ways to fathom, there is a modern method, among others, that could be used for this purpose which is the forensic accounting. This study therefore attempts to determine the impact of using forensic accounting on financial corruption. It contributes to the limited existing literature on the forensic accounting where no previous study has been down in Iraq dealing with such a serious issue. Specifically there is a failure of accounting and control methods that lies in the methodology taught in Iraqi universities to discover financial corruption cases. This study adopted a correlation research design. Data was collected by using interviews and questionnaires. The main findings of the study revealed that there is a significant relationship between the forensic accounting methods and effectiveness of the control and auditing bodies to detect financial corruption cases. On the other hand, the majority of the audit and accounting personnel in Iraq are suffering from poor perception and information of the forensic accounting methods. Therefore, a suggestion was made by the current study that forensic accounting methods should add to the curricula of accounting departments in Iraqi universities at both levels of preliminary and higher studies through theoretical and practical classes.

Keywords: forensic accounting, financial corruption, Iraq

#### 1. Introduction

According to Transparency International (TI) reports, Iraq occupies advanced position among the list of most corrupt. This is not far from reality cause the Ministry of Electricity declared that it spent more than 37 billion dollars on the electricity sector without tangible result (Iraqi Commission on Public Integrity, 2012).

Due to the this serious issue and in addition to the dangerous effects of corruption at all levels, this research is trying to contribute by selecting one of the mechanisms that can limit financial corruption, through fraud and money manipulation detection techniques by using the method of forensic accounting.

To achieve this goal, the current study is divided into (4) sections. The first section is dedicated to the definition of the methodology of the study, the second is to provide a theoretical background on the forensic accounting, its objectives and justifications, then the concept and types of financial corruption and its effects, while the third section was the practical side, and the fourth and final section contains the conclusions and recommendations.

#### 2. Literature Review

Future business in general, and in accounting discipline particularly, might have a wide and clear understanding

<sup>&</sup>lt;sup>1</sup> College of Administration and Economics, Accounting Department, University of Basrah, Iraq

<sup>&</sup>lt;sup>2</sup> College of Administration and Economics, Accounting Department, Al-Qadisiya University, Iraq

<sup>&</sup>lt;sup>3</sup> Graduate School of Business, University Sains Malaysia, Malaysia

<sup>&</sup>lt;sup>4</sup> School of Management, University Sains Malaysia, Malaysia

of the new 21st century of governance, awareness and accountability created by the post-Enron/WorldCom environment, especially that a global phenomenon of fraud has extended beyond the borders of the U.S. (Ramamoorti, 2008). Thus, the accountants and auditors that work in the markets and business organizations should have a clear understanding in how to deal with fraudulent transactions and forensic accounting. The concept of forensic accounting field is new, resulting in a scarcity of studies. Nevertheless, as argued by Harris (2012) and Shanikat and Khan (2013), there is a continuous demand in all sectors for accountants who work in the framework of forensic accounting. In the same vein, the survey done by McMullen and Sanchez (2010) found that the forensic accountants' demand might be increased in the upcoming future, especially in fraudulent financial reporting area. A few studies in the developing countries have dealt with forensic accounting and no previous one has done in Iraq. For instance, Hao (2012) deals with the necessity to develop forensic accounting in China. They concluded that in the light of the rapid developments of the market economy, there is a need for modeling the accounting behavior, and the combination of accounting and law. This requires the development of accounting mechanisms that do not have-so far at least-complete processors for each economic issues, as well as the existence of problems in the application of accounting principles in the real environment, and this problem requires identifying the economic conditions and linking them to legal frameworks and society requirements, because the development of forensic accounting depends on community need and desire to combat cases of financial and administrative corruption.

The study of Chi-Chi and Ebimobowei (2012) has addressed the issue of fraudulent activates and forensic accounting services of Port Harcourt Bank, Nigeria. The study found that the prevalence of fraud and poor financial transactions in the Nigerian banking sector created the need to develop the necessary means to meet these challenges. The study used a sample of (24) banks and analyzed their answers using statistical methods such as (Dickey-Fuller), the least-squares, and Granger Causality. The results indicated that the forensic accounting application affects the level of fraudulent activities in the banks, because forensic accounting provides banks with good mechanisms that help to detect these activities. Therefore, the study suggested investment in the human element in this field.

While, Efiong (2012) study addressed the education of forensic accounting and investigated its familiarity in one of the emerging economies, Nigeria. They found that in spite of the growing demand for forensic accounting globally, this science is still confined mainly to economies of developed countries with simplified application in emerging economies. The study was addressed to academics and practitioners to assess the demand for forensic accounting and the level of its understanding. The study found that there are limited conscious to this discipline on the level of initial studies, and that there is an convictions of the need to adopt forensic accounting curricula at universities and provide students with the qualifications and skills that will help them reduce methods of fraud.

#### 3. Research Methodology

## 3.1 Problem Statement

The problem of this study lies in the prevalence of financial and administrative corruption, and the failure of accounting and control methods. Moreover it lies in the methodology taught in Iraqi universities to discover financial corruption cases, because these tools concentrate on the formal aspects of the accounting cycle without substantive contents, as well as the rigidity of these approaches and their lack of continued modernization.

## 3.2 Research Hypotheses

H1: There is a significant correlation between the forensic accounting education and the effectiveness of detecting the financial corruption activities.

H2: There is a significant effect relationship between the forensic accounting education and the effectiveness of detecting the financial corruption activities.

#### 3.3 Research Objectives

The study aims to explain forensic accounting concept, objectives and justification for why we need it as well as to review the basic concepts of financial corruption content, and then to analyze and estimate the relationship between the two variables.

## 3.4 Significance of the Study

The importance of the study comes from its attempt, which might be pioneering, to define forensic accounting method as a way of contemporary method, and its attempt to employ this knowledge to reduce financial corruption cases, which we may consider as an epidemic that ravaged and destroyed the country's economy, just

like the ongoing destruction of the economy and society caused by the scourge of terrorism.

## 3.5 Research Population and Sample

The researchers have encountered a trouble getting numeric data, or even sample selection, given the novelty of forensic accounting, not only in Iraq but in the whole emerging countries, in addition to its limited existence in the universities of developed industrial countries.

Therefore, they select a purposive sample that consists of (29) specialist lecturers from accounting, auditing and public administration community.

They were surveyed, taking advantage of the questionnaire prepared by the Efiong (2012) study by adding some variables that serve the subject of the study. The current study used the "interview" to clarify the variables included in the form, in addition to the cognitive means to ensure accuracy of answers.

# 3.6 Scale Validity Test

Following Al-Mashhadani & Hormuz, (1989), the purpose of ensuring the stability of the scale, we used the stability method, one of the known ways in social research, which requires Test & Retest, and then compares the results of the first test with the results of the retest to find a Rank Correlation, which is called Spearman's rank coefficient. The test was conducted on a sample of (12) lecturers and the rank coefficient were (0.836) which is a very good coefficient, so we can be reassured to the results.

#### 4. Theoretical Framework

## 4.1 Forensic Accounting

## 4.1.1 Forensic Accounting Concept & Nature

Since forensic accounting arose in America, it has become a very important issue by the researchers and scholars in several countries (Renzhou, 2011). Forensic accounting concept is characterized by modernity to a large extent, especially in the emerging economies. It was introduced by Western countries for the first time in the 1980s, in line with the developments in the market economy and to support the judicial system. Is a science that differs from traditional accounting in which leads getting accounting facts throughout using procedures and audit method that dealt with legal problems and financial attributes. According to Keskin and Ozturk (2013), forensic accounting is defined as a science that differs from traditional accounting in which leads getting accounting facts throughout using procedures and audit method that dealt with legal problems and financial attributes. Hao (2012) believes that the forensic accounting is the result of the integration between the legal framework and the accounting framework.

The teaching approaches of this field are still limited to the universities of developed countries, as is the case with their experimental research, in spite of the growing demand for their tools and curricula (Hao, 2010). Forensic accounting is a legal instrument that uses accounting, law and audit to assess and solve illegal problems, value maintaining, and damages (Renzhou, 2011).

Zysman (2004) defined forensic accounting as the process to integrate accounting, auditing and investigative skills, while Dhar and Sarkar (2010) define forensic accounting as the application of accounting concepts and techniques to legal problems. It demands reporting, where accountability of the fraud is established and the report is considered as evidence in the court of law or in administrative proceedings (Chi-Chi & Ebimobowei, 2012). On the other hand Pedneault, Sheetz, & Rudewicz (2012) and Crumbley (2003) believe that these claims are not concerned with administrative proceedings only, rather there are (3) groups of fraudsters who can be held against: they are 1-Internal Fraudsters represented by the owners of the organization and its directors, and 2-External Fraudsters who are not members at the organization, and 3-Mixed Fraudsters being a combination of the two previous fraudsters.

Degboro and Olofinsola (2007) described forensic accounting as the application of criminalistic methods, and integration of accounting investigative activities and law procedures to detect and investigate financial crimes and related accounting misdeeds.

This is also the opinion of Dhar and Sarkar (2010), in which he indicates that forensic accounting, also called investigative accounting or fraud audit, is a merger of forensic science and accounting. It has considered that using forensic accounting techniques will help in exposing and identifying the culprits, because this accounting presents the process of interpreting, summarizing and providing complicated financial issues clearly i.e. using the accounting literature to help draw facts in the litigation (Chi-Chi & Ebimobowei, 2012).

#### 4.1.2 Forensic Accounting Objectives

Forensic accounting literature includes a range of models and methodologies of investigative procedures that search for assurance and attestation in the accounting data to produce legal evidence. Practically, forensic accounting, as mentioned by Skousen and Wright (2008) and Skousen and Wright (2009), is concerned with discovering the ways of accounting fraud, forensic auditing, compliance, diligence and risk assessment; detection of financial misrepresentation and financial statement fraud.

Bhasin (2007) notes that the objectives of forensic accounting must include the assessment of damages caused by an auditor's negligence, fact finding to see whether an embezzlement has taken place, in what amount, and whether criminal proceedings are to be initiated; collection of evidence in a criminal proceedings; and computation of asset values in divorce proceedings. Bhasin argues that the primary orientation of forensic accounting must be explanatory analysis (cause and effect) of fraud phenomenon. Thus forensic accounting is the ability to look beyond the numbers and deal with the business realities of situations, then investigating and analyzing financial evidence; developing computerized applications to assist in the analysis and presentation of financial evidence; communicating the findings in the form of reports and ways that help justice to reach facts (Bhasin, 2007). The goal of forensic accounting, as demonstrated by Renzhou (2011), is to provide advices to experts as instruments to determine whether or not the defendant has to bear legal responsibilities. In that, the target of forensic accounting refers to court or lawsuit accounting.

## 4.1.3 Justification to Use and Develop Forensic Accounting

There are some justifications for using the forensic accounting.

• Widespread use of false accounting information.

This phenomenon caused big losses for the emerging economies, and these losses have had an impact on the economic development and state revenues. Perhaps the most prominent example of this situation in Iraq is the accounting statements prepared by auditors for the companies benefiting from, where the auditor prepare statement of current account and balance sheet in accordance with the company's desire to show losses in which they use for tax evasion purposes or to show a few profits in order to compete for local tenders (Hao, 2010).

• Weakness and lack of legal and accounting legislation in solving problems.

Legislations dealing with the financial and administrative corruption are characterized by weaknesses and stereotypes, therefore they can no longer respond to the exacerbation of these dangerous phenomena, in addition to the fact that the traditional accounting procedures do not contribute to detecting and diagnosing financial corruption cases, because they focus on the form rather than content (Renzhou, 2011).

Weakness in the traditional auditing.

Renzhou (2011) and Hao (2010) show that many audit procedures suffer from obvious deficiencies in diagnosing the financial distractions as the evidence provided by the internal auditor is still limited and unable to detect corruption and financial deviations mainly because they do not enjoy administrative autonomy

• Lack of professional institutions to provide forensic accounting consulting.

Unlike the developed countries, most emerging countries do not have a special organization which could really provide the real forensic accounting service to judicial authorities. This shortage could affect the objectivity of judicial rulings and exacerbate the problem of financial corruption (Renzhou, 2011).

# 4.2 Financial Corruption

# 4.2.1 Financial Corruption Concept

In general, as argued by Tanzi (1998), corruption is related to the action by the state and particularly with the state's discretionary and monopoly power. Ochulo, Metuonu, and Asuo (2011) demonstrate that corruption is a kind of being out of the common values of the society, which is usually to achieve a personal gain that stems from values deviation and translated into deviant behaviors from the natural order, and end with goals other than the real goals of the state apparatus.

Transparency international organization (TIO) classified corruption into two types, one resulting from the practice of law, and occurs when the legislature establishes laws for the sake of self-interest. Just like what the former Philippine President (Fernandez Marcos) who re-drafted sections of the Philippine Constitution to confer legitimacy on the looting of the people's wealth (Johnston, 1996).

The second type is the corruption committed by breaking law, and revolves around the deviation of public authority to achieve private gain or misuse of public office, authority or resources to achieve those gains

(Svensson, 2005).

One can note that these definitions focus on the abuse of office, i.e. the traditional definition of corruption, which did not specify what is the scale used to determine the deviation, and does it mean the deviation from the morals and value system or from business rules. The standard of public opinion tried to avoid this controversy in its definition of corruption, so it adopted the concept of Heidenheimer named (test litmus paper) by resorting to public opinion to determine what is considered as corrupt actions of administrators and what is not (Leys, 1965). Based on this selection, corruption has (3) types: (Johnston, 1996)

- Black Corruption: in which the public opinion is agreed to condemn and punish the behavior of those who commit it.
- White Corruption: in which the public condone this type of corruption and tend not to punish the perpetrators.
- Gray Corruption: temporary standing compromise between the former two types.

## 4.2.2 Corruption Classification

Researchers interested in the financial corruption classified it into several types, perhaps the most common classification is according to the corruption nature (Johnston, 1996; Rajshree & Srivastava, 2012; Tanzi, 1998).

#### • Collusive Corruption

For example, a corrupt employee in agreement with others, facilitate their illegal practices and they facilitate his practices "give and take".

## Extortionary Corruption

Such corruption is based on the forced extraction of material benefits and bribes from others by extortion manner.

## • Anticipatory Corruption

Includes favoritism by providing services to others and expect to receive benefits or gifts in return.

There is another classification for corruption according to career level in the organizational structure of the state or its institutions, which is shown in the Table 1.

Table 1. Corruption classification according to career level

Туре	Career Level	Methods Used		
Casual	junior staff, opportunists individuals	embezzlement, bribery, favoritism, discrimination		
Regular	public officials, politicians, representatives of donors,	bribes, commission, complicity, looting and public		
	administrative elites, businessmen, mediators	acquisition of property, special privileges, gifts and bribes.		
Comprehensive	administrative elites, politicians, businessmen, higher	widespread looting of public funds through fake		
	staff categories	transactions, transfer public property to private		

Source: (Peter, 1998).

#### 4.2.3 Corruption Impact on Economic Aspects

In addition to the serious social damage caused by corruption among community members within the scope of everyday life (not least foster a spirit of despair and frustration resulting from the sense of injustice and inequity), the economic effects of corruption is subversive, summarized by Gray, Hellman and Ryterman (2004) as follows:

- A. Reducing growth rates and prevents direct investments.
- B. Reducing and misusing the resources of the state.
- C. Low economic efficiencies and poor distribution of national wealth.
- D. Low efficiency in money investment, and weaken the level of infrastructure quality.
- E. Increasing the external debt and weaken the state's ability to repay its debts.
- F. The high cost of services and capital formation due to the addition of bonuses paid as commission for the corrupter.

G. The decline of human development indicators and scientific brain drain due to favoritism and cronyism.

While the researchers try to use forensic accounting to uncover the corrupters fraud methods and deter them, they indicate that revealing corruption cases and corrupters is not a goal in itself, rather a means to accomplish the lofty goal, namely to punish the perpetrators of corruption through strict legal rules associated with active sanctions that does not leave any corrupter. Because the legal rules does not consider strict unless they are equipped with the necessary force to enforce its respect for everyone, otherwise it'll be as the German jurist (Ihering) says: a fire which does not burn, a light that does not shine.

#### 5. The Analytical Side

#### 5.1 Testing the First Hypothesis

This hypothesis said (there is a significant correlation between the forensic accounting education and the effectiveness of detecting financial corruption activities), and after linking the paragraphs dealing with the variables in the form, and through Kendall correlation coefficient, we got the indicators shown in Table 2.

Table 2. Kendall's correlation matrix of the relationship between forensic accounting and the effectiveness of detecting financial corruption activities

Variable	Forensic Accounting Methods	Discovering Corruption Effectiveness
forensic accounting methods	1	0.41
detecting corruption effectiveness	0.41	1

Note: level of Significance 0.01.

It is noted that the correlation coefficient between the two variables (0.41) is acceptable in the case of one variable, taking into account the novelty of this approach. In order to verify the significance relationship between the two variables, we tested Kendall correlation coefficient through Student's (t) distribution, and the results were as indicated in Table 3.

Table 3. Significant correlation test between the two variables of forensic accounting and expose corruption

Correlation	Degree of freedom	Calculated T value	Theoretical T value
0.41	28	2,350	1,701

It is clear from the test results and comparison that calculated (T) value is greater than t tabulated value, level of significance (0.05), confidence limit (0.95), which confirms the existence of a relationship between the two variables, and leads to the acceptance of Research Hypothesis 2.1.

5.2 Test and Analyze the Effect Relationship between the Variables of the Study

The researchers have assumed in hypothesis (H2) a significant effect relationship between the forensic accounting education (x) and the effectiveness of detecting the financial corruption activities(y).

In the light of this hypothesis the simple regression equation indicates that the forensic accounting education (x) affect the detecting financial corruption cases (y) and this effect assumes a functional relationship between two variables which can be formulated with the following regression equation:

$$Y=a+\beta_1X_1$$

(a) Represent a constant, on the practical level this relationship means that the effectiveness of detecting financial deviations (Y) is a function of the true value of the forensic accounting curriculum (X). The assessment of these values and statistical indicators done by the regression equation, and the correlation coefficient shows the direction and strength of the relationship. In the framework of this formulation, the analysis of variance (ANOVA) table resulted in the subsequent results, under which the analysis of variance among these relations was made.

Table 4. Analysis of variance (ANOVA) for the relationship between the two variables

Variation Source	Degree of Freedom	Sum of squares	Mean Squares	Calculated Value of T	Level of Significance
Regression	1	1.44	1.44	7.23	0.01
Error	28	8.24	0.294	-	-
Total	29	9.68	-	-	-

Source: prepared by the researchers with benefit of the outputs of electronic calculators.

While the table of transactions has resulted in the subsequent results.

Table 5. Regression equation coefficients

M- 1-1	Non-Standard Coefficient		Standard Coefficient	T.C. W.: 4	I 1 CG: :C
Model	Beta	Standard Error	Beta	1 Coefficient	Level of Significance
Fixed	3.127	0.37		8.388	.00
Forensic Accounting	0,273	0,054	0,382	2,648	.009

Source: prepared by the researchers with benefit of the outputs of electronic calculators.

It is clear from the analysis of variance table of the relationship between forensic accounting variable and the effectiveness of detecting the financial corruption activities, at the level of a study sample of (29) person that the calculated (F) value is large compared with its theoretical value, level of significance 0.01, and degree of freedom (1.28).

This shows that the regression trend is enough to describe the relationship between the two variables and the level of confidence of 99%, this is confirmed by significance value (X) according to (t) test, which amounted (2.648) at the level of significance (0.009). In the light of the regression equation, the constant indicates (3.127) revealing cases of corruption even when forensic accounting mechanisms is zero, while the value of the fixed slope ( $\beta = 0.382$ ) associated to (X) they suggest that a change of (1) in the methods of forensic accounting will lead to a change by (0.382) in the effectiveness of exposing financial corruption cases, which is an acceptable change, while the coefficient of determination ( $R_2$ ) stood at 16.8%, which means that the move towards the forensic accounting tools and software explains 16.8% of the variation related to the detection of financial corruption cases, and the (83.2%) of unexplained variance caused by uncontrolled variables which did not enter the regression model, these results are acceptable in the case of one variable, and based upon, we can accept the premise of the existence of the effect of the forensic accounting methods to detect cases of financial corruption.

#### 6. Conclusions

In Iraq, forensic accounting subject and education couldn't have a chance to be emphasized. Consequently, such a thing will increase both fraud and corruption and lead to have a negative impact on the economy of the country. Fraud could be prevented and limited by using forensic accounting. The financial fraud and corruption have increased in Iraq; the reason is that the forensic accounting is not included in the curricula taught in Iraqi universities as is the case in the universities of the developed countries. In that, currently, there are no courses for forensic accounting in Iraqi universities in both postgraduate and undergraduate studies. Moreover, most of the audit and accounting personnel in Iraq are suffering from poor perception and information of the forensic accounting methods. As a result, it is recommended that the techniques of forensic accounting should be an important aspect imposed at educational curricula and training of undergraduate accountants in Iraqi universities and also for other professionals that belong to the Iraqi Institute of Chartered Accountants. This consequently ensures that there will be many ways to limit or at least mitigate the fraud and corruption in the country.

#### 7. Recommendations

- Add the forensic accounting field to the curricula of accounting departments in Iraqi universities, and at both levels of preliminary and higher studies through theoretical and practical classes.
- Involve number of specialized teachers in forensic accounting courses at the application level in developed countries.
- Reconsider the legal texts and rules dealing with financial and administrative corruption toward tightening deterrent measures.
- Participate publicly in the detection of financial corruption cases by implementing regular surveys through

specialized public bodies to fight corruption.

• Show the names and pictures of the corrupters in the media.

#### References

- Al-Mashhadani, M. H., & Hormuz, A. (1989). Statistics. Iraq-Baghdad: Bayt Al-hekma.
- Bhasin, M. (2007). Forensic accounting: A new paradigm for niche consulting. *The Chartered Accountant*, 55(7), 1000–1010.
- Chi-Chi, O. A., & Ebimobowei, A. (2012). Fraudulent Activities and Forensic Accounting Services of Banks in Port Harcourt. Nigeria.
- Crumbley, D. L. (2003). What is forensic accounting.
- Degboro, D., & Olofinsola, J. (2007). Forensicaccountants and the litigation support engagement. *Niger. Account*, 40(2), 49–52.
- Dhar, P., & Sarkar, A. (2010). Forensic accounting: An accountant's vision. *Journal of The Department of Commerce with Farm Management Vidyasagar University*.
- Efiong, E. J. (2012). Forensic Accounting Education: An Exploration of Level of Awareness in Developing Economies-Nigeria as a Case Study. *International Journal of Business and Management*, 7(4), 26. http://dx.doi.org/10.5539/ijbm.v7n4p26
- Gray, C., Hellman, J. S., & Ryterman, R. S. (2004). Anticorruption in transition 2: corruption in enterprise-state interactions in Europe and Central Asia, 1999–2002 (Vol. 2).
- Hao, X. (2010). Analysis of the Necessity to Develop the Forensic Accounting in China. *International Journal of Business and Management*, 5(5), 185.
- Harris, T. (2012). Forensic Accountants Are Increasingly Becoming Part of the Legal Team. *Journal of Forensic & Investigative Accounting*, 4(1), 369–370.
- Iraqi Commission on Public Integrity. (2012). Report 2013. Retrieved from http://www.nazaha.iq/
- Johnston, M. (1996). The search for definitions: the vitality of politics and the issue of corruption. *International Social Science Journal*, 48(149), 321–335.
- Keskin, D. A., & Ozturk, S. G. (2013). Determining of Employee Frauds in Forensic Accounting: A Research on Forensic Cases in the City of Kars in Turkey. *Journal of Modern Accounting and Auditing*, 9(6), 729–738.
- Leys, C. (1965). What is the Problem about Corruption? *Journal of Modern African Studies*, 3(2), 215–230. http://dx.doi.org/10.1017/S0022278X00023636
- McMullen, D. A., & Sanchez, M. H. (2010). A Preliminary Investigation of the Necessary Skills, Education Requirements, and Training Requirements for Forensic Accountants. *Journal of Forensic & Investigative Accounting*, 2(2), 30–48.
- Ochulo, C. L., Metuonu, I. C., & Asuo, O. O. (2011). Corruption in contemporary Nigeria: The way out. *American Journal of Social and Management Sciences*, 2(1), 91–99. http://dx.doi.org/10.5251/ajsms.2011.2.1.91.99
- Pedneault, S., Sheetz, M., & Rudewicz, F. (2012). Forensic accounting and fraud investigation for non-experts.
- Peter, E. (1998). Corruption and Integrity Improvement Initiatives. In developing countries. Retrieved from http://www.akhbaar.org/home/2009/12/82324.html
- Rajshree, N., & Srivastava, B. (2012). *Open Government Data for Tackling Corruption–A Perspective*. In Workshops at the Twenty-Sixth AAAI Conference on Artificial Intelligence.
- Ramamoorti, S. (2008). The psychology and sociology of fraud: Integrating the behavioral sciences component into fraud and forensic accounting curricula. *Issues in Accounting Education*, 23(4), 521–533. http://dx.doi.org/10.2308/iace.2008.23.4.521
- Renzhou, D. (2011). Research on Legal Procedural Functions of Forensic Accounting. *Energy Procedia*, 5, 2147–2151. http://dx.doi.org/10.1016/j.egypro.2011.03.371
- Shanikat, M., & Khan, A. (2013). Culture-Specific Forensic Accounting Conceptual Framework: A Skills Set Theoretical Analysis. *International Journal of Business and Management*, 8(15), 112. http://dx.doi.org/10.5539/ijbm.v8n15p112

- Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Advances in Financial Economics*, 13, 53–81. http://dx.doi.org/10.1108/S1569-3732(2009)0000013005
- Skousen, C., & Wright, C. (2008). Contemporaneous risk factors and the prediction of financial statement fraud. *Journal of Forensic Accounting*, *6*, 37–62.
- Svensson, J. (2005). Eight questions about corruption. *The Journal of Economic Perspectives, 19*(3), 19–42. http://dx.doi.org/10.1257/089533005774357860
- Tanzi, V. (1998). Corruption around the world: Causes, consequences, scope, and cures. *Staff Papers-International Monetary Fund*, 559–594. http://dx.doi.org/10.2307/3867585
- Zysman, A. (2004). Forensic accounting demystified. *World Investigators Network*. Retrieved from http://www.forensicaccounting.com

## Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).