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Forensic Accounting Impact on Fraud Detection in Saudi Arabia

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Abstract
The primary subject matter of this research is to examines the effect of forensic accounting on fraud detection in Saudi Arabia. The aim of this study is to determine the relationship between fraud detection and forensic accounting in the context of a developing country, Saudi Arabia. Descriptive Statistics are used to present quantitative descriptions in a manageable form. The collected data were analyzed with descriptive statistics using ordinary least square (OLS) regression and Chi-square. The study reveals that the application of forensic accounting services on firms affects the level of fraudulent activities. This paper findings conclude that forensic accounting services provide Saudi Arabian companies with the necessary tools to deter fraudulent activities but does not curb fraudulent activities.
Keywords: Forensic Accounting; Financial Fraud, Anti-fraud detection; falsification of accounts; and Saudi Arabia.
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1. INTRODUCTION

The integration of accounting, auditing and investigative skills results in the special field known as forensic accounting (Crumbley, 2008). Forensic accounting received more attention due to a series of corporate failures that affected not only those directly connected with the companies concerned (i.e., directors, shareholders and auditors) but also those affected by its existence like employees, customers, suppliers and the environment. The first well-documented failure of governance was the South Sea Bubble in the 1700s, which revolutionized business laws and practices in England (Iskander et al., 1999). The Asian financial crisis, which started with the devaluation of the Thai baht in July 1997, brought to the foreground the common occurrence of weak corporate governance which had allowed companies to engage in excessive over-leverage, some of which were aided by implicit state guarantees. The concepts of transparency, disclosure and accountability were largely ignored in the lead-up to the crisis as investors assumed a short-term outlook in order to derive increasing profits from the steadily rising regional financial markets.

Forensic accounting arises from the effect and cause of fraud and technical error made by human. The American Institute of CPAs (AICPA) anticipates significant growth in the field of forensic accounting. In a recent AICPA survey, current forensic accountants claimed to have witnessed an impressive 20 percent increase in demand in recent years (Davis et al., 2017). A 2016 report by the Association of Certified Fraud Examiners – the world's largest anti-fraud organization and is a provider of anti-fraud training and education – said that a typical organization loses 5 percent of its revenue to fraud each year. The report also mentioned that banking and finance were the most represented sectors in the fraud cases examined by the association.

The main objective of the study is to examine the impact of forensic accounting on fraud detection in the context of a developing country, Saudi Arabia. The specific objectives are to: to find out the manner in which forensic accounting affect fraud detection in Saudi Arabia; to ascertain if forensic accounting will curb fraudulent activities in the Saudi corporations.

1.1. RESEARCH PROBLEM

The incidence of financial fraud is increasing and has been a central feature in a number of financial scandals in recent years (Bunget, 2009). In spite of the fact that the cost of fraud is difficult to estimate because not all fraud is discovered and not all uncovered fraud is reported (Farrell and Franco, 1999), different endeavors have been made to estimate fraud. For example, it has been estimated that six percent of US companies' revenue in 2002 was lost through fraud committed by employees (Holtfreter, 2004) and of the 491 Australian and New Zealand companies who responded to the KPMG survey in 2004, almost half had experienced a fraud costing them $457 million (KPMG, 2004). Therefore, the entire business community has become more aware of the threat of fraud and the need to be vigilant when searching for instances of fraud following the well-publicized corporate collapses earlier last decade (Coram et al., 2008).

Forensic Accountants could be identified as experienced investigators of financial data who are external and could be contracted to detect suspicions of fraudulent financial activities and improve corporate governance practices which will finally lead to better performance. Forensic accountants can play vital role to improve

corporate governance in a company by improving the company's control and accounting systems that ensures a proper recording, classification and reporting of all relevant transactions. Forensic accountants should always put an eye on corporate governance practices to ensure good corporate governance and improve responsibilities and accountability. They should also ensure the integrity of financial statements by actively investigating for fraud, identifying areas of risk and associated fraud symptoms, pursuing each anomaly aggressively, and delving into the finest details of accounting and financial anomalies. Forensic accounting is the application of financial skills and investigative mentality to unsettled issues, conducted within the context of the rules of evidence (Arokiasamy and Cristal, 2009). In connection with the responsibility for the prevention and detection of fraud, the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) (2009) makes it clear in the International Standard on Auditing (ISA 240) that the primary responsibility rests with those charged with governance of the entity and with management.

The Kingdom of Saudi Arabia has had strict anti-bribery legislation in place since 1992 with the promulgation of Royal Decree No. M/36, known as the anti-bribery law. Saudi governmental and private regulators such as the General Auditing Bureau, the National Anti-Corruption Commission (Nazaha), the Saudi Capital Market Authority (CMA), the Saudi Arabia Monetary Agency (SAMA), the Ministry of Commerce and Investment, the Saudi Organization for Certified Public Accountant (SOCPA), and others have increased management's responsibilities for fraud risk management and prevention. Every corporation is susceptible to fraud, but not all fraud can be prevented, nor is it cost-effective to try. The provisions of the anti-bribery law are targeted at acts involving public officials, and Saudi Arabia's continued adherence to Sharia law provides an additional layer of protection to acts that fall outside of this specific sphere. Responsibility for overseeing anti-corruption efforts has been charged to the National Anti-Corruption Commission, also known as Nazaha, since its formation in 2012. Nazaha is responsible for investigating instances of graft in government contracts and ensuring that appropriate action is taken in cases where an offence has occurred.

On the forth of November 2017, the Saudi government declares a Royal Decree authorizing the formation of a new Anti-Corruption Committee ("The Anti-Corruption Committee"), led by the Crown Prince Mohammed bin Salman, with a view to eliminating illicit practices and corruption. The newly formed Committee has been granted enhanced powers to investigate and prosecute instances of corruption at all levels, and is comprised of high-ranking officials from across various government branches including security, finance, and existing anti-corruption bodies. Despite the ability of Nazaha to refer specific corruption cases to the relevant authorities and conduct subsequent follow-ups, the new Committee will benefit from greater powers to investigate and prosecute instances of graft, including the capacity to issue arrest warrants and order interim measures such as asset freezing and issuing travel bans.

Saudi Arabian corporations just like other international corporations in the rest of the world are subject to fraud risks. International large frauds and crises as mentioned above have led to the downfall of the entire corporations, significant legal costs and noticeable business and investment losses which effect the confidence of investors and stakeholders. The financial crises mainly driven by undetected fraud and the increased corporate governance weaknesses in Saudi corporations has led to the need for multi-dimensional relationship (that is inter-relationship between the audit committee, the external auditor and the management) in corporate governance as to protecting the interest of shareholders and other stakeholders with the common goal of improving oversight function and ensuring good corporate governance (Deloitte and Touch 2006). Weak corporate governance companied with financial fraud have led to poor performance and to corporate collapse resulting to huge lost of new investment (Rezae 2005). The abovementioned corporate structure failure has made academics and investigators realize that there is a great need for forensic accountants who can identify, expose and prevent corporate governance weaknesses and detect fraudulent financial statements. The possible way to solve this issue is that the public should be educated and be informed of the use and function of forensic accounting to prevent fraud occurrences. When the public is made known of the concept, then they could actually demand for the service in the company which they invest in.

Forensic accountants have played an increasingly important role in the litigation and other legal disputes fomented by these recent frauds and failures. The fact is that very little has been written in this area. Based on the problem stated above, this study focus on the impact of forensic accounting on fraud detection.

1.2. RESEARCH QUESTIONS

The study is expected to answer the following questions:

1) To what extent does forensic accounting impact fraud detection in Saudi corporations?
2) To what extent does forensic accounting curb fraudulent activities in Saudi corporations?

1.3. RESEARCH HYPOTHESES

The following hypothesis will be tested:

H01: Forensic accounting does not affect fraud detection in Saudi corporations.

H02: Forensic accounting cannot curb fraudulent activities in Saudi corporations.

2. LITERATURE REVIEW

Forensic Accounting is not as new term, however forensic accounting has been practiced since early 1940s. Auditors used to take responsibilities for fraud detection and play a forensic accountant roles. Therefore, it could be said that forensic accounting techniques were used in audit. Back in 1940's, auditors and the accounting profession began to redefine the duties of an audit. Auditors were no longer primarily responsible for fraud detection and that the prime purpose of an audit is to enable the auditor express an opinion as to whether the financial statements of an organization showed a true and fair view of the entity's transactions. Owojori et al. (2009) states that the Failure of Statutory audit to prevent and reduce misappropriation of corporate fraud and increase in corporate crime has put pressure on the professional accountant and legal practitioner to find a better way of exposing fraud in business world. With the strident calls and pressures on modern audit to once again assume responsibility for fraud, the signs are that Audit and Forensic Accounting will soon reunite again. Forensic accounting techniques by increasing the probability of fraud prevention and detection help in bridging the audit expectation gap as it relates to inability of an audit to detect fraud. Perception studies have shown that various stakeholder groups agree on the core skill sets required of the modern Forensic accountant.

PricewaterhouseCoopers' (PWC) 2003 Global Crime Survey shows that 37 percent of respondents in 50 different countries reported significant economic crimes with the average loss per company of $2,199,930 (PWC, 2003). KPMG's Fraud Survey (2003) also concluded that more companies are: recently experiencing incidents of fraud than in prior years; taking measures to combat fraud; and launching new antifraud initiatives and programs in response to the Sarbanes-Oxley Act of 2002 (KPMG 2003).

Turning to the main issue of this study, fraud is a costly problem for organizations (Burnaby et al., 2009), which affects companies of all sizes and occurs in a variety of industries (Beasley et al., 2010). Traditionally, each business is always susceptible to internal fraud from its management and nonmanagement employees (Phua et al., 2010). According to ISA 240 fraud is defined as "an intentional act by one or more individuals among management, those charged with governance, employees or third parties, involving the use of deception to obtain an unjust or illegal advantage". Organizations that discover fraud, including embezzlement, asset misappropriation, and manipulation of financial statements are usually surprised that the incident occurred and the auditors failed to uncover it (O'Reilly-Allen 2009). The empirical literature of fraud detection and prevention shows results relating fraudulent actions to poor corporate governance (Beasley et al. 2010; Cohen et al. 2004; He et al. 2009; Nieschwietz et al. 2000), in contrast, this study investigates the impact of forensic accounting on fraud detection in a developing country, Saudi Arabia. As pointed out by Bozec and Bozec (2012), most studies investigate characteristics of corporate governance components on fraud detection. Therefore, this study will try to investigate the impact of forensic accounting on the level of fraud detection as perceived by the respondents.

In the view of Howard and Sheetz (2006), forensic accounting is the process of interpreting, summarizing and presenting complex financial issues clearly, succinctly and factually often in a court of law as an expert. It is concerned with the use of accounting discipline to help determine issues of facts in business litigation (Okunbor and Obaretin, 2010). Forensic accounting is a discipline that has its own models and methodologies of investigative procedures that search for assurance, attestation and advisory perspective to produce legal evidence. It is concerned with the evidentiary nature of accounting data, and as a practical field concerned with accounting fraud and forensic auditing; compliance, due diligence and risk assessment; detection of financial misrepresentation and financial statement fraud (Skousen and Wright, 2008); tax evasion; bankruptcy and valuation studies; violation of accounting regulation (Dhar and Sarkar, 2010).

Bhasin (2007) mentioned that forensic accountants are trained to look beyond the number and deal with the business realities of situation. He also reported that forensic accounting involve: investigating, analyzing financial evidence, developing computerized applications to assist in the analysis and presentation of financial evidence, communication their finding in form of reports, exhibits and collect documents, and assist in legal proceedings, including testifying in court, as an expert witness and preparing visual aids to support trial evidence. Investigation is an examination of records and accounts of an organization for a specific purpose. According to Oxford Advanced learner's Dictionary (2010), fraud is defined as the crime of cheating somebody in order to get money or goods illegally. Arzova (2003) viewed fraud as enriching oneself by intentionally realizing the value or worth of an asset in secret. Okafor (2004) reported that fraud is a forensic term and embraces all multifarious means which human ingenuity can devise which can resort to by one individual to get advantage over another in false representation.

Adeniji (2004) and others summaries the types of fraud on the basis of methods of perpetration, include the following but not exhaustive as the methods are devised day in day out; defalcation, suppression, outstripped, theft and embezzlement, tampering with reserves, insider abuses and forgeries, fraudulent substitutions, unauthorized lending, lending to ghost borrowers, kite flying and cross firing, fake payment, fraudulent use of firms documents, fictitious contracts and lot more. Oyejide (2008) opined that fraud is a subject matter that have

received a lot of attention both globally. Bozkurt (2003) indicated that there are two types of fraud committed in business. These are: Personal use of business resources and drawing up of financial statement of business falsely. Research has shown that the amount of loss in public sector as a result of employees' fraudulent activities is far greater than that suffers as a result of citizens negligence. About 50 % of employees is determined to commit fraud while 80 % of employee might be inclined to commit fraud under a suitable condition (Owolabi 2007). Researchers also observed that high rate of fraud committed in public sector are committed by married men is higher than unmarried with high level of education and higher IQ level of age 28 and above, under a suitable working environment who is entrusted with responsibility of taking care of fraud or their collaborators and occupies lucrative positions in the organization. The wide spread of fraud in developing countries have made traditional auditing and investigation ineffective in detection and prevention of fraud.

Recently, Saudi Arabia government is conducting a huge reform in its private and public sectors to prevent frequential activities and emphasizing that fraud, corruption and money laundry were becoming the greatest challenge and major hindrance to national development. This study amongst other studies try to introduce forensic accounting as an excellent tool to detect, reduce and prevent fraud. This became possible by introduction of forensic accounting training. Forensic accountants could be trained to look beyond mere members and deal with business realities of situations (Bhasin, 2007). Forensic accountants analyze, summaries, interpret, and Present complex financial business-related issues and also develop computerize application skills to assist in analyzing financial evidence.

Forensic accounting is a rapid growing field in detection and prevention of fraud in the public sector. This has become a complex area of concern for the accounting profession, (Okoye et al, 2003). Forensic accountant apply accounting, auditing and investigating skills in detecting fraud and present litigation support service in the court (Bolgna et al., 1995). Forensic accountants are trained to look beyond mere numbers and deals with business reality (Bhasin, 2007). According to Zysman (2004), forensic accountant are usually geared towards finding where money went, how it got there and who was responsible. Forensic accounting as a rapid growing field can be effective in detecting and preventing fraud in Saudi Arabian public and private sectors by application of its professional and expert technical skills to detect manipulated evidence, analyze financial document in fraud scheme, other illegal financial activities, asses the damages caused by auditor's negligence and fact finding as evidence used against defaulter as litigation support service in the court.

Crumbley and Apostolou (2005) claimed that a professional forensic accountant has a single-minded focus on detection and prevention of fraud. Forensic accounting often involves and in-exhaustive detail effort to penetrate concealment tactics (Krell, 2002). Forensic accountant specializes in fraud detection, documenting the exact evidence required for successful criminal prosecution, give preliminary advice as an appraisal of the pleading and evidence available at the start of proceedings, review and identify key documents which should be available as evidence, prepare a detail balance on quantum evidence which is understandable, review expert accounting report and legal counsel on financial and accounting issues.

To remain competitive in a changing world, Saudi corporations should update and control their forensic accounting practices so that they can meet new demands and new opportunities. The Saudi government also has an important responsibility for shaping an effective regulatory framework that provides for sufficient flexibility to allow the Saudi market to function effectively and to respond to expectations of shareholders and other stakeholders. The way these principles should be adopted is the responsibility of the government and the market participants. Forensic Accountants can make significant contributions in the area of corporate governance, fraud prevention and investigation, creating positive work environment, establishing effective lines of communication and vigilant oversight.

3. METHEDOLOGY

The objective of the present research is to answer the research questions and identify whether there is a relationship between forensic accounting and fraud detection in the context of Saudi Arabia. The survey method is selected for the purpose of this study in order to collect a sufficient amount of primary data. The use of questionnaires is the most widely used data collection technique in a survey and, in this study. Survey is a flexible research approach used to investigate a wide range of topics and it will be the research methodology adopted for this study. The choice was predicted on the fact that descriptive survey method is one which looks with intense accuracy at the phenomena of the moment and then describes precisely what the researcher sees (Saunders et al, 2003). Surveys often employ the questionnaire as a tool for data collection and the use of questionnaires is the most widely used data collection technique in a survey and, in this study. The data collected are analysed using Chi-square statistical software and OLS regression analysis. The chi-square test of independence was used to test for differences in responses involving categorical dependent variables for the between subject analysis. The Kruskal-Wallis non-parametric analysis of variance was used to examine differences in responses in the ranked data.

Using a five-point Likert scale test, the questionnaire was developed to measure responses of respondents

on five scales: Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and strongly Disagree (1). The values as generated through administration of questionnaire were subjected to empirical investigation. The data collected were analyst using Frequency distribution expressed in percentages and Chi-square (X2) statistics to test the hypotheses formulated for the study.

Table (1) Responses

	Emailed Accountants	Response Percentage
Emailed Questionnaires	200	100
Undeliverable Questionnaires *	9	5
Complete Questionnaires	86	43
Incomplete Questionnaires	4	2
Unreturned Questionnaires	101	50
Response Rate	43%	

The questionnaire was prepared, pre-tested, revised, and then e-mailed to the respondents. The questions included in the questionnaire were meticulously chosen to ensure the attainment of the research objectives. About 200 online survey copies of the questionnaire were electronically distributed on respondents. The researcher was able to enlist the help of mid-level employee and senior accountant at the Saudi public and private sector corporations who facilitated the delivery and return of the questionnaires, data were elicited from our respondents with the aid of the research instrument adopted in this study. The response rate was acceptable at 43 percent given that 86 copies of the questionnaire were completed and emailed back. However, 13 copies of the questionnaire were invalid as they were not properly filled out and 101 copies were not returned or undeliverable (see Table 1). Simple percentages were used to analyze the distribution of responses. While this response rate is lower than might be desired, response rates of this level are not uncommon when certain types of individuals are surveyed (Dillman 1978; Hodge 2003). The author compared late responses with early responses and find no significant differences.

4. RESULTS

This section is concerned with the presentation and analysis of data gathered from the research questionnaire administered on mid-level employee and senior accountant at the Saudi public and private sector corporations. The author attempts to empirically examine the impact of some forensic accounting variables on fraud detection such as: miscellaneous fraud, suppression of lodgement, falsification of accounts, cashiering fraud, forged cheques with forged signature fraud. A proxy for variable fraud detection as independent variables. Main analysis of this study was done here and results obtained in line with the objectives of study. The analysis was carried out in such a way that allowed a smooth flow that enabled implications to be drawn for tertiary institutions and policy making. The method of Ordinary Least Squares (OLS) estimating regression equations is employed (see Table 2). The choice of this technique arises as a result of the following facts: (1) OLS estimates the unknown parameter in a linear regression model; (2) it is subject to some crucial assumption of the error-term which provides the “best” (minimum variance), unbiased linear estimator (BLUE PRINT) of the parameter estimates of a single equation model; (3) the best linear unbiased estimator of the unknown parameters is obtained by minimizing the residual (error) sum of squares.

Table (2) Coefficients

Model *	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1432.635	452.783		-3.962	.274
MF	-139.920	21.938	-.104	-21.873	.006
SL	-.003	.006	-.001	-.291	.917
FA	392.846	.439	.830	934.983	.001
CF	.000	.000	.003	2.836	.000
FCFS	.000	.003	-.327	-.527	.391
(*) Dependent Variable: FD: Fraud Detection; Independent Variables: MF: miscellaneous fraud; SL: suppression of lodgement; FA: falsification of accounts; CF: cashiering fraud; FCFS: forged cheques with forged signature fraud.					

FDprox = -1432.635 – 139.920 MF – 0.003 SL + 392.846 FA + 0.000 CF + 0.000 FCFS

Data collected for the study was analyzed using multiple regression analyses on Statistical Package for

Social Sciences (SPSS). Results of the data analyses are shown in Table 2. The results show that the coefficient of miscellaneous fraud had a value of -139.920 implying that there is negative relationship between miscellaneous fraud and fraud detection in Saudi Arabia corporations. Thus, a one unit increase in fraud miscellaneous fraud is predicted to lead to a -139.920 units decrease in the ability of Saudi companies to prevent the occurrence of fraud. The findings also show that there a negative relationship between suppression of lodgement and fraud detection in Saudi Arabia corporations. With a coefficient of regression value of -.003 for the relationship between suppression of lodgement and fraud detection in Saudi companies implying that a one unit increase in suppression of lodgement is predicted to lead to a -.003 decrease the ability of Saudi companies to prevent fraud. On the other side, it was found that the relationship between the following independent variables: falsification of accounts, cashiering fraud, and forged cheques with forged signature fraud and the dependent variable: Fraud Detection was positive as shown in Table 3, implying that a one unit increase in fraud miscellaneous falsification of accounts, cashiering fraud, and forged cheques with forged signature fraud lead to a 392.846 units, .000 units, and .000 units increase in the ability of Saudi companies to detect fraud. The results in general as shown in the equation above are satisfactory. The diagnostic statistics obtained from the estimation exercise are very much impressive. For example, after adjusting for degrees of freedom, the R bar squared stood at 1.000, accounting which is about 100% of the total variations in the fraud detection carried out satisfies the sample period 2021-2022, justifying apparently that the fit to the data to the model was very good.

Table (3) NOVA

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	823659369353.824	5	149322432531.274	125729.838	.000
Residual	7593260.439	2	1438459.194		
Total	823666962614.263	7			
Dependent Variable: FD			Predictors: (Constant)		

Table (4) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000	1.000	1.000	2318.820937
Predictors: (Constant), MF, SL, FA, CF, FCFS				

Table (5) Excluded Variables

Model	Beta In	T	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
1 MF	.904	41.629	.013	1.000	4.624E-003
Dependent Variable: FD			Predictors: (Constant), MF, SL, FA, CF, FCFS		

As shown in Table 3, with an f-value of 125729.838, it could be concluded that the overall model is found to be significant, hence the hypothesis of a significant linear relationship between fraud detection and forensic accounting explanatory variables namely, miscellaneous fraud, suppression of lodgement, falsification of accounts, cashiering fraud, forged cheques with forged signature fraud, all taken together is validated. The implication of this is that the estimated fraud detection equation has an overall goodness-of-fit especially when the computed F-statistic (125729.838) exceeds the critical value, easily passing the significance test. The choice of ANOVA for this research in based on the fact that it determines the extent of variance in dependent variables that are caused by independent variables, also used in comparing the variation in more than two independent samples that are drawn just once from population with the same variance. More so, ANOVA reduces the type 1 error rate (rejecting null hypothesis instead of accepting) thus, the equality of several means can be tested in a single classification, where the relationship between one independent and one dependent variable is examined. The standard-error of estimation is also high at 2318.820937 (see Table 4), hence taking the model ratio, the standard error of estimation, to the mean of the dependent variable, the error estimation was 452.783 (see Table 2). This again implies that a very high forecasting performance is associated with the estimated equation.

Model summary as shown in Tables 3, 4 and 5 indicates that the coefficient of correlation (R) for fraud detection and forensic accounting explanatory variables namely, miscellaneous fraud, suppression of lodgement, falsification of accounts, cashiering fraud, forged cheques with forged signature fraud, in Saudi manufacturing

companies gave a value of 1.00 indicating that the strength of the relationship between fraud detection and forensic accounting explanatory variables of Saudi Arabian companies is about the 100%. Table 3 further show that the coefficient of determination (R2) gave a value of 1.00 implying that as much as 100% of the changes in fraud detection is attributable to changes in the forensic accounting explanatory variables of Saudi Arabian companies. Hence, both the unexplained residual variance and the error of prediction are very high. The serial correlation associated with the preliminary Ordinary Least Square (OLS) regression results have been eliminated as evidenced by a Durbin Watson (DW) Statistic of 1.89. Table 5 above shows that the estimated parameters of the serial correlation autoregressive error specification providing observations of the error term are uncorrelated with each other reveals that all the autoregressive schemes i.e. first, second and third autoregressive parameters are statistically different from zero even at the conservative 1% level of significance. All variables passed the significance test even at the conservative 1% level. Thus, with a t-value of 41.629 greater than the table t-value of .013, it is obvious that the coefficient of the fraud detection variable is significantly different from zero.

Results are consistent with other studies in other countries in the literature. Amahalu et al. (2017) study showed that forensic accounting is effective in reducing financial crimes through active and thorough investigation of such fraud. They posit that the implementation of certain standard methodology and procedures to guide forensic accounting assignments will further help to reduce the occurrence of fraud. Adebisi et al. (2016) also found that forensic accounting had a significant role to play in fraud detection and prevention. From the above findings, the researcher can infer that fraud investigation by forensic accountants should be a routine activity in business organizations as the mere presence of forensic investigators paying regular visits in itself can deter certain categories of fraud - more especially those that are driven into such activities as a result of financial/economic pressures not because of habit.

Results of this research showed that Chi-Square was 159.842 and the degree of freedom was 42 with 0.000 P-Value. With a 0.05 level of significance, 159.842 computed value using Statistical Package for Social Sciences (SPSS) and 42 degree of freedom, while the tabulated figure is 8.72 indicating that the computed figure is higher than the tabulated, it could be concluded that the null hypothesis (Forensic accounting cannot curb fraudulent activities in Saudi corporations) will be rejected and the alternate will be accepted. These results emphasizes that Forensic accounting in Saudi Arabia has strong relationship with fraud detection. This finding implies that forensic accounting services provide Saudi corporations with the necessary tools to deter fraudulent activities but does not curb fraudulent activities. Olukowade et al. (2015) investigated the roles of forensic accountants in combating fraudulent activities and found that forensic accounting services will assist audit committee members in carrying out their oversight functions by providing them assurance on internal audit report. Similarly, Enofe et al. (2013) revealed that the application of forensic accounting services on firms affects the level of fraudulent activities. Saudi Arabian companies may simply choose to fire staff that was involved in fraud in order not to incur the additional cost of litigation. This could be justified, but on the long run, the company will tend to pay a steep price for what is perceived by other employees as a tolerance for fraud. Thus, it would be more appropriate that Saudi Arabian companies ensure that employees indicted in fraud be allowed to face prosecution and bear the steep penalty for these. In this way, other employees will be deterred.

5. CONCLUSION

On the basis of this study findings, the author concludes that forensic accountants in Saudi Arabian companies is still raw and needs more development and intensive care to provide Saudi companies with the necessary tools to deter fraudulent activities. The past two decades have witnessed significant changes in the business environment in Saudi Arabia including globalization, technological advances and now with internationally reported high-profile financial scandals, ways to improve public trust and investor confidence in Saudi companies' financial reports. Lack of formal training schools in forensic accounting techniques could contribute to high rate of financial fraud and other fraud related activities in the Saudi business economy. This paper findings conclude that forensic accounting services provide Saudi Arabian companies with the necessary tools to deter fraudulent activities but does not curb fraudulent activities. The gap can be filled by introducing and adapt forensic accounting as financial strategy to curb economic and financial crime. Forensic accounting indeed is a fast-developing accounting area, especially given today's fraudulent business practices and international financial scandals, litigious business environment, and regulatory initiatives.

REFERENCES

Adebisi, J. F.; Okike, B. M. and Yoko, V. E., (2016), "The impact of forensic accounting in fraud detection and prevention: evidence from Nigerian public sector", *International Journal of Business Marketing and Management*, 1(5), Pp.34-41.

Adeniji .A.A., (2004), "Auditing and investigation value Analyses Consult", Lagos.

Amahalu, N. N.; Ezechukwu, B. O; and Obi, J. C., (2017), "Effect of forensic accounting application on financial crime detection in deposit money banks", *International Journal of Advanced Engineering and*

Management Research, 2(6).
Arokiasamy, L., & Cristal-Lee. S., (2009), "Forensic accounting: Public acceptance towards occurrence of fraud detection", *International Journal of Business and Management*, 145-160.
Arzova, S.B, (2003), "Forensic Accounting and Crime investigation for Beginners", *Journal of Accounting*, 4(20).
Association to Advance Collegiate Schools of Business (AACSB), Ethics Education Task Force, (2004), "Ethics Education in Business Schools". Available at: http://www.aacsb.edu/eerc/EETF-Draft-Report-02-03-04.pdf
Beasley, M.S., Carcello, J.V., Hermanson, D.R. & Neal, T.L., (2010), "Fraudulent financial reporting 1998–2007, an analysis of U.S. public companies", Committee of Sponsoring Organizations of Treadway Commission (COSO).
Bhasin, M., (2007), "Forensic Accounting: A New Paradigm Niche Consulting", The Charttered Accountant Country, 1000.
Bolgna, I.G & Liquist R.I., (1995), "Fraud Auditing and Forensic Accounting", New York Wiley.
Bozec, R. & Bozec, Y., (2012), "The use of governance indexes in the governance-performance relationship literature: international evidence", *Canadian Journal of Administrative Sciences*, 29, (1), 1-109.
Bozkurt, E., (2003), "Fraud detection and forensic accounting", Retrieved from http://www.springer.com/cda/content/document/9783642c1.pdf%3FSGWID%3D0-0-45- 1326442-p174119761&sa=U&ei=oBCGML6PMGkgagK&ved=0CBcLmQ.
Bunget, O., (2009), "The Role of financial auditor in detecting and reporting fraud and error", MPRA Paper No. 12888, online at http://mpra.ub.uni-muenchen.de/12888/
Burnaby P., Howe, M. & Muehlmann, B. W., (2009), "Detecting fraud in the organization: an internal audit perspective", *Journal of Forensic & Investigative Accounting*, 3, (1), 195-233.
Cohen, J., Krishnamoorthy, G. & Wright, A., (2004), "The corporate governance mosaic and financial reporting quality", *Journal of Accounting Literature*, 23, 87-152.
Coram, P., Ferguson, C. & Moroney, R., (2008), "Internal audit, alternative internal audit structures and the level of misappropriation of assets fraud", *Accounting and Finance journal*, 48, (4), 543-559.
Crumbley, D. L., (2008), "What is Forensic Accounting?", *Journal of Forensic Accounting*, IX(1),1
Crumbley, D.L. and Aposolou, N.G., (2005), ''The Expanding Role of the Forensic Accountant'' *The Forensic Examiner*, Vol. 14, No. 3.
Davis, Charles, Ramona Farrell, and Suzanne Ogilby, (2017), "Characteristics and Skills of the Forensic Accountant," The American Institute of CPAs (AICPA): https://www.aicpa.org/InterestAreas/ForensicAndValuation/Resources/PractAidsGuidance/DownloadableDocuments/ForensicAccountingResearchWhitePaper.pdf
Deloittee and Touche, (2006), "Integrity and Quality corporate Governance", available at https://www.google.com.ng/search?q=Deloittee+and+Touche .
Dhar, P., & Sarkar, A., (2010), "Forensic accounting: An accountant's vision", *Vidyasagar University Journal of Commerce*, 15(3), 93-104.
Dillman, D. A., (1978), "Mail and telephone surveys: The total design method", New York: John Wiley and Sons, Inc.
Enofe, A. O.; Okpako, P. O.; and Atube, E. N., (2013), "The impact of forensic accounting on fraud detection", *European Journal of Business and Management*, 5(26).
Farrell, B. R. & Franco, J. R., (1999), "The role of the auditor in the prevention and detection of business fraud: SAS No. 82", *Western Criminology Review* 2/1, online at: http://wcr.sonoma.edu/v2n1/v2n1.html.
He, L., Labelle R., Piot, C. & Thornton D., (2009), "Board monitoring, audit quality, and financial reporting quality: an international review of empirical evidence", *Journal of Forensic & Investigative Accounting*, 1, (2), 1-41.
Hodge, F.D., (2003), "Investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information", *Accounting Horizons* 17 (Supplement): 37– 48.
Holtfreter, K., (2004), "Fraud in US organizations: an examination of control mechanisms", *Journal of Financial Crime*, 12, (1), 88-95.
Howard, S. and Sheetz, M., (2006), "Forensic accounting and fraud investigation for non-experts", New Jersey: John Wiley and Sons Inc.
International Federation of Accountants (IFAC): International Auditing and Assurance Standards Board (IAASB), (2009), "The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements, International Standard on Auditing (ISA)" 240. New York, NY: IFAC.
Iskander, M and Chamlou, N., (1999), "Corporate Governance: A Framework for Implementation", World Bank Group.
KMPG Forensic, (2003), Fraud Survey 2003. Montvale, NJ.
KPMG, (2004), "Fraud Survey", KPMG.

Krell, E., (2002), "Will Forensic Accountings go Mainstream?" *Business Financial Journal*. 8(5).
Nieschwietz, R., Schultz, J. & Zimbelman, M., (2000), "Empirical research on external auditors' detection of financial statement fraud", *Journal of Accounting Literature*, 19, 190-246.
O'Reilly-Allen, M. & Zikmund, P. E., (2009), "Whose responsibility is it to deter and detect fraud? the role of management, the auditor and the fraud examiner", *Journal of Global Business Management*, 5, (1).
Okafor, B., (2004), "Strategic approach to reduction of employee, theft fraud and embezzlement", *Nigerian Accountant*, 37(4), 3-5.
Okoye, E. I. & Gbegi, D. O., (2003), "Forensic Accounting: A tool for detecting fraud", *International Journal of Academic Research in Business and Social science*. 3 (3) 4-8.
Okunbor, J.A., & Obaretin, O., (2010), "Effectiveness of the application of forensic accounting services in Nigerian organisations", *Journal of Management Sciences*, 1(1), 171-184.
Olukowade E. and Balogun, E., (2015), "Relevance of forensic accounting in the detection and prevention of fraud in Nigeria", *International Journal of Accounting Research*, 2(7).
Owojori, A.A. and Asaolu, T.O., (2009), "The Role of forensic Accounting in solving the vexed problem of corporate world", *European Journal of scientific Research*, 29 No (2) P183-187.
Owolabi,E.A., (2007), "Corruption and financial crime in Nigeria", Genesis, trend and consequences. Lagos Business School.
Oxford Advanced Learner's Dictionary, (2010), 8th Edition. Oxford University Press, Oxford.
Oyejide, A., (2008), "Corruption and development. A Nigeria perspective", *Journal of Accounting*. 41(4)28-29.
Phua, C., Lee, V., Smith, K., & Gayler, R., (2010), "A Comprehensive survey of data mining-based fraud detection research", Working Paper arXiv preprint arXiv: 1009.6119: http://arxiv.org/ftp/arxiv/papers/1009/1009.6119.pdf.
Price Waterhouse Coopers (PWC), (2003), "Global economic crime survey 2003", Available at http://www.pwc.com/extweb/ncsurvers.nsf.
Rezae, Z., (2005), "Causes, Consequence and Deterrence of financial statement fraud". *Critical perspectives on Accounting*, (April 2005) 277-298.
Saunders, M., Lewis, P., & Thornhill, A., (2003), "Research method for business students", 3rd edition. New York: Prentice Hall.
Skousen, C. J., & Wright, C. J., (2008), "Contemporaneous risk factors and the prediction of financial statement fraud", *Journal of Forensic Accounting*, 9: 37-62.
Zysman, A., (2004), "Forensic accounting demystified", the world investigation network standard practice for investigative and forensic accounting, 1-28.