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The relationship between politics, legal system and financial reporting on fraud

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Abstract

Motivation: Fraud is a challenging problem. Its economic effects are clear – worse public services, less financially stable and profitable companies, charities deprived of resources needed for charitable purposes and diminished levels of disposable income of everyone. In every sector globally, fraud has an adverse impact on the quality of life. Fraud threatens the effective and efficient utilization of resources and hence is of great concern to industries, the whole community and academia.

Research Question: Does political regime moderate the relationship between financial reporting regime and on fraud? Does the legal system moderate the relationship between financial reporting regime and on fraud? What is the impact of financial reporting regime, legal regime and political regime on fraud at national level?

Idea: This study investigates how political, legal and financial reporting impacts on fraud at a country level and whether any triangular effects exist.

Data: Country level data published by ACFE, World Fact book, Deloitte IAS Plus Report, IFAC Report and Economic Intelligence Unit Report on Democracy Index for 106 countries for the years 2010 to 2014 was used.

Tools: To test study's hypotheses and to determine the interactive effects of legal regime, political regime and financial reporting regime on fraud, a three-way ANOVA is used. To determine the impact of the independent variables on fraud, pooled regression analysis is used.

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Findings: The findings provide both theoretical and empirical evidence on the interaction effects of political, legal and financial reporting regimes on fraud. Political and legal regime has a significant interaction with financial reporting on fraud as posited by political accountability theory and legal theory. Even the main effects of each regime separately are statistically significant.

Contribution: given the complex nature of frauds, the study is relevant to regulators, practising auditors, legal and political experts and politicians engaged in the debate on frauds and how to address this harmful act at a cross country level. When collusion exists between executive, legislative oversight in a full democratic regime is weakened, impacting the mechanism of fraud minimisation.

Keywords: Auditing, Financial Reporting. Fraud, Law, Politics

JEL Codes: M41, M42, K49, P00

1. Introduction

There are two principal methods of getting something from others illegally. They can either be physically forced, or they can be deceived into giving up their assets. The first type is robbery and the second is fraud. Albrecht *et al.* (2009) defines fraud as deception made for personal gain. "Deception" is key. Fraud is defined as "...the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false representations." (Webster, 2001: 380). These may include surprise, trickery, cunning and unfair ways by which another is cheated.

Fraud is a challenging problem. Its economic effects are clear – worse public services, less financially stable and profitable companies, charities deprived of resources needed for charitable purposes and diminished levels of disposable income of everyone. In every sector globally, fraud has an adverse impact on the quality of life. Fraud threatens the effective and efficient utilization of resources (Brink & Witt, 1982) and hence is of great concern to both industries and the whole community. It is also a topic of great interest to academics, professional practitioners and regulators both nationally and internationally (Vanasco, 1998; Glncy & Yadav, 2011). There are many definitions of fraud in extant literature and most, if not all, of them rest on the main tenet that fraud is an intentional act to mislead a third party for one's own personal gain. According to Prosser (1971) frauds include false representation of a material fact; representation made with knowledge of its

falsity; a person acts in the representation; and the person acting is damaged by his/her reliance (see also Arens & Loebbecke, 1994).

Frauds are harmful acts perpetrated by stakeholders ranging from investors, creditors, regulators and the community at large. Over the last decades, the rise in number of corporate frauds has further reduced public confidence in the corporate world (Kaminski et al., 2004). Since the Enron saga regulators, academics, professional associations and practising auditors have attempted to develop new ways and means to detect and prevent corporate fraud. The USA passed the Sarbanes Oxley Act in 2002 while other countries strengthen their laws to prevent and deter fraud. The International Auditing and Assurance Board (IAASB) reviewed the International Auditing Standard (ISA) 240 to accommodate some elements of fraud reporting by auditors. Academic research has continually investigated the matter and made recommendations but commonly on fraud at firm level (Phua et al., 2005). Yet, frauds have not stopped and many others have occurred (for example; World Com, Parmalat, SATYAM, and Lehman Bros). At a global by country based on a survey conducted every two years since 1996. The report, however, does not provide empirical evidence to increase our understanding on the interaction of a country's financial reporting, legal and political regimes on fraud deterrence, prevention and detection. While extant literature provides corroborative evidence on fraud and its drivers and inhibitors at firm level, there is still the belief that (1) 'Politicians could intervene to protect a fraudster and that this intervention varies between political regimes of countries and (2) the legal system could be less rigorous or contain loopholes that reduces deterrent incentives to frauds and fraudsters'. This is an anecdote that is yet to be demystified. We argue that there is an interaction between politics, laws and financial reporting on fraud and that the nature and magnitude of this interaction either deters or conceals frauds. First, we determine this interaction by attempting to answer the following questions: (1) Does political regime moderate the relationship between financial reporting regime and on fraud?; (2) Does the legal system moderate the relationship between financial reporting regime and on fraud?; (3) What is the impact of financial reporting regime, legal regime and political regime on fraud at national level?

We answer the questions using country level data published by ACFE, World Fact book, Deloitte IAS Plus Report, IFAC Report and Economic Intelligence Unit Report on Democracy Index for 106 countries for the years 2010 to 2014. We provide evidence regarding how legal regime and political regime interact

with financial reporting on fraud using a three-way analysis of variance. Secondly, we use regression analysis to investigate the impact of each regime on fraud at country level. To determine the significance of the impact that each category of political and legal regime has on fraud, we use split regression.

To minimise the effects of omitted variables and endogeneity we run year fixed effects and country fixed effects regressions. Our study makes several contributions to the literature. Firstly we address the issue of fraud which is important to regulators (national and international), fraud investigators, practising auditors, law makers, politicians, political experts as well as the public. Secondly our study is conducted on a large number of countries and thirdly our findings inform the literature by providing empirical and theoretical evidence on the interactive effects between politics, laws, financial reporting on fraud at country level. The results suggest that (1) there is a statistically significant three-way interaction between accounting regime, legal regime and political regime on fraud, (2) there is a statistically significant three-way interaction between audit regime, legal regime and political regime on fraud. We regress frauds against these regimes to determine how they influence fraud. Our findings reveal that accounting and audit regime, and legal regime have a negative but less significant influence on fraud as opposed to political regime which has a positively statistically significant influence.

The significant positive influence of politics on fraud suggests (i) politics intervene probably to cover up fraud, (ii) to influence regulators' decisions and (iii) to intimidate professional practitioners (accountants and auditors) thus making them less effective in fraud investigations and reporting. (3) We also use each category of political regime as a dummy variable to determine the direction and magnitude of its influence on fraud. The results suggest there is a significantly positive association between a full democratic regime and fraud as opposed to the other political regimes. Contrary to political accountability theory (Persson et al., 1997), our result suggests that there is collusion between executive, legislative and oversight in a full democratic regime, hence weakening the preventive, detective and deterrent mechanism required for fraud minimisation. The finding is also contrary to the poliheuristic theory of Fox and Shotts (2009) that suggests executives should be non-compensatory, and selfless. These results suggest that executives do not adopt a non-compensatory decision behaviour which is also evidence of collusion between executives and legislative as well as with the oversight

systems in place against frauds, (4) Finally we run a similar test using the legal regime as a dummy variable. Similar to deterrence theory (Beccaria, 1963; Mahoney, 2001), the results suggest that legal regime has a negative impact on fraud. But when comparing the magnitude of each regime, our analysis reveals the association between (i) fraud and civil law countries, (ii) fraud and common law countries are positive and (iii) fraud and mixed law countries are negative which is contrary to (Neova, 2000; Mahoney, 2001) who contend that deterrence of fraud is higher in common law countries because they do not only provide more freedom but also protection to the public. Our finding suggests that preventive, detective and deterrent incentives to frauds in common law countries are equally less rigorous when compared to civil law countries and those with a mixed legal system.

2. Fraud in a global context

What is the risk or likelihood of a fraud occurring in an organization? This is a more difficult question to answer than one might think. However, many studies have been performed examining that very question (ACFE, 2014; BDO, 2012; EY, 2012; EY, 2013; EY, 2015; KPMG, 2012; PwC, 2014). Findings indicate that the risk of experiencing fraud is high and year-on-year instances of fraud are increasing. According to the ACFE Report to the Nations on Occupational Fraud and Abuse (2014), the typical organization loses 5% of revenues each year to fraud causing losses totaling more than \$3.6 billion. If applied to the 2020 estimated Gross World Product, this translates to a potential projected global fraud loss of more than \$4.5 trillion per annum. The median loss caused by occupational fraud cases was \$125 000. The average loss per case was \$1 509 000. The report found that perpetrators with higher levels of authority tend to cause much larger losses. The median loss among frauds committed by owner / executives was \$600,000, \$150,000 by managers and \$60,000 by employees. The Centre for Counter Fraud Studies at the University of Portsmouth estimated losses of £2.7 trillion (\$4.23 trillion) to fraud and mistakes every year. The Financial Cost of Fraud 2015 report, based on global research over 17 years, revealed that losses increased in 2012-2013 compared to 2010-2011, up from 5.01 per cent of annual expenditure to 5.9 per cent - an increase of 17.8 per cent, and 29 per cent higher than for the period from 1997 to 2007 (Gee & Button, 2015)

Globally organizations are facing increasing challenges to growth – market volatility, geopolitical instability, fluctuating oil prices and economic sanctions, however, these organizations are also under pressure to achieve growth. The Ernst & Young Fraud and corruption – an easy option for growth report (EY, 2015) found that the risk of individuals acting unethically is high in these circumstances. More than half of their respondents believed that bribery and corruption was widespread in their respective country although 42 percent of respondents reported that their company did not have an anti-bribery policy in place or didn't know if there was one. The PwC 2014 Global Economic Crime Survey (PwC, 2014) confirmed that economic crime continues to pervade every segment of the global business community. Thirty-seven percent of their respondents reported that their organization had experienced economic crime during the survey period, an increase of 3 percent since that previous survey. There was also a relative increase of 13 percent in reported incidences of bribery and corruption. The cost of fraud — both in financial and non-financial terms — was significant. Almost one in five (18 percent) organizations suffering fraud experienced a financial impact of between US\$1 million and US\$100 million and the percentage of respondents reporting losses in excess of US\$100 doubled, from one to two percent. Respondents also cited damage to employee morale, corporate and brand reputation, and business relations as some of the most severe non-financial impacts of economic crime.

Bussmann and Werle (2006) examined economic crime from a global perspective. Their results showed that economic crime is widespread and risks are underestimated by companies. Globally, 45 percent of companies reported having been a victim of economic crime in the previous two years. The number of control and detection measures were below average in African countries implying that a larger number of economic crimes were undetected. In contrast, the higher Australian and North American economic crime rates may reflect their higher number of control mechanisms. Companies reporting few or no victimization had significantly fewer control measures in place. Asian countries reported a lower rate of economic crime. They attributed this finding to less willingness to reporting economic crime or to avoiding defining such offences as economic crime.

Organizational responses to fraud vary significantly from sector to sector and country to country and the commitment to countering fraud is not high enough (Button *et al.*, 2011). A study of UK FTSE 100 companies found a significant number of those surveyed did not have a counter fraud strategy. There were

also gaps in terms of having a designated person responsible for counter fraud measures, regular fraud risk assessments, employment of staff to counter fraud, pursuing sanctions and the development of an anti-fraud culture (Brooks *et al.*, 2009).

Although no industry is immune to fraud, certain industries (for example; finance and banking, healthcare) are more frequently targeted by perpetrators. Business owners within these industries should establish appropriate control measures. Small businesses, in particular, are vulnerable to fraud because they may have fewer controls in place. Therefore, managers and owners ought to pay particular attention to internal controls within these environments (Smith & Iacobelli, 2013).

The rest of this paper is organised in sections as follows; section 3 reviews the literature and develops the hypotheses, section 4 describes the research methods, section 5 presents and interprets the empirical findings and section 6 offers concluding remarks.

3. Related literature

The persistence and impact of fraud has led to an increased interest in the phenomenon among researchers. A large number of studies have examined corporate frauds and misconduct based on analyses of fraudulent financial reporting, auditing issues and management misconduct (Arnold & De Lange, 2004; Baker & Hayes, 2004; Brody et al., 2003; Ferrell & Ferrell, 2011; Hogan et al., 2008; Morrison, 2004; Murison, 2013; O'Connell, 2004; Ogawa, 2017; Rezaee, 2005; Rockness & Rockness, 2005). In the area of organization studies, research has focused on why fraud occurs (Hill et al., 1992; Schnatterly, 2003) while some focus on how it occurs (Ashforth et al., 2008). Dyck et al. (2013) estimated the percentage of firms engaged in fraud and its economic cost. Their estimates were based on frauds that were detected as well as fraud that they inferred were in progress but not identified. They found that approximately 14.5% of US firms engaged in fraud and the median cost of fraud in their sample was 20.4% of the pre-fraud organizational value. Combining the two findings they deduced that the cost of fraud to be approximately 3% of enterprise value.

Baucus (1994) identified three groups of situational factors that precede fraud i.e. pressure, opportunity and predisposition to fraud. Pressure occurs as a

result of the competitive environment, legal and regulatory environment, and organizational characteristics. Opportunity comes from the competitive environment, legal and regulatory environment, and organizational characteristics. Predisposition is the result of the characteristics of the environment and the organization. As the Baucus model deals with the antecedents of fraud it is suitable in determining why fraud occurs. Wood and da Costa (2015) proposed that organizational fraud occurs because of the preceding conditions coupled with the following actions of fraud agents. First is the conception of fraud (identifying an opportunity), second is the introduction of the fraud scheme (mobilizing resources and neutralizing control systems), and third is the maintenance of the fraud scheme. The latter involves administering it and managing both impression and image.

Many employees have an opportunity to commit fraud. Bologna (1980) found 20% of employees to be honest, 20% to be dishonest, and 60% to be as honest as the situation allows. Other studies have shown that 30% of employees plan to steal, 30% may give in to temptation occasionally, and only 40% would resist the temptation (Hogsett III & Radig, 1994). While management may not be able to deter the 30% that plan to steal, they may be able to discourage the 30% that occasionally give in to temptation by understanding operational governance mechanisms (Schnatterly, 2003).

Accounting systems provide a means of collecting, processing, storing and distributing an organizations financial data (Bruns, 1968). The process of collection and processing may inevitably introduce potential errors. Better systems may reduce the degree of errors and provide less opportunity for fraud to be perpetrated. An accounting system that provides only reasonable assurance that errors and inaccuracies are minimized may be seen as a weak system when compared to one that is constantly self-examined and modified, provides extensive employee training and a sense of responsibility for improved reporting (Schnatterly, 2003).

Organizations have in place many policies to discourage fraud, beyond the accounting system. Implementing and enforcing controls and having clear divisions of responsibility that are strictly segregated may contribute towards a lower prevalence of fraud (Holmes *et al.*, 2002). Statement on Auditing Standards (SAS) No. 99 establishes ineffective controls due to a lack of monitoring of controls or circumvention of controls as a risk factor that may increase the opportunity to commit financial statement fraud (AICPA, 2002). An effective control structure is an important step in reducing opportunity to

commit fraud (Albrecht *et al.*, 2009). Internal control is intended to provide reasonable assurance regarding the achievement of effective and efficient operations, reliable financial reporting, and compliance with laws and regulations (Petrovits *et al.*, 2011). A good system of internal controls minimizes opportunities to commit fraud (Bierstaker *et al.*, 2006; Gallagher & Radcliffe, 2002; Holtfreter, 2008; McEldowney *et al.*, 1993). Several academic studies found a positive relationship between a strong internal control system and earnings quality (Doyle *et al.*, 2007; Ashbaugh-Skaife *et al.*, 2008; Hunton *et al.*, 2014). Ineffective monitoring of management is associated with a higher likelihood of fraud (Hogan *et al.*, 2008). Soltani (2014) found that it is not the form of internal control techniques that is important, but the ways they have been implemented and their suitability in reinforcing control culture within organizations companies.

Laws against frauds and theft have always existed, however their application in the area of corporate governance have been ineffective. In the aftermath of the Enron scandal an array of evidence showed that misstatements and fraud were of growing concern (Coates, 2007). In the lead up to Sarbanes-Oxley an increasing number of audit failures were observed. The established system of preventing and detecting fraud was seemingly not strong enough. A common strategy employed to permit more efficient detection of frauds is to enlist informed personnel to help in the process (Kraakman, 1986). Auditors have traditionally been employed in this role. Prior to Sarbanes-Oxley, however, auditors had been failing to detect and report improper accounting, allowing executives to exaggerate growth or profitability. Sarbanes-Oxley is intended to regulate auditors so that they will perform better in their role, improving audit quality and reducing fraud (Coates, 2007). Coffee (2005) investigated the reasons why corporate scandals in the US economy did not necessarily repeat in Europe even though they were both closely interconnected in the same global economy. While Europe also had financial scandals over the same period, most were characteristically different from the US style of earnings manipulation. They found that across different legal regimes, the structure of share ownership determined the nature of the fraud committed and that governance mechanisms that worked in one system may fail in the other. Furthermore, different auditors need to be assigned to different governance systems to monitor for different frauds.

Levinson (2002) discussed the history of deregulation, which began in the early 1980s when corporations launched a campaign to limit the power of government in their affairs. Corporate influence on both political parties has

helped create an environment wherein corporations are allowed to regulate their own actions. During the Reagan era a Presidential Task Force on Regulatory Relief was created. Its goal was to remove government oversight of business practices and reduce or eliminate the accountability of corporations and their officers to the public. This provided unrestrained economic power to corporations. Macey (2006) demonstrated the need for government regulation for private markets to function effectively. The author suggested that when government is free of political pressures to accept responsibility for market forces, regulation may not be necessary, however, when government has political motives to respond to unforeseen events, regulation is necessary. Governments in democracies respond to political pressure as voters feel that government is responsible for maintaining and ensuring integrity of the economy. Therefore, regardless of the regulatory regime in place, governments in democracies take responsibility for the economy. This is evident in the form of bank bailouts after banking crises. Given this political reality it is erroneous to compare a regulatory regime such as the US with an unregulated one in which the government makes no response to economic crises. Cosenza (2007) discussed the role of the media in western democracies and its check on rectifying abuses of power. They found that the presence of a press that maintains some autonomy from government facilitated exposing corruption and scandals. The emergence of a more assertive press in other political regimes, for example Latin America (Waisbord, 2013) and China (Chu, 1999), have resulted in further exposure of corruption and scandals.

3.1 Hypotheses development

We have reviewed several papers on fraud research including financial fraud in order to determine various theories used and tested as well as the context in which they were tested. Our review indicates that given fraud research (financial fraud) was mainly at firm and individual level, theories tested were mainly related to firms rather than countries. A common theory tested is the agency theory which asserts the presence of agency risk, hence corporate fraud by top management (Siegel, 2007; Glancy & Yadav, 2011). This theory is equally relevant at country level because elected politicians are agents and the citizens are principals, hence there is an inherent agency risk.

Other theories tested include Fraud Triangle Theory, Information Manipulation Theory (IMT) (Burgoon & Buller, 1994), Interpersonal Deception Theory (IDT) (Burgoon *et al.*, 1994, George *et al.*, 2008), Media

Richness Theory (MRT), Conversation Theory (CT), Communication Accommodation Theory (CAT) (Hancock et al., 2008), Social Presence Theory (SPT) (Carlson et al., 2004) to mention a few. Jacobs et al. (1996) tests the Information Manipulation Theory (IMT) and their findings suggest that the four maxims of IMT are not independent and that any deception violates the quality maxim because it involves distorting or befogging information. The four maxims of IMT are expected quality, quantity, relevance, and manner and deception occurs when one of the maxims is violated. In the area of cyber fraud researchers have used other theories such as rational choice theory, routine activities theory, general deterrence theory, social learning theory, and differential reinforcement theory (Akers, 2002; Hayward, 2007; Conradt, 2012). Al these studies have focussed on firms and frauds without telling more about countries and frauds, except the ACFE which reports on fraud by countries. We argue that it is not enough only to report frauds by countries but imperative to understand how legal, political and financial reporting regime interact on fraud and also their impact on fraud at a national level, a gap worthy to be filled in the literature. Our study fills this gap by investigating the interaction of financial reporting (accounting and auditing) regime, legal regime and political regime in a country and its impact on fraud. To conduct this investigation, we use (1) information manipulation theory for accounting and audit regime, (2) deterrence theory to test the impact of legal regime, (3) political accountability theory and poliheuristic theory to test political impact on fraud.

3.2 Financial reporting regime and fraud

A financial reporting regime comprises of accounting and audit regime and they differ between countries (Deloitte, 2014; IFAC, 2014). While accounting regime is the accounting standards, audit regime is the auditing standards adopted and used by a country. With the advent of globalisation countries around the globe have decided to change their accounting and audit regime. Some have either adopted the international financial reporting standards (IFRSs) (Judge *et al.*, 2010; Deloitte, 2013) and international standards on auditing (ISAs) as their accounting and audit regime (Boolaky *et al.*, 2013) or converging the local standards towards the international standards whereas others are still using their own local GAAP and local auditing standards. The accounting and audit regime of a country has an impact on fraud prevention and detection. The stronger the accounting and audit regime the greater the transparency, hence the lower the risk of fraud. For instance, audit of financial statement provides reasonable assurance that financial statements are free

from fraud or material error. Auditor thus has a vital detective role in reporting whether the financial statements as a whole comply with relevant accounting standards and are free from material misstatement whether caused by error or fraud (ISA, 240.5). This view is also supported by Needles *et al.* (2002: 183).

Compliance with accounting and auditing standards (whether local or international) adds credibility to financial reporting and enables users to assess the quality. ISAs are considered to be one of the key standards for sound financial systems by the Financial Stability Board (FSB) alongside IFRS. On one hand, the Conceptual Framework for Financial Reporting of the IASB (2010) prescribes the objective of financial reporting (see para. OB2, BC1.9 to1.12) and the qualitative characteristics of useful information (see paras QC6-QC11). In a nutshell, financial information should be faithful (IASB Conceptual Framework, para QC 6- QC 11), relevant (see IASB Conceptual Framework, para QC 12 - QC16), comparable, verifiable timeliness and understandable (para QC19). We argue that while IFRS financial statements are prepared, it is fundamental preparers attempt to present financial statements within the framework. As such, compliance with IFRS mitigate, if not, prevent frauds on financial statement, hence, the preventive role of the IFRS regime. On the other hand, the International Auditing and Assurance Standards Board (IAASB), which operates under the auspices of International Federation of Accountants (IFAC), issues high quality standards on auditing and assurance, quality assurance and related services and facilitating the convergence or national and international standards, thereby enhancing the quality and uniformity of practices around the world and strengthen public confidence in the global audit profession (Smith et al., 2006). The need for ISAs is connected to the rise in international investors who demand financial statements prepared and audited by globally accepted international standards (Humphrey et al., 2009). International investors place more reliance on accounts audited under ISAs given the audit process and procedures prescribed in the ISAs and also its international recognition. For example, ISA 240 has laid emphasis on auditor's role in fraud detection and compliance with ISA 240 would ensure equally compliance with this standard among others that are relevant or related to fraud.

Accounting deals with presenting financial information to users and auditing the assurance that the information is reliable. Drawing from Information Manipulation Theory (IMT) (Burgoon and Buller, 1994), the propensity to

manipulate information and or issue deceived messages in the financial reports are present if there is scope to violate its four maxims (Turner et al., 1975; Bavelas, 1989; Ekman, 1985; Metts, 1989). The four maxims of IMT are: (1) expectations about the quantity of relevant information that is transmitted, (2) expectations about the quality of the information transmitted, (3) expectations about the manner in which information is presented, and (4) expectations about the relevance of conversational contributions. These four maxims sit well with the characteristics of information prescribed in the IASB conceptual framework. We therefore argue that in order to prevent and detect the risk of deceptive messages in financial reports, the accounting and auditing regime should be universally recognised or one in which users, including citizens, have trust. IFRSs and ISAs are the regimes that many countries in the world are expressing their trust by adopting them in their financial reporting system (Deloitte et al., 2013) because there is a strong belief that financial reports will be more faithful and transparent. In a similar vein, Barth et al. (2008) contend that adoption of IFRS decreases earnings manipulation. Their findings are consistent with regulators' claims that the adoption of IAS/IFRS enhances the comparability of financial statements, improves corporate transparency and increases the quality of financial reporting, hence reduces the risk of fraud (see also Christensen et al., 2008; Ahmed et al., 2010). At the auditing end, Mennicken (2008) finds that adherence to ISAs confers credibility to audit exercise and enables third party to rely on financial report due to less risk of fraud and errors. On that basis, our hypotheses are expressed in its alternative form.

H1: There is a negative association between the accounting regime of a country and fraud (IFRS)

H2: There is a negative association between the audit regime of a country and fraud (ISAs).

3.3 Legal regime and fraud

The legal regime of a country exerts deterrent incentive(s) for harmful acts; be they financial crime including frauds. This topic has been significantly addressed in finance and law literature (La Porta *et al.*, 1998, 2000, 2006). La Porta *et al.* (1998) suggest that the legal regime of a country has mechanism in place to protect both minority and majority investors. We argue that the legal regime can offer protection, not only to investors, but to the whole public against harmful acts. For example, legal regime in a country can offer incentives to deter financial fraudster or provide legal protection to other

stakeholders' victim of financial fraud. However, the deterrent incentives vary among countries because of legal regimes. La Porta *et al.* (2000) suggest that deterrent incentives or protection of investors are stronger in a common law regime than in a civil law regime (see also Shavell, 2003). Drawing from deterrence theory that deterrent incentives vary among legal regimes, this study informs the literature on the impact that deterrent incentives have on fraud and whether the magnitudes vary among civil law, common law countries and countries with a mixed legal system. To address this issue, we also investigate how the legal regime of a country interacts with its political regime and accounting regime in the prevention, detection and deterrent of fraud.

Deterrence theory is the underpinning theory to construe the rigour of legal regime on fraud. The deterrence theory were developed by Thomas Hobbes (1588-1678, Cesare Beccaria (1738-1794) and Jerremy Benthan (1748-1832). They disagreed with the then legal policies and practices in Europe and the spiritualistic explanations of crime on which they were founded. In return, they proposed a modern deterrence theory based on the social contract between the people and the government. This modern deterrence theory is based on three main components namely: severity, certainty and celerity. (1) The severity component suggests that the more severe a punishment the less likely a rational individual will commit crime including financial crime. The law must therefore have in place punishment/penalties that are just and severe enough that will lure the public to obey the law, hence deterring fraud. (2) Certainty of punishment implies that punishment is given whenever a criminal act including fraud is committed. Beccaria's philosophy of the deterrence theory is that offenders (actual and potential) are aware that they will be punished for any undesirable acts. As a result, they will desist from committing offence. (3) Celerity means the speediness to punishment. Beccaria (1963) further contends that punishment must be quick in order to deter crime (McQuade, 2006) and we argue that that depends on the efficiency of legal framework in dealing with disputes.

Outside finance literature, evidence on the effect(s) of deterrence to any harmful act is mixed. Some believe that deterrence may be equally strong in civil law as in common law countries (Weiss, 2001 and Cohen & Dehejia, 2002). In a similar vein, Mahoney (2001) argues that although common law regime allows greater freedom to citizens yet it provides stronger enforcement as regard their rights and protection. Neova (2000) studies the value of corporate control rights (companies with dual class shares) by grouping

countries into mainly common law, Scandinavian civil law and French civil law regimes. He finds that both the legal regime and the level of enforcement impact on the value. He infers that largest control values occur in French civil law countries as opposed to common law and Scandinavian civil law countries. Friedrichs (2010) suggests that in general white collar criminals are treated with more leniency than traditional offenders. Our argument is that any country, whatsoever is its legal regime, will have in place deterrent incentives to frauds (financial or non-financial). Importantly is that the operation of the legal regime must interact properly and effectively with other preventive regime(s) in place to deter fraud. We investigate this interactive process by testing the following hypothesis:

H3: Legal regime of a country has a significant interaction with its accounting and political regime.

Then, we investigate how the legal regime deters fraud in a country. Our argument is that whatever the legal regime in a country it will deter fraud. In this case our hypothesis appears in its alternative form.

H4: There is an inverse relationship between legal regime (deterrent incentives) and fraud.

3.4 Political regime and fraud

Mainstream accounting literature suggests that both legal and political regimes are linked to accounting and reporting systems and practices (Nobes, 1983). Archambault and Archambault (2009) argue that a jurisdiction characterised by democratic principles would be more amenable to adopting rules pertaining to transparency and accountability, such as accounting and auditing standards, with a view to hold powerful forces to account. A degree of relative political freedom enables diverse parties to hold leaders to account. In contrast, countries with political systems with a lower level of civil liberties and more state control are less likely to favour the introduction of accounting and auditing standards, particularly if these standards are determined by international institutions. We extend this argument by contending that political system or regime of a country is also linked with fraud minimisation because of its linkage with laws, accounting and auditing. Extant literature in fraud accounting is apparently silent on the role of political regimes on fraud minimisation. It is therefore important to inform the body of literature through the use of political theories how different political regimes interact with fraud

at a country level. We therefore draw from mainstream political-agency literature to increase our understanding on this issue. Political-agency literature is wealthy both in terms of theoretical and empirical research on political regimes, separation of powers, abuse of powers due to risk of delegation trap and informational asymmetries (Persson *et al.*, 1997; Cranes-Wrone *et al.*, 2001; Maskin & Tirole, 2004; Prat, 2005; Fox, 2007; Shotts, 2009). For the purpose of our paper we are using a combination of political accountability theory (Persson *et al.* 1997) and poliheuristic theory (Mintz, 1993) in the context of fraud at a country level.

Formal theorists suggest that both competence and preference of politicians are essential for accountability, but (Fox, 2007; Maskin & Tirole, 2004; Fox & Shotts, 2009) contend that although politicians differ in their competence and preference(s), these two attributes need not be analysed in isolation. Fox and Shotts (2009) argue that in preference-based models, there is a delegation trap that executives may shy away from pursuing policies in public interest. We are arguing that this trap is an inherent agency risk, whereby the executives as agents can pursue policies toward their own interest or interest of their political nominees as opposed to the interest of the citizens (principals). Cranes-Wrone *et al.* (2001) argue that in competence-based models, when the appropriateness of an executives' policy choice is revealed before the next election, electors vote on the basis of the appropriateness and outcomes of political manifesto prior to next election, that is, taking into account past performance (see also Prat, 2005).

Persson *et al.* (1997) suggest that political constitutions are incomplete contracts and therefore leave room for abuse of power [...p. 1163]. They believe that separation of powers between executive and legislative bodies could prevent this abuse of power only if there are appropriate checks and balances. These checks and balances should attend the risk behind the conflict of interest between executives and legislative. The risk is the interaction of executive in both the development and implementation of checks and balances that would mitigate frauds. Below is an extract of a quotation in Persson *et al.* (1997)

"If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary $\lceil \dots \rceil$.

This statement supports the delegation trap hypothesis and informational asymmetries hypothesis (Fox & Shotts, 2009) and reveals the importance of accountability and also the fact that political accountability varies between countries and their regimes. Grant and Keohane (2005) state accountability assumes a relationship between power-wielders and the electors who hold them accountable. In theory accountability implicates executives if they fail in their obligations to act according to accepted standards (both national and international) and that there will be sanctions for failures to do so. We argue whatever the political regime(s) in a country, executives will attempt to protect the citizens against fraud at any cost because they know they will be accountable. As a result, they will adopt law(s) and accounting regime(s) as well as ensuring compliance in order to protect the citizens. Executives (politicians) as representative of the population will question adoption of wrong policies and non-compliance with laws and regulations. We therefore hypothesise that

H5: Political regime has a significant interaction with accounting and legal regime

Mintz (1993) uses the poliheuristic theory to explain the heuristic of noncompensatory decision rule of decision makers, ie. executives. The theory posits that decisions makers who adopt non-compensatory rule disregard other decision alternatives likely to yield negative results on a single dimension of concern, even if those alternatives are likely to yield positive outcomes on other dimensions. According to this theory the political dimension is always non-compensatory in policy decision. Poliheuristic theory has been tested in different political regimes namely democracies and non-democracies on different aspects of political decisions (Kinne, 2005). Our argument is that executives will be non-partisan as well as selfless and will therefore adopt a non-compensatory rule when it comes to decision on fraud minimisation because their aims are to protect citizens. They do not mind even if the decisions will have a negative impact on their popularity. Consequently the more non-compensatory are the executives in a regime, the lower the fraud. On that basis our hypothesis is reported in its alternative form.

H6: There is an inverse relationship between political regime(s) and fraud.

4 Research methods

4.1 Data and sample design

We collect data from different sources namely: (1) ACFE Reports (2010, 2012, 2014) on frauds by countries, (2) IFAC Reports (2010, 2012, 2014) on the 'Basis of ISA Adoption', (3) Deloitte IAS Plus Reports (2010, 2012, 2014) on IFRS adoption by countries, Economic Intelligence Unit Report on Democracy Index and World Fact book on legal systems.

ACFE obtained its data from an on-line survey conducted every two years to more than 34,000 fraud examiners. As part of the survey, respondents were asked to provide a detailed narrative of the single largest fraud case they had investigated. Each case submitted met the following four criteria: (1) The case must have involved occupational fraud (defined as internal fraud, or fraud committed by a person against the organization for which he or she works), (2) The investigation must have occurred between January and the time of survey participation, (3) The investigation must have been complete at the time of survey participation and (4) The ACFE must have been reasonably sure the perpetrator(s) was (were) identified. Respondents were then presented with 84 questions to answer regarding the particular details of the fraud case, including information about the perpetrator, the victim organization and the methods of fraud employed, as well as fraud trends in general. IFAC also obtained its data by providing its members with assessment information about the regulatory and standard-setting framework in their countries. The questionnaire contains four criteria as follows: (1) ISA adopted by law, (2) Standard setters adopt ISA, (3) National standards are ISAs subject to modifications and (4) Others (assuming not adopted at all). Deloitte classifies countries by IFRS adoption based on four criteria: (1) Not Permitted, (2) Permitted, (3) Required for some and (4) Substantially adopted. Economic Intelligence Unit classifies countries regime using the Democratic Index which is determined on responses from a survey. Countries are classified as (1) full democracy, (2) flawed democracy, (3) hybrid and (4) autocracy. The World Fact book lists countries by (1) common law, (2) civil law and (3) mixed law regimes. These data sources are considered reliable because they were used in various academic research as well as technical reports for a number of years (Judge et al., 2010; Boolaky, 2012; Porter et al., 2005; 2001; Sachs, 2003; Blanke & Lopez-Claros, 2004).

Our sample of countries is mainly guided by these sources. The number countries in these sources are different and also data was not available for some of them. As a consequence, the sample size was reduced to 106 countries for three years and comprise of civil, common and mixed law countries, thus providing us with 318 observations. The number of observations is 318 and is sufficient for the regression.

4.2 Variable description

Number of frauds reported is the dependent variable and is sourced from the ACFE Reports. It is defined as FRAUD.

Financial Reporting Regime is the first variable of interest and is made up of accounting regime and audit regime of a country. Accounting regime is considered to be IFRS whereas audit regime ISA. Each is being tested separately. Measure of the adoption of IFRS and ISA are categorical (Judge *et al.*, 2010; Boolaky *et al.*, 2013). For ISA "4" means that ISA is mandatory by law, "3" national standard setters have adopted ISA as auditing standards but not mandatory by law, "2" ISAs have been generally adopted as the local auditing standards but subject to modification and finally when a country is coded as "1" it means the IFAC does not have adequate information (IFAC, 2014). For IFRS "4" means substantial adoption, "3" Required for some, "2" Permitted and "1" not permitted (Deloitte IAS PLUS, 2014).

Legal Regime (LEG) is the second independent variable and is made of civil law (CIL), common law (COL) and mixed law (MIL) and categorised as "1", "2" and "3" respectively. Political Regime (POLREG) is the third variable of interest and is made of full democracy (FUD), flawed democracy (FLD), hybrid regime (HBD) and autocracy (AUTO) and categorised as "1", "2", "3" and "4".

4.3 Empirical model

Analysis of variance

In order to determine the interactive effects of legal regime, political regime and financial reporting regime on fraud, we used a three-way ANOVA. We aim to reveal if a three-way interaction effects exists between legal regime, political regime and financial reporting regime on frauds. Prior to embark on the ANOVA, we have tested whether our data meets the fundamental assumptions and there is no alarming result. For example, the Levene's test

for homogeneity of variances is (0.210). The ANOVA results are reported in Tables 1 and 2.

Regression analysis

To determine the impact of the independent variables on fraud, we used a pooled regression analysis. The analytical method used to test the hypotheses involves the estimation of the following general form equation for a data set of 106 countries:-

Model 1: $FRAUD = \beta_0 + \beta_1 FINREG + \beta_2 LEGREG + \beta_3 POLYREG + e$

Because each independent variable is made up of different categories, we split the regression by conducting several sensitivity analyses in order to evaluate the pressure of each category of legal and political regime on fraud. The purpose of this analysis is to determine if the findings match with the theories tested. The results are presented and discussed below.

5 Findings

We report the interaction effects in two phases. (1) Political regime, IFRS regime and legal regime in Tables 1, 1a and (2) Political regime, ISA regime and legal regime in Tables 2 and 2 a.

5.1 Interaction and main effects

Politics, IFRS and law

First we investigate the possibility of an interaction effect, that is, the influence of political regime on fraud depends on whether it is full democracy, flawed democracy, hybrid system and autocracy and how they interact with IFRS and law. The result in Table 1 suggests that there is a significant difference in the effect of political regime on fraud for different types of political regimes F(15, 248) = 2.774, p = 0.001. This implies that it is very likely that politics in a country interact with its financial reporting and legal regime as far as fraud is concerned. This finding is opposite to political accountability theory (Persson *et al.*, 1997) which states that there should be separation powers between executives and the legislative but for it to be effective there should be check and balances. These checks and balances depend on the reporting and legal regime of the country. The main effect results in Table 1 reveal that there is also a statistically significant main effect for IFRS and legal regime, F(8, 248) = 2.152, p = 0.033 and F(3, 248) =

3.858, p = 0.010 respectively. This suggests that the propensity for information manipulation under IFRS is less likely, irrespective of its legal regime, hence supporting the tenet of IMT. The main effect of political regime is moderately significant with a p value of 0.09 which confirms some political interventions through interaction with financial reporting and legal regime.

We use the Post-hoc tests to determine where the political regimes differ in their interaction. That is how interaction of politics in a full democracy regime differs from the flawed regime and how interaction in the flawed democracy differs from the hybrid regime and so on. The results are reported in Table 1 (a). Our finding suggests that full democracy and flawed democracy differ significantly from one another in term of their interaction with accounting and legal regime to fraud. As far as the hybrid and autocracy regimes are concerned they did not differ significantly. We report the specific impact of each political regime on fraud in our regression analysis.

Table 1: Tests of between-subjects effects

Table 1:10sts of between-subjects effects									
	Dependent variable: FRAUD								
Source	Type III Sum of Squares	df	Mean Square	F	Sig.				
Corrected Model	851751.828a	65	13103.874	2.142	0.000				
Intercept	25599.064	1	25599.064	4.185	0.042				
IFRS	105321.382	8	13165.173	2.152	0.033				
POLYREG	40207.149	3	13402.383	2.191	0.090				
LEGREG	70805.767	3	23601.922	3.858	0.010				
IFRS * POLYREG	273801.007	16	17112.563	2.798	0.000				
IFRS * LEGREG	133738.367	13	10287.567	1.682	0.067				
POLREG * LEGREG	125874.850	7	17982.121	2.940	0.006				
IFRS * POLYREG *	254562.769	15	16970.851	2.774	0.001***				
LEGREG									
Error	1180584.273	248	6117.017						
Total	2100574.000	318							
Corrected Total	2032336.100	317							

a. R Squared = 0.419 (Adjusted R Squared = 0.223)

Table 1 (a)									
Post Hoc Tests									
1= Autocracy, 2=Hy	brid, 3 Flawed Demo	ocracy, 4=Full Demo	cracy						
	Multiple Comparisons								
Dependent Variable	Dependent Variable: ACFE Cases Reported								
Test: Tukey HSD									
(I)1= Autocracy,	(J) 1= Autocracy,	Mean Difference	Std. Error	Sig					
2=Hybrid, 3	2=Hybrid, 3	(I-J)							
Flawed	Flawed								
Democracy, 4=Full	Democracy, 4=Full								
Democracy	Democracy								

Table 1 (a)								
Post Hoc Tests								
1= Autocracy, 2=Hy	1= Autocracy, 2=Hybrid, 3 Flawed Democracy, 4=Full Democracy							
	Multi	ple Comparisons						
Dependent Variable	e: ACFE Cases Repor	ted						
Test: Tukey HSD	-							
Autocracy	Flawed Democracy	-0.644	12.8996	10.000				
	Full Democracy	-35.127	14.9883	0.092				
	Hybrid	-13.289	15.8584	0.836				
Flawed Democracy	Autocracy	0.644	12.8996	1.000				
	Full Democracy	-34.483*	13.1371	0.046				
	Hybrid	-12.646	14.1218	0.807				
Full Democracy	Autocracy	35.127	14.9883	0.092				
	Flawed Democracy	34.483*	13.1371	0.046				
	Hybrid	21.838	16.0522	0.526				
Hybrid	Autocracy	13.289	15.8584	0.836				
-	Full Democracy	12.646	14.1218	0.807				
Flawed Democracy -21.838 16.0522 0.526								
Based on observed m	neans. The error term is	s mean square(Error)	= 6117. 048					
*The	mean difference is sign	ificant at the 0.05 le	vel.					

Politics, ISA and law

Second we test the interaction effect of political regimes with ISA and law on fraud. The results are reported in Table 2. Similar to our findings on IFRS and law above, there is a significant difference in the interaction effect of different political regimes with ISA and law on fraud F (11, 269) = 3.565, p = < 0.01. This implies that it is very likely that politics in a country also interact with auditing and legal regime as far as fraud is concerned. As stated in political accountability theory, executives and legislatives should consent but with checks and balances. The strength of the checks and balances can only be known from a strong audit regime. Our finding suggests that the interaction effect of politics could weaken the audit regime. The main effect results in Table 2 reveal that there is also a statistically significant main effect for ISA and legal regime, F (6, 269) = 4.059, p < 0.01 and F (4, 269) = 3.226, p = 0.013 respectively. This finding further suggests that the propensity for information manipulation under ISA is less likely, irrespective of its legal regime but could be influenced as a result of political intervention. The main effect of political regime is also statistically significant with a p value of 0.031.

Table 2: Tests of between subjects effects

Dependent variable: FRAUD								
Source	Type III Sum	Df	Mean Square	F	Sig.			
	of Squares							
Corrected Model	663953.489 ^a	50	13279.070	2.586	0.000			
Intercept	5561.747	1	5561.747	1.083	0.299			
LEGREG	66263.274	4	16565.819	3.226	0.013			
POLYREG	46073.656	3	15357.885	2.991	0.031			
ISA	125068.245	6	20844.707	4.059	0.001			
LEGREG *	175003.179	8	21875.397	4.260	0.000			
POLYREG								
LEGREG * ISA	184428.703	8	23053.588	4.489	0.000			
POLYREG * ISA	181224.303	10	18122.430	3.529	0.000			
LEGREG *	201373.224	11	18306.657	3.565	0.000			
POLYREG * ISA								
Error	1381390.461	269	5135.281					
Total	2100574.000	318						
Corrected Total	2045343.950	317						

A R Squared = 0.325(Adjusted R Square = 0.199

The Post-hoc tests report the difference in the interaction effect(s) of each political regime on auditing. The results are reported in Table 2 (a). There is a significant difference between full democracy and flawed democracy regime as regard their interaction with the audit and legal regime of a country. Moreover our results also indicate that there is a significant difference between full democracy and autocracy on their interaction with audit and law of a country. The impact of each type of political regime on fraud is reported in the forthcoming paragraph on regression.

Table 2 (a)				
Post Hoc Tests				
1= Autocracy, 2=Hy	ybrid, 3 Flawed Demo	cracy, 4=Full Demo	cracy	
	Multi	ple Comparisons		
Dependent Variable	e: ACFE Cases Repor	ted		
Test: Tukey HSD				
(I)1= Autocracy,	(J) 1= Autocracy,	Mean Difference	Std. Error	Sig
2=Hybrid, 3	2=Hybrid, 3	(I-J)		
Flawed	Flawed			
Democracy, 4=Full	Democracy, 4=Full			
Democracy	Democracy			
Autocracy	Flawed Democracy	-1.197	10.7130	0.999
	Full Democracy	-32.920*	12.6833	0.049
	Hybrid	-7.017	12.0702	0.938
Flawed Democracy	Autocracy	1.197	10.7130	0.999
	Full Democracy	-31.723*	11.4446	0.030
	Hybrid	-5.820	10.7611	0.949
Full Democracy	Autocracy	32.920*	12.6833	0.049

Table 2 (a)						
Post Hoc Tests	S					
1= Autocracy,	2=Hybrid, 3 Flawed Demo	cracy, 4=Full D	Democracy			
	Multi	ple Comparison	ns			
Dependent Va	riable: ACFE Cases Repor	ted				
Test: Tukey H	ISD					
	Flawed Democracy	31.723*	11.4446	0.030		
	Hybrid	25.903	12.7240	0.177		
Hybrid	Autocracy	7.017	12.0702	0.938		
	Full Democracy	5.820	10.7611	0.949		
	Flawed Democracy	-25.903	12.7240	0.177		
Based on observed means. The error term is mean square(Error) = 5135.281						
:	*The mean difference is sign	ificant at the 0.0	05 level.			

5.2 Regression effects

Table 3 presents the Pearson correlation for the dependent and independent variables used in the regression analysis. The purpose is to observe the positive and negative associations between the variables and to also examine for multi-collinearity. The correlation matrix in Table 3 shows that the highest correlation is 0.388. Correlations greater than 0.9 between the independent variables can signal the presence of multi-collinearity which might influence the findings in the regression analysis (Field 2000).

Table 3: Pearson Correlation

Tubic 5: I cui son con cui on								
	Fraud	IFRS	ISA	POLYS	LEGSYS			
ACFE Cases	1.000							
Reported								
IFRS	-0.094	1.000						
ISA	-0.086	0.388	1.000					
POLYREG	0.099	0.181	0.274	1.000				
LEGREG	-0.043	-0.068	0.101	0.023	1.000			

We test for the presence of multi-collinearity in Table 4 (last 2 columns). A VIF (Variance Inflation Factors) below 9 and a Tolerance Value greater than 0.10 confirms that multi-collinearity does not affect the findings in the regression (Hail *et al.*, 2006). None of the results in the multi-collineatiry test is alarming.

We report the regression analysis examining the association between financial reporting regime, legal regime and political regime on fraud in Table 4 followed by a discussion.

Table 4: Regression Analysis

Regressing Fraud against accounting and auditing regime,
political system and legal system.

Model	Co-efficient	т	Р	Collinearity		
Model	Co-efficient	1	P	Tolerance	VIF	
Constant	-	1.320	0.188	-	-	
IFRS	-0.089	-1.462	0.145	0.832	1.201	
ISA	-0.085	-1.366	0.173	0.792	1.262	
POLYREG	0.139	2.405	0.017**	0.918	1.089	
LEGREG	-0.049	-0.772	0.441	0.976	1.024	
AR^2	.177					
DWT	1.985					

^{**} Significant at <.05 level

IFRS= International Financial Reporting Standards, ISA = International Standards on Auditing, POLYREG = Political Regime, LEGREG = Legal Regimes.

Financial Reporting, Law, Politics and Fraud

There is negative but not statistically significant association between IFRS and fraud (B = -0.089, p 0.145). This finding suggests that a country with an IFRS regime requires financial reports to be more transparent, hence reducing risk of information manipulation including earnings manipulations (Barth et al., 2008; Christensen et al., 2008; Ahmed et al., 2010). There is also a negative association between ISA and fraud at (B = -0.085, p = 0.173). Similar to Mennicken (2008) this inverse relation between audit standards and frauds suggests that adherence to ISAs indicates that audit has been conducted using international best practice and as a consequence the risk of fraud is less, hence increasing credibility of financial reports. Although not significant, this result supports the hypotheses that there is a negative association between financial reporting regimes (IFRS & ISA) and frauds. That is the risk of information manipulation or violation of the IMT maxims is less likely in a jurisdiction where the financial reporting regime is based on international standards. According to deterrence theory, legal regime in a country is expected to have a negative association with number of fraud cases but the magnitude of the effect varies with the legal system of a country (Neova, 2000; Mahoney, 2001; Shavell, 2003; La Porta et al., 2000, 2006). Our result aligns with the findings in extant literature though less significant (B = 0.049, p = 0.441). It suggests that if financial reporting regime is more rigour through constant application of international standards then fraud could be further mitigated.

Our finding on political regime reports contrary to our hypothesis. There is a statistically positive association between political regime and fraud in a country (B = 0.139, p = 0.017). This result gives four signals: (1) politics intervene with fraud; (2) politics intervene when fraud cases are reported and (3) politics do cover up when there are frauds implicating their partisan or connected person and (4) politics could influence faithful reporting. Any of these signals indicates the risk of delegation trap and compensatory behaviour of executives (Perssons *et al.*, 1997, poliheuristic theory, Fox and Shotts, 2009). This finding is also the reason for IFRS and ISA to be less statistically significant in preventing and detecting fraud. It further supports the hypothesis (1) that politics interact with financial reporting and even legal regime when it comes to fraud.

Sensitivity analysis

In order to determine the specific impact of each political and legal regime on fraud, we perform a sensitivity analysis using split regression in four different models for political regime (reported in Table 5) and three models for legal regime (reported in Table 6).

Table 5: Sensitivity Analysis for Political Regime

	Model 1:Full Democracy		Model 2: Flawed Democracy		Mo	Model 3: Hybrid		Mode	Model 4: Autocracy			
	Beta	T	P	Beta	t	P	Beta	t	P	Beta	T	P
Constant		2.863	0.004		2.958	0.003		2.827	0.005		3.195	0.002
IFRS	6.109	-1.553	0.122	-4.734	-1.193	0.233	-4.758	-1.193	0.234	-4.776	-1.209	0.228
ISA	6496	-1.170	0.243	-3.689	-0.761	0.447	-4.697	-0.981	0.328	-6.259	-1.281	0.201
FUD	35.353	3.045	0.003**									
FLWD	-			8.392	-0.890	0.374						
HBD	-						-4.274	-0.393	0.694			
AUTOCRA	-									-15.925	-1.443	0.150
AR^2	0.167			0.119			0.11			0.135		
DWT	2.021			1.994			1.978			1.99		

^{**} Significant at 0.01 level

DWT=Durbin Watson Test. The DWT result does not indicate any serial correlation problem.

Model 1(Full Democracy) reveals that politics have a statistically significant positive influence on fraud (B = 35.353, p = 0.003). This indicates that there is more likelihood for political intervention (1) in fraud, and (2) cover-up of frauds in a democratic regime as opposed to other political regimes. Model 2 (Flawed Democracy) Intervention in flawed democracy is less significant (B = 8.392, p = 0.374). Model 3 & 4 (Hybrid and Autocracy) suggests that the association between political regimes and fraud is inverse which suggests that

the propensity of fraud cover-up or political intervention in fraud is less likely.

Table 6: Sensitivity Analysis Legal Regime

	Model 5: Civil Law			Model 6	Model 6: Common Law			Model 7: Mixed Legal system		
	Beta	T	Sig	Beta	T	Sig	Beta	T	Sig	
Constant		2.508	0.013		2.835	0.005		3.041	0.003	
IFRS	-4.713	-10.186	0.236	-5.010	-1.267	0.206	-5.157	-1.296	0.196	
ISA	-4.410	-0.918	0.359	-5.067	-1.067	0.287	-3.845	-0.803	0.423	
CIL	1.936	0.212	0.832							
COL				2.979	1.559	0.120				
MIL							-10.819	-1.108	0.269	
AR^2	0.119			0.139			0.102			
DWT	1.980			2.001			1.978			

Deterrence theory suggests that any legal regime provides deterrent incentives to fraud. Findings in the literature are mixed. Some argues that deterrent incentives are stronger in common law regime whereas others argue that civil law countries offer greater deterrent incentives to fraud. We test the impact of each legal regime on fraud. Our results show that both civil and common law regime have a positive association with fraud, suggesting that politics can intervene in fraud or do cover up of fraud in either regime. However, the magnitude is higher in a common law regime as opposed to civil law (B=2.979, p=0.120 for common law; B=1.936, p=0.832 for civil law). Interestingly our result indicates that a mixed law regime is more effective in deterring fraud than common and civil law regimes.

Table 7. Summary of findings

Hypothesis	Confirmed or Rejected
H1: There is a negative association between the accounting	Confirmed
regime of a country and fraud (IFRS)	
H2: There is a negative association between the audit regime	Confirmed
of a country and fraud (ISAs).	
H3: Legal regime of a country has a significant interaction	Confirmed
with its accounting and political regime.	
H4: There is an inverse relationship between legal regime	Rejected
(deterrent incentives) and fraud.	
H5: Political regime has a significant interaction with	Confirmed
accounting and legal regime	
H6: There is an inverse relationship between political	Rejected
regime(s) and fraud.	

6 Conclusion

Fraud is not an uncommon practice in history. Fraud has not stopped to occur despite sophisticated preventive, detective and deterrent mechanisms in place. Political accountability theory suggests that there should be separation of powers between executives and legislative, they should also consent in policy decision but to be effective there should be proper checks and balances (Perssons *et al.*, 1997). Poliheuristic theory suggests that politicians should be non-compensatory and selfless in making decisions despite the result being politically unpopular (Fox & Shotts, 2009). Yet the anecdote that political intervention cripples the effective operations of these mechanisms still flaunts in the mind of many people. We aim to demystify this anecdote by using the number of fraud cases reported by ACFE and investigate the interaction of political regime with the financial reporting and legal regime on fraud. We then determine the impact of each regime on fraud as well as the impact of each category of political and legal regime on fraud.

Our findings provide both theoretical and empirical evidence on the interaction effects of political, legal and financial reporting regimes on fraud. We find that political and legal regime has a significant interaction with financial reporting on fraud as posited by political accountability theory and legal theory. Even the main effects of each regime separately are statistically significant. However, when we investigate the impact of each regime on fraud we find that political regime has a positive association with fraud thus indicating that the interaction of politics with law and financial reporting regime could cause cover up of frauds. In line with deterrence theory, legal regime is reported to have a negative association with fraud which confirms that any legal regime has in place deterrent incentives to fraud but they vary by regimes. We conduct a further investigation by testing the impact of each category of political and legal regime on fraud. We find that the intervention of executives (politics) in a full democracy is significantly positively related to frauds as opposed to flawed and other politic regimes. This implies that in a full democracy politics do not necessarily deter frauds.

The findings are relevant to regulators, practising auditors, legal and political experts and politicians engaged in the debate on frauds and how to address this harmful act at a cross country level. We acknowledge in this study that financial reporting regime, politics and law have an interactive role in the prevention, detection and deterrent of fraud. Our study reveals that the interaction effect varies with the type of political and legal regime of a

country. While political accountability theory suggests that executives and legislative should consent, our study confirms the risk of delegation trap, informational asymmetries and collusion.

Similar to other studies, our study has some limitations. First, our data were limited to only three years. Second we do not have any assurance as to whether all frauds in a country have been reported. Third our study did not investigate each of these fraud cases reported to determine the punitive decisions against the fraudster. These are areas for future research and can be conducted as case study for a small number of countries.

References

- ACFE (2014) Report to the Nation on Occupational Fraud and Abuse, http://www.acfe.com/rttn.aspx. *Accessed:* 15/03/2015
- ACFE (2020) Report to the Nation. 2020 Global Study on Occupational Fraud and Abuse, http://www.acfe.com/rttn.aspx. *Accessed:* 15/11/2021
- AICPA (2002) Statement on Auditing Standards No. 99. *Consideration of Fraud in a Financial Statement Audit.* New York, NY:AICPA.
- Ahmed, S.A., Neel, M., & Wang, D. (2010) "Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence", Working Paper, Texas A&M University.
- Akers, R. L. (2002) "A Social Learning Theory of Crime", In S. Cote (ed). *Criminological Theories: Bringing the Past to the Future* (pp. 135 144). Thousand Oaks, CA: Sage Publications, Inc.
- Albrecht, W. S., Albrecht, C. C. & Albrecht, C. D. (2009) *Fraud Examination*, 3rd Ed., Thomson/South-Western.
- Arnold, B. & De Lange, P. (2004) "Enron: an examination of agency problems", *Critical Perspectives on Accounting*, 15 (6): 751-765.
- Ashbaugh-Skaife, H., Collins, D. W., Kinney Jr, W. R. & LaFond, R. (2008) "The effect of SOX internal control deficiencies and their remediation on accrual quality", *The Accounting Review*, 83 (1): 217-250.
- Ashforth, B. E., Gioia, D. A., Robinson, S. L. & Trevino, L. K. (2008) "Re-viewing organizational corruption", *Academy of Management Review*, 33 (3): 670-684.
- Baker, C. R. & Hayes, R. (2004) "Reflecting form over substance: the case of Enron Corp", *Critical Perspectives on Accounting*, 15 (6): 767-785.
- Barth, M.E., Landsman, W.R., & Lang, M.H. (2008) "International accounting standards and accounting quality", *Journal of Accounting Research*, 46: 467-498.

- Baucus, M. S. (1994) "Pressure, opportunity and predisposition: A multivariate model of corporate illegality", *Journal of Management*, 20 (4): 699-721.
- BDO (2012) Not-for-Profit Fraud Survey 2012. In Howard, A. & Best, P., J (Eds.) *BDO Not-for-Profit Survey 2012*. Australia, BDO.
- Bierstaker, J. L., Brody, R. G. & Pacini, C. (2006) "Accountants' perceptions regarding fraud detection and prevention methods", *Managerial Auditing Journal*, 21 (5): 520-535.
- Blanke, J., & Lopez-Carlos, C. (2004) "The Growth Competition Index: Assessing Countries Potential for Sustained Growth", in Porter M.E, Schwabs, K. Sala-Martin X. and Lopez-Carlos A. (eds) *The Global Competitiveness Report* 2004-05. Palgrave Macmillan, World Economic Forum: New York: 3-18.
- Bologna, J. (1980) "Motivated climate prevents white-collar crime", *Journal of Systems Management*, 31 (10): 36-39.
- Boolaky, P.K. (2012) "Auditing and reporting in Europe: An analysis using country level Data", *Managerial Auditing Journal*, 27(1): 41-65.
- Brody, R. G., Lowe, D. J. & Pany, K. (2003) "Could 51 million be immaterial when Enron reports income of 105 million?", *Accounting Horizons*, 17 (2): 153-160.
- Brooks, G., Button, M. & Frimpong, K. (2009) "Policing fraud in the private sector: a survey of the FTSE 100 companies in the UK", *International Journal of Police Science & Management*, 11 (4): 493-504.
- Bruns, W. J. (1968) "Accounting information and decision-making: some behavioral hypotheses", *Accounting Review*, 469-480.
- Burgoon, J.K. & Buller, D.B (1994) "Interpersonal deception: III. Effects of deceit on perceived communication and nonverbal behavior dynamics", *Journal of Nonverbal Behavior*, 18 (2)
- Burgoon, J.K., Buller, D.B., Ebesu, A.S. and Rockwell, P. (1994) "Interpersonal deception: V. Accuracy in deception detection", *Communications Monographs* 61
- Bussmann, K.-D. & Werle, M. M. (2006) "Addressing crime in companies: First Findings from a Global Survey of Economic Crime", *The British Journal of Criminology*, Oxford University Press, 46 (6): 1128-1144.
- Button, M., Gee, J. & Brooks, G. (2011) "Measuring the cost of fraud: an opportunity for the new competitive advantage", *Journal of Financial Crime*, 19 (1): 65-75.
- Carlson, J.R., George, J.F., Burgoon, J.K., Adkins, M. & White, C.H. (2004) "Deception in computer-mediated communication", *Group Decision and Negotiation*, 13 (1)
- Chu, H. (1999) China's investigative journalists cut a broad, if cautious, swath. *Los Angeles Times*, 21, A3.
- Coates, J. C. (2007) "The goals and promise of the Sarbanes-Oxley Act", *The Journal of Economic Perspectives*, 91-116.
- Coffee, J. C., Jr. (2005) "A Theory of Corporate Scandals: Why the USA and Europe Differ", *Oxford Review of Economic Policy*, 21 (2): 198-211.

- Conradt, C. (2012) "Online Auction Fraud and Criminological Theories: The Adrian Ghighina Case", *International Journal of Cyber Criminology*, 6 (1): 912-923
- Cosenza, E. (2007) "The Holy Grail of Corporate Governance Reform: Independence or Democracy?", *Brigham Young University Law Review*, 1: 1-54.
- Christensen, H.B., Lee, E., & Walker M., (2008) "Incentives or standards: What determines accounting quality changes around IFRS adoption?", AAA 2008 Financial Accounting and Reporting Section (FARS) Paper. Available at SSRN: http://ssrn.com/abstract=1013054
- Doyle, J. T., Ge, W. & McVay, S. (2007) "Accruals quality and internal control over financial reporting", *The Accounting Review*, 82 (5): 1141-1170.
- Dyck, I., Morse, A. & Zingales, L. (2013) "How pervasive is corporate fraud?", *Rotman School of Management Working Paper* (2222608).
- EY (2012) Growing Beyond: a place for integrity. 12th Global Fraud Survey, *EY*, http://www.ey.com/GL/en/Services/Assurance/Fraud-Investigation---Dispute-Services/Global-Fraud-Survey---a-place-for-integrity. *Accessed*: 15/01/2014
- EY (2013) Building a more ethical business environment. Asia-Pacific Fraud Survey 2013, *EY*, http://www.ey.com/Publication/vwLUAssets/2013_Asia-Pacific_Fraud_Survey/\$FILE/EY-Asia-Pacific-Fraud-Survey.pdf. *Accessed:* 15/01/2014
- EY (2015) Fraud and Corruption the easy option for growth? Europe, Middle East, India and Africa Fraud Survey 2015, *EY*, http://www.ey.com/Publication/vwLUAssets/ey-emeia-fraud-survey/\$FILE/ey-emeia-fraud-survey.pdf. *Accessed:* 14/07/2015
- Ferrell, O. & Ferrell, L. (2011) "The responsibility and accountability of CEOs: The last interview with Ken Lay", *Journal of Business Ethics*, 100 (2): 209-219.
- Field, A. (2000) *Discovering Statistics Using SPSS for Windows*, Sage Publications Fox, J. (2007) "Government Transparency and Policymaking", *Public Choice*, 131 (1-2): 862-886.
- Gallagher, M. & Radcliffe, V. S. (2002) "Internal Controls in Nonprofit Organizations: The Case of the American Cancer Society, Ohio Division", *Nonprofit Management and Leadership*, 12 (3): 313-325.
- Gee, J. & Button, M. (2015) *The Financial Cost of Fraud 2015*, PKF Littlejohn & Univ. of Portsmouth.
- George, J.F., Marett, K. & Tilley, P.A. (2008) "The Effects of warnings, computer-based media, and probing activity on successful lie detection", *IEE Transactions on Professional Communication*, 51 (1)
- Grant, R.W. & Keohane, R. O (2005) "Accountability and Abuses of Power in World Politics", *American Political Science Review*, 99(1): 29-43

- Hail, L. & Leuz, C. (2006) "International Differences in the Cost of Equity Capital: DO Legal Institutions and Securities Regulation Matter?", *Journal of Accounting Research*, 44 (5): 485-530.
- Hancock, T, Curry, L.E., Goorha, S., & Woodworth, M. (2008) "On lying and being lied to: a linguistic analysis of deception in computer-mediated communication", *Discourse Processes*, 45 (1).
- Hayward, K. (2007) "Situational crime prevention and its discontents: Rational Choice Theory versus the culture of now", *Social Policy & Administration*, 41(3): 232 250.
- Hill, C. W., Kelley, P. C., Agle, B. R., Hitt, M. A. & Hoskisson, R. E. (1992) "An empirical examination of the causes of corporate wrongdoing in the United States", *Human Relations*, 45 (10): 1055-1076.
- Hogan, C. E., Rezaee, Z., Riley Jr, R. A. & Velury, U. K. (2008) "Financial statement fraud: Insights from the academic literature", Auditing: A Journal of Practice & Theory, 27 (2): 231-252.
- Hogsett III, R. M. & Radig, W. J. (1994) "Employee crime: The cost and some control measures", *Review of Business*, 16 (2): 9.
- Holmes, S. A., Langford, M., Welch, O. J. & Welch, S. T. (2002) "Associations between internal controls and organizational citizenship behavior", *Journal of Managerial Issues*, 85-99.
- Holtfreter, K. (2008) "Determinants of fraud losses in nonprofit organizations", *Nonprofit Management & Leadership*, 19 (1): 45-63.
- Humphrey, C., Loft, A. and Woods, M. (2009) "The global audit profession and the international financial architecture: Understanding regulatory relationships at a time of financial crisis", *Accounting, Organizations and Society*, 34: 810-825.
- Hunton, J., Hoitash, R. & Thibodeau, J. (2014) "The relationship between perceived tone at the top and earnings quality" (Retraction of vol 28, pg 1190, 2011), *Contemporary Accounting Research*, 31 (4): 937-938.
- Judge, W., Li, S. & Pinsker, R. (2010) "National Adoption of International Accounting Standards: An Institutional Perspective", *Corporate Governance; An International Review*, 18(1): 161-174.
- Kaminski, K.A., Wetzel, T.S. & Guan, L. (2004) "Can financial ratios detect fraudulent financial reporting?", *Managerial Auditing Journal*, 19 (1)
- KPMG (2012) A survey of fraud, bribery and corruption in Australia & New Zealand 2012, *KPMG*, www.kpmg.com. *Accessed:* 15/01/2014
- Kraakman, R. H. (1986) "Gatekeepers: the anatomy of a third-party enforcement strategy", *Journal of Law, Economics, & Organization*, 53-104.
- Levinson, M. (2002) *Business scandals and democracy. Dissent.* Philadelphia, University of Pennsylvania Press.
- Macey, J. R. (2006) "Commercial Banking and Democracy: The Illusive Quest for Deregulation", *Yale Journal on Regulation*, 23 (1): 1-27.
- Maskin, E. & Tirole, J. (2004) "The politician and the Judge in Government", American Economic Review, 94 (4): 1034-54

- McEldowney, J. E., Barton, T. L. & Ray, D. (1993) "Look out for Cletus Williams", *The CPA Journal*, 63 (12), 44.
- Mennicken, A. (2008) "Connecting Worlds: The Translation of International Auditing Standards into Post-Soviet Audit Practice", *Accounting, Organizations and Society*, 33: 384-414.
- Morrison, M. A. (2004) "Rush to judgment: the lynching of Arthur Andersen & Co.", *Critical Perspectives on Accounting*, 15 (3): 335-375.
- Murison, J. (2013) "Judicial politics: election petitions and electoral fraud in Uganda", *Journal of Eastern African Studies*, 7 (3): 492-508.
- O'Connell, B. T. (2004) "Crimes and misdemeanours: The death of Arthur Andersen", *Critical Perspectives on Accounting*, 15 (3): 333-334.
- Ogawa, A. (2017) "Anti-fraud politics in the European Union: Multi-level disjuncture of legitimacy and effectiveness", *Comparing political corruption and clientelism*.
- Omoteso, K. & Obalola, M.A. (2014) "The Role of Auditing in the Management of Corporate Fraud" in A. Amran, D. Crowther and R. Said (Eds), 2014, *Ethics, Governance and Corporate Crime*, Bingley: Emerald. Pages 129-151
- Persson, T., Roland, G. & Tabellini, G. (1997) "Separation of powers and political accountability", *Quarterly Journal of Economics*, 112(2): 1163-1202
- Petrovits, C., Shakespeare, C. & Shih, A. (2011) "The Causes and Consequences of Internal Control Problems in Nonprofit Organizations", *The Accounting Review*, 86 (1): 325-357.
- Phua, C., Lee, V., Smith, K. & Gayler, R. (2005) "A Comprehensive Survey of Data Mining-based Fraud Detection Research", Available at http://www.bsys.monash.edu.au/people/cphua/.
- Porter, M.E. & Sakakibara, M. (2001) "Competing at Home Win Abroad: Evidence from Japanese Industry", *Review of Economics and Statistics*, 83 (2): 310-322.
- Porter, M.E., Schwab, K., and Lopez-Claros, A. (eds) (2005) *The Global Competitiveness Report 2005-06: Policies underpinning Rising Prosperity*, Palgrave Macmillan: New York.
- Prat, A. (2005) "The Wrong Kind of Transparency", *American Economic Review*, 95 (3): 862-877.
- PwC (2014) Global Economic Crime Survey 2014, *PwC*, http://www.pwc.com/gx/en/economic-crime-survey/about-the-survey.jhtml. *Accessed*: 14/07/2015
- Rezaee, Z. (2005) "Causes, consequences, and deterence of financial statement fraud", *Critical Perspectives on Accounting*, 16 (3): 277-298.
- Rockness, H. & Rockness, J. (2005) "Legislated ethics: From Enron to Sarbanes-Oxley, the impact on corporate America", *Journal of Business Ethics*, 57 (1): 31-54.
- Sachs, J. (2003) "Institutions Matter, but Not for Everything", *Finance and Development*, 40 (2): 38-41.

- Schnatterly, K. (2003) "Increasing firm value through detection and prevention of white-collar crime", *Strategic Management Journal*, 24 (7): 587-614.
- Siegel, M.A. (2007) "Options backdating", The CPA Journal, 77 (19).
- Smith, E. P. & Iacobelli, D. V. (2013) "Analyzing Local and Global Fraud", *The CPA Journal*, 83 (6): 9-11.
- Smith, M.L, Neja T.G & Wang K. (2006) "Going International: Accounting and Auditing Standards", *Internal Auditing*, July/August.
- Soltani, B. (2014) "The anatomy of corporate fraud: A comparative analysis of high profile American and European corporate scandals", *Journal of Business Ethics*, 120 (2): 251-274.
- Vanasco, R. R. (1998) "Fraud auditing", Managerial Auditing Journal, 13(1): 4-71
- Waisbord, S. R. (2013) Watchdog journalism in South America: News, accountability, and democracy, Columbia university press.
- Webster (2001) Webster's New World College Dictionary, 4th ed., Cleveland, IDG Books Worldwide.
- Wood, T. & da Costa, A. P. P. (2015) "Corporate Frauds as Criminal Business Models: An Exploratory Study", *Thunderbird International Business Review*, 57 (1): 51-62.