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# Capability Component of Fraud and Fraud Prevention in the Saudi Arabian Banking Sector

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**ABSTRACT**

Fraud is a fundamental problem with every financial institution in the world, and Saudi Arabian banking sector is not immune to this malaise. Advances in technology that have led to the development of electronic banking have created new challenges for preventing fraud in the banking sector. This study develops a conceptual framework that can be used by banks in Saudi Arabia to prevent fraud in light of the capabilities of bank staff to perpetuate fraud. The respondents of this study are personnel in different managerial level in the Saudi Arabian banking sector. However, the limitation of the study is that it targets banking personnel in Saudi Arabia only. As an expectation, there will be a positive relationship between capability component of fraud and bank-related fraud prevention in the Saudi Arabian banking sector.

**Keywords:** Fraud, Bank Related Fraud Prevention, Capability Component, Saudi Arabia
**JEL Classifications:** M41, M42, M43, M49

## 1. INTRODUCTION

The Saudi Arabian monetary authority (SAMA), the provider of guidelines and regulations for electronic banking, states that "banks are responsible for providing secure and safe systems and services for their customers." The banks are exempted from this responsibility only if the customer fails to safeguard their user information or passwords, or they divulge them to a third party. The regulations further stipulate that the client is not responsible for non-authorized transactions made with their cards if the cards have been reported stolen or lost provided that the customer has exercised care and vigilance in safeguarding their card from theft or loss or unauthorized use. Fraud in the banking sector can erode customers' confidence (Alghamdi et al., 2015). Therefore, there is a need to examine how Saudi Arabia banks can prevent fraud in the industry and in particular electronic banking, which is on the rise, and at the same time assess the means of evaluating the capabilities of the banks in preventing fraud.

Fraud prevention constitutes a source of concern among financial institutions around the world. In Saudi Arabia, the growth of e-banking causes the SAMA to introduce new regulations geared towards dealing with fraud in the banking industry. The literature on the causes of fraud in the industry identifies weak internal controls and ineffective governance systems as the primary reason (Daniel-Draz, 2015; Cascarino, 2013; Cascarino, 2012; Zaworski, 2005)). The highest financial losses in the banking industry due to fraud are associated with the executives according to Association of Certified Fraud Examiners (ACFE, 2014). Although cases of fraud by the executive are fewer than those of employees, executive fraud is more of high-value because of the capability of the executives to flout internal controls and governance mechanisms in the banking sector.

Bank fraud is on the increase in the area of technology-leveraged fraud known as phishing (Kroll Global Fraud Report, 2013/2014) in the Saudi Arabia especially, and the Gulf countries in general.

Newspaper organizations report the loss attributable to fraud in the banking sector amounted to SAR35.1 billion (Saudi Riyal) in totality with over two thousand and nineteen complaints received in 2012 only bordering on financial fraud, technical and human errors. Research on fraud prevention becomes imperative for banking sector organizations because it remains the plausible way to save the financial institutions from bankruptcy, considering the increasing cases of fraud globally. Hence, the objective of this study is to examine the relationship between capability element of fraud and bank-related fraud prevention in Saudi Arabia.

## 2. LITERATURE REVIEW

Different studies examine the causes of organizational fraud and the measures that firms can introduce to prevent fraud. According to Arora and Khanna (2009), fraud is preventable by strengthening a company's internal controls system. This view is supported by Albrecht (1996) who argues that poor internal controls increase the likelihood of fraud. Bologna (1994) identifies diverse environmental factors that increase the probability of fraud in banks. These factors include but not limited to deficient internal controls, inadequate rewards, lack of segregation of duties, ambiguity in job roles, responsibilities, duties, and areas of accountability. Other causes are a lack separation of audit trails, failure to take administrative action when employee performance level or behavior falls below an acceptable level, and lack of time and periodic reviews, inspections, and follow-ups to ensure compliance with the firm's goals, policies, procedures, and government regulations.

### 2.1. Saudi Banks

The history of banking institutions and banking system in Saudi Arabia dates back to 1926 when several foreign-based trading houses and money-changers provide financial services to mainly pilgrims and the financial community. Afterward, foreign banks enter the market gradually. The SAMA was created in 1952 by the government with the aim of achieving a stable monetary system and ensuring currency stability. In 1966, a new Banking Control Law was passed providing SAMA with more supervisory powers. The law provides for the approval of a minister of finance and allows SAMA to recommend financial institutions for the issuance of new licenses, take necessary action against violators of the law, and issue rules and regulations (Alghamdi et al., 2015).

Since the 1980s, SAMA introduces new systems and tools to strengthen and improve the Saudi financial systems and encourage Saudi banks to invest in technology. Significant changes are made, which include the introduction of a national automated teller machine (ATM) system and presentation of credit, debit and charge cards system linking Saudi Arabia banking institutions with the SWIFT payment network (Alghamdi et al., 2015). Today, bank customers access their accounts and utilize bank services through different channels, including bank branches, phone banking, online banking, ATM, sales point, and online shopping. The security mechanisms differ from bank to bank and channel to channel (Alghamdi et al., 2015). For example, some banks use hardware tokens to generate one-time pin for online authentication while others use SMS notification where the account holder receives an SMS for every transaction that is carried out in their account.

The Saudi Arabian Commercial Banking Sector Report for first quarter 2014 includes a 5-year forecast to 2017 on indicators such as total assets, client loans, bond portfolio, other assets, liabilities and capital, capital, client deposits and other liabilities. For example, the total assets of the commercial banks as at September 2013 stands at SAR1,835.6 billion that represents a higher amount of SAR1,649.4 billion than that of the previous year 2012, and hence, resulting in 11.3% change. The bond portfolio also increases by 28.9% (SAR218.7 billion, 2013; SAR169.7 billion, 2012). The capital of this industry also increases by 8.2% (SAR255.2 billion, 2013; SAR235.9 billion, 2012). The consequence of this record in the Saudi Arabia economy is that it shows the potentials for investors' interest because of the growth in the banking sector and also the necessity to prevent any possible drawback of the country economy, and by inferences, fraud is one of the disastrous phenomena since no nation is free from fraud. The banking sector portfolio is illustrated in Table 1.

### 2.2. Fraud

Fraud refers to deceit or trickery practiced deliberately with the aim of gaining an advantage over someone dishonestly (Jamieson et al., 2007). Fraud in the banking sector takes many forms, ranging from phishing, identity theft, card skimming, and viruses and Trojans (Berney, 2008). The aim of these frauds may be to steal vital information that allows access to a user account with the ultimate goal being to steal funds from the account, or to cause malicious damage to a user account.

### 2.3. Banking-related Fraud Prevention

Fraud poses a major challenge to every financial institution. However, while there is the need to detect fraud across the various banking channels, banks must ensure that they do not infringe upon the banking activities of good customers while, at the same time, maintaining regulatory compliance. The key objective of banks in fighting fraud should, therefore, be identifying those actions that truly represent possible fraud (UCI Universal Payments, 2015).

**Table 1: Saudi Arabian commercial banking sector portfolio SAR ' billion (2012 and 2013)**

| Date | Total assets | Client loans | Bond portfolio | Other | Liabilities and capital | Capital | Client deposits | Other |
|---|---|---|---|---|---|---|---|---|
| September 2012, SARbn | 1,649.4 | 1,010.2 | 169.7 | 469.6 | 1,649.4 | 235.9 | 1,179.9 | 233.7 |
| September 2013, SARbn | 1,835.6 | 1,151.9 | 218.7 | 465.0 | 1,835.6 | 255.2 | 1,346.2 | 234.2 |
| % Change y-o-y | 11.3 | 14.0 | 28.9 | −1.0 | 11.3 | 8.2 | 14.1 | 0.2 |
| September 2012, US$bn | 439.8 | 269.4 | 45.2 | 125.2 | 439.8 | 62.9 | 314.6 | 62.3 |
| September 2013, US$bn | 489.5 | 307.2 | 58.3 | 124.0 | 489.5 | 68.1 | 359.0 | 62.5 |
| % Change y-o-y | 11.3 | 14.0 | 28.9 | −1.0 | 11.3 | 8.2 | 14.1 | 0.2 |

Source: Business monitor international, central banks regulators

Since most of the fraud risk that is currently faced by banks arises from advances in technology, technological solutions are better placed to deal with the risk. Possible options include risk profiling customers based on specific algorithms for detecting fraud, having multiple user authentication methods to create more hurdles for potential fraudsters, studying cardholders' behavior and using the information to detect deviations that could indicate the possibility of fraud, and educating customers on proper use of their authentication tools, including credit and debit cards and passwords (Subramanian, 2014).

Internally, banks should ensure the existence of well-functioning internal controls and governance systems (Albrecht, 1996). This includes proper segregation of duties, clear definition of roles and responsibilities, compliance with organizations policies and procedures, and compliance with government regulations.

### 2.4. Capability Component of Fraud

About fraud and dishonest practices, Wolfe and Hermanson (2004) describe individual's capability as personal traits and abilities that play a major role in deciding the conditions under which fraud may occur even with the presence of the other three elements. The other three elements being referred to are incentive/pressure, opportunity, and attitude/rationalization as theorized by Cressey (1953; 1950) in the theory of fraud triangle. According to a 2014 global fraud survey by the Association of certified fraud examiners, the banking, and financial services, government and public administration, and manufacturing industries continue to lead in relation to the number of fraud cases reported in the year. The report states that people holding executive positions in the sector accounted for 19% of the fraud cases with a median loss of $500,000. In contrast, employees accounted for 42% of fraud cases with a median loss of $75,000 (ACFE, 2014. p. 4). The literature reveals that the number of frauds cases involving executive members was low compared to the frauds perpetrated by low-level employees, the value of the fraud was far higher, a situation that is attributed to the positions held by the perpetrators of the scam. Prior literature shows that the fraud committed by the executive normally involves collusion with employees in the organization and evasion of antifraud controls (Cascarino, 2013; Sengur, 2012).

According to Popoola (2014. p. 72), the Cressey's elements of fraud and Wolfe and Hermanson's fraud diamond allude to the conditions under which fraud may occur. Under the antifraud profession's response to prevention and deterrent, the probability that a fraud may occur is synonymous with the establishment of controls based on individual characteristics of measures, constructs, and combinations of hazard (Dorminey et al., 2012). Succinctly put, the capability is an essential part of what is known as "perpetrators" and thus, a significant ally to this study.

Similarly, on Statement of auditing standard No 99, consideration of financial statement fraud in an audit (AICPA, 2002) highlights three requirements for fraud to occur (Popoola (2014, p. 71). These requirements are (1) management or other employees have an incentive or are under pressure that provides a reason to commit fraud; (2) conditions exist in the absence of controls, ineffective controls, or the ability of management to override controls - that provide an opportunity for fraud to be perpetrated, and (3) those involved can rationalise committing a fraudulent act.

## 3. CONCEPTUAL FRAMEWORK

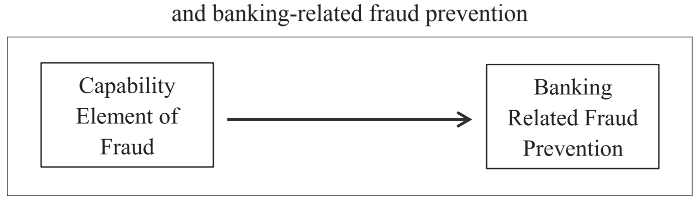
A framework refers to a real or conceptual structure that is intended to serve as a guide for building something which expands the guide into something useful. A conceptual framework, on the other hand, is a set of concepts or ideas organized in a manner that is easy to communicate to others (Yearwood, 2011). The purpose of the conceptual framework developed in this study is to describe how banks in Saudi Arabia can prevent fraud given the capabilities of potential fraud perpetrators in the country's banking sector to commit fraud. The framework is as presented in Figure 1.

Furthermore, Wolfe and Hermanson (2004) study on capability element of fraud enumerates some important characteristics under which individual can commit fraud. These traits include person's position or function within the organisation that may furnish the ability to exploit an opportunity for fraud not available to others; the right person for fraud is smart enough to understand and exploit internal control weakness and to use the position, function or authorized access to the greatest advantage; and the right person has ego and confidence that he will not be detected. Other traits are a successful fraudster can coerce others to commit or conceal fraud; a successful fraudster tells lies efficiently and consistently, and lastly, a successful fraudster deals with stress. From these traits, one can deduce the importance of "capability" as an element of fraud that associates with fraud prevention in any organization.

Popoola (2014) study embraces Wolfe and Hermanson's (2004) fraud diamond theory and argues that fraud perpetrators must possess the mindset, skills, and knowledge, that is, "capability" to be able to commit fraud. Capability in this sense entails the ability of an individual to observe the available opportunity, identify weaknesses in the internal control, and, therefore, turn it into reality. It is, therefore, evident that capability as an element of fraud possesses a direct relationship to fraud prevention, especially in the bank related sector.

Fraud threats are dynamic, and fraudsters constantly devise new techniques to exploit the easiest target (Robinson, 2006), and management must install or design appropriate controls to mitigate in the incidence of fraud. According to the Institute of Internal Auditors, "responsibility for the system of internal control within an organization is a shared responsibility among all the executives, with leadership usually provided by the Chief Financial Officer" (cf: Daniel Draz, 2011).

**Figure 1:** The conceptual framework of capability element of fraud and banking-related fraud prevention



## 4. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

The theoretical linkage in the current research framework discusses the factor of capability element of fraud on bank-related fraud prevention. The term "capability" refers to the quality possess by individuals that give such individuals the opportunity to perform. This attribute is recognized as (1) professional knowledge, (2) professional skills, (3) professional values, ethics, and attitudes necessary for individual accountants and auditors to demonstrate competence (IFAC-IES 8.8, 2006). In essence, capability enhances individual performance in the workplace. Capability component of fraud, therefore, possesses a direct relationship on decision-making task through the development of fraud measures of the control structure, which is referred to as fraud prevention (Wolfe and Hermanson, 2004; Cressey, 1953; 1950). The hypothesis is formulated based on the recognized reasoning thus:

H: There is a direct positive relationship between Capability element of fraud and bank-related fraud prevention in Saudi Arabia.

Furthermore, the relationship between capability element of fraud and fraud prevention have been recognized and supported by the psychology and accounting literature. These studies made available empirical evidence about the statement that capability element of fraud correlates the development of individuals' behavior, which in turn inspire their task fraud prevention (Sengur, 2012; Wolfe and Hermanson, 2004; AICPA, 2002). This study, therefore, intends to assert that there is a significant positive relationship between capability element of fraud and bank-related fraud prevention.

## 5. CONCLUSION

Fraud is a fundamental problem with every financial institution. Advances in technology that leads to the development of electronic banking create new challenges for preventing fraud in the banking sector. This study examines the relationship between capability element of fraud and bank-related fraud prevention in the Saudi Arabian banking sector through the development of a conceptual framework. The framework developed has two sets of mechanism that the banks can use to prevent fraud: Administrative and technical controls. Due to the limitation of the published secondary data and the restricted regulations for reporting fraud cases in Saudi Arabia banking institutions, the survey method is recommended to test the hypothesis formulated in the current study.

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