



UNIVERSITI PUTRA MALAYSIA

***EFFECT OF RISK MANAGEMENT, MANAGEMENT SUPPORT,
INTERNAL AUDIT AND QUALITY CONTROL ON FRAUD MITIGATION IN
THE LIBYAN BANKING SECTOR***

WALED YOUNES E ALAZZABI

GSM 2020 9



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LIBYAN BANKING SECTOR**

By

WALED YOUNES E ALAZZABI

**Thesis Submitted to Putra Business School, in Fulfilment of the Requirements for
the Degree of Doctor of Philosophy**

January 2020

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DEDICATION

To my great parents, may Allah bless them, Younes Essa Alazzabi and Fatimah Said
Gouma

To my wife, Sada Amar

To my daughters, Yara, Fatimah, and Allen

To my brothers, sisters, nephews, and nieces

To my supervisors for their support and comments

To all dearest friends and people who inspired, encouraged, and motivated me during
my journey



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirements for the degree of Doctor of Philosophy

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Chairman : Assoc. Prof. Hasri Mustafa @ Abdul Razak, PhD
Faculty : Putra Business School

In recent years, the occurrence of financial crimes in the region of Middle Eastern and North Africa (MENA) have raised regulators' concern for the need to manage the consequences of these crimes. Particularly, in the context of Libya, the level of financial crimes has increased in the banking sector, nonetheless, there is a little empirical research attempting to solve such a serious problem. This study is, therefore, made for mitigating fraud occurrence in the Libyan banking sector guided by Stakeholder Theory and Control Balance Theory. The study examines the effect of two independent variables, namely, risk management and management support on fraud mitigation. Internal audit activities and internal control quality are employed as two crucial mediators between risk management, management support, and fraud mitigation. Quantitative research method was employed to examine the hypothetical relationships among the variables. The questionnaires were sent to 389 internal auditors working in the Libyan banking sector who were randomly selected and purposive sampling procedure was also used for choosing the respondents based on their nature of work and knowledge. A total of 230 of completed questionnaires were found usable. Data was analysed using Structural Equation Modelling-Partial Least Square (SEM-PLS). The results of the study interestingly revealed insignificant and positive effect of risk management and management support on fraud mitigation. The study results indicated significant mediating effect of internal audit activities on the relationship between risk management, management support, and fraud mitigations. Simultaneously, internal control quality revealed significant mediating effect on the relationship between risk management, management support, and fraud mitigation. This study that is one of the first empirical studies in emerging economics that offers new insights, enhances our understanding, and contributes to theory development through introducing activities of internal audit and quality control as two mediators between risk management, management support, and fraud mitigation. This study framework is a useful blueprint and can benefit banks in their fight against fraud. The study findings also contribute to the development of corporate governance guidelines established by the Central Bank of Libya.

Keyword: Libyan banking sector, risk management, management support, internal audit activities, control quality, and fraud mitigation.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian keperluan untuk ijazah Doktor Falsafah

**KESAN PENGURUSAN RISIKO, SOKONGAN PENGURUSAN, AUDIT
DALAMAN DAN KAWALAN KUALITI TERHADAP PENGURANGAN
PENIPUAN DI SEKTOR PERBANKAN NEGARA LIBYA**

Oleh

WALED YOUNES E ALAZZABI

Januari 2020

Pengerusi : Prof. Madya Dr. Hasri Mustafa @ Abdul Razak, PhD
Fakulti : Putra Business School

Dalam beberapa tahun kebelakangan ini, kejadian jenayah kewangan di wilayah Timur Tengah dan Afrika Utara (MENA) telah meningkatkan keprihatinan badan penguatkuasaan tentang perlunya pengurusan jenayah kewangan. Dalam konteks negara Libya, tahap jenayah kewangan telah meningkat dengan serius di sektor perbankan, namun demikian, terlalu sedikit penelitian empirikal yang telah dimajukan. Ekoran dari itu, kajian ini dibuat untuk mengurangkan kejadian penipuan di sektor perbankan negara Libya berdasarkan Teori Stakeholder dan Teori Control Balance. Kajian ini mengkaji pengaruh dua pembolehubah bebas, iaitu, pengurusan risiko dan sokongan pengurusan terhadap pengurangan penipuan. Kegiatan audit dalaman dan kualiti pengendalian dalaman digunakan sebagai dua pembolehubah perantara yang penting di antara pengurusan risiko, sokongan pihak pengurusan, dan pengurangan penipuan. Kaedah penyelidikan kuantitatif digunakan untuk mengkaji hubungan hipotesis antara pembolehubah. Borang soal selidik telah dihantar kepada 389 juruaudit dalaman yang bekerja di sektor perbankan Libya yang dipilih secara rawak dan prosedur persampelan digunakan untuk memilih responden berdasarkan sifat kerja dan pengetahuan mereka. Sebanyak 230 borang soal selidik yang lengkap dan dapat digunakan diperolehi. Data dianalisa menggunakan perisian Structural Equation Modeling-Partial Least Square (SEM-PLS). Hasil kajian menunjukkan pengaruh yang tidak signifikan dan positif dari sokongan pihak pengurusan dan pengurusan risiko terhadap pengurangan penipuan. Hasil kajian pengaruh pembolehubah pengantara pula didapati signifikan dari kegiatan audit dalaman terhadap hubungan antara pengurusan risiko, sokongan pihak pengurusan, dan pengurangan penipuan. Pada masa yang sama, kualiti kawalan dalaman menunjukkan kesan perantaraan yang signifikan terhadap hubungan antara pengurusan risiko, sokongan pengurusan, dan pengurangan penipuan. Kajian ini merupakan salah satu kajian empirikal yang pertama menawarkan penemuan baru, untuk meningkatkan pemahaman dan menyumbang kepada pengembangan teori dengan memperkenalkan kegiatan audit dalaman dan pengendalian kualiti sebagai dua pembolehubah pengantara antara pengurusan risiko, sokongan pihak pengurusan, dan

pengurangan penipuan. Kajian ini dapat memberi manfaat kepada pihak pengurusan bank dalam memerangi jenayah penipuan dalam sektor kewangan. Hasil kajian juga boleh menyumbang kepada pembangunan garis panduan tadbir urus korporat yang dibentuk oleh Bank Pusat Libya.



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I certify that a Thesis Examination Committee has met on **9 January 2020** to conduct the final examination of **Waled Younes E Alazzabi** on his thesis entitled “**Effect of Risk Management, Management Support, Internal Audit and Quality Control on Fraud Mitigation in the Libyan Banking Sector**” in accordance with The Universities an University College Act 1971 and the Constitution of the Universiti Putra Malaysia [P. U. (106] 15 March 1998. The Committee recommends that the student be awarded the **Doctor of Philosophy**.

Members of the Thesis Examination Committee were as follows:

Norizan Mat Saad, PhD

Associate Professor
Putra Business School
(Chairman)

Abu Sofian Yaacob, PhD

Associate Professor
Putra Business School
(Internal Examiner)

Ridzwana Mohd Said, PhD

Associate Professor
Faculty of Economics and Management
University Putra Malaysia
Serdang, Selangor
(Internal Examiner)

Normah Omar, PhD

Professor
Accounting Research Institute
Universiti Teknologi MARA
Shah Alam, Selangor
(External Examiner)

PROF. Ts. Dr. M. IQBAL SARIPAN

Deputy Vice Chancellor (Academic & International)
Universiti Putra Malaysia

Date:

On behalf of,
Putra Business School

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirements for the degree of Doctor of Philosophy.

The members of the Supervisory Committee were as follows:

Hasri Mustafa @ Abd Razak, PhD

Associate Professor
Department of Accounting and Finance
School of Business and Economics
Universiti Putra Malaysia
(Chairman)

Ahmed Razman Abdul Latiff, PhD

Associate Professor
Putra Business School
(Member)

Annuar Md Nassir, PhD

Professor
School of Economics and Management
Xiamen University of Malaysia
(Member)

PROF. Ts. Dr. M. IQBAL SARIPAN

Deputy Vice Chancellor (Academic & International)
Universiti Putra Malaysia

Date:

On behalf of,
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Chairman of Supervisory Committee

Signature : _____
Name : Assoc. Prof. Dr. Hasri Mustafa @ Abd Razak
Faculty : School of Business and Economics, UPM

Member of Supervisory Committee

Signature : _____
Name : Assoc. Prof. Dr. Ahmed Razman Abdul Latiff
Faculty : Putra Business School

Signature : _____
Name : Prof. Dr. Annuar Md Nassir
Faculty : Xiamen University of Malaysia

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LIST OF APPREVIATIONS

ACFE	Association of Certified Fraud Examiners
AVE	Average Extracted Variance
CA	Control Activities
CBL	Central Bank of Libya
CBT	Control Balance Theory
CE	Control Environment
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CG	Corporate Governance
CIMA	Chartered Institute of Management Accountant
COSO	Committee of Sponsoring Organizations of Treadway
CPI	Corruption Perceived Index
CR	Composite Reliability
CV	Convergent Validity
DV	Discriminant Validity
FM	Fraud Mitigation
GDP	Gross Domestic Product
GWP	Gross World Product
IAA	Internal Audit Activities
IAE	Internal Audit Effectiveness
IAF	Internal Audit Function
IAQ	Internal Audit Quality
ICEQ	Internal Control Employees Quality
ICQ	Internal Control Quality
ICQP	Internal Control Quality Procedures

ICR	Internal Consistency Reliability
IIA	Institute of Internal Audit
INC	Information & Communication
ISPPIA	International Standards for the Professional Practice of IA
LC	Letter of Credits
LCBs	Libyan Commercial Banks
LOOPS	The Libyan Organization for Policies and Strategies
MENA	Middle East and North Africa
MO	Monitoring
MS	Management Support
OECD	The Organisation for Economic Co-operation and Development
OJ	Organizational Justice
QICAP	Quality of Internal Control Accounting Procedures
RA	Risk Assessment
RM	Risk Management
RMT	Risk Management Training
SOX	Sarbanes Oxley Act
ST	Stakeholder Theory

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter commences with a description to internal fraud in the banking sector. This followed by the background of the study, a brief background on Libya, the problem statement, the study objectives and research questions, its significance, and its contributions to knowledge. The chapter closes with a description of the study structure.

1.2 Background to the study

In the recent years, employees' fraudulent activities in big corporations like Société Générale 2008, UBS in 2011, Wells Fargo in 2016, and Punjab National Bank (PNB) in 2018 had caused a loss of almost \$6.3 billion, \$2.3 billion, and \$189 million of paid fines, and \$1.7 billion respectively. The Association of Certified Fraud Examiners (ACFE), which is the largest antifraud institution in the world (Suh, Shim & Button, 2018) reports that organizations lose almost 5 per cent of their annual revenues because of fraud (ACFE, 2008; 2012; 2014; 2016; Baader & Krcmar, 2018). Computing this specific percentage into the assessed 2009 Gross World Product (GWP) has produced a loss of more than \$2.9 trillion (Morales, Gendron & Guénin-Paracini, 2014). Additionally, the damages caused by fraud to the global economy increased to \$3.5 trillion in 2012 (Kummer, Singh & Best, 2015) and reached \$4 trillion in 2017 (ACFE, 2018).

At the microeconomic level, fraud is a threatening risk to operations of organizations which overburdens organizations' productivity, performance, reputation, and continuity (Bishop, 2004; Đorđević, & Đukić, 2015). Because of fraud, organizations might loss relationships with primary stakeholders e.g. customers, suppliers, and business partners (Bishop, 2004; Enofe, Abilogun & Omolorun, 2017; Mohd Sanusi, Rameli, Omar & Ozawa, 2015) and it could result in a potential decrease in organizations' market share and failure to withstand a competition because of capital devaluations and wastes (Abuazza, Mihret, James & Best, 2015). In extreme cases, fraud can be devastating (Owusu-Ansah, Moyes, Oyelere & Hay, 2002) leading to bankruptcy and collapse of organizations (Suh et al., 2018; Kennedy, 2012; Xu, Zhang & Chen, 2018). For instance, financial statement falsifications by Enron, Global Crossing, Tyco, WorldCom, and Qwest, caused damages of about \$460 billion (Cotton, 2002). Moreover, organizations which experience fraudulent activities suffer indirect costs such as damaging their brand names, tarnishing managers and auditors' reputations, and lowering employees' morale and motivations (Agwu, 2014; Krambia-Kapardis & Zopiatis, 2010; Law, 2011).

International fraud surveys and different research studies predicted and reported that fraud incidences would continue to increase and become a serious universal problem (Cross, 2018) without limits to geographical area or distance (Owusu-Ansah et al., 2002; Ibex & Grippo, 2011). Globalization and technological expansion, as a matter of fact, have tremendously contributed to the increasing rate of fraudulent incidents in various contexts. Even though fraud may occur in any country and organization, a large fraction of cases is reported in the Middle East and North Africa (MENA) region. In fact, the median loss of fraud cases in the MENA region is roughly about \$200,000, which is high compared to other regions (ACFE, 2018). The cases represent 19% with a median loss in banking sector is 270,000 (ACFE, 2018). Corruption and asset misappropriation are the most prevalent types of fraud in MENA region different sectors.

In Libya, different fraud cases have been reported recently in various sectors (Issa & Al-Azzabi, 2018). Although, fraud mitigation is crucial for organizations as it contributes in reducing the amount of damages while increasing profitability, there is little research on fraud mitigation mechanisms and potential procedures in this particular context. Furthermore, neither the previous literature nor the professional reports, e.g. ACFE reports, tend to discuss fraud incidents and suggest potentially quick remedies for employees' misconducts in the Libyan context.

1.3 Brief Background on Libya

Libya is an emerging nation located in North Africa. The Libyan territory is large, occupying around 1.8 million square kilometres (Abuhadra & Ajaali, 2014). This ranks Libya the fourth largest country on the African continent and the 17th largest internationally. Libya's population in 2018 was 6,506,800. This population is the smallest compared to its North African counterparts (Allen, Otchere & Senbet, 2011); Tunisia, Algeria, Egypt, Sudan, and Niger.

Table 1.1: Growth Rates in Libya's Population 1951-2018

Year	Population (Million)	Growth rate per year%
1951	1,122,486	N/A %
1961	1,459,216	3.39%
1971	2,161,195	4.42%
1981	3,254,932	3.98%
1991	4,448,815	2.35%
2001	5,382,784	1.73%
2011	6,277,175	0.64%
2019	6,570,000	4.66%

Source: <http://www.worldometers.info/world-population/libya-population/>

Table 1.1 clearly provides a description of the country's population. The table shows that the country's population was 1,122,486 million in 1951. However, the population slightly ascended above two million in 1971 with a growth rate of 4.42%. The country's population slightly declined (3.98%) in 1981, even though there had been development plans from 1971-1981, which were expected to cause an increase in the standards of living in the country. The growth rate of population further dropped to 2.35% in 1991 because of the international embargo on the country. A sharp decrease in the country's population in 2011 (0.64%) was caused by social and political tension and continued to be an armed revolution which developed into a civil war (Ammar, 2015). This civil war was called the "Arab Spring" and started on the 17th of February, 2011. The ruling regime stepped down and ended in October, 2011. As is currently the case, the country's population is expected to reach 6,570,000 with a rise of 4.66 % compared to the population of the years before.

1.3.1 The Country's Economy

Libya is blessed with an abundance of natural energy resources (e.g. oil, gas, and water) and proper climate conditions. Oil and gas are the main resources which account for 94% of the government's revenues for the country's income (Allen et al., 2011; Ammar, 2015). Almost 90% of Libyan lands are a desert. Nevertheless, the country is in possession of the largest oil reserves in the world (Abuhadra & Ajaali, 2014). Furthermore, agriculture is considered to be the second largest industry in the country despite the desert conditions (Allen et al., 2011).

Libya's economy is considered to be dominated by large state-owned enterprises and little control of private sector which, were founded to help in accomplishing sustained economic growth in the country (Ahmed & Gao, 2004; Ammar, 2015). The Libyan government started reforms in 2005 aiming to reduce dependency on oil and gas revenues and to attract the participation of the private sector to contribute to the economic development and be more open toward the world (Ammar, 2015).

The country takes the position of the uppermost gross domestic product (GDP) per capita in the African continent due to the high revenues from oil and gas sector (Abuhadra & Ajaali, 2014; Allen et al., 2011). Libya's annual growth in GDP averaged around 8% from 2000 to 2012. The GDP, however, reached more than 104% in December of 2012 after a fall of 62.1% in December, 2011 (Abuhadra & Ajaali, 2014) as reported by the Central Bank of Libya (CBL). After the end of Arab Spring in 2011, Libya started witnessing a booming economy. This is because the energy sector had totally recovered and oil production had become normal around 160,000 barrels per day in 2012 (Ammar, 2015; Khan & Mezran, 2013). The improved economy gave the opportunities to grow micro and small private businesses following the trend of the economy.

The World Bank report reveals that both the wholesale and retail sector have the greatest promise, employing around 80,000 Libyans (World Bank Group, 2015). The nominal sector grew at the rate of 8% in 2012. The overall post revolution small business growth was also tremendous with 70% of the 4,200 new registered firms applying for an

import/export license in Tripoli in the first six months of 2012 (World Bank Group, 2015). By Libya's banking law, these firms have the right to apply for letters of credit (LC) for the purpose of importation after six months of establishment and opening their bank accounts. Figure 1.1 shows growth and decline in the country's GDP through years, specifically, before and after (Since 2011 until 2018) Arab Spring.

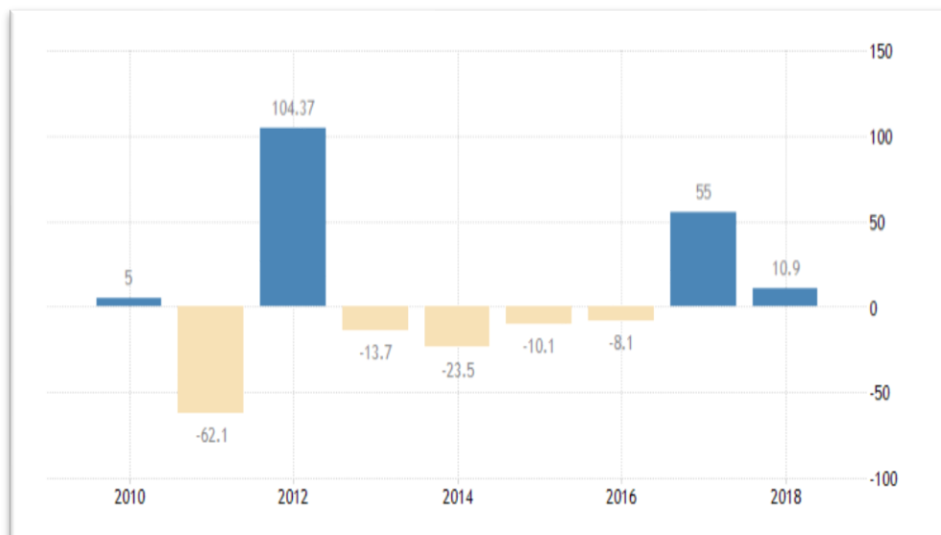


Figure 1.1: Libya Gross Domestic Product

Source: Central Bank of Libya

In 2013, the annual economic growth fell to almost -14% due to political instability in the country. Additionally, the price of oil fell down sharply which resulted in a decline in the country's GDP of about -24 percent in 2014. The decline in oil prices coupled with political tension adversely affected the country's economy (Ammar, 2015) and indicated an economic crisis. Although, the growth in the GDP reached 55% in 2017, a sharp decline was reported in 2018 due to high levels of environmental uncertainty.

As uncertainty is high during political instability and tough economic conditions, e.g. inflation, the lack of liquidity, and difficulty accessing money from bank accounts (Ammar, 2015; Miller, 1992; The World Bank, 2018), fraudulent activities are more likely to increase (Gill, 2012). The rise of the black market coupled with a large amount of the country's foreign reserves held by the Libyan banks, resulted in the continuous fraud incidents in the Libyan banking sector. Fraudulent activities caused a sharp decline to the country's available funds and tarnished the banks' image among the public. For instance, the foreign exchange reserves of Central Bank of Libya fell from \$115.1 billion in 2013 to almost \$66 billion at the end of 2016 (Bosalum, 2015; The World Bank Group, 2018) due to letters of credit fraud.

1.3.2 Political System and Policy

After declaring its independence in 1951 (Ahmed & Gao, 2004; Allen et al., 2011), King Idris Al-Sanussi ruled the United Kingdom of Libya. In 1959, the country was fortunate because of the oil discovery which was the key player for the economy and wealth of the country. A public dissatisfaction, however, grew throughout years owing to the wealth concentration amongst the country's elite (Abuhadra & Ajaali, 2014; Omagu & Odigbo, 2017). A military group led by Muamar Qadhafi and his army overthrew the monarchy regime in 1969 (Omagu & Odigbo, 2017) and, henceforth, declared (Ahmed & Gao, 2003) a unique terminology "Mass Regime" in 1977 for ruling the country under the name of Libyan Arab Jamahiriya. In 1971, all the international banks that operated in Libya before its independence were nationalized (Sole, Sensenbrenner, Tahari, De Vrijer, Moretti, Brenner & Semlali, 2007). During the forty-two years, specifically from 1969 to 2011, the country had gone through significant economic, political, social, and historical changes.

Economic policy in Libya was used to be led by different system which was influenced by a political view, more precisely, the green book as the third universal theory (Ahmed & Gao, 2003). Following many changes, Libya did not remain stable, particularly, from the political views as various events and changes occurred during the ruling of the Libyan leader. Those changes affected the economy and social affairs in the country. The rise of Arab Spring event (Abuhadra & Ajaali, 2014; Allen et al., 2011) brought to an end the ruling regime. Since then, the country is under the leadership of a Presidential Council under the State of Libya (Abuhadra & Ajaali, 2014).

Even though the Libyan government has been spending on various sectors for years, the country's financial resources have not been significantly used to improve both the country's infrastructure and economy. This has resulted in many citizens being left in bad economic conditions (Abuhadra & Ajaali, 2014). In spite of the fact that the government has begun to encourage and formulate policies that advocate a free-market to stimulate growth and diversify the resources of the economy since 2005, the rise of Arab Spring event (Omagu & Odigbo, 2017) had disrupted all the development plans.

The country is not better off today as it still suffers in areas such as slow rate of developments in the economy, human resources, and services' quality which may be caused by insufficient infrastructure and facilities (Ammar, 2015). High level of fraudulent activities in the country's sectors were also linked to the slow pace of growth in the country's development (Shariha, 2014). Fraud is an increasing risk and a reality following the Arab Spring (Gan Integrity, 2016; Wijeya & Shariha, 2016).

Fraud risk remains a serious threat and is one of the biggest problems and most complex challenges economy and social development (Enofe et al., 2017). As a serious threat to the Libyan economy (Zakari & Menacere, 2012), its prevalence in the country's public and private sectors tarnished the country's image, wasted various investment opportunities (Shariha, 2014), and depleted resources for future generations. Table 1.2

shows the country's rank from 2008 to 2018 based on the international rank and corruption perceived index (CPI)

Table 1.2: Libya's Rank based on Corruption Index from 2008 to 2018

Year	CPI Score	International Rank	Integrity Points
2008	2.6	126/180	26
2009	2.5	130/180	25
2010	2.0	146/178	20
2011	2.0	168/183	20
2012	2.1	160/176	21
2013	1.5	172/177	15
2014	1.8	166/177	18
2015	1.6	161/167	16
2016	1.4	170/176	14
2017	1.6	171/180	17
2018	1.7	170/180	17

Source: Transparency International Agency

As shown in Table 1.2, the rank of the country based on the international rank and corruption perceived index (CPI) varied through years. For instance, Libya's CPI score was 2.6 and 2.5 for the years 2008 and 2009 respectively. The country's position based on CPI was 2.0 in 2010 and improved slightly to 2.1 for the year of 2012. However, the position of the country dropped down to 1.5 in 2013, and indicated little improvement of 1.8 for the year 2014. The CPI score ranged between 1.6, 1.4, 1.6, and 1.7 for the years 2015 to 2018 respectively. Obviously, the CPI score underscores the impact of fraud activities on the future of the country.

1.3.3 The Banking Sector

The banking sector is governed by the Libyan government. Majority of banks in the country are under the control of the Central Bank of Libya (Allen et al., 2011; Shuaieb, 2013). The board of directors of the CBL consists of: a governor, a deputy, and six other members (Woldie & Dofan, 2007) from different institutions that have economic and financial interests (Shuaieb, 2013). The bank's chief executive officer "governor" takes responsibility of implementing the policies, managing matters and concerns, and delineating the CBL in all its relations with local and international parties (Woldie & Dofan, 2007).

There are eighteen commercial banks operating in Libya (Central Bank of Libya, 2018). Those banks are: Al-Jomhuria Bank, National Commercial Bank, Sahara Bank, Al-Wehda Bank (Allen et al., 2011; Shuaieb, 2013), North Africa Bank, Al-Aman Bank,

Al-Wafa Bank, Alejmaa Alarabi Bank, Mediterranean Bank, Al-Mutahed Bank, Alsaraya Trade& investment Bank, Alwaha Bank, Arab Commercial Bank, Commercial & Development Bank, the Libyan Foreign Bank, First Gulf Bank, Al- Nuran Bank, and Islamic Libyan Bank (Libyan Central Bank, 2018). The state-owned banks as key players are one of the features in this sector (Sole et al., 2007).

In order to have a strong economy and banking system, the parliament announced in 2005 and 2010 respectively new laws for more economic and financial liberalization (Allen et al., 2011; Sole et al., 2007) and banking privatization (Central Bank of Libya, 2018; Zagoub, 2011). As the Libyan government started the announced reforms, the banking sector specifically witnessed the establishment of private banks, entrances of foreign banks, and representative banks to the country. The central bank, for instance, permitted First Gulf bank and the Libyan Qatari Banks, which has been recently named Al-Nuran Bank to operate in Libya as branches of foreign banks which the Libyan government participates in their capital and management depending on agreements between the two parties. The access of foreign banks to the country has been limited (Sole et al., 2007). Arab Banking Corporation (ABC), Bank Valetta of Malta, and Suez Bank of Egypt have opened representative offices in the country until the reform plan is complete, accordingly, more foreign banks will open in the country.

The duties and responsibilities of the Central Bank of Libya centre on supervising (Woldie & Dofan, 2007) and monitoring commercial banks (Allen et al., 2011) to ensure sound practices in banks operations. Voluntary corporate governance guidelines for the Libyan Commercial Banks' Boards of Directors were issued by the CBL in 2010 (Zagoub, 2011). These guidelines are an initial step for providing general guidance and improving practices of corporate governance (CG) inside the Libyan Commercial Banks (LCBs). Every commercial bank, for instance, is run by a board of directors, an executive manager, and a deputy manager who are held responsible to the board and other governmental authorities.

The banking sector started to develop electronic payment system, comply with Basel requirements, and cooperate with international agencies in relation to improving performance and transparency in 2005. Some measures and regulations were also issued such as law (2) for the year 2005 for the purpose of combating fraud and money laundering (CBL, 2018). The financial information unit was also established to control financial crime in the Libyan banking sector. Based on law (46) in 2012, all the authorized banks must develop and retain vigorous internal controls (IC), perform risk management (RM), and have compliance and audit departments. The board of directors is accountable for appointing heads of internal audit (IA) departments. The department has to report back to the top management, boards, and audit committees. This is done to enhance soundness of operation and integrity, serve shareholders' interests, protect customers' money, and safeguard the services provided by the sector from being involved in illegal activities such as money laundering and financing terrorism (CBL, 2018).

The banking sector has been subject to environmental changes which has affected its performance, financial position, and reputation. A number of fraudulent cases were reported in this sector making the situation worth investigating to make available solution for this serious problem. Specially, the majority of the previous literature that has investigated fraud cases in terms of causes of fraud and measures to assist victimized organizations in limiting the consequences of fraud fall within advanced economies. On the other hand, rare studies have been found in developing economies. Giving attention to the nature of fraud and the hardly found empirical evidence on the used mechanisms and procedures for fraud mitigation in the emerging economics, namely, the Libyan banking sector, the current study aims to fill this void. It highlights significance and rationale of the present study. Therefore, the Libyan commercial banks represent the study targeted population and the sample frame.

1.3.3.1 Forms of Fraud in the Banking Sector

Although, different fraud cases have been reported in governmental, oil and gas, manufacturing and other sectors, the largest number of the reported cases is in the banking sector (ACFE, 2018). The Libyan banking sector alike suffered a spectrum of fraud cases such as money laundering cases, counterfeits documents, and customs papers used to deceive and smuggle hundreds of millions of foreign currencies to gain private benefits. For instance, The Libyan Audit Bureau audits revealed that Libyan Banks such as Al-Jomhuria Bank, Al- Nuran Bank, Sahara Bank, and Al-Wafa Bank were targeted by fraudsters and wasted almost \$80 million in 2016 because of fraud (Libyan Audit Bureau, 2016). Interestingly, the Libyan Audit Bureau report indicates that 45.68 % of defrauded funds in 2016 were reported in Al-Jomhuria bank, which is a public bank. While about 23.13 % of fraud cases were reported in Al-Nuran (foreign with mixed ownership) bank, 12.94 % were reported in Sahara (public) bank and 18.26 % of cases were recorded in Al-Wafa (private) bank. In these fraud cases, launders used LCs supporting with fake documents including inflated bills for importing goods for the purpose of cleaning their activities and gaining private benefits (Evidence on the above-mentioned fraud cases is provided in (Appendix A and A-1).

Besides the prevalence of money laundering (Jawher, 2017), a number of different fraudulent activities such as corruption, debit card fraud, cash theft, asset misappropriation, check fraud, accounts fraud, and electronic funds transfer fraud have been reported to affect the banking sector to high tangible financial losses and the whole economy (The Libyan Organization for Policies and Strategies, 2016). It should be noted that the nature of fraud keeps changing (Jha & Westland, 2013). This makes it not easily recognized and precisely quantified (Kummer, Singh & Best, 2015; Mangala & Kumari, 2017) where much of fraud cases go undetected and if detected, not all of cases may usually be made public (Krambia Kapardis & Papastergiou, 2016; Seda & Kramer, 2008). Certain actions, therefore, are seriously needed to work toward minimizing fraud risk in the banking sector and the entire economy.

1.3.4 Anti-Fraud Agencies in Libya

Internationally, the recent financial scandals and dramatic collapse of such large organizations in different countries have put regulators, practitioners, law enforcement agencies, and researchers on alert to develop corporate governance mechanisms to protect public interests against the consequences of wrongdoings (Jokipii, 2010). In Libya, anti-fraud agencies have gone through huge changes for years (Shariha, 2014). For instance, the Managerial Monitoring Office was officially established by law (116) in 1970 to assist the governments to investigate suspicious activities and abuse. Additionally, a law (2) was introduced in 1979 in relation to economic crimes.

The Libyan regulators had been through many years of paying attention specifically to anti-fraud agencies by: a). Organizing the work and the responsibilities of Libyan Audit Bureau (LAB) and Administrative & Financial Supervisory Authority, and, b). Establishing an Anti-corruption agency. More precisely, the Libyan National Congress issued resolution No 19, 2013 to reorganize the work of Audit Bureau (Alfteisi, 2014) and law No 20, 2013 regarding the work of Administrative & Financial Supervisory Authority to ensure integrity and investigate any managerial and power abuse. Resolution No 11, 2014 was issued to establish Integrity and Anti-Corruption Commission (Alfteisi, 2014) to combat all forms of fraud and corruption.

The Libyan Audit Bureau, for instance, delivered to the Libyan general attorney a number of fraud and corruption files in which fraudsters used forged and fake documents to smuggle millions of foreign currencies through the banking sector (Assad, 2016). Businessmen and banks' employees were involved in such crime in terms of receiving bribes and collusion with fraudsters (Assad, 2016; The Libyan Audit Bureau, 2016). Additionally, fake deposits had been approved, over-extending credit and loans without collateral, accepting cheques and debiting them from state accounts, and manipulating and misuse to guaranteed or certified cheques (The Libyan Audit Bureau, 2016). While fraudsters have been identified and travel bans have been issued, still the embezzled funds have not been recovered. This is because fraud schemes went undetected at the initial stages when fraudulent activities started taking place in those banks.

Introducing various laws, policies, and procedures are crucial to curb incidence and risk of fraud (Iwasokun, Akinyede, Fadamiro & Bello, 2019) while promoting public accountability, enhancing transparency, and ensuring good practices. However, employee fraud is rampant in this sector affecting its reputation. The occurrence of deviant behaviour in the banking sectors also erases customers' and investors' confidence in this sector (Ghanmi, 2016). Reviewing the history of fraud and control in Libya reveals that the Libyan regulators introduced various distinctive agencies over years while it seems as though no laws or changes regarding internal controls and auditing responsibilities have been considered to limit fraudulent activities. In Libya, issuance of legislations such as the act of Sarbanes Oxley (2002) in the USA (Abuazza et al., 2015) pertaining to in-house auditing and ICs might be needed in order to enhance the organizations' capacities in their fight against fraud and protect the country's resources.

Typically, the widespread of fraud cases in the banking sector have raised questions about the adequacy of corporate governance mechanisms which are intended to function effectively to keep organizations healthy and safe from various risks. Poor or ineffective corporate governance and organizational practices are the main causes that create opportunities for fraudulent activities to take place in organizations (Beasley, 1996; Dzomira, 2014; Han, Nelen & Joo, 2015; Isa, 2011; Holtfreter, 2005; Joseph, Albert & Byaruhanga, 2015; Pakhchanyan, 2016; Sulaiman, Siraj & Ibrahim, 2008; Mohd Sanusi et al., 2015). Based on Fraud Triangle and Control Balance theory, deviant behaviour occurs when there is motive, e.g. financial need (Tunley, Button, Shepherd & Blackburn, 2018), opportunity, e.g. weak corporate governance practices and mechanisms (Coram, Ferguson & Moroney, 2008) and poor internal controls (Bakri, Mohamed & Said, 2017; Chernobai, Jorion & Yu, 2008). Once these two elements exist, rationalization is needed to justify the criminal activity (Mansor, 2015; Morales et al., 2014; Zakaria et al., 2016).

In developed and emerging contexts, for instance Libya, inappropriate risk management practices when dealing with substantial operational risk faced by financial institutions were identified as one of the reasons for such fraud activities (Clark & Jolly, 2008; Mohd-Sanusi et al., 2015; Pakhchanyan, 2016). According to Abdullatif & Kawuq, (2015) external risks include both financial risks, which are associated with interest rates, credit, foreign exchange etc., and market risks, which comprise of risks associated with the economic environment, competition, etc. (Al-Tamimi & Al-Mazrooei, 2007; Mangala & Kumari, 2017). Internal risks are risks associated with controls such as failure in process (Bento, Mertins & White, 2018), erroneous staff actions, systems failure (Chornous & Ursulenko, 2013; Savić, 2008), and weak control environment that gives great tendencies for fraud incidents (Kaplan & Mikes, 2012; Zaal, Jeurissen & Groenland, 2017). These impose legal risks on organizations (Fernandez Laviada, Martínez-García & Montoya del Corte, 2007).

Krishnan, (2005) documented that organizations fall victim to fraud because of weak internal controls (Kummer et al., 2015; Fernandez Laviada et al., 2007). For example, 46.2% of firms in the US have been victims of fraud owing to the lack of effective controls (Joseph et al., 2015). Furthermore, some governments in African countries had lost almost 25% to 30% from their national budget owing to weak internal controls in the last few years (Joseph et al., 2015). What makes the situation worse is that top management rarely allocates proper funding to institute effective internal controls and provide training with sufficient resources to internal audit function (IAF) which resulted in the rise of fraudulent activities in the Libyan banking sector. Additionally, in some circumstances, management tend to outright ignore the procedures of the internal controls (Baker, Cohanier & Leo, 2017; Joseph et al., 2015). It was found that most of the victimized organizations were putting much emphasis on fraud detection instead of fraud deterrence and prevention (Holtfreter, 2005).

As the risk of fraud is no doubt more prevalent in some businesses, e.g. banks, than other businesses (Sanusi, Rameli & Isa, 2015), and the highest fraud cases are located in the banking sector (ACEF, 2018; Sanusi et al., 2015; Said, Ramli & Rafidi, 2017), setting prevention and detection procedures are among the crucial remedies. Fraud incidents

could probably have been mitigated if banks have sound corporate governance mechanisms such as adequate risk management, quality internal controls, (Board, 1998; Cerrone, 2013; Fernandez Laviada et al., 2007; Law, 2011; Rae & Subramaniam, 2008; Mohd-Sansui et al., 2015), effective internal auditing function, and sufficient support from the top management (MS) to internal controls and audit function (Alzeban & Gwilliam, 2014; Baker et al., 2017; D'Aquila, 1998; Dzumira, 2014; Zakaria et al., 2016; Joseph et al., 2015). Therefore, banks need to seek possible alternatives to elude being victims in all ways which are judiciously possible (Power, 2013).

Risk management and internal control, from this perspective, are more than a series of technical procedures as they are an interface between both private and public goals to serve stakeholders interests (The Organisation for Economic Co-operation and Development, OECD, 2017). With adequate risk management, banks can operate, compete, and deal with different risks (Power, 2013) effectively. In either normal or tough economic times and uncertain conditions, banks must have more concerns about good risk management practices (Miller, 1992). It follows that banks in Libya must also have a good control environment, assess risks regularly, perform monitoring, and introduce control activities, along with developing information and communication lines to mitigate fraud risks and suspicious activities.

Support from the top management is a vital for mitigation (preventing and detecting) fraud (Alleyne & Howard, 2005). To have high level of business ethics, and resilient ethics among executives and employees are fundamental as part of effective corporate governance system to ensure adherence to rules and transparency (El-Gammal, El Kassar & Messarra, 2018). To attain such an objective, top management should, therefore, build capacities (Iwasokun et al., 2019), act as a role model, spread ethical stance and share values (Viswesvaran, Deshpande & Joseph, 1998), develop sound internal controls (Arel, Beaudoin & Cianci, 2012; Feng & McVay, 2009), and promote internal audit activities (IAA) for fraud-free and sound operations.

In this specific sector, internal controls and internal auditors failed to mitigate fraudulent activities due to the scope of IA activities and incompetency leading to performance of insufficient tasks. To support the previous argument most of fraud cases were either discovered by the Libyan anti-fraud agencies or by incident. In emerging countries such as Libya, IAF might not be effective (Al-Twajry, Brierley & Gwilliam, 2003) as organizations including banks were found not recognizing the value of IA practices (Abuazza et al., 2015). Perry & Bryan (1997) and Westhausen, (2017) each stress the need to support internal audit function where internal auditors should receive adequate support in forms of training to be highly aware, well-qualified, and continuously updated to behave in a professional manner and perform their expected roles regarding fraud mitigation in their organization.

Power, (2013) further argues that fraud as a risk is among the responsibilities of management which requires identifying rules, procedures, and controls systems. Hence, it is necessary to implement and maintain quality internal controls at the work place in order to have satisfactory assurance against fraud risks and other risks. Implementing

and developing prevention and detection procedures within the organization's internal control system also enable decision makers to put forward proper strategies that help in managing occurrence of unethical behaviour in the future (Halbouni, Obeid & Garbou, 2016). In return, doing so could, on average, increase the profits by about 10% to % 40% in the short term (Bishop, 2004; Halbouni et al., 2016). The benefits of developing preventive and detective controls in the long term could outweigh both the associated costs of their implementation and the damages caused by fraud (ACFE, 2016; Chartered Institute of Management Accountants, 2009). Although, it is crucial for organizations to have internal controls in place, over-setting internal controls might result in complex procedures which, increase the costs and encumber the productivity and profitability of organizations.

Employees must have sufficient knowledge regarding the consequences of fraud on their banks, the entire sector, the future of the country and they must also recognize the significance of internal controls and internal audit function in managing fraud activities. Providing employees with skills, knowledge, and adequate training can also make them aware of the wrongdoings (Han et al., 2015; Holtfreter, 2005). Doing so also influences the employees' behaviour (Rodgers, Söderbom & Guiral, 2015) making them eager to take necessary actions such as reporting and whistleblowing whenever fraudulent activities are found to exist in the workplace (Perry & Bryan, 1997).

Although, fraud occurred in this sector, which is more regulated, the problem of employees' fraud and how it can be mitigated still escape the attention of researchers (Said et al., 2017; Suh et al., 2018). In previous studies, a considerable amount of research is specifically committed to the issue of corporate financial fraud with the main focus on the effects of governance structure and control mechanisms on fraud incidents (e.g. Beasley, 1996). The bulk of research tended to investigate financial statement fraud where managers tend to commit fraud for different reasons. However, little evidence is known about determinants of employee fraud mitigation, which keeps this area extensively underdeveloped in the extant literature. Additionally, few empirical studies (e.g. Kabuye et al., 2017; Law, 2011; Mohd-Sanusi et al., 2015; Rae & Subramaniam, 2008; Suh et al., 2018) have been found with mixed findings focusing on direct impact of risk management, management support, quality of internal controls, and audit activities on managing fraud occurrence.

Generally, the recent fraud incidents in the banking sector in the context of Libya have also pointed to possibilities of misunderstanding to the significance of risk management and appreciation of IAF and internal control quality (ICQ). These incidents raised further concerns on whether factors such risk management, support, IA activities, and the quality of ICs can function separately or could work integrally with each other to support banks in their fight against employee fraud. This is because fraud took place in well-known financial institutions supposedly having good corporate governance mechanisms that could enable them to survive tough environment and be protected from unexpected events.

CBT explains that the degree of setting adequate monitoring and control mechanism can either influence or limit fraud occurrence (Mohd-Sanusi et al., 2015) in the workplace. Setting effective corporate governance mechanisms to limit fraud requires the intervention of different monitoring mechanisms. This study attempts to test the ICQ and IA activities influence on fraud mitigation owing to their roles which mainly meant to protecting organizations resources, adding value to organizations, and serving various stakeholders' interests through limiting opportunistic and deviance behaviour in the work place and ensuring quality of governance. Because fraud occurs in the Libyan banking sector which is a more regulated industry in addition to lack of empirical evidence on this ongoing problem, research in this area is particularly motivating and might produce diverse and interesting findings.

1.4 Problem Statement

Fraud continues to be a challenging problem to all organizations, specifically, for banking sector which is a crucial sector for the economy development. Fraud is among the operational risks that face the banking sector (Fitzsimons, 2013). Occurrence of fraudulent activities in the banking sector can bring financial, legal, and reputational risks. It can deplete the banks' financial resources, their ability to compete, and their position in the market. The unproductive diversion of resources potentially lowers (Đorđević & Đukić, 2015) net income, which in turn could slow banks' growth (Abiola, 2009) and hinder their ability to compete in the global market. Fraud can undeniably increase the operating costs for the banks owing to the added costs of putting in necessary apparatuses for the purpose of safeguarding the organizations' assets.

Such incidences in a highly regulated sector have stressed incapability of banks to perform adequate risk management (Ashby, 2010) and maintain sound internal controls to continue functioning efficiently while minimizing the adverse implications of associated risks (OECD, 2017). Previous literature widely discusses the significance of mechanisms and procedures in limiting deviant behaviour and also a variety of means have been introduced to prevent and detect fraud (Bierstaker, Brody & Pacini, 2006; Chen, Wu, Chen, Li & Chen, 2017; Halbouni et al., 2016; Krambia Kapardis & Zopiatis, 2010; Jha & Westland, 2013; Mangala & Kumari, 2017). Many fraud schemes, however, have survived and went undetected for years in many cases. The fact that fraud is probably uneasy to be seen due to the complexity of its modus operandi (Johnson, Grazioli & Jamal, 1993), making its prevention more challenging (Suh et al., 2018). To illustrate further, executives had been found unable to prevent and detect fraud activities, even though they were well aware of fraud risks. For instance, 85.5% of firms fell victims to fraud in small economies (Krambia Kapardis & Zopiatis, 2010). It has also been found that the scope of internal auditing is limited in emerging economics and support for internal auditors is not adequate which makes them weak and ineffective to carry out their responsibilities. Supporting this assertion, weak utilization of internal auditing is reported in emerging contexts (Abuazza et al., 2015; Al-Twaijry et al., 2003).

Failure of internal controls coupled with small chances of internal audit to detect fraud on timely manner makes the situation fatal as it increases legal and reputational risks.

IAF was able to detect less than 20% of fraud cases in MENA region in 2018 (ACFE, 2018). Although, Libya suffers high levels of fraud incidents since the Arab spring owing to deteriorated governance indicators (See figure 1.2), Libya and other countries like Tunisia and Morocco were not included in professional studies e.g. ACFE, 2018 report.

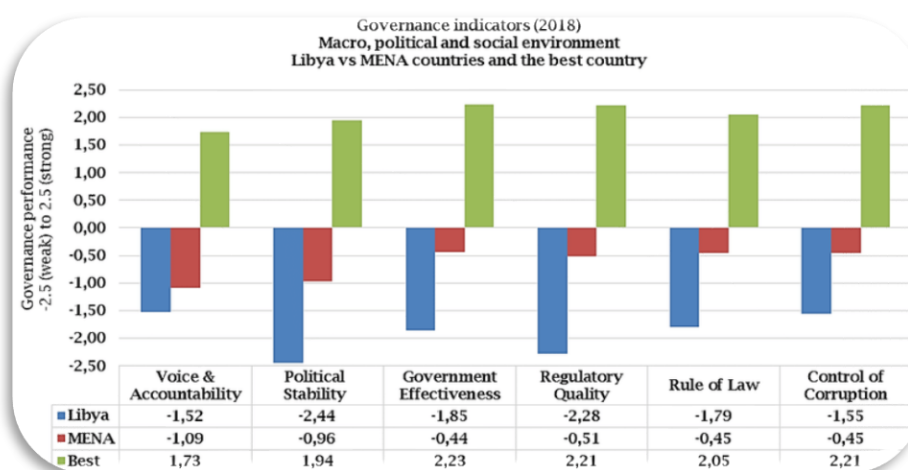


Figure 1.2: Governance Indicators of Libya in 2018 vs. MENA and Best Countries

Source: World Bank Group

In practice, the Libyan banks have internal controls and IA function fitting within their organizational structures. Nevertheless, fraud risks and funds abuse are less likely to be absent from the sector. As uncertainty is high and tough economic conditions loom large (Miller, 1992) in the Libyan context, top management, sound risk management, quality internal controls, proactive and effective internal audit function are crucial to mitigate various risks.

Recent empirical studies suggested that IA can do much better if received adequate support and if there is adequate participation in risk management. The significance of management support and risk management in improving effectiveness of IA, ICQ, and limiting fraud incidents has been recognized in quite a few studies (Abidin, 2017; Alzeban & Gwilliam, 2014; Kabuye et al., 2017; Liu et al., 2017; Mohd-Sanusi et al., 2015; Rae et al, 2008; Rae & Subramanian, 2008). Participating in risk management process (Beasley, Clune & Hermanson, 2006; Sarens & De Beelde, 2006; Venter, 2007) and support from management (Westhausen, 2017) have been discussed and stressed in few studies to be significant for proactive and effective IAF in mitigating fraud. Support from top management to IA and internal controls is indispensable as such support improves the effectiveness of the function in terms of managing risks and increase the chances to manage fraud occurrence. This support could be through education and training, building a lessons-learned database, and facilitating access to the right skills to

deal with various risks, operational issues, and compliance (Halbouni et al., 2016; Westhausen, 2017).

The extant literature reveals ongoing arguments among scholars on whether organizations would do well enough if in-house auditors are entangled in risk management. Additionally, little evidence with inconclusive findings was found on the relationship between risk management and quality of ICs regarding fraud mitigation. Lending support from Beasley et al., (2006); Abidin, (2017); and Rae et al., (2008) risk management can influence internal audit activities, which in turn unlocks and improves the auditors' potentials to improve process and limit fraud activities. Since the majority of managers fall victim to fraud, management can offer proper support to internal auditing and quality of controls to limit the incidents of fraud. The present study, therefore, introduces IAA and ICQ as two mediators on the nexus between risk management, management support, and fraud mitigation. This is because different stakeholders e.g. investors, depositors, lenders have expectation from banks in terms of carrying out responsibilities to limit fraud activities, ensure accountability, and improve transparency. The role of IAF and ICQ are important to understand how fraud in the Libyan banking sector can be mitigated.

Empirical studies on the association between risk management, management support, IA activities, and the quality of ICs on mitigating fraudulent activities in the banking sector generally, and the Libyan contexts specifically, are limited with few exceptions (Kabuye et al., 2017; Law, 2011; Mohd-Sanusi et al., 2015; Rae & Subramanian, 2008; Suh et al., 2018). The interrelationship among these factors are less examined in the past literature in an integrated framework in MENA region generally and the Libyan context specifically. Unlike the previous studies, the present study builds on internal control-integrated framework released by Committee of Sponsoring Organizations of the Treadway Commission (COSO) to address fraud-related crimes in organizations. This study attempts to offer possible remedies to an ongoing problem in the banking sector through utilizing existing organizational factors. Without which, the problem will continue unsolved, imposing severe harms on banks in terms of massive losses of money, affecting clients and investors' confidence, undermining the integrity and continuity of banks, and the reputation of the whole country. Such a crime can also sabotage the growth and the development of the nation since it lessens the chances of attracting foreign investments, which negatively impacts the growth of the economy.

1.5 Research Questions

1. How does risk management effect fraud mitigation in the Libyan banking sector?
2. How does management support influence fraud mitigation in the Libyan banking sector?
3. How does risk management sway IA activities and quality of internal controls?
4. How does management support influence IAA and quality of IC?
5. To what extent do activities of IA mediate the relationship between management support, risk management, and fraud mitigation?

6. Does internal control quality have a mediating effect between management support, risk management, and fraud mitigation?

1.6 Research Objectives

This study's key aim is to examine the nexus between governance mechanisms with mitigation of fraud. The study particularly seeks to foster and increase the influence of CG mechanisms on fraud mitigation through employing IAA and ICQ as two mediators and crucial mechanisms that explain the connection between risk management, management support, and fraud mitigation. The present study intends to achieve the subsequent six aims;

1. To examine the effect of risk management on mitigating fraud in the Libyan banking sector.
2. To examine the effect of management support on fraud mitigation in the Libyan banking sector.
3. To examine the influence of risk management on internal audit activities and control quality in the Libyan banking sectors.
4. To examine the influence of management support on internal audit activities and internal control quality in the Libyan banking sector.
5. To investigate the mediation effect of IA activities between risk management, management support, and employee fraud mitigation.
6. To investigate internal control quality mediating effect on the relationship between risk management, management support, and employee fraud mitigation.

1.7 Motivation of the Study

The increased number of fraud incidents in the banking sector which is a more regulated industry have raised regulators and professionals' concerns. Interestingly, studies on fraud mitigation in this particular sector (Suh et al., 2018) and specially in emerging economics did not receive sufficient attention (Said et al., 2017). Although, the Libyan banking sector suffers high level of financial crimes, no studies have been found addressing this issue in the existing literature. Concerns about fraud incidents in the Libyan banking sector have dominated recent headlines and shaken public confidence, specially, after the failure of internal auditors and anti-fraud agencies to prevent and detect fraud on early stages.

The extant literature on fraud mitigation which is concentrated in advanced economics indicates inconclusive findings and voids. Research is needed to fill voids in literature and provide possible remedies to this serious problem in order to limit its adverse consequences on this particular sector which is the backbone of the economy. If the problem continues, banks will face severe damages such losing customers and market share, discontinuity, and bankruptcy. This study therefore attempts to contribute to solving a serious problem, offer useful insights, and provide better understanding on the

influence of risk management and support on activities of IA, quality of internal control, and fraud mitigation.

1.8 Scope of the Study

The present study concentrates on fraud mitigation in the Libyan banking sector since the previous literature which, investigates fraud mitigation falls within advanced economies. Considering limitations in the previous studies, the significance of the topic, and the scarcity of experimental evidence on fraud mitigation in emerging economies, the present study attempts to examine the organizational factors influence on mitigation of fraud in the Libyan banking sector. The unit of enquiry is internal auditors working in the Libyan banking sector owing to their positions and involvement in daily activities.

1.9 Research Significance

Fraud risks are economically substantial for numerous economies and organizations (Owusu-Ansah et al., 2002). Recent globally and local fraud cases have established a strong nexus between occurrence of fraud within entities on the one hand and fundamental governance dilemma at every senior levels of management concerning risk management, IA activities, and controls quality on the other hand. As fraud remains one of the biggest threatening risks in the work place (Gullkvist & Jokipii, 2013; Tunley et al., 2018), organizations seek to find the most cost-effective ways to limit risk of fraud. Research on fraud and how to manage its occurrence are of global and local significance and remain among the scholars' interests (Enofe et al., 2017). It is in this way that this study will make significant contributions to body of knowledge, theory, methodology, practice, and policy.

First, the previous empirical examinations into the relationships between corporate governance mechanisms and fraud mitigation are undertaken in private and public sectors in developed contexts. However, no one study has attempted to examine such relationships in emerging economies. The extent to which the previous factors besides management support can discourage employee fraud and protect stakeholders' interests in the Libyan banking sector is still not clear. As there is a dearth of research that has been undertaken in the MENA region pertaining to fraud mitigation in the workplace, this particular study contributes to the body of knowledge through addressing voids in the extant research.

This study furthermore contributes to the theoretical discussion and debate on the nexus among risk management, internal auditing, internal control quality, and fraud mitigation. The study findings improve our understanding regarding the influence of risk management process on the efficacy of CG mechanisms. Thus, the study offers insights and expands CG and fraud literature domain in terms of the role of CG mechanisms in mitigating employee fraud.

Second, it is anticipated that risk management and support from top management influence the quality of ICs and IA activities which, independently contribute to reducing fraud risks. Nevertheless, the mediating effect of IA activities and quality of internal controls has not been investigated in previous studies. The present study, thereby, contributes to theory development by employing internal control quality including its components and internal audit activities as mediating variables between risk management, management support, and fraud mitigation.

Third, the study is important because of its methodological contribution. Although, there is no available data on ICQ in emerging economics, this study adopts measurements ICQ which, is developed in a Western context and utilize it in less developed context. Additionally, the study adopts quantitative research method supported with open-ended questions for the purpose of providing new insights and future research avenues.

Fourth, the study findings are important to executives and internal auditors who want to know how to limit the consequences of various risks such as operational, reputational, and legal risks connected with risk of fraud activities. This study accordingly provides evidence that participation of IA in the process of risk management significantly contributes to fraud mitigation in the banking sector. When involved in risk management, internal auditors will be more proactive, will have higher chances of understanding to various risks, and will be able to provide quality recommendations to enhance internal control procedures to deal with those risks including but, not limited to risk of fraud. Executives in the Libyan commercial banks, therefore, have to sufficiently support IA in terms of committing resources, training, defining responsibilities of IA and lines of reporting and communication to enhance their role in mitigating the risk of future fraudulent incidences in the workplace.

The study findings, furthermore, provide cost effective solutions which contribute to saving organizations' funds and protect stakeholders' interests. It underscores the role of senior management in Libyan banks to better recognize the significance of their supervision role in meeting their fiduciary responsibilities and commitments to protect various stakeholders' interests. The study particularly provides empirical evidence that risks can be controlled and resources can be saved if all the components of IC and internal auditors are properly supported and linked with risk management process.

Finally, this study is significant for policy makers e.g. the Central Bank of Libya who is concerned about ways to improve CG practices inside the banks. The study findings contribute to CG guidelines concerning risk management, internal auditing, and internal control policy development for the purpose of ensuring better practices in the Libyan banks. Accordingly, CBL should mandate commercial banks to understand the surrounding risks and perform risk management from a comprehensive view. Also, CBL should force banks to produce periodic reports on; the status of internal controls quality, risks facing the commercial banks, the precautionary procedures to manage these risks, and level of involvement of IA in managing various risks.

1.10 Key Terms Definitions

1.10.1 Risk Management

This particularly refers to the process of managing risks through various practices and implementing effective procedures to actively manage risks and minimize their adverse effects on bank's financial positions, reputations, and performance.

1.10.2 Management Support

Management support refers to financial, organizational, and moral support that management provides to internal auditing and control quality. In this, management supports takes the form of resource allocation, participation in audit plans, etc.

1.10.3 Internal Audit Activities

Activities of IA refer to the wider degree of services that internal auditing provides which ranges from assessing effectiveness of internal controls, improving risk management, protecting organizations assets, preventing and detecting fraud, etc. to enhance governance process and add value to organizations.

1.10.4 Internal Control Quality

Quality of internal controls refers to the existence of all the components of COSO, namely, control environment, risk assessment, control activities, information and communication, and monitoring.

1.10.5 Fraud Mitigation

Fraud mitigation refers to the procedures taken to minimize deviant behavior at work places committed basically by an organization's personnel.

1.11 Organization of the Study

The present study is structured into six chapters. The current one offers an overview of employee fraud and organizational factors to curb its incidents, sets the problem statement, the objectives, the questions of research, and its importance. The second chapter provides a theoretical discussion and reviews literature on the subject in relation

to fraud, its types, activities of IA, risk management, management support, internal control quality, and their influence and significance. Chapter three highlights the conceptual framework and study hypotheses derived from the review of literature. Chapter four outlines the methodology of research pertaining to design, population, and sampling, measures used, data collection, and statistical tools for analysis. Chapter five discusses processing of data, analysis, and findings. Lastly, chapter six presents summary of the findings, major conclusions, and recommendations for future research.

1.12 Chapter Summary

In the present chapter, four key points were discussed. First, the background of the study was outlined clarifying the current study roots followed by problem statement which concentrated more closely on the particular area of concern of the study. It highlighted, in brief, the work that has been done in this area and how this empirical work will affect the mitigation of fraud. Subsequently, the chapter presented the five main research objectives. First, is to investigate the influence of risk management and management support on fraud mitigation. Second, is to examine risk management and support effect on activities of internal audit, and quality of IC. Third, is to examine the impact of IA activities and quality of control on mitigation of fraud. Fourth, is to determine the mediating effect of IA activities on the relationship between risk management, management support, and fraud mitigation. Fifth, is to determine the mediating effect of internal control quality on the nexus between risk management, management support, and fraud mitigation. The final content of the chapter discusses the study significance and implications for different users of research outputs.

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BIODATA OF STUDENT

Waled Younes E Alazzabi was born in Jadwo, Libya. After graduation from Aljabal Algharbi University in 2005 with Bs of Accounting, he joined the Libyan Company for Public Services. He also joined Sahel Sahara Bank in 2006. He continued his education and obtained a master's degree in Accounting and Information System in 2010. Thereafter, he pursued his study as a full PhD student at Putra Business School, Universiti Putra Malaysia. His research interests in the field of accounting and auditing.



LIST OF PUBLICATIONS

Journals:

Alazzabi, W. Y. E., Mustafa, H., & Latiff, A. R. A. (2020). Corruption and control from the perspective of Islam. *Journal of Financial Crime*.

Alazzabi, W. Y. E., Mustafa, H., & Karage, A. I. (2020). Risk management, top management support, internal audit activities and fraud mitigation. *Journal of Financial Crime*.

Alazzabi, W. Y., Mustafa, H., Nassir, A. M., & Khabari, Y. (2019). Accounting Fraud in Libya and The Challenges. Research in Accounting and Sustainability. *Universiti Putra Malaysia Press*.

Issa, M., & **Al-Azzabi, W.** (2018). Assessing Awareness and Acceptance of Forensic Accounting among the Libyan Accounting Educators. *International Journal of Economics, Commerce, and Management*. VI (4), 331-348.

Conferences and Seminars

Presented a research paper, entitled of “**Fraud and Internal Control direction: History of Libya**” in *Global Conference on Business and Economics Research*’ (GCBER), at Universiti Putra Malaysia. 14-15 August 2017.

Presented a research paper entitled “**Risk Management and Top Management Support: Effects on Internal Audit Activities and Employees’ Fraud Mitigation**” in the *National Seminar on Digitalization, Globalization & Sustainability* (10th Faculty of Economics and Management Seminar, UPM) on 16th July 2019 at FEP, UPM.



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