

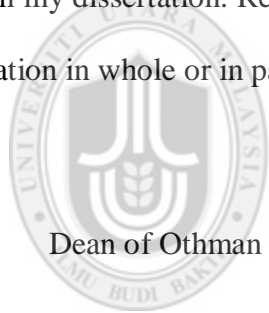
**AN INVESTIGATION INTO FACTORS AFFECTING THE INTERNAL AUDIT
EFFECTIVENESS: A SURVEY ON THE LIBYAN COMMERCIAL BANKS**



Thesis Submitted to
Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia,
in Partial Fulfillment of the Requirement for the Master of
Science (International Accounting)

PERMISSION TO USE

In presenting this dissertation in partial fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this dissertation in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my dissertation. It is understood that any copying or publication or use of this dissertation parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my dissertation. Request for permission to copy or to make other use of materials in this dissertation in whole or in part should be addressed to:



Dean of Othman Yeop Abdullah Graduate School of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

ABSTRACT

The purpose of this study is to investigate the factors affecting an internal audit effectiveness (IAE) in the Libyan commercial banks. Therefore, this study employed a quantitative method through convenience sampling survey. To achieve objectives of the study, questionnaires were distributed online to 113 Libyan commercial banks. Eighty questionnaires were retrieved back from the internal auditors in the banks at the response rate of 70.8%. The data was analyzed through Statistical Package for Social Sciences (SPSS). The result showed direct relation effects of management support, organizational independence of internal auditors, competence of internal auditors and audit experience with the IAE within the Libyan commercial banks. According to the regression output, management support has significant and positive contribution for the IAE, while the other three variables: the organizational independence of internal auditors, competence of internal auditors and audit experience have shown positive relation with the IAE, however their contribution for the IAE are statistically insignificant. The whole four independent variables provide 52.8% of the contributions for IAE in the Libyan commercial banks. The variables have collective significance in identifying any non-compliance activities and could also add values for the IAE in the Libyan commercial banks.

Key Words: Internal Audit; Libyan commercial banks; internal audit effectiveness; determinants of internal audit effectiveness.

ABSTRAK

Audit dalaman telah menjadi satu fungsi yang penting dan diperlukan dalam sesebuah organisasi bagi melindungi aset dan mencapai matlamat mereka. Tujuan kajian ini adalah untuk mengkaji faktor yang mempengaruhi keberkesanan audit dalaman (IAE) di bank-bank perdagangan Libya. Kajian ini menggunakan kaedah kuantitatif melalui kajian persampelan mudah. Bagi mencapai objektif kajian ini, soal selidik telah diedarkan ke 113 bank-bank perdagangan di Libya. Lapan puluh soal selidik telah diambil kembali daripada juruaudit dalaman di bank-bank pada kadar respons 70.8%. Data dianalisis melalui Pakej Statistik untuk Sains Sosial (SPSS). Hasil kajian menunjukkan terdapat hubungan secara langsung di antara sokongan pengurusan, kebebasan organisasi juruaudit dalaman, kecekapan juruaudit dalaman dan pengalaman audit dengan keberkesanan audit dalaman di bank perdagangan Libya. Hasil output regresi menunjukkan sokongan pengurusan memberikan kesan yang signifikan dan positif dalam keberkesanan audit dalaman di sektor awam manakala tiga pemboleh ubah lain: organisasi bebas juruaudit dalaman, kecekapan juruaudit dalaman dan pengalaman audit telah menunjukkan hubungan positif dengan IAE bagaimanapun, sumbangan mereka untuk IAE adalah tidak signifikan secara statistik. Seluruh empat pembolehubah bebas menyediakan 52.8% daripada sumbangan untuk keberkesanan audit dalaman di pejabat-pejabat sektor awam. Pembolehubah yang terkandung mempunyai kepentingan kolektif dalam mengenal pasti apa-apa aktiviti tidak patuh dan juga boleh menambah nilai untuk IAE di bank-bank perdagangan Libya. Secara keseluruhannya empat pemboleh ubah bebas tersebut telah menyumbang 52.8% kepada keberkesanan audit dalaman di pejabat-pejabat sektor awam.

Kata Kunci: Audit dalaman; Bank perdagangan Libya; keberkesanan audit dalaman; penentu keberkesanan audit dalaman.

ACKNOWLEDGEMENTS

In the name of ALLAH, the most gracious, the most merciful. Praise be to ALLAH, the creator and custodian of the universe. Salawat and Salam to our Prophet Muhammad, peace and blessings of ALLAH are upon him and to his family members, companions and followers.

First and foremost, I would like to express my heartfelt thanks and gratitude to Allah S.W.T for His blessing and allowing me to complete this project.

In completing this research, I would like to acknowledge the intellectual sharing of many great individuals.

My foremost gratitude goes to my supervisor; Dr. Mohd Atef MD Yusof, for their professional guidance and devoting their expertise and precious times to guide me to reach this level. Thank you, for all that you did.

Additionally, I would like also to express my gratitude and thanks to my friends for their constructive comments and invaluable suggestions.

Undoubtedly, this thesis would have been impossible to complete without the assistance of the internal auditors of Libyan banks in the data collection stage.

To my father, mother, brothers, sisters and all my family members, thank you so much for your support and prayers.

TABLE OF CONTENT

PERMISSION TO USE	i
ABSTRACT.....	ii
ABSTRAK.....	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENT	v
LIST OF TABLE	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Research Questions	5
1.4 Research Objective	5
1.5 Significance of the Study	6
1.6 Scope of the Study	7
1.7 Structure of the Study.....	7
CHAPTER TWO LITERATURE REVIEW	9
2.1 Background.....	9

2.2	Internal Audit.....	9
2.2.1	Types of Audits Implemented by Internal Auditors	11
2.3	The Accounting and Auditing Environment in Libya	12
2.3.1	Libyan Banking Environment	14
2.4	Literature Review Related to Internal Audit Effectiveness.....	16
2.5	Empirical Review Related to Factors Affecting in IA Effectiveness	18
2.5.1	Management Support	18
2.5.2	Organizational Independence	22
2.5.3	Audit Competence	25
2.5.4	Audit Experience	28
2.6	Theoretical Perspectives.....	29
2.6.1	Institutional Theory.....	29
2.6.2	Contingency theory.....	30
CHAPTER THREE METHODOLOGY		32
3.1	Background.....	32
3.2	Research Framework.....	33
3.3	Hypothesis Development	33
3.3.1	Management Support	33
3.3.2	Organizational Independence	34
3.3.3	Audit Competence	34

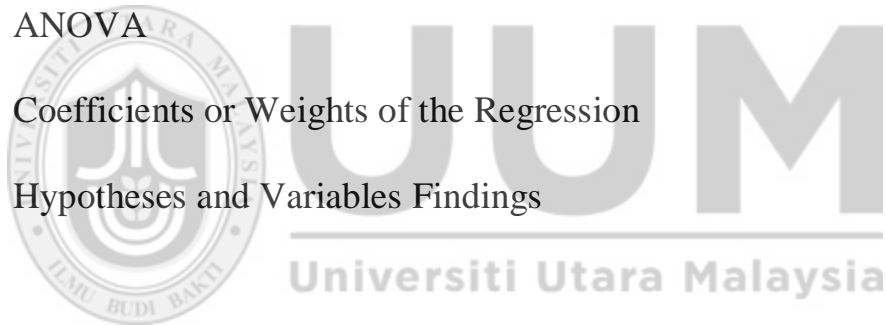
3.3.4	Audit Experience	35
3.4	Research Design	36
3.5	Population and Sampling Techniques	36
3.6	Sample Size	37
3.7	Data Collection Instrument.....	37
3.8	Variables Measurement.....	38
3.8.1	Dependent Variable	38
3.8.2	Independent Variable	39
3.9	Data Analysis Method.....	40
3.10	Pilot Study (Test).....	40
3.11	Model Specification	41
CHAPTER FOUR DATA ANALYSIS AND RESEARCH FINDINGS		43
4.1	Introduction	43
4.2	Descriptive Statistics	43
4.2.1	Response Rate.....	43
4.2.2	Respondents Profile	44
4.3	Reliability Test.....	46
4.4	Assessment of Multicollinearity	48
4.5	Assumption Test	49
4.6	Pearson Correlation Analysis	50

4.7	Multiple Regression Analysis.....	52
4.8	Hypothesis Test	55
CHAPTER FIVE CONCLUSION AND RECOMMENDATIONS		61
5.1	Summary of Major Findings	61
5.2	Conclusion.....	62
5.3	Recommendations.....	63
	References	65
Appendix A: Questionnaires.....		74
Appendix B: List of Libyan commercial banks		80
Appendix C: Statistical Analysis for Variables.....		81



LIST OF TABLE

Table		Page
3.1	Pilot Study	40
4.1	Respondents General Profile	44
4.2	Reliability Statistics	46
4.3	Collinearity Statistics	47
4.4	Pearson Correlations Matrix	50
4.5	Summary of the Regression Model	51
4.7	ANOVA	52
4.8	Coefficients or Weights of the Regression	52
4.9	Hypotheses and Variables Findings	55



LIST OF FIGURES

Figure		Page
1.1	The Research Structure	9
2.1	Accounting and Auditing Environment in Libya	13
3.1	Research Framework	32
4.1	Histogram of Dependent Variables (IAE)	48
4.2	Normal P-P Plot of Regression Standardized Residual	49



UUM
Universiti Utara Malaysia

LIST OF ABBREVIATIONS

IA	Internal Audit
IAE	Internal Audit Effectiveness
MS	Management Support
OI	Organizational Independence
AC	Audit Competence
AE	Audit Experience
ISPPIA	International Standards for the Professional Practice of Internal Auditing
GPCC	General People's Committee for Control
SAB	State Accounting Bureau
LGPC	Libyan General People's Congress
IPC	Institute of Public Control
GPCMA	General People Committee for Management Audit
GPCFA	General Peoples Committee for Financial Audit
IIA	Institute of Internal Auditors
IFAC	International Federation of Accountants
GAAP	Generally Acceptable Accounting Principles
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The professional practice of Internal Audit (IA) was initiated in 1941 in USA. The early Internal Audit or in 1950, the professionals only focused on financial audit which was far away from financial statement. In the recent years the organizations were being declared bankrupt due to an increase number of accounting scandals that solely focuses only on financial audit. Afterwards, the IA function has received a great deal of attention as it had been playing an important contributing role in effective and quality financial reporting and corporate governance practice (Prawitt, Smith, & Wood, 2009). In spite of the importance of IA effectiveness, there has been very limited research carried out that concentration on the problem of Internal effectiveness and the diverse method used to explore the Internal Audit effectiveness (Al-Twaijry, Brierley, & Gwilliam, 2003). Therefore, it is appropriate that the factors that influence the effectiveness of IA should be identified as effective IA as it will leads to the improvement in the operations within an organization.

Since 1941, the development and enhancement in the professional structure of internal audit is due to the Institute of Internal Audit that played an important role (Yee, Sujana, James, & Leung, 2008). Furthermore, Internal Audit (IA) has played a critical role within organization and the professional standards of internal auditing are not widely applied in Libya as well as the Institute of Internal Auditors does not exist in Libya (Abuazza, Mihret, James, Best, & Martinov-Bennie, 2015).

Although Internal Audit (IA) had a serious role inside an organizations; nevertheless, lack of attention had been given to this critical issue of internal audit whereas more focus was put on the external audit. Gendron and Bédard (2006) investigated that academician and researcher focused on external audit as compare to the internal audit, according to their results the external audit is more important as compare to internal. Effectiveness of internal audit still has not comprehensively investigated, Mizrahi and Ness-Weisman (2007) find out the very few literature is available to measure the effectiveness of internal audit particularly in the public sector. Furthermore, few researcher recommend that effectiveness of Internal Audit is not only due to its function in an organization (Getie Mihret, James, & Mula, 2010). Although there is a huge significance of IA effectiveness yet there had very limited research that is been carried out that address this issue and in particular for under developing countries. Therefore, this area of internal audit effectiveness that had been suggested by many research scholars (Al-Twajjry *et al.*, 2003; Getie Mihret & Wondim Yismaw, 2007; Yee *et al.*, 2008),

The corruption and fraud can be investigated within an organization by internal audit. According to Abu-Azza (2012) it is expected that IA will increase importance to organizations in Libya by facilitating proper practice that includes audit operational and consulting management on a variety of matters. Also according to Abuazza et al. (2015) the scope of IA in Libyan organizations do not consider internal audit effectiveness as value adding service. So, there is urgent need for the expansion in scope of the internal audit in organization that consider as a value adding service in Libyan organization or for their stakeholders.

This study focuses on investigation and extent of IA effectiveness in Libyan commercial banks, past research in Libya had been investigating in the area of external audit. Hence, the aim of this study is to investigate the factors influencing IA effectiveness in the Libyan commercial banks.

From previous literature we found that there is not a particular generally accepted method to measure and assess the effectiveness of internal audit (Getie Mihret *et al.*, 2010). Therefore, there are very few studies that investigated the effectiveness of internal audit through different methods. From past example, (Haniffa & Cooke, 2002) investigated how environmental factors influence on Internal Audit. Yee *et al.* (2008) focused on international standards for the professional practice of internal auditing (ISPPIA) formation Institute of internal audit for determination and guideline to assess internal audit effectiveness, beside this Mizrahi and Ness-Weisman (2007) developed a model and investigated the determinants of internal audit effectiveness.

1.2 Problem Statement

The importance of internal auditor is getting more attention with the trend of objective oriented organization for attaining their target and task. Lack of supervision and control is crucial problem for organization due to the speedy growth in public sectors, recently it is necessary for the organization to evaluate every aspect of the organization for transparency and achievement of organizational task as well as for the protection of its assets (Yee *et al.*, 2008). Particularly it is more vital for the under developing countries where exploitation of capital, heavy wastage rate and devaluation of assets is common. The reason behind this is lack of systematic evaluation of the organization whereby the chances of corruption and fraud increases beside this sometimes undue favor is given to particular persons.

In spite of the importance of IA effectiveness, there has been very limited research carried out which addresses this issue, as different approaches were used in such investigations (Al-Twaijry *et al.*, 2003). Therefore, several academic scholars have called for further researches and have

advocated essential latest inclusive research on this problem of internal audit and its effectiveness (Al-Twajjry *et al.*, 2003; Getie Mihret & Wondim Yismaw, 2007; Prawitt *et al.*, 2009).

Libyan public institutions had set-up a special department of internal audit for the evaluation of all activities within organizations. Although concentration and attention had been increased in effectiveness of internal audit in Libya, but still there is no proper regulatory authority to design the formal guidelines for internal audit department to solve the basic problem that which department suffer, it is expected that IA gives addition value to enterprises by providing new scope of services consisting of operations (performance) audits and look into many matters related to management issues (Abu-Azza, 2012). Therefore, on the basis of recommendation it is necessary to conduct the research on internal audit specifically on effectiveness of internal audit in the context of Libya as there are lack of international profession institution such as institute of internal audit.

According to Abu-Azza (2012) there are lack of efficiency in management support, organizational independence and competence of internal auditors. Therefore, the aim of current research is to cover the gap in literature and also to investigate of factors that affect internal audit effectiveness in the context of Libyan commercial banks. Therefore, it is interesting and of great value to investigate the affect of management support, organizational independence, and competence of internal auditors on the internal audit effectiveness at the Libyan commercial banks. It also aims to examine audit experience as the study contribution to identify whether it has effect on the effectiveness of IA at the Libyan commercial banks.

1.3 Research Questions

The main question of the study is related to what extent the effect of management support, organizational independence, competence of internal auditors, and audit experience on the context of Libyan commercial banks and how the internal audit function are to be effective. The current research has proposed to answer the following research questions;

- Does management support to internal auditors affect the internal audit effectiveness in the Libyan commercial banks?
- Does organizational independence of internal auditors affect the internal audit effectiveness in the Libyan commercial banks?
- Does competence of internal auditors affect the internal audit effectiveness in the Libyan commercial banks?
- Does experience of internal auditors affect the internal audit effectiveness in the Libyan commercial banks?

1.4 Research Objective

Specifically, the researcher tried to achieve the following objectives:

- To examine the affect of management support on internal audit effectiveness in the Libyan commercial banks.
- To examine the affect of organizational independence on internal audit effectiveness in the Libyan commercial banks.

- To examine the affect of audit competence on internal audit effectiveness in the Libyan commercial banks.
- To examine the affect of audit experience on internal audit effectiveness in the Libyan commercial banks.

1.5 Significance of the Study

In developing countries such as Libya, studying IA practice, could pave the way for a deeper understanding of IA and for an increase in the development of knowledge in internal auditing areas as well as to maximize organizational performance; thereby rendering support for the development of the national economy, as developing countries have a greater need to similar studies to help increase and to develop the general perspective about the importance of IA.

The aim of this research is to identify the factors that affect the internal audit effectiveness in Libyan commercial banks, this study will be helpful for researchers as well as for industry sector in Libya. Furthermore it will enhance understanding of some factors that affect internal audit effectiveness, besides this the present research will provide the guideline to practitioner that are facing problems relevant to internal audit effectiveness. In addition, this research is important for the empirical evidences for the Libyan commercial banks to examine their policies and procedures. The results of the study may lead to future recommendations to improve any weak areas.

1.6 Scope of the Study

This study extends on the limited scope of the investigation of the internal audit effectiveness in Libyan commercial banks based on the study of a set of determinants that affects the achievement of the effectiveness of internal audit such as; management support, organizational independence, competence of internal auditors, and audit experience.

This study is based on the quantitative approach, the respond were internal auditors of commercial banks. The questionnaire provide questions related to the determinants influencing the effectiveness of the internal audit.

1.7 Structure of the Study

The present research comprises of five chapter that are presented in Figure 1. Chapter first contains different heading that focuses upon: firstly, of all of the headings discuss the introduction of study, secondly explore the problem statement and also mention the research questions, the objective of the research and scope of the study. Second chapter contain literature review of all relevant factors. The third chapter composed of conceptual framework and methodology of the research. Chapter four entail analysis and discussion of results of the study. The chapter five discuss about the future recommendations for the Libyan commercial banks employees along with final conclusion of the study.

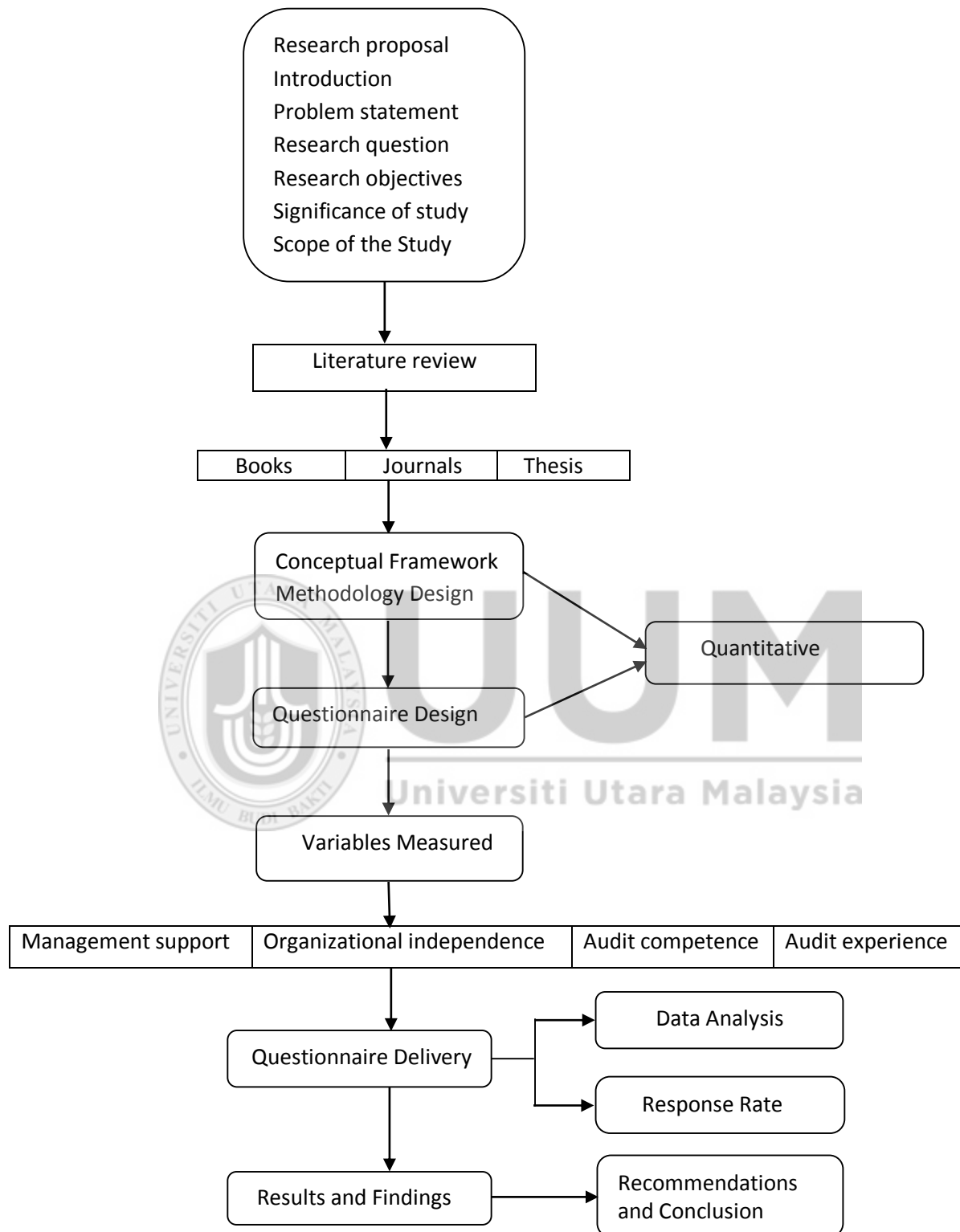


Figure 1.1 The Research Structure

CHAPTER TWO

LITERATURE REVIEW

2.1 Background

In this portion of second chapter the main concentration is on literature with in-depth on all factors that are relevant to the effectiveness of internal audit in Libyan commercial banks. Internal audit is considered as fundamental function that enhances the organizational capability in achieving protection of their assets and improve their task properly. There is an increasing awareness and value of internal audit effectiveness expansion which will be consider value-added in latest organization requirement.

According to Al-Twaijry *et al.* (2003) organization get two major advantages from internal audit department of the organization, first is transparency in operation, timely performance of the task and risk management. Second is deduction of corruption and frauds and protection of assets.

2.2 Internal Audit

With the passage of time organizations has adopted new technology, implemented new regulation and requirement of advancement. From these changes function of internal audit integrated to enhance the opportunities to support management with the provision of service and facility to the organization and to create direct relationship with audit committee. This type of activities are considered new challenges for the internal auditors who seek a vision of the future from The Institute of Internal Auditors (IIA) (Leung, Cooper, Hass, Abdolmohammadi, & Burnaby, 2006). The definition of internal auditing had been changed with the conclusion of vision report, institute of Internal Audit Standards and Code of Ethics and Practice of professionalism in Internal

Auditing. As mention below the latest definition of internal auditing provide new expansion in internal auditing into corporate governance and managing risk of the organization (IIA, 2004):

“Internal auditing is a process that works as an independent, objective oriented assurance and guidelines which enhances, add the value and improve the operational performance of the organization. It provides the capability to the organization to develop systematic and disciplined way to implement evaluation regularly which automatically enhance the effectiveness of managing risk, control and process of corporate governance” 1000.C1-1. Page 3.

According to this definition the major scope of IA is making assurance to the organization and giving consultant facilities to overall management of the corporate governance. By providing the independent opinion and conclusions regarding the operation, function, system and wellbeing of the organization the IA can provide assurance services; and by giving the advisory service based on the specified requests of an engaged client the internal auditor can give the consulting service to the organization.

Anderson and Dahle (2006) explain that assurance and services of consultancy include in the new definition of internal audit which change it into proactive customers concentrated concerned activities which is very important for managing risk, control and governance. Simple objective of new definition is particularly relevant to the enhance add value services an organization's operations properly (IIA, 2004).

2.2.1 Types of Audits Implemented by Internal Auditors

According to Hailemariam (2014) page 20. Some types of audits are as below:

Operations Audits: These type audits investigate the effective usage of resources which are being used in the most effective way according to the organizational mission and objective.

Financial Audits: These type of audits examine the financial transaction which has been done during the financial year main objective of these audit are to check the accuracy of financial transaction and financial reporting transparency inclusion of all payment and received record. Secondly these type of audit focus on the cash control of the organization and other assets.

Compliance Audits: These type of audits analysis the implementation of law mean verify the all entities are conforming to applicable laws, principles, procedures and processes. Suppose for examples inclusion of federal and state laws, and trustee policies and regulations.

Information Systems Audits: the objectives of these audits are examine the organizational environment and judge how employees implementing the system technology and their check and balance. Basically they concentrate on the control and risk some issue of recovery, input and some failure and provision of facilities of technology.

Internal Control Reviews: These type of audits reviews the top level organization financial position salary payment and other benefits, managing cash and inventory as well as financial reporting quality.

2.3 The Accounting and Auditing Environment in Libya

In Libya, the Quality of accounting and auditing had faced many challenges. It got many amendments since the independence of Libya, and had passed through under several developmental stages. Figure 2.1 below summarizes the different important stages of development in accounting and auditing environment in Libya.

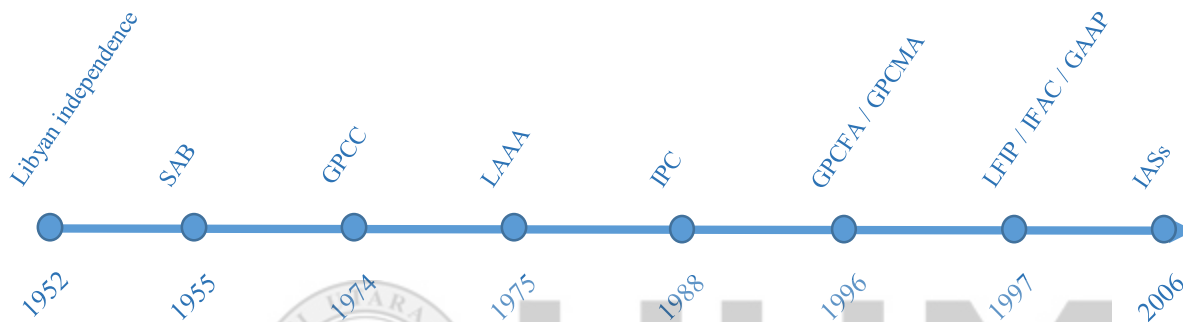


Figure 2.1 Accounting and Auditing Environment in Libya.

At the time of independence under the rule of empire under King Idris Sanusi, there prevails no opportunity for educating and training of accounting in Libya. This reason has caused a shortage of qualified individuals in the field of accounting and auditing, most of the local businesses had upon foreign accounting firms mainly from Italy and the United Kingdom (Ahmad & Gao, 2004).

In 1955, the organization was established to handle the financial matters of the corporate in Libya namely State Accounting Bureau (SAB). This organization was established under the Law No. 31 of 1955 under the Ministry of Treasury. The SAB has played an important part in the development process of accounting as profession in Libya (Ahmad & Gao, 2004).

In 1974, General People's Committee for Control (GPCC) Replaced the SAB through the Introduction of Law No. 88 of 1974. GPCC was held responsible to review the LBE in terms of management and financial audit (Abu-Azza, 2012).

Latter in 1975, to make the favorable environment for accounting profession. Libyan Association of Accountants and Auditors (LAAA) was established. LAAA was also assigned to enhance the accountant's and auditor's standard professionally, academically and culturally. Furthermore it was also decided to engage the auditors and accountants in research related activities e.g. conference and seminars on accounting policies (Ahmad & Gao, 2004). LAAA was seemed to be failed in achieving its main objectives of holding and participating in productive activities including making sure of participation in research conferences, education and training workshops, seminars. LAAA also seemed to be failed to make sure the following of current development in the field of accounting and auditing by local auditors(Ahmad & Gao, 2004).

In 1988, Institute of Public Control (IPC) was established by Libyan State in replacement of State Accounting Bureau (SAB) Law no. 7 of 1988. The IPC was assigned the responsibility of auditing all the state owned agencies, departments, organizations aided by government or any enterprise having more than 25% of Government investment of total Capital (Zakari, 2014).

In 1996, the issuance of Law No. 11 in 1996 by the Libyan General People's Congress (LGPC), the LGPC was divided into two separated bodies called General People Committee for Management Audit (GPCMA) and General Peoples Committee for Financial Audit (GPCFA) (Libyan-Government, 1996).

Foreign Investment Board of Libya was established in 1997. The scope of board was to attract the foreign investment into the country within framework of socialist economic and social development, similarly Libya membership International Federation of Accountants (IFAC) body compliance program, that has compiled the Generally Acceptable Accounting Principles (GAAP) customized to needs of the country analogous to encourage their enterprises to follow the adoption of International Accounting Standards/International Financial Reporting Standards (IAS/IFRS) (N. Masoud, 2014).

In 2006, Libyan concerned authorities adopted IASs principals without any alternation to the prevailing legislation and the lack of change in this respect, is considered a big challenge facing in implementation of IASs in Libyan environment (Faraj & El-Firjani, 2014).

2.3.1 Libyan Banking Environment

The banking sector is one of the most important in Libya. It is also one of the most sensitive structural components of any economy. Historical sources show that the first banks in Libya were established in the beginning of the nineteenth century, at the end of the Ottoman period. Until the middle of the twentieth century, the commercial banks were branches of foreign banks, such as Barclays (Al-Arbah, 1985).

The Libyan banking sector now consists of the Central Bank of Libya (CBL), specialized banks (the Libyan Arab Foreign Bank, the Agricultural Bank, the Savings and Investment Bank, and the Development Bank) and commercial banks. The commercial banks have an economic and social role. Libyan commercial banks consist of public commercial banks (state commercial banks

[SCBs]) and private commercial banks (Central Bank of Libya, 2001). They played a significant role in the growth of the Libyan economy.

The period of 1972–1992 was dominated by five public commercial banks. On 13 November 1969 a decree was issued that required Libyan foreign banks to become Libyan joint stock companies. Libyan nationals were obliged to own more than 51% of the company and the majority of its board of directors, including the chairman, had to be Libyans. In December 1970, Law No. 153 nationalized foreign shares in the commercial banks and specified the contribution of Libyans to them. It also reorganized the banks and increased the contribution of the Central Bank of Libya to 51% in banks where it was less than that. In order to keep up with the latest developments in both the national and international environment, legislation was enacted in the 1990s to encourage the private sector to participate in owning and managing commercial banks (A. Masoud & Al-Shrif, 2002).

From 1993 onwards the banking sector witnessed important developments. Law No. 1 1993 (Amended by Law No. 1 2005) allowed private banks to be established and permitted foreign banks to open branches, agencies, or representative offices. The private banks established following this passage of this law include the Bank of Commerce and Development, Aman Bank for Commerce and Investment, Al-Ijmaa Al-Arab Bank, Al-Wafa Bank, etc. (Luxford, 2005) and these banks now compete very effectively with state banks (Central Bank of Libya, 2004). To observe international standards, the CBL has issued regulations for the commercial banks. Those handed down by Basle Committee, for example, are aimed at assuring that capital investment is in line with international developments and innovations, and at reaching a banking standard necessary to compete in the international banking world.

2.4 Literature Review Related to Internal Audit Effectiveness

Internal audit can play an important role in implementing the strategies to achieve the organizational goals (Ljubisavljević & Jovanović, 2011), furthermore internal audit is also responsible to strengthen the management and audit committee of the organization (Hutchinson & Zain, 2009).

Similarly the reliability, integrity of financial and operational information which is pooled from the different units of organization depend upon the internal audit system developed by the organization, all the important business decision are made by analyzing this information. Internal audit plan can only be possible if it is independent of management of organization, no person from the top management should be allowed to disrupt its work, information, drawn conclusions and evaluation done by internal auditors (Ljubisavljević & Jovanović, 2011).

Issues related to effectiveness of internal audit become important because it help in enhancing the overall quality of work in government ministries (Unegbu & Kida, 2011). IIA (2010) has defined the internal audit effectiveness as “The degree (including quality) to which established objectives are achieved”. It is expected that effective internal audit help organizations to achieve their objectives (Dittenhofer, 2001). IIA (2004) has also defined IA as “Internal audit helps organizations to accomplish its objectives”. Similarly role of internal audit in achieving the organizational goals has been recognized in literature (Gramling, Maletta, Schneider, & Church, 2004; Leung *et al.*, 2006; Yee *et al.*, 2008).

The scope and objectives of internal audit system may varies for each organization dependent upon the objectives of organization (Pungas, 2003), likewise the effectiveness of the internal audit (IA) also depends upon the defined goals by the management of that council, furthermore, internal audit

effectiveness may take different position depending upon the organizational levels and country (Al-Twajjry *et al.*, 2003).

Scope of audit has changed along with the dynamics of environment. McNamee and McNamee (1995) has proposed three phases of IA's history transformation. First phase started after 1940's that mainly focuses on propriety of transactions and there records. In 1940s based on the information technology development was made based on the idea of systems caused the arise of modern internal audit with system evaluation approach. After the first phase, since 1990s a new wave of transformation, directed internal audit to be regarded as a value adding service that have a broader scope of activities including assisting organizations in risk management.

Effectiveness of internal audit may be associated with the role and effectiveness internal audit is possibly associated with the isomorphic pressures that could shape IA practices. Leung *et al.* (2006) reviewed the previous american litreature on effectiveness of internal audit and support this argument. Most of the literature support issuance of SOA (2002) engendered internal audit's emphasis on services assurance. Consistent to previous literature Arena, Arnaboldi, and Azzone (2006) provided that the organizations with stiff regulations can more focused tends to be conferred to audit compliance. The essential point to note is that both of the approaches could be considered as value addition based on the context (Roth, 2002).

In contrast to earlier studies, current study used Marxist economic theory for internal audit function. Furthermore results are in contrast to Ethiopian economy (Getie Mihret & Wondim Yismaw, 2007; Getie Mihret & Zemen Woldeyohannis, 2008) and also to Saudi Arabia (Al-Twajjry *et al.*, 2003). For Singapore Yee *et al.* (2008) finds the following points, 1) internal audit function on improving stage and is being recognized as an important part of organizations; 2)

generally, managers are contended with internal audit; and 3) the internal audit function have capability to play role for value adding in modern organizations by expanding scope of service to embrace operational areas.

Getie Mihret *et al.* (2010) reviewed the previous literature and argued that effectiveness of IA influenced by the prevailing dynamics in IA settings. This study further stated that the primary objective of the IA is to guide the organization to achieve its objectives. A positive association between the compliance level by internal auditors with accounting standards for professional practice and organizational performance could prove as an additional approach to assess effectiveness of internal audit.

2.5 Empirical Review Related to Factors Affecting in IA Effectiveness

2.5.1 Management Support

Support by organizational management is one of the important factor that can enhance the effectiveness of internal audit. To achieve the internal audit effectiveness, organizational support is absolutely critical. Boyle (1993) found that the top management support to internal audit is prerequisite for the internal auditors to perform their task effectively. Internal auditors have to build close relationship with management to perform their routine activities. Internal auditors need positive support and perception from the management to perform their work more effectively to achieve their goals. Management support can take the different shapes like support of audit process by providing necessary resources. These resources may be in form of financial resources, training, support by management, transport facility, providing of access to new technology and procedures, providing funds for professional certificates and other similar facilities that facilitate the internal

audit process (Hailemariam, 2014). Getie Mihret and Wondim Yismaw (2007) suggested that the support can be take different forms such as, allocation of sufficient human and financial resources to internal audit department. By looking all these review of literature it can be judged that it is overall organizational culture that define the level of cooperation by auditees to internal auditors.

IIA's set standards for the guidance of professional practice of internal auditing (1110-Organizational independence) identifies that top management and board of governance should support the auditors, it will help the auditors to get cooperation by the auditees within the organization and they will able to perform their task more independently (IIA, 2012). This statement clear that top management support undoubtedly plays an important role in enhancing the performance of internal auditors. Therefore, internal auditors be supported by the top management to perform their task effectively. Top management support also help the internal audit department to monitor the overall performance of the organization.

Walker, Shenkir, and Barton (2002) argued that success of risk management strategy cannot be successful without the top management support in an organization, because key responsibility of the internal audit is identification and assessment of risk and in this process they are likely to interact with top management to discuss the issues in risk management implementation strategies. Moreover, support by senior management can be seen by their provided motivation to internal auditors.

Furthermore, support by top management is much crucial for the success of initiatives taken by the internal auditors. One form of the support by management is to provide motivation and take initiatives for the betterment of auditors. Motivation can be provided in form of establishing institutional school for education its staff, training programs designed to enhance the skills of the

auditors, adequate budget for the internal audit department, bonuses and salaries and acceptance and implementation of recommendations made by audit department.

Mihret (2010) argued that support of management for IA is on the key factor that ensures a high profiled internal audit department. Zain, Subramaniam, and Stewart (2006) also support this statement by concluding that, the appropriate level and type of resources provided by management to internal audit department ensures the clearness in conducting external audit. On form of management support could be establishing audit education and training programs for their auditors.

Internal auditors should be encouraged to equip with current knowledge through providing opportunities of education and training in their fields. These programs should be designed to provide supplement knowledge in area where there is no formal education available for training. Getie Mihret *et al.* (2010) found that technical competencies and continuously conducting of training programs are considered important for effective internal audit. Engle (1999) stated that enhancing the competency of internal audit department should be the top priority of any organization, and organization should focus their efforts to update the skills and knowledge of internal auditors.

The other form of management support for the internal auditors is financial support, this can take the form of bonuses and salaries. It could be argued that financial supports in form of salaries and bonuses to the staff of internal audit department can motivate the individuals to perform their task with more motivation. In this connection, Müller-Peters, Kern, and Geißler (2001) in his experiment recruited member for a commercial market research panel through personal interviews and find that 52% of the individuals were agree to work in audit department with and attractive incentives.

It is the fact that activities of internal audit have to undergo an excessive dynamic management process and also need a supportive environment. It is believed that senior management should take first step by supporting to intern audit process. As Sarens and De Beelde (2006) concluded that the general acceptance and appreciation of IA within the organization is strongly affected by top management support. Internal audit frequently pursues support by the senior management by providing resources, commitments to promote and communicate their importance.

A study was carried out by Sarens and De Beelde (2006) analyzed the relationship between the internal audit and top management with the aim to make contribution in literature by investigating the nature of association between internal audit and top management. This study was designed to provide qualitative examination of their anticipations and perception with reference to each other. Furthermore they examines the influence of audit committee. The conclusions was drawn on the basis of five studies that were conducted in Belgian firms and concluded that, on one hand, expectation of senior management significantly influence the IA, while the support and appreciation by the management significantly influence the internal audit.

In addition Getie Mihret and Wondim Yismaw (2007) studied the Internal audit effectiveness in Ethiopian public sector and concluded that management support is an important determinant of IA effectiveness. This study aimed at identifying the factors that are influencing the effectiveness of internal audit services. This study has taken the data from the higher educational institutions in Ethiopia. This study concluded that quality of internal audit enhance audit processes by management support, organizational settings and interaction between these factors. This study confirms the positive relation between top management support and internal audit effectiveness.

2.5.2 Organizational Independence

In general, the idea of organizational independence has been used to correspond to the efficacy of an auditor to be reasonable, determined and rationale in the evaluation. There is also a strong need that the assessment of internal auditors should not to in excessive pressure that it might reaches up to level of reflecting state of prejudice in the opinion. Therefore, in order to avoid such scenario; IIA's has developed criteria terms as Standards for Professional Practice of Internal Auditing (glossary) whereby it is clearly indicated that internal auditors should be unbiased. Internal auditing should comprises of two core features namely internal auditing should be a person whose potentials can't be restricted to certain conditions; internal auditing should be given freedom awareness on the goals to be achieved (IIA, 2012).

This explanation is important for the audit work as it contributes towards the internal audit's objectivity and its reliability. In the work of Diamond (2002) where the authors depicts that the internal auditing standards independence is to make intent judgment and mental liberated from directly management responsibility, it is open to decide any transaction for audit and is permitted access to all necessary information to come up with informal judgments.

Abu-Azza (2012) supported the notion that the IIA has recognized the vital practicality of the IA function such as the independence of IA, the American Institute of Certified Public Accountants (AICPA) and others IA function. The issue of independence in the international standards for the professional practice of internal auditing ISPPPIA, IIA had concerned and investigated a various aspects of the issue of independence in the ISPPPIA; specifically the Standard 1100 Independence and Objectivity was explored where much emphasis was given on the internal audit activity and it was claimed that internal auditory should be autonomous in performing their tasks (IIA, 2010):

“Independence of an organization is its freedom from those conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner”

Standard 1100.

IA independence is an indispensable component of business governance (Al-Twajjry *et al.*, 2003). Exclusive of independence factor, the IAD merely becomes a part of the management team, might loses its ability to offer a fresh viewpoint. Although total independence of an organization might perceived as a unattainable goal, since clearly employees are attached with the organization for long therefore, they are also well aware of the aims and objectives of their organization (Gay & Simnett, 2007), practical independence is promising and is very necessary (Christopher, Leung, & Sarens, 2007). This independence had been resulted as two major characteristics – organizational status and objectivity.

It can be seen that a huge body of research has examined auditor organizational independence, however the previous researchers solely focused primarily on the external audit perspective (Gendron & Bédard, 2006), and resulted in little attention towards internal auditor independence. Although; literature has shed light on the IA effectiveness, nevertheless, much emphasis has been placed on the external audit (Cohen & Sayag, 2010), which in-turned resulted in ignorance towards the internal auditory. In-addition ignorance not only resulted in lacking in attention towards the flourishing the potentials of internal auditory rather it also ignored the issues linked with the independence of IA (Stewart & Subramaniam, 2010). This gap on the body of knowledge particularly on the role of IA has increasingly being transformed from primarily being concerned with three vital features namely checking the accuracy of transactions, records, systems evaluation whereby the consideration is primarily given to the value-adding service with a diverse scope of activities, including assisting organizations in the management of risk. Consequently brings out a

perception towards the role of IA as they should be given much emphasis and a prominent placement of advising the board of directors, although discrepancies remained between the consulting role and the need (Getie Mihret *et al.*, 2010).

A research was conducted by Cohen and Sayag (2010) that was designed to investigate the effectiveness of internal audit and its determinant in Israel. This study was designed to draw conceptual insights of the IA effectiveness in firms and to observe the determinants of internal audit. Questionnaires were distributed to collect the data from 292 organizations. After analyzing the data it was concluded that the effect of organizational independence on IA. The findings of the study showed the effect of organizational independence on IA effectiveness. The effect was found consistent among the private and public sectors.

In addition, Hailemariam (2014) study the factors that influence the effectiveness of internal audit in public sector of Ethiopia. This study was design to investigate the factors that influence the effectiveness of internal audit. This study was focused on 15 purposely selected public sector offices that are expected to represent all other sectors. The questionnaires were distributed to both the senior managers and the internal auditors of the selected federal level public sector offices. In total, 120 questionnaires are distributed both to the senior managers and internal auditors and from which 112 questionnaires were collected (56 responses each from managers and internal auditors) giving the response rate of 93.33%. The finding of the study showed the organizational independent of internal auditors are positively connected with the internal audit effectiveness, however their contribution for the internal audit effectiveness were statistically not significance.

2.5.3 Audit Competence

In order to gain satisfactory performance; a wider range of competencies are required in the audit department at assorted hierarchical positions (Burnaby *et al.*, 2009). Knowledge and professionalism are considered as the vital aspects that the internal auditor should acquire prior appointed for the concerned positions in the organization. However, knowledge and professionalism can merely be enhanced through education, job training, and experience.

Therefore, there is a strong need that whoever is given auditory jobs must be qualified accordingly (Paape, 2007). Engle (1999) depicts that an auditory job requires three core features because the audit department is associated with fruitful benefits namely the qualified audit staff might contributes towards the achievement of desired outcomes and goals of an organizational; the more internal audit enhances the efficiency in the performance, the more the probability increased in reduction of cost employed for the external audits; and lastly since the internal audits are more well aware of the organization. Therefore, internal audits are considered as an adequate representative in providing the financial statement about the organization.

Numerous skills are required for the potential internal audits such as persuasive skills, underpinning constructs and knowledge of general business, basic know-how on the information technology and efficacy of auditing (Getie Mihret & Zemenu Woldeyohannis, 2008; Leung *et al.*, 2006). According to IIA (2001) Standard 1210; potential internal audits needs to have adequate knowledge, skills and capabilities in order to perfume to their gives task efficiently. Flesher and Zanzig (2000) has provided similar definition given by IIA (2001) and standard 1210; of this construct which they defines as internal audits must possess multiple competencies that enables

them to facilitate auditory department and organisation beyond the necessary requirements such as financial activities.

Likewise, appropriate computer skills are professed as an indicator of proficiency of internal auditors to perform audit tasks (Gramling & Myers, 1997). Burnaby and Klein (2000) states that auditing has become more composite, as the volume of information being stored in computers has increased progressively. Therefore, in order to cope up with this era of information technology, internal auditors must be capable to work within the environment. According to Bierstaker, Burnaby, and Thibodeau (2001) technology having a major impact on audit that is capable of planning. For example, computers are used to make client specific internal control templates to help identify the strengths and weaknesses in a system.

In addition, when the internal auditors are well equipped with satisfactory knowledge, professional certification and training to work with computer system, it can be seemed that they are competent enough to observe the quality of the internal control system (Hanim Fadzil, Haron, & Jantan, 2005).

Consequently, several programs were started to enhance the quality and excellence of internal audit professionals in USA, UK and Canada. For example, IIA offers the professional course to the internal auditors that have to obtain bachelor degree, have to gain relevant experience in auditing and must follow the ethical code of conduct devised by IIA in order to pass the professional examination. Moreover, American Institute of Certified Public Accountants (AICPA) also organize courses for professional developments of internal auditors even some departments of university also offering professional courses for the development of internal auditors.

Cohen and Sayag (2010) study the usefulness of internal auditing Israeli organizations. The objective of the study was to develop a theoretical understanding of the effectiveness of IA in these organizations in order investigate internal audit effectiveness. Results from this study reflects that professional proficiency of internal auditors is one of dominant factors of internal audit efficiency.

Questionnaires were designed and mailed to 292 organizations that were listed and accumulated by the IIA in Israel. The response rate was 37% as the respondent were both the general managers and internal auditors. The study concludes that professional proficiency of internal auditors is of key aspect for efficiency and competence of internal auditing. In addition, findings also claimed that competence of internal audit team and efficiency of internal audit are optimistically allied.

Similar study was conducted by George, Theofanis, and Konstantinos (2015) where authors investigated the factors associated with internal audit effectiveness in Greece. The investigated factors were namely: internal audit effectiveness; quality of internal audit, competence of internal audit team, independence of internal audit and management support. A questionnaire was designed and mailed to several organizations. The population rate was 240 firms listed on the Athens Stock Exchange and questionnaires were dispersed to 140 companies. After initial screening where incomplete and invalid questionnaires were excluded, only 40 valid questionnaire with the 29 percent response rate were selected for statistical analysis. The findings get through the regression analysis, shows that identified factors are the leading factors that influence the internal audit effectiveness. It further confirms that aptitude of internal audit team have a positive association with internal audit effectiveness.

2.5.4 Audit Experience

Recently, there has been greater attention given on the effects of audit experience towards audit efficiency and effectiveness. The reason to take into account the effect of experience is because during auditors professional practices are influenced by their professionalism and it showed a significant relation between audit proficiency and internal audit effectiveness (Intakhan & Ussahawanitchakit, 2010). Many of the researchers are agree on the point that, professional knowledge of the internal auditors increases as the experience increases (Knapp & Knapp, 2001).

Fu, Tan, and Zhang (2011) found that meeting different clients and negotiating of them, improves the auditors negotiation style and this will help in their effectiveness and efficiency of dealing with clients. This supports the claim that different negotiating styles are linked with gaining knowledge and improves negotiation strategies.

Earlier studies gave more importance towards the role of the audit experience with respect to discover the errors and judgments in the financial statement (Chung & Monroe, 2000; O'Donnell, 2002). Whereas, few recent studies on audit experience did not scrutinize the audit experience in relation to internal audit effectiveness in the public sectors organizations (Gaballa & Ning, 2011; Intakhan & Ussahawanitchakit, 2010).

M. Badara and S. Z. Saidin (2014) presented the empirical evidences of experience of internal audit effectiveness from the Nigerian perception. 500 questionnaire were sent to several bodies such as internal auditors, audit committee and chairman of local government. For the collection of data through the random sampling from six-geo-political zones in Nigeria. Statistical results shows a positive relationship between audit experience and internal audit effectiveness.

In the same way, Wang, Yu, Zhang, and Zhao (2012) conducted the research to explore the relationship between individual audit experience and audit quality, questionnaire were distributed to collect the data, descriptive statistics and correlation were applied on the data for the analysis. The study concluded that audit partner experience have a positive effect on actual as well as perceived audit quality.

In the work of M. a. S. Badara and S. Z. Saidin (2014) investigate the moderating effect of audit committee effectiveness by exploring the relationship between IA and IA effectiveness. 300 questionnaires were distributed to collect the data from the organization, by analyzing the results by using the statistical package for Social Science (SPSS). The results showed a positive relationship between audit experience and internal audit effectiveness.

2.6 Theoretical Perspectives

2.6.1 Institutional Theory

Institutional theory shows the different aspects of the organizational practices and how these practices are fashioned and shaped when certain pressures are involved in an organization either internal and external sources for instances laws and regulations or by the professions (Getie Mihret *et al.*, 2010). There are few previous studies that had adopted an institutional theory in internal audit (Al-Twaijry *et al.*, 2003; Getie Mihret *et al.*, 2010; Sakour & Laila, 2015).

In the study of Al-Twaijry *et al.* (2003) author claimed that there is a positive relationship between compliance with International Standards for the Professional Practice of Internal Auditing ISPPA and organizational goal achievement, this relationship could assess the internal audit

effectiveness. Later, similar argument was made in the study of (Getie Mihret *et al.*, 2010). Sakour and Laila (2015) adopted the institutional theory to investigate the internal audit effectiveness in Libyan public enterprises to explicate their research findings regarding the effectiveness of internal audit and the role of ISPPIA factors in promoting organizational goal.

Therefore, it can be seen through the discussion made that, the institutional theory is a appropriate and valid theory for internal audit effectiveness in both countries either developed and under developing countries. This theory has viability for both countries and this theory can explain the relationship between variables of the study and its relevance will be embedded in the development of the research framework.

2.6.2 Contingency theory

Contingency theory had extensively used in area of business, management accounting and auditing, that is why is considered fundamental theory in accounting and auditing (Abushaiba & Zainuddin, 2012). However, contingency theory provide base to the researchers to analytically introduce the factors to be explained or to predict expected phenomena (Umanath, 2003). The explanation of this theory provide a base to the researcher to hypothesize a conditional relationship between two or more independent variables with the dependent variable (Drazin & Van de Ven, 1985), it's also contributes in the identification of relationship that is complex among variables i.e. examining moderating or mediating effect of variables (Heo & Han, 2003).

In the realm of audit effectiveness M. Badara and S. Z. Saidin (2014) applied the Contingency theory in the context of internal audit effectiveness which depend upon the contingent variables

such as effective audit committee, effective internal control system, risk management, audit experience, cooperation between internal and external auditors and performance measurement.

Therefore and in line with the above, this study posits that the internal audit effectiveness will be contingent upon the contingency variables of management support, organizational independence, audit competence and audit experience.



CHAPTER THREE

METHODOLOGY

3.1 Background

Effective research design is an integral part of research activity which shows the logical link between the data collected, the analysis and conclusions to be drawn. This research design specifies the most suitable methods of for conducting the research based investigation, the nature of the research instruments to be used, the sampling plan along with the nature and type of data.

The chapter two provided an overview of the important relevant literature on the topic. The present chapter is assumed to explain the research design, methodology and the procedures to be employed to achieve the objectives of the study. In particular, this chapter describes research design, target population, sampling method, research instrument, the dependent and independent variables applied throughout the research, and finally the model specifications used for data analysis which are applicable and use in the study are included.

3.2 Research Framework

Based on the above discussion at literature review section, the following is the study framework

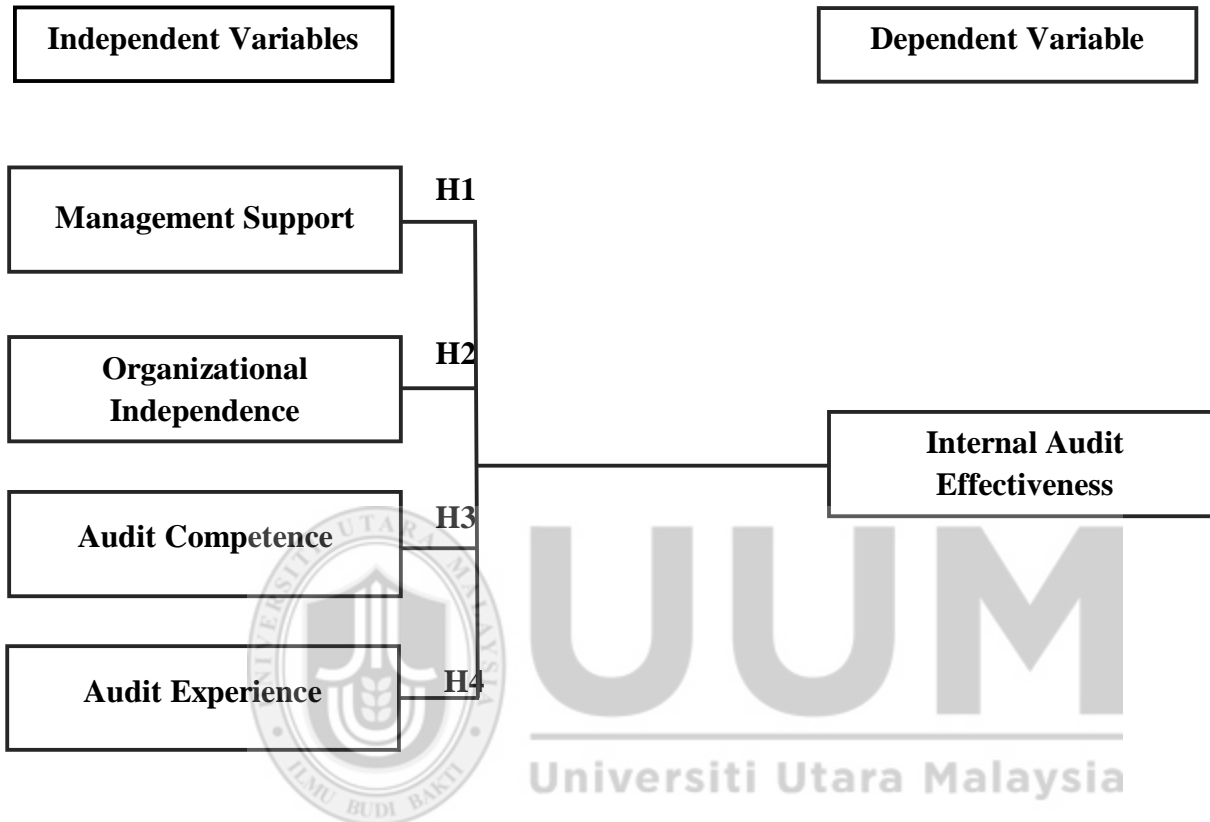


Figure 3.1 Research framework

3.3 Hypothesis Development

3.3.1 Management Support

In literature one of the important factor that influence the internal audit effectiveness is management support. Getie Mihret and Wondim Yismaw (2007) found a positive association between the management support and internal audit effectiveness. Consistent with (Cohen & Sayag, 2010)) found management support as an important determinant of internal audit

effectiveness. Another study by Alzeban and Gwilliam (2014) confirms the positive relationship between the management support and internal audit effectiveness. On the basis of above literature support, the first hypothesis was developed as follows.

H1: There is positive relationship between management support and internal audit effectiveness in the Libyan commercial banks.

3.3.2 Organizational Independence

Cohen and Sayag (2010) showed the positive association between the organizational support of internal audit and internal audit effectiveness. Arabia, Alzeban and Gwilliam (2014) examine the relation between the internal audit effectiveness and organizational independence for Saudi Arabia, and found a positive relation of organizational independence and internal audit effectiveness. George *et al.* (2015) indicate that the independence of internal audit is positively associated with internal audit effectiveness, where is the foundation of internal audit effectiveness. On the basis of above discussion, second hypothesis for this study was developed as follows.

H2: There is positive relationship between organizational independence and internal audit effectiveness in the Libyan commercial banks.

3.3.3 Audit Competence

Technical competence of audit committee and training plays an important role in enhancing the internal audit effectiveness. Getie Mihret *et al.* (2010) found that continuous training provided to internal audit team and technical competence are important determinants of audit effectiveness. Furthermore, Cohen and Sayag (2010) confirms that professional competence of internal auditors

is on the core factor that influence the effectiveness of internal audit. Alzeban and Gwilliam (2014) confirms the positive association between internal audit competence and internal audit effectiveness, internal audit effectiveness is increases with an increase in professional competence of audit team. On the basis of literature support third hypothesis is developed as follows.

***H3:** There is positive relationship between audit competence and internal audit effectiveness in the Libyan commercial banks.*

3.3.4 Audit Experience

In literature most of the research has postulated that audit experience can be an important predictor of internal audit issues. Anuntaakalakul (2010) concluded that the auditors with greater experience have a greater comprehension of decision process and place greater dependence on the net income. O'Donnell (2002) concluded that experience auditors may have already necessary knowledge that they need to perform analytical procedures effectively because they learned it through error specification experience. M. Badara and S. Z. Saidin (2014) also found a positive relation between audit experience and internal audit experience. Therefore, based on the discussed literature we can formulate the research hypothesis as follows:

***H4:** There is positive relationship between audit experience and internal audit effectiveness in the Libyan commercial banks.*

3.4 Research Design

The study expect investigate of factors affecting the effectiveness of internal audit in the context of the Libyan commercial banks. The method adopted in this study is the quantitative method (Survey), the data used to conduct this study are the primary data obtained through the questionnaires. The questionnaires are distributed to the internal auditor team. The study area selected is capital state of the country Tripoli, in order to contain a sufficient number of banks for choosing sampling, and which have greater impact to influence the banks sector.

3.5 Population and Sampling Techniques

The target populations for this research is the commercial banks in Libya. According to Central Bank of Libya 2014 the number of commercial banks operating in Libya 536 banks, includes bank branches and agencies which are reached 520 branch and agency as the end of 2014 and appendix B provides the list of Libyan commercial banks.

The researcher focused on this commercial banks which have internal audit staffs, very popular in nature and have greater impact to influence the country's banks sector overall social, political and economic issues. The data collection was conducted based on a survey from the selected banks and its branches that have internal auditors. The internal auditors of those purposively banks having more professional certification and experienced auditors also participated for the questionnaires administer.

3.6 Sample Size

From the researcher's preliminary study the total number of commercial banks are 16 of central bank with 520 of branches banks scattered in all throughout the Libya. Due to the difficulty of covering all the total number of banks and branches, and due to the current situation in the country such as political and security instability, the researcher obliged to minimize its study area by focusing only on 11 banks and 149 branches banks in the capital state Tripoli, which are purposively selected that are be used as a representative of other banks. The questionnaires are distributed for these selected commercial banks to get appropriate responses.

To obtain the adequate responses through questionnaire the researcher believes that distributing the questionnaire on the internal audit staffs in Libyan commercial banks regarding the factors affecting the effectiveness of internal audit in the commercial banks. According to Sekaran (2003) the number selected of the respondents as 160 banks were be 113 respondents of the internal audit staffs in banks.

3.7 Data Collection Instrument

The primary data were used to accomplish the study, and to collect the data from the respondents included in the sample questionnaires are distributed. The questionnaires were distributed to the internal auditors in the Libyan commercial banks. The questionnaires distributed to the respondent are organized in to six parts; Part one comprises the demographic questions regarding the respondents. Part two described the extent of effectiveness of internal auditors' in identifying non-compliance activities and added contributions to the organizations, while the parts three to six contains items relating to the effectiveness of IA and its determinants.

The effectiveness of internal auditors' in identifying non-compliance activities and added contributions to the organizations is measured by 15 items, and the management support, organizational independence, audit competency and audit experience are measured by 5 items, the questionnaires were adopted and modified from the prior author and literature review (Hailemariam, 2014). While audit experience is measured with 5 items as adapted with some modification (M. Badara & S. Z. Saidin, 2014). And those questionnaires are prepared in the form of Likert-Scale type (showing respondents agreement or disagreement) by constructing into five point scale where the lowest scale represent strongly disagree and the highest scale represent strongly agree.

3.8 Variables Measurement

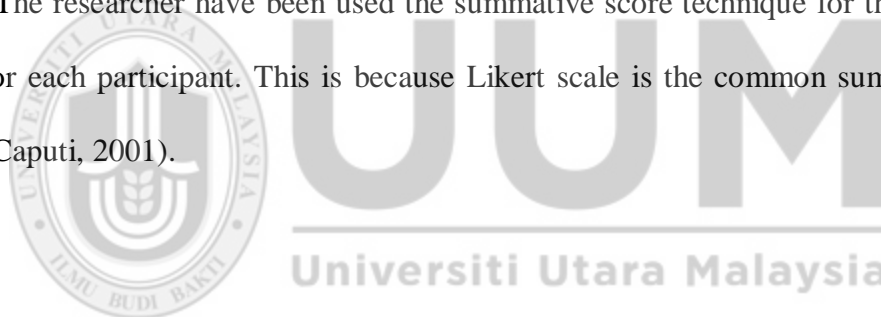
3.8.1 Dependent Variable

The dependent variable for this research is the internal audit effectiveness. The internal audit effectiveness are measured in terms of internal auditors' ability to identify non-compliance activities with the banks procedures and policies, and the contributions added by IA to the public sector. Compliance audit is a type of audit service that mostly performed by internal auditors of the organization (Hanim Fadzil et al., 2005).

Compliance is defined as 'adhering to the requirements of laws, industry and organizational standards and codes, principles of good governance and accepted community and ethical standards'. Compliance also involves ascertaining the extent of compliance with established policies, plans, procedures, laws and regulations, which could have a significant impact on the organization's operations (Hanim Fadzil *et al.*, 2005). Therefore, IA is responsible to regularly

assess and verify internal operations conformance with organization's policies and procedures, and then issue compliance report to the concerned body. The added contribution by IA to organizations can be measure in terms of value creation (e.g. its role in the avoidance of corporate failures) and cost saving (Cohen & Sayag, 2010).

In this study the research measures the IA effectiveness by implementing the internal audit effectiveness of the public sector offices with the country's auditing environment in which the internal auditor's ability in identifying non-compliance activities and the added contribution by the IA to the public banks. To understand the level of the perception of IA effectiveness a 5-scale point Likert-type of 15 different item questions were constructed and distributed to the respondents. The researcher have been used the summative score technique for the questions in each factor for each participant. This is because Likert scale is the common summative scores (Balnaves & Caputi, 2001).



3.8.2 Independent Variable

This study was focused on four independent variables that might have an impact on the internal audit effectiveness in the public banks. Those predicted variables investigated in this research are: the management support for the IA activity, organizational independence of the IA work, audit competence, and audit experience. It should be noted that the data for the independent variables were collected from the internal auditors of the selected public commercial banks. Therefore, the independent variables represent the perceptions of the internal auditors regarding these concepts. Similarly with the dependent variable items, all of the independent variables items were measured

on a 5-scale point Likert-type of 5 different item questions for each variable, where the lowest scale represent strongly disagree and the highest scale represent strongly agree.

3.9 Data Analysis Method

Data analyses are conducted through a descriptive statistics to provide details regarding the demographic question and the various factors that affect the effectiveness of IA in the public sector. To evaluate the effects of various factors on the effectiveness internal auditors in the public sector the correlation analysis were used.

And also, the Statistical Package for Social Sciences (SPSS) and Excel were used for the data analysis. In order to assess the reliability and consistency of the instrument the Cronbach's Alpha (α) analysis was conducted. Whereas, to determine the relationship among the variables and to test the research hypothesis correlation and regression analysis method are used by meeting the ordinary least square (OLS) assumptions of the linear regression.

3.10 Pilot Study (Test)

Pilot test concerned with the stability and consistency measurement in order to access the goodness of a measure. It will answer the questions on how consistent it measures a specific perception. A sample of 11 questionnaires was self-administered and dully completed by the target respondents. The respondents were internal Auditors in the public commercial banks in Tripoli City. The calculated value of (Cronbach's Alpha) shows that all the items are internally consistent and associated with each other. As the analysis shown in table 1 depicted that the reliability Cronbach's

Alpha for all the variables are acceptable as they range from (0.641 - 0.842). The result shows that the Cronbach's Alpha is more than 0.6 in the study which indicates that the questions are consistent and reliable in capturing the information from the respondent. As mentioned by Sekaran and Roger (2010) stated that the alpha value of 0.6 is generally considered sufficient, acceptable and the variables appropriate for further analysis.

Table 3.1 Reliability Statistics

Variable Name	Cronbach's Alpha	N of Items
Internal Audit Effectiveness	0.775	15
Management Support	0.642	5
Organizational Independence	0.794	5
Audit Competence	0.815	5
Audit Experience	0.842	5

3.11 Model Specification

The following model is formulated for this research in order to test the research hypothesis set earlier. Most of the independent variables included in the model are extensively used in prior audit researchers (Cohen & Sayag, 2010; Getie Mihret & Wondim Yismaw, 2007) except the perception of IA's value and the adopted internal audit charter. So the reliability and validity of the model was recognized and used in this research is to analyze and interpret the result of the study.

Where:

$$IAE = \alpha + \beta_1 MS + \beta_2 OIN + \beta_3 IAC + \beta_4 AEX + e_i$$

IAE → The effectiveness of internal auditors' in identifying non-compliance activities and the added contributions of IA to the public commercial banks,

MS → The management support,

OIN → The organizational independence,

IAC → The internal audit competence,

AEX → The audit experience.

α → Is a constant, represents the effectiveness of IA when every independent variables are zero.

β_{1-4} → Is the coefficient, in which every marginal change in variables on internal auditor's effectiveness affects correspondingly.

e_i → The error term



UUM
Universiti Utara Malaysia

CHAPTER FOUR

DATA ANALYSIS AND RESEARCH FINDINGS

4.1 Introduction

This chapter provides the analyzing data generated from the questionnaires. As the main aim of this study is to investigate the factors affecting in internal audit effectiveness in the Libyan public sector. Therefore, the result and research finding are discussing according to the research objectives and hypotheses which have been indicated formerly in the study are provided in this chapter also. The data collected are analyzed by using Special Package for Social Sciences (SPSS) version 20.

4.2 Descriptive Statistics

4.2.1 Response Rate

The questionnaires were distributed to the internal auditors in the 11 selected Libyan commercial banks. For these, 113 questionnaires are distributed to the internal auditors. And which 80 questionnaires were collected from the internal auditors at the response rate of 70.8%. This shows good response rate for the internal auditors.



4.2.2 Respondents Profile

The table 4.1 given below describes the general findings regarding the respondent's gender, age, field of study, level of education, professional certification, experiences working as IA and the presence of audit committee for the internal auditors in their organization. The respondents from the internal auditors (64 at rate 80.0%) were males, while (16 at rate 20.0%) were females. Here the percentage of males are higher than females.

The majority of the ages of respondents are fall under the age of 30-39 (36 at rate 45.0%) and 40-49 (28 at rate 35.0%) and the rest falls in the age of 20-29 (11 at rate 13.8%) and Above 50 (5 at rate 6.3%) respondents. Here, the majority of the respondents are in the age of 30-50 (64 at 80%) years.

In the case of field of study the respondents were composed of from Accounting (49 at rate 61.3%), Management (20 at rate 25%), Economics (10 at rate 12.5%), and others fields (1 at rate 1.3%). Here, the majority internal auditors were studied accounting and management fields respectively which shows the good assignment of professionals for their appropriate job.

In terms of the level of educational background, most internal auditors have bachelor's degree (43 at rate 53.8%), master's degree (28 at rate 35.0%) and (9 at rate 11.3%) respondents from IA have other level of educational background.

Table 4.1 Respondents general Profile

Demographic Questions		Responses of Internal Auditors	
		Frequency	Percent
Gender	Male	64	80.0%
	Female	16	20.0%
	Total	80	100.0%
Age	20-29	11	13.8%
	30-39	36	45.0%
	40-49	28	35.0%
	Above 50	5	6.3%
	Total	80	100.0%
Field of Study	Accounting	49	61.3%
	Management	20	25.0%
	Economics	10	12.5%
	Other	1	1.3%
	Total	80	100.0%
Education level	Bachelor	43	53.8%
	Master	28	35.0%
	Other	9	11.3%
	Total	80	100.0%
Professional certification	Certified Internal Auditor CIA	54	67.5%
	Certified Public Accountant CPA	13	16.3%
	Certified Management Accountant CMA	7	8.8%
	Other	6	7.5%
	Total	80	100.0%
Experience working as IA	Below 5 years	11	13.8%
	5 to 10 years	56	70%
	11 to 15 years	11	13.8%
	16 to 20 years	2	2.5%
	Above 20 years	-	-
	Total	80	100.0%
The presence of audit committee	Yes	11	14%
	No	69	86%
	Total	80	100.0%

The professional certification of the internal auditors were; (54 at rate 67.5%) Certified Internal Auditors (CIA), (13 at rate 16.3%) Certified Public Accountants (CPA), (7 at rate 8.8%) have Certified Management Accountants (CMA) and (6 at rate 7.5%) are with other certifications.

The internal auditors work experience ranges from 1 year up to 20 years, but the majority of the respondents are in the range of 5-10 years (56 at rate 70%), the participants below 5 years were (11 at rate 13.8%) and from 11-15 (11 at rate 13.8%) and participants having work experience of 16-20 years are 2 at rate (2.5%). Here the majority of the IA are well experienced and can perform their auditing activities by using their past audit experiences.

In terms of the presence of audit committee, about 11 of banks have audit committees at rate (14%) and 69 at rate (86%) of banks have no audit committees. The availability of audit committee in the public sector have the advantages for the organization such as monitoring and controlling the internal audit activities and objectives. Audit committee ensures the independent, re-examining the work done by internal audit program and ensures the adequacy of the scope on internal audit activities. It also monitor the actions taken by the management in term of financial, risk management and internal control.

4.3 Reliability Test

Reliability is the value of which an experiment, test or even measurement process, is expected to achieve the same result on a repeated trial. According to Litwin (1995) reliability test is the most common technique employed by many studies in testing reliability of variables. Table 4.4 represents the said test estimated by the researcher.

To measure the consistency of the questionnaire particularly the Likert-type scale the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha (α) is the most common measure of scale reliability and a value greater than 0.700 is very acceptable (Cohen & Sayag, 2010). And according to Cronbach (1951) a reliability value (α) greater than 0.600 is also acceptable.

Table 4.2 Reliability Statistics

Variable Name	Cronbach's Alpha	N of Items
Internal Audit Effectiveness	0.603	15
Management Support	0.621	5
Organizational Independence	0.825	5
Audit Competence	0.730	5
Audit Experience	0.673	5

From table 4.2 above, the value for Cronbach's Alpha (α) of the variables internal audit effectiveness, management support, organizational independence, audit competence and audit experience are 0.603, 0.621, 0.825, 0.730, and 0.673 respectively. The reliability analysis result will be accepted provided that the Cronbach's Alpha coefficient range are between 0.6 and 1.0 (Cronbach, 1951). The result presented that there is consistency reliability and stability in the answers of questionnaires which received from the respondent, this reliable enough for data analysis.

4.4 Assessment of Multicollinearity

Multicollinearity simply refers to a situation in which two or more descriptive variables in a multiple regression models are extremely linearly connected. Therefore, multicollinearity is used to check whether there is any relationship among the independent variables. This can be explained by the degree of which any variable impact can be predicted with the other variable (Field, 2009). Similarly, multicollinearity will be a serious issue in multiple regressions because of the difficulties of identifying the effect of each independent variable on the dependent variable. However, a common approach used for measuring multicollinearity is the Variance Inflation factor (VIF) for each independent variable. The independent variable is considered to be highly related if the value of variance inflation factor (VIF) is above 10, resulting in a problem of multicollinearity (Hair, Sarstedt, Ringle, & Mena, 2012). Pallant (2007) suggest that multicollinearity hypothesis is in order if the values of VIF are less than 10.

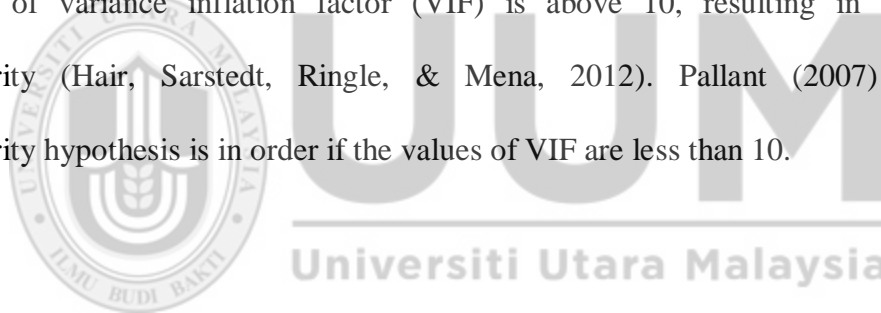


Table 4.3 Collinearity Statistics

Variables	Collinearity Statistics	
	Tolerance	VIF
Management Support	.212	4.723
Organizational Independence	.278	3.602
Audit Competence	.199	5.036
Audit Experience	.338	2.961

Table 4.3 show the Variance Inflation Factor (VIF) for management support, organizational independence, audit competence, audit experience are 4.723, 3.602, 5.036 and 2.961 respectively. This shows that there is no multicollinearity problem as, the VIF value for each variable are not

more than 10. This shows that the multicollinearity assumption was not violated ($VIF < 5$ / tolerance > 0.20 ; condition index < 30) (Hair *et al.*, 2012).

4.5 Assumption Test

Normality, linearity, histogram and independence of residuals are investigation of residual scatter plots to test the assumption (Coakes & Steed, 2009).

Figure 4.1 below show the normal plot of regression standardized residuals for independent variable are relatively normal distributions.

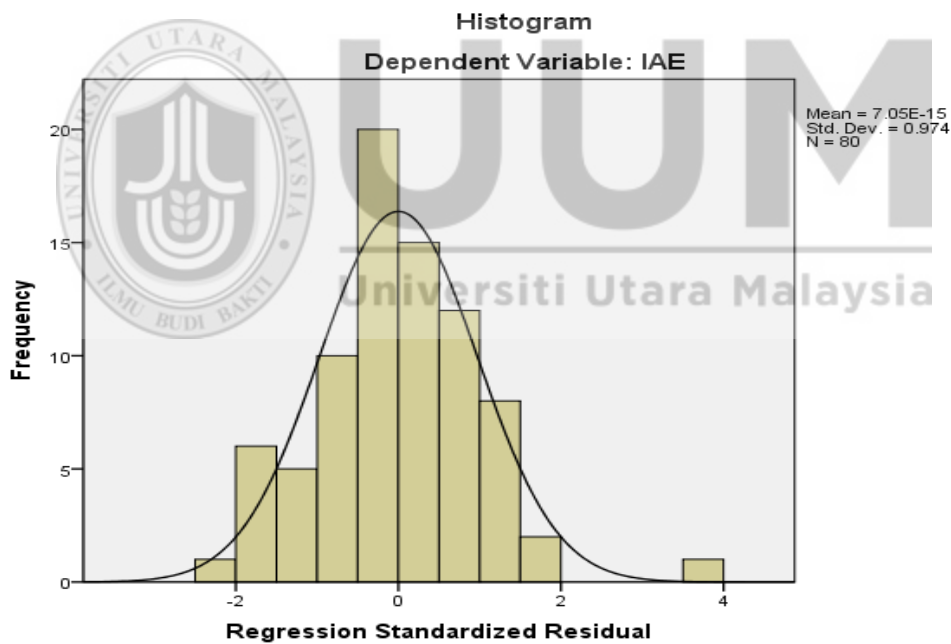


Figure 4.1 Histogram of dependent variables (IAE)

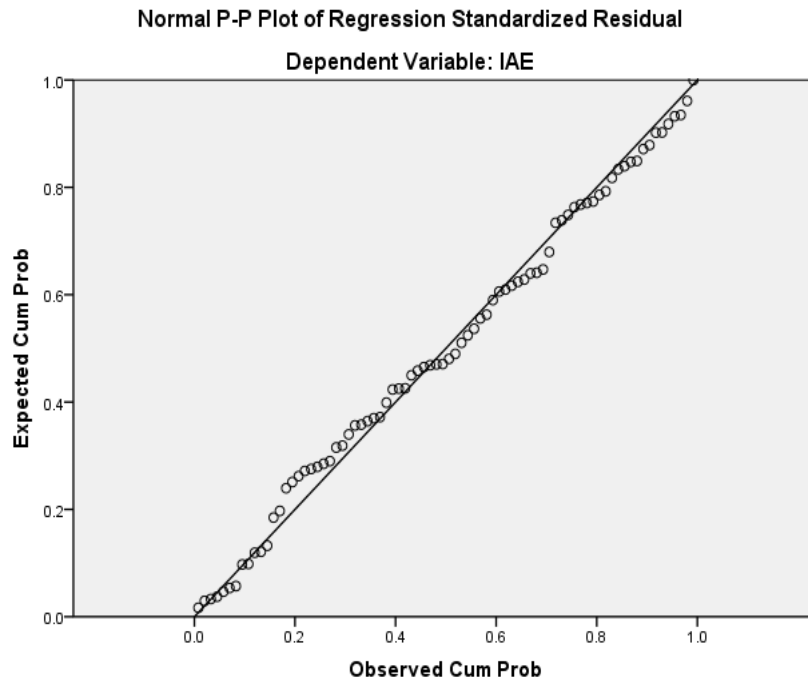


Figure 4.2: normal P-P plot of regression standardized residual

4.6 Pearson Correlation Analysis

Pearson Correlation matrix will show the direction, significant and strength of the bivariate associations between the variables of the study. Table 4.4 shows the relationship between internal audit effectiveness (dependent variable) and the four variables management support, organizational independence, audit competence, audit experience (independent variables).

Table 4.4 Pearson Correlations Matrix

Correlations					
Variables	IAE	MS	OI	AC	AE
Internal Audit Effectiveness	1.000				
Management Support	.709**	1.000			
Organizational Independence	.611**	.775**	1.000		
Audit Competence	.667**	.875**	.778**	1.000	
Audit Experience	.609**	.710**	.787**	.743**	1.000

** . Correlation is significant at the 0.01 level (2-tailed).

From Table 4.4 the result shows that, management support, organizational independence, audit competence and audit experience are correlated positively with internal audit effectiveness at (0.709), (0.611), (0.667) and (0.609) significant at 0.01 level respectively.

The result shows that the correlation between management support with organizational independence, audit competence and audit experience at (.775), (.875) and (.710) significantly at 0.01 level respectively. While the correlation between organizational independence with audit competence and audit experience at (.778) and (.787) significantly at 0.01 level respectively. As well as audit competence correlated with audit experience at (.743) at 0.01 level.

The findings indicate positive correlation between the management support, organizational independence, audit competence and audit experience with internal audit effectiveness, this independent variables do not contrary to hypotheses proposed for the study.

4.7 Multiple Regression Analysis

In this section, the discussions are more focus on the relationship between the dependent variable and the independent variables of the study by deploying multiple regression techniques. Multiple regression is the most common technique used in a situation whereby the research is aimed to predict a single continuous dependent variable by a given continuous or classified independent variables (Pallant, 2013). Thus, the result of multiple regressions summary of the regression model is showed in the Table 4.5

Table 4.5: Summary of the Regression Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.726 ^a	.528	.502	.20094
a. Predictors: (Constant) MS, OI, AC, AE.				

The results as measured by R^2 which indicate the effect of the independent variables over the dependent variable. This explains the independent variable value of 0.528 variance in internal audit effectiveness in the table 4.5.

The R^2 of 52.8%, indicates that the all the variables generated from the multiple regression analysis is high. Thus, the number of variables tested in the study have a high value of the R^2 . This indicates that, the variables contributed in the study in determining the relationship between the dependent variable and independent variables. However, the remaining 47.2 % of the relationship effect on internal audit effectiveness may result from other reasons and situations. The reasons could be contributed by other variables such as the approved internal audit charter, political influence on

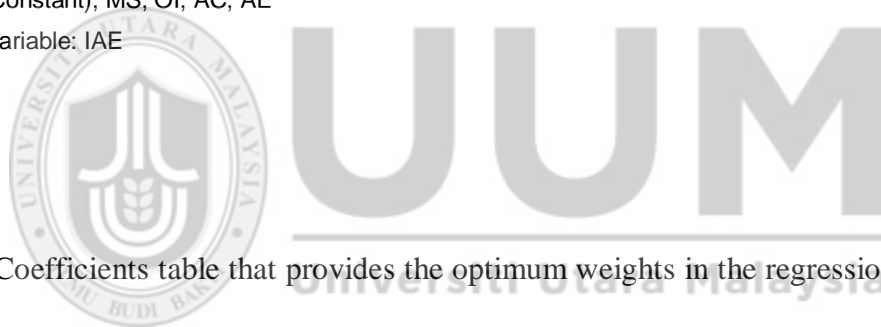
performance of internal audit, internal audit risk management as a factors which have influences the internal audit effectiveness.

Table 4.6 ANOVA (b)

ANOVA ^b					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.382	4	.846	20.942	.000 ^a
Residual	3.028	75	.040		
Total	6.411	79			

a. Predictors: (Constant), MS, OI, AC, AE

b. Dependent Variable: IAE



Below is the Coefficients table that provides the optimum weights in the regression model of the study.

Table 4.7 Coefficients or weights of the regression

Model	Unstandardized Coefficients		Standardized Coefficients	t – value	Sig.
	B	Std. Error	Beta		
(Constant)	2.432	.214		11.384	.000
Management Support	.283	.102	.479	2.780	.007
Organization Independence	.010	.061	.024	.162	.872
Audit Competence	.045	.082	.098	.548	.586
Audit Experience	.088	.068	.177	1.295	.199

As proposed by Lind, Marchal, and Wathen (2013) the t -value > 1.645 show that the relationship between management support with dependent variable is significant and thus, this hypothesis is supported. While organizational independence, audit competence and audit experience are have positive relationship with dependent variable but not significant.

From the regression equation and based on the coefficients of the dependent variable (β sign) the result indicates that the management support, organizational independence, audit competence and audit experience are positively associated with internal audit effectiveness. Therefore, all the hypotheses proposed by the researcher are acceptable because of all the four hypotheses stated the positively relationship with the dependent variable are meet. But based on the statistical significances of the independent variable over the dependent variable at 5% level of significance, only one independent variable management support is significantly contributed for the IAE at t -value > 1.645 .

Thus, this implies the management support is the most important determinants of IAE in which the public sector banks should give more emphasis in their IA function. Besides this, even if their relationships are positive the remaining three independent variables organizational independence, audit competence and audit experience have not significant contribution for the predicted dependent variable (IAE) because they have a sig. value of greater than 5%. The variable with the level of significance (sig) value less than 5% could make a significance unique contribution to the predicted value of the dependent variable, beyond this level of sig. the variable are not making a significance contribution for the prediction of the dependent variable (Pallant, 2007).

On the other hand, the coefficient analysis result shows that the management support, organizational independence, audit competence and audit experience are positively associated with internal audit effectiveness. The findings of the study indicate that the independent variables are representing the opinion of the internal auditors in understanding the factors influencing the internal audit effectiveness. Furthermore, understanding and tackling the factors determining the internal auditors perception toward internal audit effectiveness would improve the performance of internal audit in the organizations.

4.8 Hypothesis Test

The regression analysis whose results are presented in table 4.7 above and appendix C provides a more comprehensive and accurate examination of the research hypothesis. Therefore, the regression results obtained from the model were utilized to test these hypotheses. The hypotheses sought to test for a significant influence of management support (MS), organizational independence (OI), audit competence (AC) and audit experience (AE) on the direct effect of internal audit effectiveness which was measure in terms of internal auditors' ability to identify the noncompliance activities and by their added contributions to the public sector. The following hypotheses test were conducted based on the regression results of the internal audit effectiveness obtained from the regression output.

Table 4.8 Hypotheses and Variables Findings

Hypotheses	Variable	Beta	SE	t-value	P-value	Findings
H1	Management support	0.479	0.102	2.78	0.007	Supported
H2	Organizational independence	0.024	0.061	0.162	0.872	Not supported
H3	Audit competence	0.098	0.082	0.548	0.586	Not supported
H4	Audit experience	0.177	0.068	1.295	0.199	Not supported

H1: There is positive relationship between management support and internal audit effectiveness in the Libyan commercial banks.

The first hypothesis of this research posted that the effectiveness of the internal audit is directly related with the extent of the management support it receives. Showing the strongly correlated relationship between the IAE and the management support, the positive beta sign and a statistically significant result of management support related with the internal audit effectiveness ($\beta = 0.283$, $t = 2.780$, $P < 0.05$) support the proposed hypothesis acceptable. The management support in terms of providing resources, giving trainings, introducing with new technologies, providing enough facilities and encourages the internal audit process with commitments to promote and communicate their added value for the effectiveness of internal audit work in their office contributes for the IAE.

The result were consistent with the previous auditing research works of (Alzeban & Gwilliam, 2014; Cohen & Sayag, 2010; Getie Mihret & Wondim Yismaw, 2007) they find that the top management support was the critical factor of internal audit effectiveness in audit result and the commitment to strength of internal audit by employing a professional internal audit staff, development the career channels for internal audit staff, and providing internal audit work

independence. Similarly, in this research finding the managements support in terms of trainings, resources and through other necessary facilities to the internal auditors the top management can contribute to the effectiveness of internal audit works for their office.

Therefore, the management contribute for the effective result of the internal auditors through their support in terms of continuous training for their IA staff, fulfilling the necessary materials and facilities that the IA staff needs; and this in turn strongly supports the first proposed hypothesis (H1).

H2: There is positive relationship between organizational independence and internal audit effectiveness in the Libyan commercial banks.

The second hypothesis of this research which is assumed to be the determinants of IA effectiveness is the independence of the organization in which internal audit work were conducted. As shown in table 4.8 above the coefficient of OI ($\beta = .024$, $t = .162$, $P < 0.05$) were positively related with the effectiveness of IA. But, because of its statistical result ($P > 0.05$) the regression output result haven't statistically significant relationship between the organizational independence and the IA effectiveness reveals not to support the second hypothesis.

Whereas, it is inconsistent with the previous studies conducted by (Alzeban & Gwilliam, 2014; Cohen & Sayag, 2010; George et al., 2015) they find that, the more organizational independence to the internal auditors plays the vital role in assurance of internal audit effectiveness by freely access of necessary documents, information and data about the organization for audit work, and can provide audit finding, report, freely and directly to the responsible body. And this all supports the IA effectiveness in their sector.

This may be occurred due to the organizations support to the IA effectiveness and accordingly, the level of independence, reporting level, direct contact to the board and senior management, conflict of interest, interference, the unrestricted access to all departments and employees, appointment and removal of the head of internal audit, and performing non-audit activity may not be equally perceived. But, without the relevant senior management support simply the independence of the organization to the internal auditors may not be enough to add value and to identify the noncompliance activities performed in their office.

Therefore, the existence of management support for internal auditor's activity are strong enough to make effective the internal audit function in the public sector. And this in turn leads to make the result of OI for the IAE insignificant contribution and not to support the proposed hypothesis (H2).

H3: There is positive relationship between audit competence and internal audit effectiveness in the Libyan commercial banks.

The third hypothesis of this research which is assumed to be the determinants of IA effectiveness is the competence of internal audit staff in which internal audit work were conducted. As shown in table 4.8 above the coefficient of AC ($\beta = .045$ and $t = .548$). Were positively related with the effectiveness of IA. But, because of its statistical result ($P > 0.05$) the regression output result haven't statistically significant relationship between the audit competence and the IA effectiveness reveals not to support the third hypothesis.

This research was conducted the effects of IA by considering the overall abilities of the internal auditor staffs and the availability of adequate and certified internal auditors in terms of their performance to proceed the required auditing activities by matching with the audit standards

and organizational objectives by using modern technologies when compared to previous studies. This result were inconsistent with the previous studies conducted by (Alzeban & Gwilliam, 2014; Cohen & Sayag, 2010; Getie Mihret et al., 2010) they find that, both of the technical competence, continuous training of internal audit team and the professional proficiency of internal auditors is of major importance for effective internal auditing.

This may be occurred due to the organizations support to the IA effectiveness and accordingly, the level of competence, technical competence, continuous training of internal audit team and the professional proficiency of internal auditors, performing their activities on time, cover the planned scope of auditing activities by using the computerized data tools and specific IA software. But, without the relevant senior management support to internal audit by training and technology to get professional proficiency simply the competence of internal auditors may not be enough to add value and to identify the non- compliance activities performed in their office.

Therefore, the existence of management support for internal auditor's activity are strong enough to make effective the internal audit function in the public sector. And this in turn leads to make the result of AC for the IAE insignificant contribution and not to support the proposed hypothesis (H3).

H4: There is positive relationship between audit experience and internal audit effectiveness in the Libyan commercial banks.

The existence of internal audit staff have an experience also supposed to be the factor of internal audit effectiveness and is the fourth hypothesis of this research. The regression result not supported this hypothesis at ($P < 0.05$) level of significant and with the positive signs of beta and t- statistics

($\beta = .088$ and $t = 1.295$). Were positively related with the effectiveness of IA. But not supported the proposed hypothesis acceptable. The result were inconsistent with the previous studies conducted by (Anuntaakalakul, 2010; M. Badara & S. Z. Saidin, 2014; O'Donnell, 2002) they find that the auditors with greater experience have a greater comprehension of decision process and place greater dependence on the net income.

This may be occurred due to the organizations support to the IA effectiveness and accordingly, the level of audit experience in terms of required knowledge on the overall activities, adequate knowledge on current internal audit practices of the profession and professional related training required for IAE. But, without the relevant senior management support to the internal auditors to acquire sufficient experience may not be enough to add value and to identify the non-compliance activities performed in their office.

Therefore, the existence of management support for internal auditor's activity are strong enough to make effective the internal audit function in the public sector. And this in turn may leads to make the result of AE for the IAE insignificant contribution and not to support the proposed hypothesis (H4).

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major Findings

According to the regression output all these predictors were positively contributed for the effectiveness of internal audit functions in Libyan commercial banks. Therefore, the Libyan commercial banks should give emphasis to use these determinant variables to make their service delivery effective, efficient and economical throughout their subsidiaries. Moreover the management support is the major determinants of IAE in the Libyan commercial banks. However, the organizational independence, audit competence and audit experience of IA are not significantly important for the IAE of Libyan commercial banks.

This study finds that the composite measure of management support, organizational independence, audit competence and audit experience for 52.8% ($R^2 = 0.528$) variance for the IA effectiveness in identifying noncompliance activities and added contributions to the public sector offices. That means, the impact of these four independent variables contributed for the dependent variable IAE were 52.8%, and the remaining 47.2% were other variables that are not included in this study.

The final portion of this research aims to conclude the finding of the study focusing on the core determinants that have significant impacts to the internal audit effectiveness and to provide recommendations based on the research findings of the study. These conclusions and recommendations are drawn from the findings of the study specifically related to the management support, organizational independence, audit competence and audit experience in the Libyan commercial banks.

5.2 Conclusion

Due to internal audit (IA) important role it plays for the overall management system internal audit is the major mechanism to ensure sound corporate governance. The existences of effective internal audit in the office links with internal control risk management system, improves organizational efficiency and effectiveness, reduce information asymmetry during decision making, and ensures internal reliability of financial reporting process. By taking this aspect into consideration, this study was identified factors that determine the IA effectiveness in the Libyan commercial banks and then analyzed the organizational dimensions in which banks should carry out to enhance the IA effectiveness. And also by testing of the proposed hypotheses showed relations of these independent variables with the IAE the following conclusions were drawn:

- The IAE of the commercial banks increases, when there are more supports from the management. The regression analysis (shown on table 4.7) shows very strong contributions of these variables for the IAE. Therefore, the overall effect of the management support in the public sector is very important for the IAE in the public sector banks without neglecting the other three statistically insignificant variables organizational independence, audit competence and audit experience because they have a positive sign of beta and contribute for the 52.8% of the variances for the IAE. Thus, neglecting these three variables may cause to decrease the value of IAE variance that was obtained from collective contribution of the five independent variables.
- In addition, the correlation analysis (shown on table 4.4) shows all the independent variables have the direct effect of the internal audit effectiveness (IAE) and the regression result also depicts all the independent variables have a positive sign of coefficients (shown on table 4.7) with IAE in the commercial banks. However, the organizational

independence, competence and experience of IA were statistically not significant enough at 5% sig level to contribute for the IAE in the commercial banks. Therefore this conclusion requires future research should consider for obtaining the impact of these variables on the IA effectiveness.

- Institutional theory and Contingency theory as well as quantitative methods are employed. The results indicate that internal audit is not perceived to be effective that is, there are deficiencies in independence, competence, and experience of internal audit. Internal audit may be unable to identifying non-compliance activities and added contributions to the Libyan commercial banks. The results are also consistent with institutional theory and contingency theory arguments. The conclusions exhibit practical utility and the findings pave the way for further research.

5.3 Recommendations

The research findings and achieved results with regard to the main objective of this study to identify the major determinants of IAE in the Libyan commercial banks and also to prove the hypotheses, the researcher provides the following recommendations to the public sector organizations, the internal auditors, and the educational institutions.

- The finding of this research proved that the management support, organizational independence, audit competence and audit experience were positively related with the IAE in the Libyan commercial banks. Thus, the Libyan commercial banks should support more for the internal audit functions by facilitating the IA works, should recruited more experience of IA staff and should maintain the approved IA charter and workable manuals

for their office because it directs the overall activities of the internal auditors in line with IIA standards.

- The internal auditors of the Libyan commercial banks should recommended to maintain and improve their effective contribution for the IAE in their organization, by using the supports from their offices management team appropriately, by improving their professional certification in line with the institute of internal audit standards and organizational guidelines and by introducing themselves with modern technologies that improve their IA function for their organization.
- Finally, the internal audit staffs of the Libyan commercial banks also recommended to work in accordance with the available internal audit charters, it helps the internal auditors to provide the appropriate reports and to know the extent of their relationships with the managements, briefly describes their rights and duties IA and the employers.



UUM
Universiti Utara Malaysia

References

- Abu-Azza, Wahid. (2012). *Perceived effectiveness of the internal audit function in Libya: a qualitative study using institutional and Marxist theories*. University of Southern Queensland.
- Abuazza, Wahid Omar, Mihret, Dessalegn Getie, James, Kieran, Best, Peter, & Martinov-Bennie, Nonna. (2015). The perceived scope of internal audit function in Libyan public enterprises. *Managerial Auditing Journal*, 30(6/7).
- Abushaiba, Ibrahim Ali, & Zainuddin, Yuserrie. (2012). Performance measurement system design, competitive capability, and performance consequences-a conceptual like. *International Journal of Business and Social Science*, 3(11), 184-193.
- Ahmad, Nassr S, & Gao, Simon S. (2004). Changes, problems and challenges of accounting education in Libya. *Accounting Education*, 13(3), 365-390.
- Al-Arbah, SA. (1985). The Banking System in Socialist People's Libyan Arab Jamahiriya. *The Institute of Banking Business and Management Publishing, Al-Dar Arabia for Cyclopaedia, Beirut*.
- Al-Twaijry, Abdulrahman AM, Brierley, John A, & Gwilliam, David R. (2003). The development of internal audit in Saudi Arabia: an institutional theory perspective. *Critical Perspectives on Accounting*, 14(5), 507-531.
- Alzeban, Abdulaziz, & Gwilliam, David. (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. *Journal of International Accounting, Auditing and Taxation*, 23(2), 74-86.
- Anderson, Urton, & Dahle, Andrew J. (2006). *Implementing the professional practices framework*: Institute of Internal Auditors.
- Anuntaakalakul, A. (2010). *The achievement in risk management and governance of public sector organizations in Thailand: The Empirical Evidence of Internal Auditing efforts*. Paper presented at the EABR & ETLC Conference Proceedings Dublin, Ireland.

- Arena, Marika, Arnaboldi, Michela, & Azzone, Giovanni. (2006). Internal audit in Italian organizations: A multiple case study. *Managerial Auditing Journal*, 21(3), 275-292.
- Badara, MAS, & Saidin, Siti Zabedah. (2014). Empirical evidence of antecedents of internal audit effectiveness from Nigerian perspective. *Middle-East Journal of Scientific Research*, 19(4), 460-469.
- Badara, Mu'azu Saidu, & Saidin, Siti Zabedah. (2014). Empirical Evidence of the Moderating Effect of Effective Audit Committee on Audit Experience in the Public Sector: Perception of Internal Auditors. *Mediterranean Journal of Social Sciences*, 5(10), 176.
- Balnaves, Mark, & Caputi, Peter. (2001). *Introduction to quantitative research methods: An investigative approach*: Sage.
- Bierstaker, James L, Burnaby, Priscilla, & Thibodeau, Jay. (2001). The impact of information technology on the audit process: an assessment of the state of the art and implications for the future. *Managerial Auditing Journal*, 16(3), 159-164.
- Boyle, Edmund J. (1993). A framework for the modern internal audit function. *Advances in Management Accounting*, 2, 227-254.
- Burnaby, Priscilla A, Cooper, BJ, Leung, P, Dellaportas, S, Abdolmohammadi, Mohammad, Hass, Susan, . . . Allegrini, Marco. (2009). Usage of Internal Auditing Standards by companies in the United States and select European countries. *Managerial Auditing Journal*, 24(9), 835-860.
- Burnaby, Priscilla A, & Klein, Lawrence. (2000). Internal auditors' changing roles. *INTERNAL AUDITING-BOSTON-WARREN GORHAM AND LAMONT INCORPORATED-*, 15(3), 15-24.
- Central Bank of Libya (2001) Economic Bulletin41, First Quarter.
- Central Bank of Libya (2004) Annual Report No. 47 (2003). Tripoli Musrath Al-Ezdihar Printing.

- Christopher, Joe, Leung, Philomena, & Sarens, Gerrit. (2007). An exploratory study on internal audit independence in Australia. *The Accounting and finance association of Australia and New Zealand*.
- Chung, Janne, & Monroe, Gary. (2000). The effects of experience and task difficulty on accuracy and confidence assessments of auditors. *Accounting & Finance*, 40(2), 135-151.
- Coakes, Sheridan J, & Steed, Lyndall. (2009). *SPSS: Analysis without anguish using SPSS version 14.0 for Windows*: John Wiley & Sons, Inc.
- Cohen, Aaron, & Sayag, Gabriel. (2010). The effectiveness of internal auditing: an empirical examination of its determinants in Israeli organisations. *Australian Accounting Review*, 20(3), 296-307.
- Cronbach, Lee J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334.
- Diamond, Jack. (2002). *The role of internal audit in government financial management: an international perspective*: International Monetary Fund.
- Dittenhofer, Mort. (2001). Internal auditing effectiveness: an expansion of present methods. *Managerial Auditing Journal*, 16(8), 443-450.
- Drazin, Robert, & Van de Ven, Andrew H. (1985). Alternative forms of fit in contingency theory. *Administrative science quarterly*, 514-539.
- Engle, Terry J. (1999). Managing External Auditor Relationships: Capitalizing on the common ground between internal and external auditing standards can create mutual benefits for auditors in both camps. *Internal Auditor*, 56, 65-69.
- Faraj, Shamsaddeen, & El-Firjani, Essa. (2014). Challenges Facing IASs/IFRS Implementation by Libyan Listed Companies. *Universal Journal of Accounting and Finance*, 2(3), 57-63.
- Field, Andy. (2009). *Discovering statistics using SPSS*: Sage publications.
- Flesher, Dale L, & Zanzig, Jeffrey S. (2000). Management accountants express a desire for change in the functioning of internal auditing. *Managerial Auditing Journal*, 15(7), 331-337.

- Fu, Honglin, Tan, Hun-Tong, & Zhang, Jixun. (2011). Effect of auditor negotiation experience and client negotiating style on auditors' judgments in an auditor-client negotiation context. *Auditing: A Journal of Practice & Theory*, 30(3), 225-237.
- Gaballa, Azza SM, & Ning, Zhou. (2011). *An analytical study of the effects of experience on the performance of the external auditor*. Paper presented at the International Conference on Business and Economics Research.
- Gay, G., & Simnett, R. . (2007). *Auditing and Assurance Services in Australia*, Revised 3rd Edition. Sydney: McGraw-Hill Australia.
- Gendron, Yves, & Bédard, Jean. (2006). On the constitution of audit committee effectiveness. *Accounting, Organizations and Society*, 31(3), 211-239.
- George, Drogalas, Theofanis, Karagiorgos, & Konstantinos, Arampatzis. (2015). Factors associated with Internal Audit Effectiveness: Evidence from Greece. *Journal of Accounting and Taxation*, 7(7), 113-122.
- Getie Mihret, Dessalegn, James, Kieran, & Mula, Joseph M. (2010). Antecedents and organisational performance implications of internal audit effectiveness: some propositions and research agenda. *Pacific Accounting Review*, 22(3), 224-252.
- Getie Mihret, Dessalegn, & Wondim Yismaw, Aderajew. (2007). Internal audit effectiveness: an Ethiopian public sector case study. *Managerial Auditing Journal*, 22(5), 470-484.
- Getie Mihret, Dessalegn, & Zemenu Woldeyohannis, Getachew. (2008). Value-added role of internal audit: an Ethiopian case study. *Managerial Auditing Journal*, 23(6), 567-595.
- Gramling, Audrey A, Maletta, Mario J, Schneider, Arnold, & Church, Bryan K. (2004). The role of the internal audit function in corporate governance: A synthesis of the extant internal auditing literature and directions for future research. *Journal of Accounting Literature*, 23(1), 194-244.
- Gramling, Audrey A, & Myers, Patricia M. (1997). Practitioners' and users' perceptions of the benefits of certification of internal auditors. *Accounting Horizons*, 11(1), 39.

- Hailemariam, Shewamene. (2014). *Determinants of internal audit effectiveness in the public sector, case study in selected Ethiopian public sector offices*. Jimma University.
- Hair, Joe F, Sarstedt, Marko, Ringle, Christian M, & Mena, Jeannette A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Haniffa, Rozaini Mohd, & Cooke, Terry E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349.
- Hanim Fadzil, Faudziah, Haron, Hasnah, & Jantan, Muhamad. (2005). Internal auditing practices and internal control system. *Managerial Auditing Journal*, 20(8), 844-866.
- Heo, Jaeho, & Han, Ingoo. (2003). Performance measure of information systems (IS) in evolving computing environments: an empirical investigation. *Information & Management*, 40(4), 243-256.
- Hutchinson, Marion Ruth, & Zain, Mazlina Mat. (2009). Internal audit quality, audit committee independence, growth opportunities and firm performance. *Corporate Ownership and Control*, 7(2), 50-63.
- IIA. (2001). Standards for the Professional Practice of Internal Auditing (SPPIA): Audit Tools/NewIIAStandards.htm.
- IIA. (2004). The Professional Practices Framework, The Institute of Internal Auditors Research Foundation, Altamonte Springs, FL.
- IIA. (2010). Measuring internal audit effectiveness and efficiency. IPPF- Practice guide. . *The Institute of Internal Auditors*.
- IIA. (2012). *International standards for the professional practice of internal auditing*: Institute of Internal Auditors South Africa.

- Intakhan, Phaithun, & Ussahawanitchakit, Phapruek. (2010). Roles of audit experience and ethical reasoning in audit professionalism and audit effectiveness through a moderator of stakeholder pressure: An empirical study of tax auditors in Thailand. *Journal of Academy of Business and Economics*, 10(5), 1-15.
- Knapp, Carol A, & Knapp, Michael C. (2001). The effects of experience and explicit fraud risk assessment in detecting fraud with analytical procedures. *Accounting, Organizations and Society*, 26(1), 25-37.
- Leung, Philomena, Cooper, Barry J, Hass, Susan, Abdolmohammadi, Mohammad J, & Burnaby, Priscilla. (2006). The Americas literature review on internal auditing. *Managerial Auditing Journal*, 21(8), 835-844.
- Libya, Central Bank of. (2001). Economic Bulletin 41, First Quarter. .
- Libyan-Government. (1996). *Establishment and Organization of the General People's Committee for Financial Audit, Law No. 11 of 1996, Tripoli, (In Arabic)*.
- Lind, Douglas A, Marchal, William G, & Wathen, Samuel A. (2013). *Basic Statistics for Business and Economics*
- Litwin, Mark S. (1995). *How to measure survey reliability and validity* (Vol. 7): Sage Publications.
- Ljubisavljević, Snežana, & Jovanović, Dejan. (2011). Empirical research on the internal audit position of companies in Serbia. *Economic annals*, 56(191), 123-141.
- Luxford, K. (2005). Libya beats a path to foreign bankers,' *Euromoney* 36 (437). 262–265.
- Masoud, AM, & Al-Shrif, B. (2002). The Libyan commercial banks: the development and activation. *Journal of Arab Banks Union*, 259, 81-88.
- Masoud, Najeb. (2014). Libya's IAS/IFRS Adoption and Accounting Quality: What Lessons from the European Union Experience. *International Journal of Accounting and Financial Reporting*, 4(1), Pages 118-141.
- McNamee, David, & McNamee, Thomas. (1995). The transformation of internal auditing. *Managerial Auditing Journal*, 10(2), 34-37.

- Mihret, Dessalegn Getie. (2010). *Antecedents and organizational performance implication of internal audit effectiveness: Evidence from Ethiopia*. University of Southern Queensland.
- Mizrahi, Shlomo, & Ness-Weisman, Idit. (2007). Evaluating the effectiveness of auditing in local municipalities using analytic hierarchy process (AHP): A general model and the Israeli example. *International Journal of Auditing*, 11(3), 187-210.
- Müller-Peters, A, Kern, O, & Geißler, H. (2001). *Die Wirkungsweise unterschiedlicher Incentivierungssysteme auf Rekrutierungserfolg und Stichprobenqualität [The effect of incentives on recruitment and sample quality]*. Paper presented at the German Online Research conference, Göttingen, Germany.
- O'Donnell, Ed. (2002). Evidence of an association between error-specific experience and auditor performance during analytical procedures. *Behavioral research in Accounting*, 14(1), 179-195.
- Paape, Leen. (2007). *Corporate governance: The impact on the role, position, and scope of services of the internal audit function*: Erasmus Research Institute of Management (ERIM).
- Pallant, Julie. (2007). *SPSS survival manual, 3rd. Edition. McGrath Hill*.
- Pallant, Julie. (2013). *SPSS survival manual*: McGraw-Hill Education (UK).
- Prawitt, Douglas F, Smith, Jason L, & Wood, David A. (2009). Internal audit quality and earnings management. *The Accounting Review*, 84(4), 1255-1280.
- Pungas, Krisi. (2003). Risk assessment as part of internal auditing in the government institutions of the Estonian Republic. *EBS REVIEW*, 42.
- Roth, James. (2002). *Adding value: Seven roads to success*: Institute of Internal Auditors Research Foundation.
- Sakour, Abdelwahab Sassi, & Laila, Nur Hidayah Binti. (2015). Internal Audit Effectiveness in Libyan Public Enterprises: An Approach to the Development of a Theoretical Framework. *Global Business & Management Research*, 7(2).

- Sarens, Gerrit, & De Beelde, Ignace. (2006). The relationship between internal audit and senior management: a qualitative analysis of expectations and perceptions. *International Journal of Auditing*, 10(3), 219-241.
- Sekaran, Uma. (2003). *Research Methods for Business, a Skill Building Approach* 4th edition. Wiley, New York. *John Wiley and Sons Inc., New York.*
- Sekaran, Uma, & Roger, Bougie. (2010). *Research methods for business: A skill building approach.* *John Wiley and Sons Inc., New York.*
- Stewart, Jenny, & Subramaniam, Nava. (2010). Internal audit independence and objectivity: emerging research opportunities. *Managerial auditing journal*, 25(4), 328-360.
- Umanath, Narayan S. (2003). The concept of contingency beyond “It depends”: illustrations from IS research stream. *Information & Management*, 40(6), 551-562.
- Unegbu, Angus Okechukwu, & Kida, Mohammed Isa. (2011). Effectiveness of internal audit as instrument of improving public Sector management. *Journal of emerging trends in economics and management sciences*, 2(4), 304-309.
- Walker, Paul Lynn, Shenkir, William G, & Barton, Thomas L. (2002). *Enterprise risk management: pulling it all together:* Institute of Internal Auditors Research Foundation.
- Wang, Yanyan, Yu, Lisheng, Zhang, Zhenyu, & Zhao, Yuping. (2012). *Engaging audit partner experience and audit quality.* Paper presented at the AAA conference.
- Yee, Cassandra SL, Sujan, Ahmad, James, Kieran, & Leung, Jenny KS. (2008). Perceptions of Singaporean internal audit customers regarding the role and effectiveness of internal audit. *Asian Journal of Business and Accounting*, 1(2).
- Zain, Mazlina Mat, Subramaniam, Nava, & Stewart, Jenny. (2006). Internal auditors’ assessment of their contribution to financial statement audits: The relation with audit committee and internal audit function characteristics. *International Journal of Auditing*, 10(1), 1-18.

Zakari, Mohamed Abulgasem. (2014). Challenges of International Financial Reporting Standards (IFRS) Adoption in Libya. *International Journal of Accounting and Financial Reporting*, ISSN, 2162-3082.

