Ain Shams University
Faculty of Commerce
<u>Accounting and Auditing Department</u>

"A Proposed Framework to Assess and Interpret the Role of Internal Audit in Mitigating Fraud Risk in Financial Reporting"

"An Applied Study"

<u>Prepared by</u>

Yasmin Mamdouh Abd El-Hamid

A Thesis Submitted in Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Accounting

<u>Supervised by</u>

<u>Professor Mohamed Abdel Fattah</u>
Professor of Auditing
& Vice Dean of Undergraduates
Faculty of Commerce
Ain shams University

<u>Dr. Farid Mohuram</u>
Associate Professor of Accounting & Auditing
Faculty of Commerce
Ain shams University

2018

بسم الله الرحمن الرحيم

قالوا

سبحانك لا علم لنا إلا ما علمتنا إنك أنت العليم الحكيم

صدق الله العظيم

سورة البقرة الآية: ٣٢

Examination Committee

Prof. Mohamed Abdel Majeed

Professor of Auditing and Former Dean of
Faculty of Commerce - Ain Shams University

"Committee Member & Committee Chairman"

Prof. Mohamed Abdel Fattah

Professor of Auditing and Vice Dean of Undergraduates
Faculty of Commerce - Ain shams University

"Supervisor"

Dr. Mohamed Hassan Abdel Azeem
Professor of Accounting and Dean of
Faculty of Commerce - Cairo University

"Committee Member"

Dr. Farid Mohuram
Associate Professor of Accounting & Auditing
Faculty of Commerce - Ain shams University

"Co-Supervisor"

Supervisor Signature

Acknowledgement

I would like to express my deep gratitude to my supervisor Prof. Mohamed Abd El Fattah for his guidance, feedback, and constant encouragement. I am very grateful for his support that made it possible to work effectively and complete my dissertation.

It is a real blessing to have Dr. Farid Mohuram as my co-supervisor, who went beyond the call of duty of being a Co-supervisor but a motivation and support that one actually looked-for. His valuable ideas, time, and encouragement were of a great support.

It is an honor to have Prof. Mohamed Abdel Majeed, the internal examiner. Thanks a lot for accepting to be a member of the committee, giving me the opportunity to learn from his experience. Thanks for the support and personal advice.

I would like to express my sincere gratitude to Prof.Mohamed Hassan Abd el Azzem, for accepting to be a member of the examining committee, providing me with comments that would enrich my thesis.

Dedication

My gratitude goes to My great father "Mamdouh Abdel Hamid" & My beloved mother "Somia" as they stood by me throughout this process being the Roots of my strength.

I would like to thank My husband Wael for his real support and understanding during the last four years and I also thank my pretty daughter Salma and my pleasing son Omar for their understanding when "Mummy" was busy.

I would like to Thank my Brother Ahmed and my Sisters Reham and Yosra for being such a pleasing Family.

Table of Contents

List of tables……………………………………………………VII-VIII

List of Acronyms…………………………….............................VX

Chapter ١: Introduction

١,١ Background…………………………………….…….……..٢

١,٢ Research Problem……………………………….………..........٤

١,٣ Research objectives…………………………….……………...٧

١,٤ Research Importance………………………….……………….٧

١,٥ Developed Research Hypotheses…………….…………………...٩

١,٦ Research Methodology…………….………..……….……………١٣

١,٧ Research Limitations…………..……………….……………١٤

١,٨ Research Outline……………………………………...........١٥

Chapter ٢: Literature Review

٢,١ Literature Examining Internal and External Factors Affecting Internal Audit Function Quality………………….…………..............١٨

٢,٢ Literature Examining Interaction Between Internal Audit Function and Other Corporate Governance Mechanisms……………......٢٣

٢,٣ Literature Examining the Association Between the Internal Audit Function Quality and Financial Reporting Quality…………….٢٧

٢,٤ Conclusion of Literature Review and Research Gap…………٣٢

Chapter ٣: The Emerging Value of Internal Audit Function and its Interaction with other Corporate Governance mechanisms

٣,١. Introduction……………………………………..……..….........٣٥

٣,٢ The Emerging Role of Internal Audit Function

٣,٢,١ Steps Behind a Value-Adding Internal Audit Function..…...٣٧

٣,٢,٢ The Scope for an Effective IA coverage….………...……...٤٢

٣,٢,٣ Regulatory Standards of Internal Audit Function in Developed Countries vs. Egypt………..…………………...٤٦

٣,٣. Internal Audit Function and Other Corporate Governance mechanisms

٣,٣,١ The Extent of Interaction Between IAF and Audit Committee……………………………………….......٥٠

٣,٢,١,١ The Role of Internal Auditors in Supporting and Assisting the Audit Committee………..………٥١

٣,٢,١,٢ The Role of the Audit Committee in Monitoring and Controlling the Internal Audit Function…………………..٥٣

٣,٣,٢ The Extent of Interaction Between the Internal Audit Function and the External Auditor...............................٥٤

٣,٤ Measuring the Internal Audit Function Quality…….......................٥٥

٣,٥ Degree of Compliance with Internal Auditing Standards................٦٣

٣,٦ Debate about Professionalization of Internal Auditing…………..…٦٤
٣,٧ Summary………………………..……………………….............٦٨

Chapter ٤: Financial Statements Fraud and Internal Audit Function

٤,١ Introduction………………………………….............................٧١
٤,٢ Debate around Earning Management and Financial Statements fraud………………………………………………..٧٤
٤,٢,١ Earning Management, Creative accounting and Fraudulent Financial Reporting..٧٥
٤,٢,٢ Reasons why Earning Management should lead to Fraudulent Financial Reporting ………………..…………………..…..٧٩

٤,٣ Factors behind Financial Statements Fraud Perpetration
٤,٣,١ The Psychology of Fraud and Fraud Triangle..…………......٨٢
٤,٣,٢ Pressures to Commit fraud………………............................ ٨٤
٤,٣,٣ Opportunities to Commit Fraud……………......................... ٨٥
٤,٣,٤ Rationalization toward Fraud…..…………………….......... ٨٥

٤,٤ Financial Statements Fraud Schemes……………………………….٨٧
٤,٥ Prevention and Detection Methods for Fraudulent Practices
٤,٥,١ Proactive Methods to Prevent Fraud…...................................٩٣
٤,٥,٢ Use of Analytical Procedures to Detect Fraud……………….٩٣

٤,٦ The Internal Audit Function's Role in Mitigating Fraudulent Practices…………………………………………………………….٩٧
٤,٦,١ Internal Audit Function's's Expanded Role &Value after SOX...٩٧

٤,٦,٢ The Responsibility of IAF in Preventing and Detecting Financial Statements Fraud…………………………..٩٩

٤,٦,٣ Different Obstacles That Hinder IAF to Effectively Report Fraudulent Practices….……………..………………….… ١٠٤

٤,٧ The Role of Ethics and behavior in EM and Fraud……….................١٠٨
٤,٨ Summary……………………………………….………..........١١٠

Chapter ٥: Research Methodology and Data Analysis

٥,١ Introduction ………………………………………………………...١١٢
٥,٢ Data & Sample………………………...…………………………١١٣
٥,٣ Identifying & Measurement of Variables…………………………...١١٥
٥,٣,١ Fraudulent Financial Reporting…………………..................١١٧
٥,٣,٢ Internal Audit Function Quality……......................................١٢٤
٥,٣,٣ Control Variables………………………………...................١٢٧

٥,٣,٤ Regression Models and Variables Description………..……١٢٩

٥,٤ Data Analysis and Findings ……………………………………….١٣٤

٥,٤,١ Descriptive Statistics………………………………………...١٣٤

٥,٤,٢ Pearson's Correlation Matrix …………………………..……١٣٦

٥,٤,٣ Normality Tests……………………………………………...١٣٨

٥,٤,٤. Results of The Regression Models……………………........١٤٠

٥,٤,٤,١ Regression Results - First Hypothesis.........................….١٤٠

٥,٤,٤,١,١ Model Fit- First Hypothesis……………………………..١٤٠

٥,٤,٤,١,٢ Model Parameters- First Hypothesis …………...……...١٤٢

٥,٤,٤,٢ Regression Results - Second Hypothesis………………...١٤٦

٥,٤,٤,٢,١ Model Fit- Second Hypothesis…………………………١٤٦

٥,٤,٤,٢,٢ Model Parameters- Second Hypothesis ……………........١٤٧

٥,٤,٤,٣. Regression Results – Third Hypothesis……………….……..١٥٠

٥,٤,٤,٣,١ Model Fit -Third

Hypothesis…………………………...…..…١٥٠

٥,٤,٤,٣,٢ Model Parameters -Third

Hypothesis…………………………١٥١

Chapter ٦: Results, Conclusions and Recommendations

٦,١ Results………………………………………………………….....١٥٦

٦,٢ Conclusions………………………………...................................١٥٨

٦,٣ Recommendations…………………………………….….….……...١٥٩

٦,٤ Future Research……………….………………………..………..١٦٠

References………………………………………………................١٦٢-١٨٨

Appendix

List of Tables

Table ٥,١	Summary of the response rate……………	١١٤
Table ٥,٢	Variables Definations…………………….....	١٣٠
Table ٥,٣	Descriptive statistics…………………….....	١٣٥
Table ٥,٤	Pearson's Correlation Matrix……………..	١٣٧
Table ٥,٥	Normality Tests…………………………...	١٣٩
Table ٥,٦	Model Summary for testing the First Hypothesis...	١٤١
Table ٥,٧	Details of the Beta Values and their Significance - First Hypothesis ………	١٤٢
Table ٥,٨	Annova Table of testing the First Hypothesis …………………………………	١٤٥
Table ٥,٩	Model Summary of testing the Second Hypothesis………………………………….	١٤٧
Table ٥,١٠	Details of the Beta Values and their Significance - Second Hypothesis…...	١٤٨

Table ٥,١١	Annova Table of testing the Second Hypothesis………………………………….	١٤٩
Table ٥,١٢	Model Summary of testing the Third Hypothesis………………………………….	١٥١
Table ٥,١٣	Details of the Beta Values and their Significance - Third Hypothesis ……..	١٥٢
Table ٥,١٤	Annova Table of testing the Third hypothesis…………………………………..	١٥٣

List of Figures

Figure ١,١ Relationship between IAF, Audit Committee, BOD and Fraudulent Financial Reporting……………١٢،١١٦

List of Acronyms

Acronym	Stands for
AA	Abnormal Accruals
AAER	Accounting and Auditing Enforcement Releases
AC	Audit Committee
ACFE	Association of Certified Fraud Examiners
ACQ	Audit Committee Quality
AICPA	American institute of certified Public Accountant
BFP	Business Failure Prediction
BOD	Board of Directors
BODQ	Board of Directors Quality
CBOK	Common Body of Knowledge
CG	Corporate governance
CIA	Chief Internal Audit
COSO	Committee of Sponsoring Organizations
DAC	Discretionary Accruals
EM	Earnings Management
FASB	Financial Accounting Standard Board
CAE	Chief Audit Executive
FFR	Fraudulent Financial Reporting
FRD	Fraudulent Reporting Detection
GAAP	Generally Accepted Accounting Principles
IAD	Internal Audit Department
IAF	Internal Audit Function

IAFQ	Internal Audit Function Quality
IASB	International Accounting Standard Board
IFRS	International Financial Reporting Standards
IIA	Institute of Internal Auditors
ISA	International standard on Auditing
ISPPIA	International Standards for Professional Practice of Internal Auditing
MW	Material Weakness
NYSE	New York Stock Exchange
PCAOB	Public Company Accounting Oversight Board
SAS	Statement on Auditing standards
SEC	Securities and Exchange Commission
SOX	Sarbanes Oxley Act