

Ain Shams University Faculty of Engineering Structural Department

Causes and Solutions for Loss and Bankruptcy for Contracting Companies in Egypt

A thesis submitted in partial fulfillment of the requirement of the Master of Science in Civil Engineering

By

Eng. Mahmoud Hegazy Mohammad Solayman

B.Sc. (2008)

Faculty of Engineering – Al azhar University

Supervised by

Prof. Dr. Ayman Hussein. H. Khalil

Professor at Structural Department
Faculty of Engineering - Ain Shams University

Dr. Mohamed Badawy Abd Elmegeed

Lecturer at Structural Department
Faculty of Engineering - Ain Shams University

Cairo (2015)



Ain Shams University Faculty of Engineering Structural Department

APPROVAL SHEET

Causes and Solutions for Loss and Bankruptcy for Contracting Companies in Egypt

 $\underline{\mathbf{B}}\mathbf{y}$

Eng. Mahmoud Hegazy Mohammad Solayman

B.Sc. in Civil Engineering 2008

EXAMINERS COMMITTEE

Name:

Signature:

el Nawas

Prof. Dr. Khaled Mohamad Heiza

Prof. of Reinforced Concrete Structures
Faculty of Engineering - Almonofia University

Prof. Dr. Omar Ali Moussa Elnawawy

Professor of Concrete Structures
Faculty of Engineering - Ain Shams University

Prof. Dr. Ayman Hussein. H. Khalil

Professor at Structural Department
Faculty of Engineering - Ain Shams University

The second secon

Date: / /2015

STATEMENT

This thesis is submitted as partial fulfillment of M.Sc. Degree in Structural Engineering, Faculty of Engineering, Ain Shams University.

The author carried out the work included in this thesis, and no part of it has been submitted for a degree or qualification at any other scientific entity.

Signature

Mahmoud Hegazy

RESEARCHER DATA

Name : Mahmoud Hegazy Mohammad

Date of Birth : 2 / 2 / 1985

Academic degree : B.Sc. in Structural Engineering

University issued the degree : Al azhar University

Date of issued degree : 2008

E-Mail : eng_m_hegazy@yahoo.com

ACKNOWLEDGMENT

All praise belongs to **ALLAH**, Most Gracious and Most Merciful. Only by his grace and guidance, this work could not be completed.

Words cannot demonstrate my gratefulness to **Prof. Dr. Ayman Hussein. H. Khalil**, for his support, enlightening, direction, and continuous supervision, which without it this work would not have been presented as such.

Special thanks are extended to **Dr. Mohamed Badawy** for his great support to finish this work.

I am grateful to my family without their continuous support, help, patience and understanding this work could not be finished. Every success and achievement I have in my life belongs to my family. Without the guidance and advice of my **Father** and the blessings and care of my **Mother**, this work could not be finished. I am also most grateful to my **Wife** for her deep support.

ABSTRACT

The construction industry has unique characteristics that sharply distinguish it from other sectors of the economy. It is fragmented, very sensitive to the economic cycles and political environment, and has a significantly high rate of business failure. Business failure, collapse and bankruptcy are common terms in the industry due to the many risks inherited in how the industry operates. None of these are pleasant words, but in real life companies do collapse.

For all that was this study. It aims to identify the causes of loss and bankruptcy for Egyptian contracting companies. This research will be focused to explore the factors that lead to failure and identify the severity of each factor. In addition to finding solutions and possible means to prevent or reduce loss.

The current situation for construction sector in Egypt was evaluated, and found that companies have suffered a lot and a lot of many of the problems and causes, which in turn could lead to the loss.

Research has been depended on a questionnaire, the questionnaire survey was designed based on the objectives of the study and developed to get the opinion from the experienced respondents. Different types of organizations were included, small, medium and big construction companies, consulting offices, general and private companies. The questionnaire distributed to participants to give their experience and opinion.

The causes of failure divided into four groups: Administrative causes, Financial causes, Technical causes and General causes

Quantitative statistical analysis for questionnaire was done by using Statistical Package for Social Sciences program (SPSS).

The analysis of data is done to rank the severity of causes. Ranking was followed by comparison of mean values within groups and for the overall sub factors as following: ranking of factors for Administrative Causes, ranking of factors for Financial Causes, ranking of factors for Technical Causes, ranking of factors for General Causes, ranking of Main Groups and Top Ten critical factors

An explanation of the Top Ten critical factors that lead to loss and bankruptcy of the contracting companies in Egypt was done. Also a comparison between top critical factors from analysis and the same critical factors from previous researches was done.

The study has highlighted some important recommendations and recommendations for future research.

KEYWORDS: Failure Factors, Egyptian Construction, Contracting Companies, Loss Bankruptcy, Construction Industry, Projects Management.

LIST OF CONTENTS

	Page
APPROVAL SHEET	•••••
STATEMENT	I
RESEARCHER DATA	II
ACKNOWLEDGMENT	III
ABSTRACT	IV
LIST OF CONTENTS	VI
LIST OF TABLES	IX
LIST OF FIGURES	XI
CHAPTER (1): INTRODUCTION	1
1.1 General	1
1.2 Significance of the study	4
1.3 Research Objectives	5
1.4 Scope of Work	5
1.5 Thesis Organization	6
CHAPTER (2): LITERATURE REVIEW	7
2.1 General	7
2.2 Success and Failure Factors of Indian Construction Compani	es7
2.3 Critical Factors Causing Failure of Construction in Vietnam	13
2.4 Causes of Contractor's Failure: The Case of Palestine	17
2.5 Argenti's studies on trajectories of corporate failure	23
2.6 Concept of Failure, Loss and Bankruptcy	28
2.7 The current situation for the construction sector in Egypt	32
2.7.1 General index of the performance of the construction secto	r34
2.7.2 The index of the total building permits in Egypt	35
2.7.3 Contribution to the Gross domestic product (GDP)	36

CHAPTER (3): REASEARCH METHODOLGY	37
3.1 General	37
3.2 Questionnaire Phases	37
3.3 Questionnaire Design	38
3.4 Measurement scale	40
3.5 Survey Responders	41
3.6 Research Population	42
3.7 Sample size	42
3.8 Questionnaire Distribution	46
3.9 Data Analysis	47
3.10 Additional factors	48
CHAPTER (4): SPSS ANALYSIS	49
4.1 General	49
4.2 Evaluation of the construction sector in Egypt	49
4.3 Ranking of Factors for Administrative Causes	51
4.4 Ranking of Factors for Financial Causes	53
4.5 Ranking of Factors for Technical Causes	55
4.6 Ranking of Factors for General Causes	57
4.7 Ranking of Main Groups	60
4.8 Top Ten Critical Factors for All Kinds of Firms	61
4.9 Top Ten Critical Factors (Viewpoint of Consultant)	62
4.10 Top Ten Critical Factors (Viewpoint of Owner)	63
4.11 Top Ten Critical Factors (Viewpoint of Contractor)	64

CHAPTER (5): RESULTS & DISCUSSION	65
5.1 General	65
5.2 Political Changes and Fluctuations	66
5.3 Relatives, Corruption and bribery	67
5.4 Insufficient coordination between departments of the company	68
5.5 Dependence on weak subcontractor	70
5.6 Fluctuations in the prices of construction materials	72
5.7 Individual decision making (One man rule)	73
5.8 Interference between the authority and the construction sector	74
5.9 Poor Studying, Pricing and Estimation Tenders	76
5.10 Non integrated managerial structure of the company	78
5.11 Poor Projects Management Techniques	79
CHAPTER (6): SUMMARY AND CONCLUSION	81
6.1 General	81
6.2 Summary	81
6.3 Recommendations	83
6.4 Recommendations for future research	84
REFERENCES	85
(APPENDIX I: ENGLISH QUESTIONAIRE)	89
(APPENDIX II: ARABIC QUESTIONAIRE)	93
(APPENDIX III: MASTER SHEET)	97
محتويات البحث	iii
الملخص	ii
تعريف بمقدم الرسالة	i
لجنة الأشراف	
المو افقة على المنح	

LIST OF TABLES

	Page
Table 2.1 - Ranking and Average Rating of Factors for Large Size fir	ms10
Table 2.2 - Ranking and Average Rating of Factors for Medium firms	s10
Table 2.3 - Ranking and Average Rating of Factors for Small Size fir	ms11
Table 2.4 - Ranking and Average Rating of Factors for All Size firms	11
Table 2.5 - Critical factors ranking causing the failure	15
Table 2.6 - Categorization of the top Ten factors causing failure	16
Table 2.7 - Managerial Factors.	18
Table 2.8 - Financial Factors.	19
Table 2.9 - Business Growth Factors.	19
Table 2.10 - Business Environment Factors.	20
Table 2.11 - Political Factors.	20
Table 2.12 - Overall Factors Ranking.	21
Table 2.13 - Ranking of Groups	21
Table 4.1 - All Main Groups and Factors Listed in the Questionnaire	50
Table 4.2 - Statistics of Factors for Administrative Causes	51
Table 4.3 - Descriptive Statistics of Factors for Administrative Cause	s51
Table 4.4 - Ranking and Mean of Factors for Administrative Causes .	52
Table 4.5 - Statistics of Factors for Financial Causes	53
Table 4.6 - Descriptive Statistics of Factors for Financial Causes	53
Table 4.7 - Ranking and Mean of Factors for Financial Causes	54
Table 4.8 - Statistics of Factors for Technical Causes	55
Table 4.9 - Descriptive Statistics of Factors for Technical Causes	55
Table 4.10 - Ranking and Mean of Factors for Technical Causes	56
Table 4.11 - Statistics of Factors for General Causes	57
Table 4.12 - Statistics of additional factors in General Causes	57

Table 4.13 - Descriptive Statistics of Factors for General Causes	58
Table 4.14 - Ranking and Mean of Factors for General Causes	59
Table 4.15 - Ranking and Average Rating of Main Groups	60
Table 4.16 - Top Ten Critical Factors	61
Table 4.17 - Top Ten Critical Factors (Viewpoint of Consultant)	62
Table 4.18 - Top Ten Critical Factors (Viewpoint of Owner)	63
Table 4.19 - Top Ten Critical Factors (Viewpoint of Contractor)	64

LIST OF FIGURES

	Page
Figure 1.1: Participates in (GDP)	5
Figure 2.1: Argenti's trajectories of corporate failure	23
Figure 2.2: Argenti's trajectories of corporate failure Type I	24
Figure 2.3: Argenti's trajectories of corporate failure Type II	25
Figure 2.4: Argenti's trajectories of corporate failure Type III	26
Figure 2.5: General index of the performance of the construction sect	tor34
Figure 2.6: The index of the total building permits in Egypt	35
Figure 2.7: Contribution to the Gross domestic product (GDP)	36
Figure 3.1: Questionnaire Phases	37
Figure 3.2: Causes of Failures of (Main Groups)	39
Figure 4.1: Evaluation of the construction sector in Egypt	49
Figure 4.2: Ranking and Mean of Factors for Administrative Causes	52
Figure 4.3: Ranking and Mean of Factors for Financial Causes	54
Figure 4.4: Ranking and mean of Factors for Technical Causes	56
Figure 4.5: Ranking and mean of Factors for General Causes	59
Figure 4.6: Ranking of Main Groups	60
Figure 5.1: Causes of Failures of (Main Groups)	65
Figure 5.2: Projects management criteria	79

CHAPTER (1)

INTRODUCTION

CHAPTER (1)

INTRODUCTION

1.1 General

In this chapter an introduction to the construction industry will be highlighted. Also, the research importance, research objectives, and scope of work are to be explained.

Collapsed, failed, bankrupt, broke, and bust. None of these are pleasant words, and this is not a very pleasant subject, but in real life companies do collapse.

This research aims to define what makes healthy companies collapse or fail. Understanding this process can perhaps prevent their failure or alleviating it or may be even reversing it.

The prospect of construction business failure is an important topic to explore. Since construction industry has a very high risks, failure is a real possibility. In the overall picture the construction industry is at or near the top in the annual rate of business failures and resulting liabilities.

The construction industry is the tool through which a society achieves its goals of urban and rural development. However, it is becoming increasingly more complex partly because the complexity of the construction process itself and the large number of parties involved including clients, users, designers, regulators, contractors, suppliers and others.

The construction business is large in size and significant in the role it plays in the economy but throughout recent years it has witnessed an increasing number of construction financial failures. A number of studies