

CLAIM ISSUES IN STRUCTURAL FAILURE

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A project report submitted in partial fulfillment of the
requirements for the award of the degree of Master of
Science (Construction Management)

Faculty of Civil Engineering
Universiti Teknologi Malaysia

DECEMBER 2010

DEDICATION

Bismillahirrahmanirahhim

*Thank you to my mom and dad
for everlasting support to their beloved daughter*

*And all of my colleagues
May we all succeed and be blessed by Allah s.w.t*

ACKNOWLEDGMENTS

First of all, i would like to thank Allah s.w.t for the entire blessing of my whole life. It is a great pleasure after working on this study completely.

A sincere appreciation to Assoc. Prof Dr. Mohamad Ibrahim Mohamad, my project supervisor of the Faculty of Civil Engineering, Universiti Teknologi Malaysia for his generous advice, patience, guidance and encouragement during my study.

I also would like to express my sincere thanks to all the participants in construction especially the engineers, lawyers and quantity surveyors who generously spent their time to participate in my data collections.

Last but not least, special thanks to all of my colleagues and seniors, who involved directly or indirectly for their assistance and cooperation in supplying the relevant information in turning this study into success.

ABSTRACT

The lack of knowledge and standard guidelines for resolving of structural failure cases has contributed to several problems in construction industry especially in making claims. This phenomenon often leads to many difficulties for the involved parties in the incidents of structural failure. This study attempted to explore the available law and contract provision that can be referred in managing structural failure cases. The study also tries to determine the common parties that claim to be responsible for this failure cases. Methodology adopted for this study involved interviews with professional and questionnaire survey. Findings of the study indicate that the most common laws referred for failure cases and claims are contract law and tort. Common offences inflicted normally related to breach of contract and negligence. The study also identified the common contract provisions that are being violated in failure cases as well the responsible parties that often being blamed for structural failure cases. Eventually, this study has made several proposals for the industry to improve the process of managing structural failure cases.

ABSTRAK

Kekurangan pengetahuan dan panduan menyelesaikan kes-kes kegagalan struktur telah menyumbang kepada beberapa masalah dalam industri pembinaan terutamanya dalam membuat tuntutan. Fenomena ini biasanya akan mengakibatkan masalah kepada pihak-pihak yang terlibat dalam isu kegagalan struktur ini. Kajian ini cuba meneroka undang-undang dan peruntukan didalam kontrak yang boleh dirujuk dalam mengususkan kes-kes kegagalan struktur. Kajian ini juga menentukan pihak-pihak yang biasanya bertanggungjawab didalam kes-kes kegagalan struktur ini. Kaedah yang digunakan didalam kajian ini ialah temuduga dengan profesional dan kajian soal selidik. Keputusan menunjukkan undang-undang yang biasa digunakan didalam kes-kes kegagalan dan tuntutan ialah undang-undang kontrak dan tort. Biasanya, kesalahan-kesalahan yang berlaku berkaitan dengan kemungkiran kontrak dan kecuaiian. Kajian ini juga mengenal pasti peruntukan-peruntukan kontrak yang biasa dilanggar didalam kes-kes kegagalan struktur dan pihak-pihak yang bertanggungjawab terhadap kes kegagalan ini. Akhirnya, kajian ini telah menyediakan beberapa cadangan kepada industri untuk meningkatkan mutu dalam proses menguruskan kes-kes kegagalan struktur.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Structural failure refers to loss of the load-carrying capacity of a component or member within a structure of the structure itself. Structural failure is initiated when the material is stressed to its strength limit causing fracture or excessive deformations. The ultimate failure strength of the material, component or system is its maximum load-bearing capacity. When this limit is reached, damage to the material occurred, and its load-bearing capacity is reduced permanently, significantly, and quickly.

Structural failure may lead to claim. When the structure was fail, a claim was made to recover damages. Claim is assertion to the right to remedy, relief or property or a failure to fulfill obligations under the contract. In structural failure, a claim presents the basis of the causes and effects, explain the contractual and legal basis for payment and also quantifies the resulting damages (Sodhi, 1980). Thus, a claim is the common thing among the construction practitioners especially when failures occur. However, contractors, designers or owner often faced difficulties in managing the claim issues due to lack of information and proper procedures. Therefore, a new strategy is required in order to improve the current approach of this situation.

1.2 Statement of Problems

Today's construction industry has become a very complex, high-risk, multiparty business. The number of new building is being constructed continuous to grow every year. It is understandable that a great deal of conflict exists within the construction industry. Some of the conflict arise when the structure become failure due to defect or damages. In United States, 225 building failure are recorded within the 1989 to 2000. The number of failures is distributed with respect to the year that the failure occurred. The overall pattern of previous study reveals and trend of increasing number of failure despite the relatively stable growth of building population in the last five years. The causes of failure are classified into six principle causes which include design, detailing, construction, maintenance and material-related problems (Kumalasari and Fabian, 2003).

As we know, construction contract determine the basis for the relationship between these parties whose one party is liable to provide services or materials to build things (structure) and another party who promise to pay for the work. The construction industry is always in dispute prone one. It is therefore common for the claimant pursuing his claim for works and services rendered to meet with a cross claim instead for defective work, delayed completion etc. In view of the above and considering the giant size of the projects, it is not surprising that the number of claim issues continues to increase. In fact, no project can be considered shielded from this issue.

A construction claim arises when a party to a construction contract believes that in some way, by act or omission, the other party has not fulfilled its part of the bargain (Levin, 1998; Kartam, 1999). In the other words, a claim arises when one party to the contract has suffered to a detriment for which that party should be compensated by the other party. Therefore, the construction claim is an assertion of and a demand for compensation by way of evidence produced and arguments advanced by a party in support of its case. When a claim is submitted, the claim value has usually broken down

into several categories of compensation. These are the areas in which the claimant feels that they deserve payment. If they do not get that payment, problems in claim will arise.

These problems occur because of lack of guideline and lack of awareness from all parties in construction industry including owner, designer and contractor. Another problem in this claim is existing contract cater for during construction project but failure may occur after handover. Even though construction claim are frequent, many time legal advice is not sought because it is not available and expensive (Diekman, 1985).

Besides, standard forms of contract are written for the project that may only be useful during construction period. Since projects participants are becoming more aware of the high costs and risk associated with claims, the construction industry needs to develop a clear law and provision dedicated to address failure issues and recognized authority or professional to assist the client to evaluate damages and cost related to them. For this reason, the claim and how to manage it should be clear and understood by all project parties, especially the owner so that they know how to act for such claims in a way that ensures receiving their rights.

Several attempts were made in literature review to study the type of construction loss or damages, liable parties, main causes of structural failure, any available laws and provisions, and ways to protect owners' rights. Zaneldin (2006) conducted a research of the types, causes and frequency of construction claims in the emirates of Dubai and Abu Dhabi. Besides, Adnan *et. al* (2008) evaluates problems associated with the process of claim management in Palestine. Semple (1994) also determine causes of claims, categories of compensation for claims and contract clauses quoted in claims.

However, there is still a great extent, a lack of information related to the liable party and ways to protect owners' rights. Therefore, this research focuses on the type of construction loss or damages, evaluate the liable parties and main causes, any available laws and provisions and the possible right and action that the owner can take upon cases

of structural failure. So that we may know how to make claim and who can we met when this failure occur.

1.3 Research Aims and Objectives

The main aim of this study is to evaluate the related issues inherent to structural failure cases and determination of liable parties. A part from that, this research is to carry out and achieve the following list of objectives:

- i. To evaluate the available laws and provision that can be used to support claims.
- ii. To determine the liable parties and type of losses that can claim.
- iii. To determine the possible right and action that the client can take upon cases of structural failure.

1.4 Research Scope and Limitations

Regarding to the claims issue in structure failure, this study conducted on partial or total structural failures that lead to disruption of operation and need to repair. All the issues, facts, ideas and proposal presented in this study will only focus on those related to the scenario of construction industry.

1.5 Brief Research Methodology

There are a suitable steps that are providing a clear methodology framework such as describe in Figure 1.1.

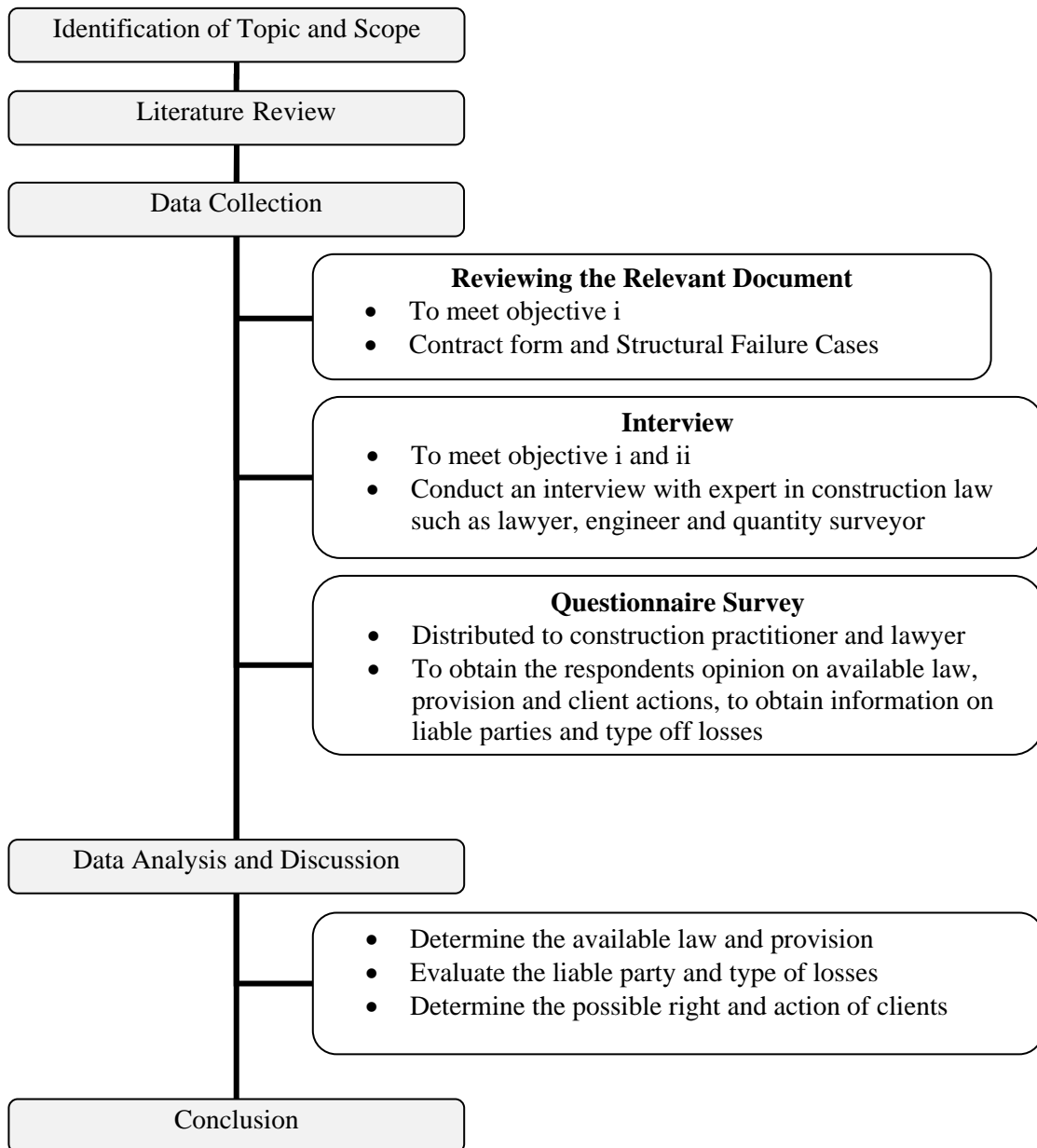


Figure 1.1: Flowchart of Research Methodology

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