FACTORS CAUSING CONSTRUCTION COMPANY FAILURE

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Abstract

In a competitive business environment, companies have to consider some critical issues to prevent business failures and continue to survive. There have been many factors that can cause business failures in the construction industry. Poor management practices, unqualified subcontractors, and lack of communication are some of the critical reasons that can negatively affect the business in construction and thus result in failure. The aim of this study is to investigate the critical factors causing construction company failure. Within this context, a survey was conducted among 40 small-medium sized Turkish construction companies. Top-level managers of the companies were interviewed and a questionnaire was administered during face-to-face interviews. The interviews took place over a five month period between January and May 2007. The ranking of the critical failure factors has been determined by using the Simple Multi Attribute Rating Technique (SMART). Based on the results, lack of business experience and country's economic conditions were found to be the most important factors to company failure.

Keywords: Business Failure; Construction Industry; Failure Factors.

Introduction

Organizations have to be successful in their businesses in order to survive in competitive business environments such as construction. The construction industry is changing constantly with the developments of new business methods and technologies (Koota 2003). Therefore, construction companies should follow these applications and develop appropriate strategies to be more competitive in this industry and succeed in their businesses. As construction is a risky business, the possibility of business failure always exists for any construction company. Within this context, construction companies have to consider the critical factors to prevent business failure and continue to survive in the industry.

There are many definitions of failure. Bankruptcy is widely used in failure definitions (Balcaen and Ooghe 2006). Frederikslust (1978) defined failure as the inability of a firm to pay its obligations when they are due. In recent years, there has been an increase in success/failure studies, especially in the subject of project management (Hyvari 2006). Hall (1982), and Morris and Hough (1987) explained failure at the project level in construction. One of the studies on failure at the company level in construction is the study of Arditi et al. (2000). They investigated the factors related to company failures in the context of the construction industry and found budgetary and macroeconomic issues as the main reasons for construction company failure. Kale and Arditi (1999) studied age-dependent failures in construction organizations. They found that the risk of

failure increases initially with increasing age, reaches a peak point and decreases thereafter as companies grow older.

Osama (1997) presented a study of the factors that contribute to construction business failure of construction contractors in Saudi Arabia and the most important factors were: difficulty in acquiring work, bad judgment, lack of experience in the firm's line of work, difficulty with cash flow, lack of managerial experience, and low profit margins. Kangari (1988) investigated the effect of macroeconomic factors on business failures in the construction industry, and developed a model for evaluating and forecasting these failures. Russell and Jaselskis (1992), and Abidali and Harris (1995) also developed prediction models.

Schaufelberger (2003) studied business failure at subcontractor level in construction. He found the primary causes of subcontractor business failure as insufficient capital/excessive debt, lack of managerial maturity, lack of early warning measures, increase in project scope, poor billing procedures, failure to evaluate project profitability, unfamiliarity with new geographical areas, and poor use of accounting systems. He also developed risk management strategies for small, mid-size, and large firms.

This study aims to investigate the critical factors causing construction company failure in Turkey. Within this context, a survey was carried out among 40 small-medium sized Turkish construction companies which are located in the North-West region of Turkey. SMART was used to determine the ranking of the critical factors causing failure.

Turkish contracting services

The construction industry is one of the major industries in Turkey. It represents approximately 6% of Turkey's Gross National Product (GNP). Turkey started to export contracting services in the first half of the 1970s. Currently, many Turkish contractors have been operating within the international market. They have carried out $65 billion worth of projects internationally so far (Turkish Contractors Association 2007). The majority of them have been operating in the Russian Federation, Middle East Republics, Northern Africa and Far East regions. Turkish contractors gain the competitive advantage by rapid construction and high risk-taking ability. They are using the most advanced technologies in the market and are able to design, erect, build and operate almost all kinds of civil and industrial projects.

Turkish contracting services can be divided into two parts: the lower-quality domestic-only set of firms, and the higher quality international firms. There are more than 30,000 active local firms and approximately 130 firms operating internationally. Additionally, there are about 70,000 companies that are not registered but that constitute the informal construction industry and most of them carry out small and irregular projects (Katsarakis et al. 2007).

Research methods

The aim of this research is to find out the critical factors causing construction company failure. The survey was carried out among 40 small-medium sized Turkish construction companies which are located in the North-West region of Turkey. The majority of these firms are operating in building and housing sectors. Construction firms registered with the Chamber of Commerce at this region were considered in the study. In this survey, semi-structured interviews were carried out among top-level managers and owners of the companies. Top-level managers and owners were selected for the interviews because they were assumed to have enough knowledge about the organizational structure, culture and strategies. The 40 interviews took place over a 5 month period between January and May 2007 and each lasted approximately 1 hr.

The survey questionnaire was administered during face-to-face interviews and it consisted of 23 questions including both closed and open-ended questions. It was divided into two main sections. Section 1 covered general information about the companies. Section 2 dealt with factors leading to company failure. Although survey results reflect the opinions of experts from 40 firms, it is believed that they can give an idea about the critical factors resulting in company failure in the Turkish construction industry.

SMART was used to determine the ranking of the critical factors causing failure. This technique was originally introduced by Edwards (1971). It is an extension of direct rating techniques. In SMART, ratings of alternatives are assigned directly. The decision maker is asked to rank each of the attributes, assigning the first ranked attribute to a score of 100. Then the performance values with relative weights for all attributes are determined and a utility value for each alternative is calculated. One of the limitations of this technique is that it ignores the interrelationships between parameters.

The factors considered in the study were identified from a literature review. A total of 7 possible factors, that were felt to have an effect on the construction business failure for small-medium sized companies in Turkey, were determined. These main factors are: a lack of business experience, a country's economic conditions, a lack of managerial experience, personal attributes, low profit margins, difficulties in winning projects, and over-trading. Similarly, the sub-factors of these main factors were determined based on the literature review and their weight of importance were calculated according to the responses.

Research question or research hypothesis:

- What are the main factors causing construction company failure?
- What are the sub-factors affecting the main factors identified that cause construction company failure, namely: lack of business experience, a country's economic conditions, a lack of managerial experience, personal attributes, low profit margins, difficulties in winning projects and over-trading?

Research Objectives:

- To investigate the critical factors causing construction company failure.
- To determine the ranking of the critical failure factors.

Research results

The respondents were asked to evaluate the level of importance of the main factors. Table 1 shows the ranking of the factors according to their average scores and the importance as perceived by the respondents. Lack of business experience, country's economic conditions, lack of managerial experience, and personal attributes were considered as the most important factors to company failure, respectively. Over-trading was reported to be less significant than expected.

Table 1. Main factors of company failure

Factors	Score	Weight
Lack of business experience	82	0.1524
Country's economic conditions	82	0.1524
Lack of managerial experience	80	0.1487
Personal attributes	79	0.1468
Low profit margins	76	0.1413
Difficulties in winning projects	74	0.1375
Over-trading	65	0.1209
Total	538	1.0000

According to the evaluation of the sub-factors for lack of business experience, difficulties with cash flow was considered the most important failure factor. Availability of cash flow is highly essential for the companies in order to continue their businesses. Generally, Turkish contractors face difficulties with cash flow due to delays in progress payments when they operate in public construction works. This situation is due to lack of funds to finance public construction works in Turkey (Dikmen and Birgonul 2003).

Poor relationship with the client and lack of proper planning were determined to be the next most important factors (Table 2). The majority of the respondents considered client satisfaction as one of the most essential items in business success. They also indicated that it can give the opportunity for winning future projects in this industry.

For successful business, one of the most important management practices addressed in the literature is planning (Hutchings and Christofferson 2001). Lack of proper and strategic planning can be a major determinant of company failure. Difficulty in acquiring work was reported in our study to be less significant than expected.

Table 2. Sub-factors of lack of business experience

Factors	Score	Importance Weight
Difficulties with cash flow	82	0.0273
Poor relationship with the client	78	0.0260
Lack of proper planning	77	0.0256
Lack of communication management	75	0.0250
Lack of financial management	75	0.0250
Difficulty in acquiring work	71	0.0235
Total	458	0.1524

Turkey experienced three different economic crises in 1994, 1999 and 2001. Many construction companies, especially small and mid-size companies, went out of business during that period. The majority of the respondents considered economic crises as the most important sub-factor of the country's economic conditions, as might be expected. (Table 3).

Table 3. Sub-factors of country's economic conditions

Factors	Score	Importance Weight
Economic crises	94	0.0404
Increase in material prices	89	0.0382
Increase in interest rates	87	0.0373
Increase in exchange rate	85	0.0365
Total	355	0.1524

In this study, lack of managerial experience was considered as one of the main important factors of company failure. It is highly essential that owners also have some managerial experience. It is critical to deal well with their employees and to motivate them (Osama 1997).

Decision-making is a critical issue in a successful business. Bad judgments can easily cause a company to go out of business. The respondents considered poor decision-making as one of the most important sub-factors, together with defective financial control (Table 4). The use of technology was not considered as a major sub-factor to company failure. It was considered less significant than might be expected.

According to the results, personal attributes play also an important role in causing company failure. Honesty and reliability was considered as the most important factor (Table 5). This result correlates well with the study of Hutchings and Christofferson (2001), conducted among small-volume residential contractors in the United States, in which honesty and integrity was found as one of the most important items leading to company success. Leadership and problem solving ability were listed as the next most important factors.

Table 4. Sub-factors of lack of managerial experience

Factors	Score	Importance Weight
Poor decision-making	82	0.0256
Defective financial control	82	0.0256
Difficulty in establishing qualified project teams	81	0.0253
Poor supervision of jobs	79	0.0247
Lack of technical expertise	77	0.0241
Under-use of technology	75	0.0234
Total	476	0.1487

Table 5. Sub-factors of personal attributes

Factors	Score	Importance Weight
Honesty and reliability	90	0.0184
Leadership	89	0.0182
Problem solving ability	88	0.0180
Communication skills	81	0.0166
Job experience	80	0.0164
Reputation	76	0.0155
Entrepreneurial skills	75	0.0153
Self-confidence	75	0.0153
Flexibility	64	0.0131
Total	718	0.1468

Construction companies should make realistic bid proposals to win the bid. It is obvious that success does not mean simply winning the bid but completing the project with the highest possible profit-margin. Therefore, preparing accurate and realistic bid proposals during the bidding process, in which the amount of profit is determined, is highly critical (Arslan et al. 2006). However, due to high competition, companies are generally forced to reduce their profit-margin in order to be the lowest bidder and win the bid. Kangari (1988) found that more than 50% of business failures in the construction industry were due to low profits. As might be expected, competition was considered as the most important sub-factor of low profit margins (Table 6).

The respondents were asked to evaluate the sub-factors of difficulties in winning projects. Based on the responses, the most important factor was identified as the financial condition of the company (Table 7). Strong financial resources can be a competitive advantage for companies in winning and performing projects. On the other hand, a shortage of financial resources can have a serious effect on acquiring new projects and expanding a company's business volume.

Table 6. Sub-factors of low profit margins

Factors	Score	Importance Weight
Competition	85	0.0364
Decrease in job quality	83	0.0355
Difficulty in cash transfer	82	0.0351
Problems in cash flow	80	0.0343
Total	330	0.1413

As mentioned previously, high competition is considered a major item for adding a higher profit margin during the bid proposal preparation. Similarly, high competition is also a major cause for winning new projects and is considered highly important by the respondents.

Wrong market selection is also seen as important for acquiring new works. Companies that do not have adequate experience in selected markets will probably face difficulties in winning new projects.

Table 7. Sub-factors of difficulties in winning projects

Factors	Score	Importance Weight
Financial condition of the company	81	0.0241
Financial condition of the country	77	0.0228
Competition	77	0.0228
Lack of qualified staff	77	0.0228
Market selection	76	0.0225
Lack of technical expertise	76	0.0225
Total	464	0.1375

Over-trading was reported to be the least significant factor for company failure. Overexpansion can increase the chance of company failure (Arditi et al. 2000). Companies expanding their business more than their financial limits can have severe shortages of cash flow as indicated by the respondents in this study (Table 8). Difficulty in establishing qualified project teams and job control can be the other major consequences of overexpansion.

Table 8. Sub-factors of over-trading

Factors	Score	Importance Weight
Increase in need for cash	80	0.0312
Difficulty in establishing qualified project teams	79	0.0308
Difficulty in job control	77	0.0300
Shortage of workforce	74	0.0289
Total	310	0.1209

Discussion and conclusions

This study presented the results of the survey carried out among small-medium sized Turkish construction companies. The critical factors causing construction company failure were investigated through interviews among top-level managers and owners of the companies. According to the results, lack of business experience, a country's economic conditions, and a lack of managerial experience were identified as the most important main failure factors.

Economic crisis was perceived to be the most important factor resulting in company failure when considering the weight of importance of the factors identified. This result might be expected since the country experienced serious economic crisis in the last years and many contractors failed during that period. Moreover, it was interesting to note that managers/owners did not consider the use technology as a highly essential item for company failure.

The findings from the study should be interpreted with caution since the sampling was limited to only 40 small-medium sized firms. Future research involving managers/owners of top construction contractors can provide a comparison of the results of studies conducted in other countries.

Key Lessons Learned:

- Lack of business experience, a country's economic conditions, and a lack of managerial experience were identified as the most important critical failure factors.
- Economic crisis was determined to be the most important sub-factor.

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