

Critical Factors Causing Contractor's Business Failure in Gaza Strip

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Abstract— The construction industry remains a major player of the Palestinian economy. Business failure is an important issue for companies in the Gaza Strip uncertain environment. This paper aimed to explore the critical factors that have the potential to cause contractor's business failure and to determine their level of severity from contractor's viewpoint. This paper has considered. Critical factors were listed under five groups: financial and political, contractual, managerial, organizational, and economical causes. Contractors have been advised to consider the most critical factors that have the potential to cause business failure. The most critical factors include: cost of materials, lack of resources, delay in collecting dibs from clients, monopoly, changing funding sources, dealing with suppliers and traders and Israeli attacks.

Index Terms— Business failures, Contractors, Construction industry, Contracting failure, Construction in Palestine, Gaza Strip, Factor analysis.

1- Introduction:

The pattern of Palestinian economic activity in Palestine is uncertain and unusual. While economic activity and growth stimulators in conventional economies are largely related to internal economic variables and policies, the Palestinian economy operates in an environment rife with different internal and external risks and challenges, which significantly affect and change the economic situation. The most external challenges facing the Palestinian economy include the Israeli occupation and closure (Economic Forecast Report, 2018). Organizations need to be well prepared, organized, and plan appropriate strategies to stay relevant, competent, and active, in the industry (Abu Bakar et al., 2016).

In Gaza Strip, construction has a positively affecting on economic, social, educational and vocational sectors and other sectors. It has a large contribution to the gross domestic product directly, in addition to the indirect contribution through the related activities such as manufacturing, electricity, water and other economic activities. It used to employ an average of 14.4 % of Palestinian labor force volume (PCU, 2017). Present contribution to real GDP by construction at the end of year 2018 was 6% and 6.7% in Gaza Strip and the West Bank respectively. The rate of change of real value added by construction between year 2017 and 2018 recorded a significant contraction by (-22.5%) in the Gaza Strip. During the same period, a significant expansion was noticed by (+6.0%) in the West Bank (UNSCO Socio-Economic Report, 2019). Among other unique characteristics of life in Palestine, the construction industry stands out from other parts of the economy. Construction is heavily affected by economic cycles and political environment, which change frequently and dramatically in Palestine in general and in Gaza Strip in particular. The construction industry has a significantly high rate of business failure due to high operating risks and uncertain conditions. All over the world, contractors compete fiercely in the marketplace, exposing

themselves to risk of failure, as well as the prospect for success. Palestine is not an exception.

In the last two years, more than 50 contracting companies exposed to failure as a result of unnatural environment in Gaza Strip. Currently, there are about 70 contractors facing business failure due to their inability to cope with environmental, subjective and competitive conditions. This research will identify the most important and critical factors that lead to the failure of contractors in order to enhance the ability of these companies to survive, compete, and overcome the abnormal conditions.

2- Literature Review

2.1 Definition of Failure

There are many definitions of business failure. Altman (1968) defined the failure from an economic viewpoint and said that a company is considered to have failed if the realized rate of return on invested capital, with allowances for risk considerations, is significantly and continually lower than prevailing rates on similar investments. Berryman (1983) recognized it as the condition of the firm when it is unable to meet its financial obligations to its creditors in full. It is deemed to be legally bankrupt and is usually forced into insolvency liquidation. Another definition of failure denoted by Watson & Everett (1993) as attributed business failure to four different situations: discontinuance for any reason; ceasing to trade and creditor loss; sale to prevent further losses; and failure to make a go of it. Shepherd (2003) show that, the failure occurs when a fall in revenues and/or a rise in expenses are of such a magnitude that the firm becomes insolvent and is unable to attract new debt or equity funding; consequently, it cannot continue to operate under the current ownership and management. Ucbasaran et al. (2010) said that the failure as not only the sale or closure of a business due to bankruptcy, liquidation, or receivership but also the sale or closure of a business because it has failed to meet the entrepreneur's expectations, which reflects the varying personal thresholds of performance among entre-

preneurs.. David O. Mbat & Eyo (2013) said that the failure could be seen in terms of the inability of a corporate organization to conform itself with its strategic path of growth and development to attain its economic and financial objectives as well as legal obligations.

2.2 Causes of Failure

A number of researchers had studied the causes of contracting business failure. Dun and Bradstreet Corporation (1986) had identified the major causes of business failures in the construction industry as; economic factors, inexperience, poor sales, expense, customer, fraud and neglect, asset and capital, and disaster. They found the most significant failure cause as economic factors. Within the economic factors category, there were five subcategories that were bad profit, high interest rates, loss of market, no customer spending and no future. Schleifer (1989) also identified ten causes as the bane of the construction industry. The first five of the identified factors are related to business strategies and the second five are related to accounting considerations. The factors were; increasing project size, expanding into unfamiliar locations, replacing key personnel, moving into new construction, not maturing in management as business expands, using poor accounting systems, evaluating project profit incorrectly or not in time, not controlling equipment costs, not billing or collecting effectively and jumping between computerized accounting systems.

The findings indicated that over 80% of the failures were caused by five factors, namely insufficient profits (27%), industry weakness (23%), heavy operating expenses (18%), insufficient capital (8%) and burdensome institutional debt (6%). All these factors, except for industry weakness, are budgetary issues and should therefore be handled by companies that are cognizant of the effects of these factors on their survivability (Donkor, 2011).

Argenti (1976) in his book 'corporate collapse' summarized what was written in failure. He concluded six main causes as a result of what written about the subject of company failure follows; top management, accounting information, change, accounting manipulation, rapid expansion, economic cycle.

Hartigan (1973) listed seven main causes of failure were as follows: Lack of capital, Under costing, lack of control, lack of advice, the government, trade fluctuations and fraud.

Jannadi (1997) had previously presented a study of the factors that contribute to the failure of construction contractors in Saudi Arabia and found that 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.

Davidson and Maguire (2003), based on their accountancy experience, identified ten most common causes for contractor failures as: growing too fast, obtaining work in

a new geographic region, dramatic increase in single job size, obtaining new types of work, high employee turnover, inadequate capitalization, poor estimating and job costing, poor accounting system, poor cash flow, and buying useless stuff.

Enshassi, et al. (2006) identified the main factors that cause business failure based on contractors' view point in Palestine. The research identified delay in collecting debt from clients (donors), border closure, heavy dependence on bank loans and payment of high interest on these loans, lack of capital, absence of industry regulations, low profit margin due to high competition, awarding contracts by client to the lowest bidder, and lack of experience in contract management.

Kivrak and Arslan (2008) examined the critical factors causing the failure of construction companies through a survey conducted among 40 small to medium-sized Turkish construction companies. A lack of business experience and the country's economic conditions were found to be the most influential factors in company failure.

Mahamid (2011) ranked the factors as highly influential with huge potential to cause contractor's business failure based on contractors' view point in Palestine: fluctuation in construction material costs; delay in collecting dibs from clients; lack of experience in contracts; low margin of profit due to competition; and closure and limitation of movement between West Bank areas.

Mbat and Eyo (2013) concludes that there are a lot of factors, internal and external, to the firm could be responsible for corporate failure. The corporate should consider the relative influence of management, board of directors, employees, external auditors, regulatory bodies, and government to avert failure. Holt (2013) aimed to synthesize published knowledge in construction business failure to explore the failure agents. He concluded that the broad practical propositions to help negate the potential negative effects are the managerial, financial, company characteristics, and macroeconomic environment.

Wang and Wu (2017) adopted modified two-stage learning algorithm to predict business failure. The modified learning model can utilize geometric feature of the data to discover the low-dimensional manifold embedding in the high-dimensional space by coordinate representations. It is more suitable to select feature values for financial data. The first stage, the stepwise forward selection approach is easy to understand and implement, and can enhance the performance of the selective ensemble model efficiency. In the second stage, different selective ensemble models are integrated according to normal or failed firms, which can exert the respective advantage of ensemble models to process the suitable firms. Doumpos et al. (2017) examined the development of corporate failure prediction models for European firms in the energy sector, using a

large dataset from 18 countries. The construction of models is based on multiple criteria decision aid approach taking into consideration both ordinal criteria and nominal country-sector effects. The results confirmed the importance of incorporating energy-related data to the analysis of the distress risk for firms in the energy sector. It was found that data related to the quality and reliability of energy networks, energy sustainability factors, as well as the size and openness of a country's internal energy market, can provide valuable additional information compared to firm-specific attributes and economic/business environment.

Venugopal (2018) explained the persistence discourse of failure in development as a point of departure to understand what it signifies, how it is structured, and what consequences it bears. He framed failure as a socially constructed category. He also concluded that changing sets of beneficiaries, definitions, goals, and indicators of success, and outcomes that are multi-layered, evolve over time, hard to measure, and generate unpredictable externalities, every successful project can also be reinterpreted as a failure. Cui et al. (2018) concluded that: the company's business capacity cannot adapt to the company's development is the most primary factor in the green business failure. While the "short-term investor mind-set and less investment" had the strongest effect on green business failure.

3- Methodology

A total of 73 factors that might affect contractors' business failure were defined through a detailed literature review of relevant research studies (Hartigan, 1973; Ross & Rami, 1973; Cohen, 1973; Argenti, 1976; Dun and Bradsteet, 1986; Kangari, 1988; Schleifer, 1989; Abidali and Harris, 1995; Osama, 1997; Assaf, S., 2004; Peterson, 2005; Enshassi et al., 2006; Strischek and McIntyre, 2008; Donkor, S., 2011). The factors were tabulated in a questionnaire form and the questionnaire was reviewed by three groups of experts to test its content validity. The target population in this study is all contractors of the first, second and third categories for building works that have valid registration by the Palestinian Contractors Union with a total of 203 contractors. The following statistical equation was used to determine the sample size:

$$X = Z^2 \times \pi \times (1 - \pi)$$

$$n = \frac{NX}{((N - 1)E^2 + X)} \quad \text{Where:}$$

Z: (1.96 for 95% C.I) P: (0.50) n: Sample size N: Population size =186

E: Maximum Error of estimation (0.07)

$$X = 1.96^2 \times 0.5 \times (1 - 0.5) = 0.9604$$

$$n = \frac{NX}{((N - 1)E^2 + X)}$$

$$= \frac{203 \times 0.9604}{((202 - 1)(0.05)^2 + 0.9604)}$$

$$\cong 133$$

Therefore, the calculated sample size is 133 contractors based on a 95% confidence level. The questionnaire was sent out to a total of 133 contractors asking their contribution in ranking the identified 73 factors in terms of severity using an ordinal scale. The ordinal scale that was used are 1 = very low influence, 2 = low influence, 3 = moderate influence, 4 = high influence, and 5 = very high influence. Only a total of 101 completed questionnaires were returned representing a good response rate of 75.93%.

Factor analysis was employed to reduce a large number of variables (factors of business failure) to a smaller set of underlying factors that summarize the essential information contained in these variables. Using SPSS v.22, Principle Component Analysis with Varimax rotation were performed to set up which items could capture the aspects of same dimension of the proposed determinants causes of business failure and examine the underlying structure or structure of interrelationships among these causes. In order to perform the factor analysis for proposed items, all appropriate checks, requirements and procedures were fulfilled, as mentioned in Table (1). Three main three phases were proceeded to accomplish factor analysis, as follows: preliminary analysis, factors extraction, and factors naming and interpretation.

Table (1): Factor analysis process requirements and criteria

| Factor analysis phase | Requirement | Acceptation criteria | References |
|------------------------------------|---|---|---|
| Preliminary analysis (First phase) | Type of the study data (variables) | Subjective variables | (Yong and Pearce, 2013) |
| | Distribution of the data | Normal distribution (Sample size of the study larger than 30) | (Hair et al., 2010) (Field, 2009) |
| | Sample size | More than 50 | (Winter et al., 2009) (Sapnas and Zeller, 2002) |
| | Data reliability test (Internal consistency) | Cronbach coefficient alpha > 0.7 | (Pallant, 2005) |
| | Factorability of the correlation matrix (Visual inspection of the correlation matrix) | Each item (variable) correlated with several other variables with correlation coefficients greater than 0.30 and none of the correlation coefficients has a | (Field, 2009) (Tabachnick and Fidell, 2007) |

| Factor analysis phase | Requirement | Acceptation criteria | References | |
|--|---|---|---|---|
| | | value greater than 0.9. | | |
| | Anti-image correlation matrix | The diagonals on the anti-image correlation matrix should have an overall measure of sampling adequacy (MSA) of 0.50 or above | (Hair et al., 2010) | |
| | Items Correlation Matrix Adequacy “Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy/Bartlett's Test of Sphericity | the Bartlett’s test of sphericity is significant when (p-value <0.05), and when the value of the KMO index is above 0.5. | (Mane and Nagesha, 2014) (Hair et al., 2010) | |
| Factors extraction (Second phase) | Communality values | Each item communality value more than 0.5 | (Field, 2009) | |
| | Cumulative percentage of variance explained by the extracted factor solution | The cumulative variance explained by the extracted factors should be greater than 50% of total variance explained. | (Meyers et al., 2006) (Mane and Nagesha, 2014) | |
| | Loaded items and extracted factors properties | | Each item should have at least one factor loading value equal or more than (0.5). | (Pallant, 2005) (Mane and Nagesha, 2014) |
| | | | Each one of the extracted factors should include at least three items to be acceptable. | (Costello and Osborne, 2005) |
| | | | Any item loaded on more than one factors with factor loading greater than 0.5 should be removed “no cross-loading items”. | (Henson and Roberts, 2006) (Hair et al., 2010) |
| Reliability measure of the extracted factors | The variables formed each factor explains the measure within this factor based on Cronbach’s Alpha (C α) value, which should be more than 0.7 | (Pallant, 2005) | | |
| Factors naming and interpretation (Second phase) | Arrangement of extracted factors | Extracted factors should be arranged and numbered in a descending order on the basis of the amount of variance explained by each one. | (Hart, 2008) (Henson and Roberts, 2006) (Williams et al., 2010) | |

| Factor analysis phase | Requirement | Acceptation criteria | References |
|-----------------------|---|--|------------|
| | Factor naming | Each factor subjectively labeled in accordance with the factor loading values and the correlation between the individual items loaded on it. | |
| | Interpretation of the principal factors | Interpretation of each factor should be provided based on the labeling and items included in each factor. | |

4- Result and Discussion

Factor analysis was used to examine the pattern of inter-correlations between the 73 items/ variables of success factors for the application of EMS in an attempt to reduce the number of them. It also used to group items/ variables with similar characteristics together. In other words, it identified subsets of items/ variables that correlate highly with each other, which called factors or components. Factor analysis was conducted for this study using the Principal Component Analysis (PCA).

Appropriateness of factor analysis

The data was first assessed for its suitability to the factor analysis application. There were many stages of that assessment:

1. **Distribution of the data:** With the base of Central Limit Theorem, the data collected can be considered normally distributed because sample size for this study was 101 and it was larger than 30 as proposed by Hair et al. (2010). Therefore, the normal distribution requirement for factor analysis application for this part of study has been satisfied as stipulated by Field (2009).
2. **Validity of sample size:** the reliability of factor analysis is dependent on sample size. Factor analysis/ PCA can be conducted on a sample that has fewer than 100 respondents, but more than 50 respondents. The sample size for this study was 101.
3. **Data reliability test:** The first stage of the quantitative analysis was related to the reliability test where the reliability of the questionnaire was tested according to the Cronbach's alpha measurement. Through the analysis that has been done, the alpha reliability of the scale of 73 items (factors) in this study was 0.94 for the items indicating that 94% of the variance of the total scores of all factors can be attributed to systematic variance. Since the result was achieved above 0.7, it showed that all items have indicated internal consistency and achieved high reliability as proposed by Pallant (2005).
4. **Kaiser-Meyer-Olkin (KMO) and Bartlett's test:** the Kaiser-Meyer-Olkin (KMO) sampling adequacy test and Bartlett's test of Sphericity were carried out. The results of these tests are reported in Table (1). The value of the KMO measure of sampling adequacy was 0.792 (close to 1) and was considered acceptable and marvelous because it exceeds the minimum requirement of 0.50 and it is above 0.90 ('superb' according to Kaiser, 1974; Field, 2009; Zaiontz, 2014). Moreover, the Bartlett test of sphericity was another indication of the strength of the relationship among items/ variables. The Bartlett test of sphericity was 1417.778, and the associated significance level was 0.000. The probability value (Sig.) associated with the Bartlett test is less than 0.05, which satisfies the PCA requirement. This result indicated that the correlation matrix was not an identity matrix and all of the items/ variables are correlated (Field, 2009; Zaiontz, 2014).

Table (1): KMO and Bartlett's test for business failure factors

| KMO and Bartlett's test | | |
|---|--------------------|--------------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.792 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1417.778 |
| | DF | 378 |
| | P-value | 0.000 |
| Cronbach's Alpha (C α) | | 0.90 |

After all the appropriate checks were performed and indicated that all the 73 variables should be retained in an initial capture of factors, using the principal component analysis approach with exploratory factor analysis through SPSS v.22. Several criteria should be achieved in order to accept the extracted solution obtained in any phase and to consider this solution as a suitable final solution for the involved variables. The following sections explains these criteria and process of investigation for the final solution (after sixteenth run).

1. Communalities (common variance)

Communality is the first criteria to be checked in the extracted solution. It reveals the percentage of variance in a particular variable that is explained by the factor (Williams et al. 2010). Larose (2006) has also claimed that communalities less than 0.5 were considered too low, since this would mean that the variable shares less than half of its variability with other variables. Higher communality value means higher importance of the variable. After (sixteenth run) of factor analysis, we get (28) factors that communality values confirms with this assumption as their values larger than 0.5.

Table (2) : Communality values of business failure factors "Final run"

| Item | Communality values of final run "Sixteenth run" |
|------|---|
| A4 | 0.676 |
| A5 | 0.576 |
| A6 | 0.626 |
| A7 | 0.667 |
| A8 | 0.598 |
| A11 | 0.620 |
| A18 | 0.568 |
| A28 | 0.601 |
| A30 | 0.651 |
| A32 | 0.509 |
| A43 | 0.577 |
| A44 | 0.632 |
| A45 | 0.701 |
| A46 | 0.686 |
| A49 | 0.649 |
| A50 | 0.560 |

| Item | Communality values of final run "Sixteenth run" |
|------|--|
| A54 | 0.547 |
| A55 | 0.619 |
| A59 | 0.680 |
| A63 | 0.598 |
| A64 | 0.667 |
| A65 | 0.856 |
| A66 | 0.813 |
| A67 | 0.672 |
| A68 | 0.575 |
| A70 | 0.673 |
| A71 | 0.730 |
| A73 | 0.732 |

Extraction Method: Principal Component Analysis.

1. Total Variance Explained

By using the output from iteration 1, there were five eigenvalues greater than 1 (Figure 1). The eigenvalue criterion stated that each component explained at least one item's/ variable's worth of the variability, and therefore only components with eigenvalues greater than one should be retained (Larose, 2006; Field, 2009). The latent root criterion for some factors to be derived would indicate that there were five components (factors) to be extracted for these items/ variables. Results were tabulated in Table (3). The five components solution explained a sum of the variance with component 1 contributing 28.894%, component 2 contributing 11.105%, component 3 contributing 8.597%, component 4 contributing 7.010%, and component 5 contributing 5.306%. All the remaining factors are not significant.

The five components were then rotated via varimax (orthogonal) rotation approach. This approach does not change the underlying solution or the relationships among the items/ variables. Rather, it presents the pattern of loadings in a manner that is easier to interpret factors (components) (Reinard, 2006; Field, 2009; Zaiontz, 2014). The rotated solution revealed that the five components solution explained a sum of the variance with component 1 contributing 14.405%, component 2 contributing 14.047%, component 3 contributing 11.436%, component 4 contributing 11.325%, and component 5 contributing 9.522%. These five components (factors) explained 60.734% of total variance for the varimax rotation.

Table (3): Total variance explained by factor analysis for the final run of business failure factors

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 8.090 | 28.894 | 28.894 | 8.090 | 28.894 | 28.894 | 4.033 | 14.405 | 14.405 |
| 2 | 3.109 | 11.105 | 39.999 | 3.109 | 11.105 | 39.999 | 3.933 | 14.047 | 28.451 |
| 3 | 2.407 | 8.597 | 48.596 | 2.407 | 8.597 | 48.596 | 3.202 | 11.436 | 39.887 |
| 4 | 1.963 | 7.010 | 55.607 | 1.963 | 7.010 | 55.607 | 3.171 | 11.325 | 51.212 |
| 5 | 1.486 | 5.306 | 60.912 | 1.486 | 5.306 | 60.912 | 2.666 | 9.522 | 60.734 |
| 6 | 0.998 | 3.577 | 64.489 | | | | | | |
| 7 | . | . | . | | | | | | |
| 8 | . | . | . | | | | | | |
| 9 | . | . | . | | | | | | |
| 10 | . | . | . | | | | | | |
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| 44 | . | . | . | | | | | | |
| 45 | . | . | . | | | | | | |
| 46 | . | . | . | | | | | | |
| 47 | . | . | . | | | | | | |
| 48 | . | . | . | | | | | | |
| 49 | . | . | . | | | | | | |
| 50 | . | . | . | | | | | | |

Extraction Method: Principal Component Analysis

1. Scree Plot

The scree plot below in Figure (1) is a graph of the eigenvalues against all the factors. This graph can also be used to decide on some factors that can be derived. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between factors 1 and 5. Note also that factor 6 has an eigenvalue of less than 1, so only five factors have been retained to be extracted.

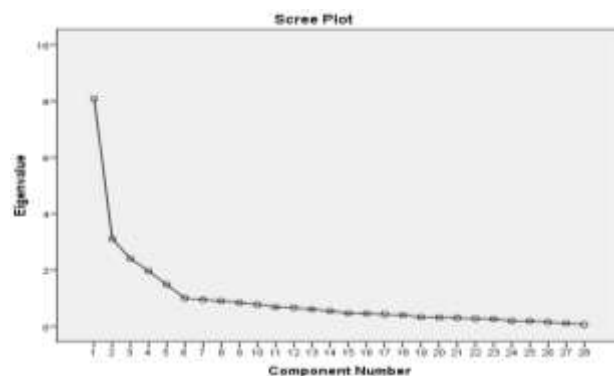


Figure (1): Scree plot of business failure factors

2. Rotated Component (Factor) Matrix

Table (4) shows the factor loadings after rotation of 28 items/ variables on the five factors extracted and rotated. The pattern of factor loadings should be examined to identify items/ variables that have complex structures (Complex structure occurs when one item/ variable has high loadings or correlations (0.50 or greater) onto more than one factor/ component). If an item/ a variable has a complex structure, it should be removed from the analysis (Reinard, 2006; Field, 2009; Zaiantz, 2014). It was loading onto five components.

On the basis of such restriction, seven items loaded on the first factor, six items loaded on the second factor, five items loaded on the third factor, five items loaded on the fourth factor, five items loaded on the fifth factor "Table (5)". It is worth noting here, that rotated component matrix table should be checked only after satisfying all requirements mentioned above such as MSA values, communalities, KMO, p-value for Bartlett's test of sphericity and etc.,. However, three conditions should be satisfied in this table to consider the solution acceptable.

Table (4): *Rotated component matrix for the final run of business failure factors*

| No. | Factors/ Components of business failure factors | Factor loading | Eigenvalues | % variance explained | Cronbach's Alpha (C α) |
|--|---|----------------|-------------|----------------------|--------------------------------|
| Component/ Factor One: Financial and political causes | | | | | |
| A66 | High cost of materials | 0.754 | 8.10 | 14.41 | 0.87 |
| A67 | Lack of resources | 0.734 | | | |
| A70 | Delay in collecting dibs from clients | 0.729 | | | |
| A65 | Monopoly | 0.718 | | | |
| A73 | Changing funding sources | 0.713 | | | |
| A68 | Dealing with suppliers and traders | 0.688 | | | |
| A66 | Israeli attacks | 0.604 | | | |
| Component/ Factor two: Contractual causes | | | | | |
| A11 | Owner absence from the company | 0.760 | 3.11 | 14.05 | 0.82 |
| A28 | Low margin of profit due to competition | 0.723 | | | |
| A55 | Owner involvement in construction phase | 0.712 | | | |
| A30 | Estimating practices | 0.706 | | | |
| A54 | Award contracts to lowest price | 0.651 | | | |

| No. | Factors/ Components of business failure factors | Factor loading | Eigenvalues | % variance explained | Cronbach's Alpha (C α) | | | |
|--|--|----------------|-------------|----------------------|--------------------------------|--|--|--|
| A59 | Monopoly of some important material for construction | 0.649 | 2.41 | 11.44 | 0.79 | | | |
| Component/ Factor three: Managerial causes | | | | | | | | |
| A6 | Use of project management techniques | 0.741 | | | | | | |
| A4 | Bad decisions in regulating company policy | 0.733 | | | | | | |
| A7 | Company organization | 0.710 | | | | | | |
| A5 | Labor productivity and improvement | 0.656 | | | | | | |
| A8 | Procurement practices | 0.654 | 1.96 | 11.33 | 0.82 | | | |
| Component/ Factor four: Organizational causes | | | | | | | | |
| A45 | Increase number of projects | 0.792 | | | | | | |
| A46 | Increase size of projects | 0.750 | | | | | | |
| A49 | Increase number of employees | 0.721 | | | | | | |
| A44 | Contractor's difficulties in achieving bank facilities | 0.589 | | | | | | |
| A43 | Problem rising due to temporary items in the contract | 0.573 | 1.49 | 9.52 | 0.75 | | | |
| Component/ Factor five: Economical causes | | | | | | | | |
| A64 | Banks policy | 0.754 | | | | | | |
| A50 | Change work from private to public or vice versa | 0.635 | | | | | | |
| A63 | General government restriction | 0.635 | | | | | | |
| A18 | Inflation | 0.610 | | | | | | |
| A32 | Bill and collecting effectively | 0.558 | | | | | | |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Once factors have been extracted and rotated, it was necessary to cross checking if the items/ variables in each factor formed collectively explain the same measure within target dimensions (Doloi, 2009). If items/ variables indeed form the identified factor (component), it is understood that they should reasonably correlate with one

another, but not the perfect correlation though. Cronbach's alpha ($C\alpha$) test was conducted for each component (factor).

The higher value of $C\alpha$ denotes the greater internal consistency and vice versa. An alpha of 0.60 or higher is the minimum acceptable level. Preferably, alpha will be 0.70 or higher (Field, 2009; Weiers, 2011; Garson, 2013). According to the results which were tabulated in Table (4), $C\alpha$ for each factor higher than 0.7, they are considered to be excellent.

Financial and political factors

It is clear that the seven items that loaded on this group are related to financial and political factors that can cause business failure according to the view point of local contractors. This group accounts for 14.41% of the total variance explained and the reliability score (Cronbach's α) of 0.87. According to factor analysis theory, the first factor accounts for the largest part of total variance of the data. Hence, it implies that high cost of materials considered as the most important factors cause business failure in Gaza Strip. It is closely followed by lack of resources, delay in collecting dibs from clients, monopoly, changing funding sources and dealing with suppliers and traders. Most of these factors are financial factors but associate with political conditions.

According to the statistical analysis, there is no weighted difference between the financial and political factors except the lowest ranking factor, which was Israeli attacks. It may be interpreted as most of companies in Gaza strip are not exposed to Israeli attacks directly, and if exposed to attacks, they compensate by local authorities.

Contractual factors

It can be seen from Table (6) that there are six items\variables that loaded on this group. The total variance was 14.04% and the reliability score (Cronbach's α) of 0.82. Table (6) illustrates that the owner absence from the company, low margin of profit due to competition, owner involvement in construction phase, estimating practices are the top ranked four factors. These are closely followed by award contracts to lowest price and monopoly of some important material for construction.

The owner absence from the company is the most factor affecting to the failure of company because the loss of experience in the stuff and not good following the work result the failure, the second factor more competitive lead to less profit in the contract from the contractor side, the monopoly is important factor in failure in Gaza because the closure of ports.

Managerial factors

There are five factors listed under this group as shown in Table (6). The highest three business failure causes are the use of project management techniques, bad decisions in regulating company policy, and company organization.

It is closely followed by two factors which were labor productivity and improvement and procurement practices. It is quite interesting to note that the use of the project management techniques is heavily affecting in failure

because the very good techniques lead to good management at the project less the failure, the bad decision at company affect more on the work and make problem at the sites that is a failure, company organization to the employee in the company is good less failure and choice bad engineer or any employee do the failure, good productivity for the employee is important factor to less the failure, less factor affecting on the failure in this group procurement practices.

Organization factors

Table (6) illustrates the ranking of five factors under this group. The top-ranked factors are increase number of projects, increase size of projects and increase number of employees. That more affecting three factor because more skilled employees are needed to sequence the project without problem, increase successful project less failure. According to the contractors, there is significance difference between the three top factors and the two lowest factors which were contractor's difficulties in achieving bank facilities and problem rising due to temporary items in the contract, this factor lead to failure because no bank facilities is stopping the project that may lead to financial failure, the lowest factor in the items of the contract lead to more problem between the owner stuff and contractor stuff may lead to failure.

Economic factors

It is obvious that the five factors that loaded on this group are related to economic factors that can cause business failure according to the viewpoint of local contractors. The first factor accounts for the largest part of total variance of the data. Hence, it implies that banks policy considered as the most important in the economic factors in Gaza Strip and it is heavily affecting factor. The other factors respectively are change work from private to public or vice versa, general government restriction, inflation, bill and collecting effectively. The change of the type of work that need to skilled employee and more experience project manager to do best in the project new type without failure, inflation is a worldly reason from financial viewpoint and contractor.

Conclusion

Business failure has become an increasingly important issue in the Gaza Strip construction industry due to ongoing closure that cause business instability. The failure of a company may cause considerable losses to all parties in the construction industry. In particular, it may affect various stakeholders, such as clients, contractors, subcontractor, suppliers, consultants, investors, or employees.

There are many factors that could be responsible for the contractors failure which impact negatively the local economic environment. The main objective of this paper is to identify the critical factors that have the potential to cause contractor's business failure in the Gaza Strip and to determine their level of severity from contractor's viewpoint. Seventy-three factors were considered in this research paper, and then reduced to twenty-eight factors using factor analysis. They were listed under the following five groups: (1) financial and political, (2) contractu-

al, (3) managerial, (4) organization, and (5) economical. The most critical factors that highly affect contractor's business failure are: (1) high cost of materials, (2) Lack of resources, (3) Delay in collecting dibs from clients, (4) Monopoly, (5) Changing funding sources, (6) Dealing with suppliers and traders, (7) Israeli attacks.

It is recommended that contracting companies should consider the influence of the previous factors to avert failure. They should also focus on the remedies of failure by using a blend of managerial and organizational actions to overcome the impacts of financial and political implications of failure.

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