

Business failures among Small and Medium sized construction companies' in Abuja, Nigeria

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ABSTRACT

Purpose of this paper

Business failures are risks that exist in all the various types of industries. The Nigerian construction industry has experienced a high incidence of Small and Medium business failure which has impacted negatively on the local construction market environment. The main purpose of this paper is to explore the factors associated with Small and Medium Enterprise construction (SMEs) company failures in the context of the Nigerian construction industry.

Design/methodology/approach

The study employed quantitative research approach using a well-structured questionnaire to elicit information from a purposive sample of 50 construction SMEs registered with Federal Housing Authority, Abuja.

Findings and value

The study results indicate that the main causes of business failure are lack of access to capital and undervaluing of construction works, poor estimating practices, and lack of evaluation of project profit yearly, and dealing with high magnitude of project. The study further categorized the causes of the failure under five main headings: lack of managerial experience; poor business strategy; poor project management; poor organisational administration, and poor coordination; finally presents strategies to assist companies survive.

Research limitations/implications

The study has some limitations which future researches need to eliminate. The study relied on the



use of cross-sectional data both from questionnaire survey of 50 SMEs in Abuja.

Practical implications

The results of the study present here will be a huge advantage to owners as well as managers of SMEs construction organisations in growing their businesses and enhancing their chance of survival. It will inform SMEs of the need to put into considerations political and business environment risk in their estimate and the need to improve their managerial and financial abilities in order to tackle the challenges.

Originality/value of paper

The results presented in this paper have important implications for the entrepreneurs who are contemplating starting a business in the construction industry and it also provides a clear signal of the potential business risk factors in doing construction business.

Conclusions:

The study concludes that the main causes of SMEs failures are political and financial factors as well as lack of managerial ability which have largely prevented them from breaking even.

Keywords: Business Failure, construction industry, Nigeria, SMEs Contractors,

1.0 Introduction

The construction industry has been reported to be a major and an important contributor in the economic growth of any nation. The industry significantly plays a prominent role as huge employer of people; and it provides abundance economic opportunities for SMEs (Small and medium sized enterprises) within the sector to grow; with its resultant output having a long time impact by providing abundant economic opportunities for their stakeholders (Van Wyk, 2003; Bowen et al., 2007). According to the National Bureau of Statistics (NBS) and Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2012), in 2010 the contributions of SMEs to the country's economic growth in terms of investment in building and other construction related business is around 11% of the Nigeria's Gross Domestic Product (GDP). In spite of these contributions by the SMEs, their failure is very disturbing. Although business failure exists in all industries, but it is more pronounced within the construction industry where companies are prone to bankruptcy as a result of the hypercompetitive and fragmented nature of the industry, which is orchestrated by lack of entry barrier, high uncertainty and risk involved in the process (Wong and Ng, 2010).

The goal of every business is continuous survival in all circumstances. Gyadu-Asiedu (2009) opined that a poor business performance remain one of the problems confronting construction industry. Care should be taken by Contractors to take into proper cognisance factors that will affect their survival positively (Donkor, 2011). The studies of business failure have generated high interest with studies carried out by Arditi, Koksal and Kate (2000), Koksal and Arditi (2004), Kangari (1988)



and Russell and Zhai (1996). These authors explored causes of business failures, others developed prediction models and how organisation can manage their resources and competence in achieving good and competitive results. According to David and Eyo (2013), the occurrence of corporate failure in Nigeria is not well researched into apart from that which concerns the banking industry. But the fact is that Nigeria has been hit with a high occurrence of Small and Medium business failure which has impacted negatively on the local surroundings. However, researches concerning this class of business have not been extensively published. In view of the interest and attention been created on business failure, review of literature on construction firms shows paucity of research on business failure of construction firms in Nigeria. According to Arditi et al. (2000), data or reports on business failure offers the much needed assistance to construction entrepreneurs who are considering starting a business. It provides a clear indication of the likely risk factors operators in the industry may encounter as well as required experience for the professionals who are to manage the inherent risks.

Premise on this, the research aimed at exploring the cause of business failure of SMEs contractors in the Nigerian Construction industry context. This study will be presented as follows: a literature review on business failure and brief definition of SMEs will be presented in the next section, to be followed by the methodology of the study. The data for the study, its analysis, results and discussion will be presented. Finally, conclusion based on the findings will be presented after a discussion of the factors that cause business failures in the construction industry.

2.0 Literature review on business failure

Business failures have been researched into more at the project level compared to organisational level (Arditi et al., 2000). Kangari (1988) established a process system for classifying construction companies at the risk of failure. Abidali and Harris (1995) found that lack of engineering expertise, lack of robust financial director, insufficient cash flow plan, poor budgetary control system and unreliable bidding system contributed to company failure. Davidson and Maguine (2003) identified causes of construction contractors failure as growing too fast, obtaining contract in a new environmental locations, intense increase in single contract, procurement of new types of work, increase in number of workers, insufficient capitalization, poor appraising and job costing, poor accounting system and bad cash flow. Arditi, Koksal and Kate (2000) credited business failures to the following factors: human/organisational funds problems of adjustment to market condition, budgetary issues, macro economies issues and normal factors. According to Argenti (1986), the main sources of business failure are lack of fund, poor estimation, lack of control, lack of guidance, government guideline, vocational instability and fraud. Schaufelberger (2003) carried out studies of business failure at the level of subcontractor and discovered that the main causes of subcontractors business failure were inadequate capital/unnecessary debt, lack of managerial development, lack of early cautionary measures, increase in project magnitude, poor billing procedures, failure to appraise project profitability, lack of understanding within new geographical zones and poor use of accounting systems. Osama (1996) 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 securing work, poor decision, and lack of knowledge in the firm's line of work, problem with cash flow, lack of executive knowledge and low profit margins. Enshassi, Al-Hallaq,



and Mohammed (2006) researched into factors regarding business failure of contractors in developing countries. The results showed that the primary causes of business failure are delay in collecting debt from clients, boundary shut down, substantial reliance on bank loans and payment of great interest on these loans, lack of capital, absence of industry guidelines, low profit brim due to high competition, awarding contracts by clients to the lowest bidders, and lack of knowledge in contract administration. Study carried out by Donkor (2011) on determinant of business failure revealed that abandonment of contracts of previous administration, inability to collect debts from new government officials, financial demand from political office holder, unwillingness in payment of interest on delayed payments etc. were the leading factors. This is evident in the number of companies that have been liquidated or become insolvent in the recent years with many being dormant and unproductive in the industry (Van Wyk, 2003; Thwala and Mvubu, 2008; Martin and Root, 2012). In fact, Van Wyk (2003) in a research conducted within the South African construction industry, suggested that few of the reasons for the failure of SMEs are due to lack of profitability in contracting, poor management and management expertise and chief among these are the metric of measuring performance which focused mainly on financial measures. Baard and van den Berg (2004) affirmed further that the origin of the failures could be traced to internal factors such as managerial incompetence, a lack of managerial experience, inadequate planning and poor financial control. The failure of the industry was acknowledged by Rwelamila et al. (2000), that asserted that most construction industry in the developing countries especially in Africa are vulnerable to accepting various techniques that tend towards development without considering local factors and country specific cultural issues in project management which have resulted into unpredictable outcomes.

3.0 Definition of SMEs

SMEs within this context mean small and medium-sized construction enterprises. Hudson (2001) asserted that SMEs are pretty difficult to define due to many factors involved and the incongruence that characterised their nature. There are myriad of definitions or what constitute SMEs (Deros et al., 2006; Fathian et al., 2008). Different countries have different definition for what SMEs represent (Hudson, 2001; Wu, 2009; Thassanabanjong et al., 2009; Mirbargkar, 2009) many adopt annual turnover, number of employees or asset to define size for classification of firms. The incongruities was as a result of the source where many of these definitions come from, mostly they are being defined based on Acts or for legal purposes; for example, United States Census Bureau (2008) that stated that small companies are those having not more than 500 employees on their payroll, medium companies consist of employees in the range of 500 to 2499 while large companies are those having more than 2500 employees. Australian Bureau of Statistics (ABS, 2001) defined small businesses to be inclusive of sole proprietorships and partnerships without employees, businesses having more than five employees are referred to as micro-businesses and other businesses employing five or more people but less than 20 people, whereas medium-sized businesses are defined as those employing people not more than 199 (ABS, 2001). SME Corporation of Malaysia cited in Rose et al. (2010) defined SME as a company with full time employees between 5 to 150 and annual sales turnover between RM251k to RM25 million. However, many criticisms have greeted these forms of classification of firms; this was as a result of difficulties involved in making comparisons when different units of measurement are being used in classifying companies (Hudson, 2001). Within the context of this study which focuses on Nigeria, where working capital, number of employees and



annual turnover were used in classifying companies. SMEs can therefore be defined as companies having full-time equivalent of paid employees ranging from 11 to 200 workers or whose working capital is between N100-300 Million or whose turnover is between N10-20 Million annually.

4.0 RESEARCH METHODS

This study was conducted using quantitative method. This approach was used through a questionnaire survey in an attempt to generate required information and identify array of causes of business failures from the sample population. The factors were identified through extensive review of existing literature that revealed a myriad of causes of business failures in the construction industry (Arditi et al. 2000; Enshassi et al., 2006; Ibn-Homaid and Tijani, 2015). This led to the identification of 48 factors that may lead to contractors' business failure and 22 strategies for minimising failures which were used in developing the questionnaire. The questionnaire was divided into three parts: the first part was used to obtain background information which centred on the general particulars of the respondent's organisation, and other information such as the years of experience of the respondent, the respondent's position within the organisation. The second part requested the participants to rate the causes of business failure based on their experience, while the last part delved into likely strategies that may be employed by SMEs in mitigating the occurrence of business failure. To ensure content validity, the questionnaire was reviewed by three senior colleagues and experts in research methodology and questionnaire design. Amendments were then made to the questionnaire as suggested by the experts before it was finally self-administered on the field. As a result of the difficulties in obtaining a comprehensive list of SMEs construction companies in Abuja the study area, the list of those SMEs that registered with Federal Housing Authority (FHA) was obtained with their addresses and telephone numbers. Telephone calls were made to these companies to confirm the addresses, intimated them of our intention and to ascertain who to meet to find out the potential respondent within the organisation based on the structure of their companies. The interest of CEOs/senior managers in participating in the study was arose through personal interactions and by confiding in them that the responses were for academic purpose only. This assisted in administering the questionnaires to the appropriate person. The questionnaire was self-administered to a total of 50 SMEs construction companies identified and verified on the list obtained from FHA requesting their contributions in rating the identified 48 factors in terms of severity in causing business failure using an ordinal scale (see Enshassi et al., 2006). The Likert scale used are 1 = very low influence, 2 = low influence, 3 = moderate influence, 4 = high influence, and 5 = very high influence. A total of 50 questionnaires were self-administered to the senior managers or CEOs where applicable as the major respondents for the study, because it is assumed that they are likely to have more information and knowledge about the difficulty their respective companies encounter in the course of operating within construction industry that may lead to distress. After series of calls and visits, a total of 50 completed questionnaires were retrieved representing a very high response rate of 100%. The data were analysed using both descriptive and inferential statistics.

5.0 RESULTS AND DISCUSSION

Table 1 provides the summary of the background information of the respondent's organisation. The results in Table 1 indicate that 56% of the respondent are Sole proprietorship which is typical of SMEs



firms, while Partnership and Private Liability Company had 26% and 18%. None of the company under consideration is Public Liability Company. Table 1 also shows that 14% of the respondents have less than 5 years working experience, 36% have between 6 to 10 years, 36% have between 11 to 15 years and 14% have between 16 to 20 years. This extensive working knowledge would make the results more reliable. The result in Table 1 shows that 56% of the contractors have less than 71 numbers of permanent workers, a development which shows that such contractors are not growing and their ability to take charge of infrastructural development of the country will be difficult.

Table 1: Background information

	Frequency	Per cent
Business Registration Category		
Sole Proprietorship	28	56
Partnership	13	26
Private liability company	9	18
Public liability company	-	-
Total	50	100
Year your firm has been in business		
Less than 5 years	7	14
6 to 10 years	18	36
11 to 15 years	18	36
16 to 20 years	7	14
>20	- -	-
Total	50	100
Number of employee in your company		
>30	9	18
11-70	19	38
71-200	22	44
over 200		-
Total	50	100

Table 2 and 3 present the means and standard deviations as well as ranking for all variables. The items used in the questionnaire required respondents to rate on a 5 point Likert scale from 1 to 5. The study mean score of each of the variables was determined to ascertain the most severe factors that often result into SMEs distress. The mean statistics was employed in analysing the perceptions of the respondents that could range between e.g. very high influence 5 points, very low influence 1 point. In exploring the variables identified in the survey, the study first used analytical descriptive statistics to denote the data in terms of the mode, median and mean, as well as the standard deviation. These measures were employed to generate a methodical understanding of the nature of data and give a summary of the variables used.



Table 2 shows the mean value of and rank for all business failure variables in a descending order. The descriptive results show that lack of access to capital and undervaluing of construction works are the top two most severe factors based on ranking that may lead to business failure. These are closely followed by poor estimating practices, lack of evaluation of project profit yearly, and dealing with high magnitude of project complete the list of the most five important causes of business failure for all the business variables. These findings are closely related to the previous findings in literature (e.g. Schaufelberger, 2003; Van Wyk 2003), who identified lack of capital and of profitability in contracting as causes of business distress. The lowest ranked business failure factors were lack of using project management techniques, owner's involvement in the construction phase, replacement of key successful personnel.

Table 2: Descriptive Statistics

Variables	Mean Statistic	Ranking	Std. Error	Std. Deviation	Alpha without item
Lack of access to capital	4.20	1	.13	.88	.91
Under-valuing of work done	4.14	2	.11	.76	.92
Poor estimating practices	4.04	3	.10	.70	.92
Lack of evaluation of project profit yearly	4.00	4	.15	1.07	.91
Dealing with increase in the size of projects	3.94	5	.11	.77	.91
Lack of experience in the line of work Bad decisions in formulating and regulating company	3.88 3.86	6 7	.08	.59 .97	.91 .92
policies Change in the type of work	3.80	8	.13	.93	.92
Change in the type of work	3.78	9	.13	.93	.92
Non-payment of interest on delayed certificate	3.78	9 10	.14	.98	.92
Bad record keeping	3.76	11	.08	.57	.91
Inappropriate procurement practises					
Non completion of construction work on schedule	3.62	12	.09	.67	.92
Frauds within the company Lack of managerial development and maturity as the company grows	3.60 3.60	13 13	.11	.81 .90	.92 .91
Lack of proper material control system	3.58	15	.10	.70	.92
Change work from private to public or vice versa	3.54	16	.15	1.05	.92
Delay and improper claim submission process	3.54	16	.10	.73	.92
Dealing with increase in number of projects	3.52	18	.10	.67	.92
Poor communication system	3.44	19	.15	1.07	.92
Low profit margin of profit due to competition	3.44	19	.17	1.16	.91
Shrinkage in construction activities	3.44	19	.15	1.07	.92
Lack of employee benefit and compensation	3.42	22	.14	1.01	.92
Material wastage	3.42	22	.14	.97	.91
Sudden death of company owner	3.42	22	.13	.93	.92
Change in government policies	3.42	22	.14	1.01	.92



Table 2 cont'd: Descriptive Statistics

Variables	Mean Statistic	Rank	Std. Error	Std. Deviation	Alpha without item
Opening of regional office	3.40	26	.12	.86	.92
Award of contract to lowest bidder	3.40	26	.13	.93	.91
Lack of proper way of dealing with variation orders	3.38	28	.12	.88	.91
Financial demands by political heads	3.38	28	.12	.88	.91
High cost of construction material	3.36	30	.18	1.29	.91
Neglect of issues/action that can cause the company losses	3.34	31	.14	1.00	.91
Bad company organisation	3.32	32	.11	.77	.91
Delay in collecting bills/payment	3.32	32	.11	.77	.91
Weak construction industry regulations	3.32	32	.11	.77	.91
Improper cash flow management	3.30	35	.13	.91	.91
Lack of good book keeping practice	3.30	35	.18	1.30	.91
Expansion into new geopolitical zones	3.30	35	.13	.90	.91
Lack of labour productivity and improvement	3.26	38	.14	.99	.91
Lack of well-structured training and re-training programme	3.26	38	.14	.99	.91
Owners absence from the company	3.24	40	.14	1.00	.91
Suspension of projects of previous government Assigning of unqualified/incompetent project leader at the	3.24	40	.11	.80	.92
site	3.22	42	.10	.71	.91
National slump in economy	3.22	42	.14	.98	.91
Delay in collecting debt from new political heads	3.22	42	.10	.71	.91
Poor equipment cost and usage	3.20	45	.12	.83	.91
Lack of using project management techniques	3.18	46	.12	.85	.91
Owners involvement in construction phase	3.16	47	.16	1.10	.91
Replacement of key successful personnel	3.02	48	.12	.82	.92

Table 3 presents the mean value of the business strategies that can be used by companies to mitigate business failures and rank for all the strategy variables in a descending order. The descriptive results indicate that easy access to capital, control of overheads and recurrent expenditure, effective purchase system, flexible interest rate for lending purposes and undervaluing of construction works are the top five strategies SMEs could employ to overcome business distress. The least ranked strategy for reducing business failure factors were compensation and bonuses packages, ensuring regular and accurate valuation of work, and separation of business activities from family matters. The Table also shows the Cronbach's alpha that was used to examine the internal consistency of the factors identified in literature and to assess whether co-variation among the variables measuring the business failure (Oyewobi, 2014). However, previous researchers (such as Sanders, 2003) have suggested that a minimum acceptable Cronbach's alpha value is 0.7, and Nandakumar (2008) stated that 0.6 could be considered acceptable in exploratory research.



Table 3: Descriptive Statistics

Variables	Statistic	Rank	Error	Deviation	item
Easy access to capital Control of Overheads and recurrent	3.88	1	.15	1.07	.68
expenditures	3.75	2	.12	.87	.68
Effective Purchase system	3.73	3	.08	.57	.66
Flexible interest rate for lending purposes	3.71	4	.13	.90	.65
Transparent and effective tendering systems	3.63	5	.09	.66	.65
Business expansion at gradual speed	3.63	5	.09	.66	.65
Proper contractor selection and registration	3.61	7	.11	.80	.64
Implementation of dividend policy	3.59	8	.10	.70	.66
Adequate Capital Structure	3.55	9	.12	.88	.64
Good successive plan policy	3.49	10	.11	.81	.65
Good and proper record keeping procedure	3.45	11	.15	1.06	.66
Effective risk management practices	3.43	12	.14	.99	.68
Good Management team	3.42	13	.15	1.06	.67
Use of competent Site Supervisors/ Engineers	3.31	14	.11	.79	.67
Proper Financial practices	3.29	15	.14	1.03	.66
Training programmes for contractors	3.29	15	.15	1.10	.70
Effective cash flow practices	3.28	17	.14	1.00	.63
Proper material control systems	3.28	17	.14	.98	.62
Adequate balance of assets and Liabilities Separation of business activities from family	3.28	17	.14	.98	.63
matters Ensuring regular and accurate valuation of	3.26	20	.15	1.09	.67
work	3.24	21	.17	1.19	.69
Compensation and bonuses packages	3.10	22	.15	1.04	.68

Exploratory factor analysis

Unlike previous study such as Arditi et al. (2000) and Enshassi et al. (2006), where the factors causing business failure were grouped before the analysis, this study explore the variables identified using factor analysis. The study therefore use exploratory factor analysis in bringing together underlying variables that are interrelated, thereby generating a factor structure through an inductive approach. This was used to examine the appropriateness of the data for further analysis and also to indicate which variables are highly correlated with one another, thereby forming sets of variables that are known to relate to each group. The results of the factor analysis are presented in Table 4 and 5. However, the overall, Cronbach's alpha statistics are well above the 0.60 to 0.70 threshold range and the Kaiser–Meyer–Olkin (KMO) statistic and Bartlett test for sphericity confirm the adequacy of the sample for factor analysis. The analysis in Table 4 showed five factors were clustered under causes of business failure. The five components include: lack of managerial experience; poor business strategy; poor project management; poor organisational administration, and poor coordination.



Lack of managerial experience

This is one of the main causes of construction business failure by the SMEs. SMEs with inexperienced owner or management that consists of personnel with little knowledge about construction work may have the business closed down due poor decisions as a result of poor managerial skill. This finding underscores the previous study by Osama (1997) in the context of Saudi Arabia, who examined the factors contributing to the failure of construction contractors and found that the most prominent cause of failures include lack of experience in the company's line of business, difficulty with cash flow and poor managerial experience. This result is supported by the assertion of Schaufelberger (2003) who assessed the causes of business failure at the level of subcontractor and discovered that the main causes of subcontractor's business failure were lack of managerial development and inadequate capital/unnecessary debt among others. Similarly, Kivrak and Arslan (2008) reported on the critical factors causing failure of SMEs construction companies in Turkey. The study revealed that lack of business experience and country's economic conditions as the most influential factors to company failure. Hence, in engaging in any business, most especially construction, experienced people in that field are more desirable to ensure continuous improvement and survival. These together explain more than approximately 15% of the variance.

Poor business strategy

Organisation or company that fails to have a comprehensive business plan will fail particularly in the construction business environment where there are lots of uncertainties in terms of securing jobs. Regular and continuous assessment of organisation is required by construction companies, this will assist in developing and implementing relevant business strategies that can sustain the business and guarantee continuous existence in the market niche (Ibn-Homaid and Tijani, 2015). Construction business environments are dynamic and may change with time, it is thus essential that strategy developed must be modified appropriately in order to sustain a dynamic sense of balance between the company and its environments (Ho, 2015). Many of the SMEs lack appropriate business strategy to withstand the business environment and as such experience low profit margin due to high competition and poor cash flow (Arditi Koksal and Kale, 2000; Enshassi et al., 2006). According to Arditi et al. (2000), low profits and crunch cash flow are synonymous with the construction business, which is typified by one-off projects and hypercompetitive business environment due to the tendering procedure; this constitute a major source of failure to the SMEs (Davidson and Maguire, 2003). Poor business plan can lead to overexpansion which is capable of driving a company to greater risk investments with huge financial deficit, thus increasing company's chances of failure (Arditi et al., 2000). Business strategy explains 14.18%

Poor project management

Projects require to be controlled from inception through to the completion stage. This can be achieved using any of the numerous project management techniques. Ibn-Homaid and Tijani (2015) reported that the Surety Information Office (SIO) identified six warning indications that show that a construction company may be in distress. Prominent amongst these factors is poor project management. This is also emphasised by Enshassi et al. (2006) who argued that more than half of business fail-



ure in construction industry are due to unrealistic project margin. Project management techniques are considered ever-changing techniques, similar to those in nature, which depict they change over time and are hard to predict (Ahmadi and Golabchi, 2013). No matter how big or small a company is, it requires a good and effective management to ensure that the company objectives and goals are achieved. SMEs construction companies should therefore adopt management techniques such as risk management and the rest for project implementations. However, the majority of these SMEs contractors that are functioning within the Nigerian construction industry are small-scale outfits with fair level of ignorance in research and development breakthroughs that can improve their output and efficiency both in terms of technical know-how (application of technology) and management techniques. Their inability to employ qualified and experienced personnel coupled with lack of ploughing back profit have created business setbacks for them. This component explains 8.91% of the variations in the business failure.

Poor organisational administration

The following factors were categorised under the heading- Poor organisational administration. The clustered variables include delay and improper claim submission process; neglect of issues/ action that can cause the company losses; bad company organisation; lack of employee benefit and compensation; delay in collecting bills/payment; weak construction industry regulations; change in government policies. These variables are capable of affecting business failure, they collectively explain 7.56% of the variance.

Poor coordination

The last factor is named poor coordination. The variables that explain these factor include; poor communication system; assigning of unqualified/incompetent project leader at the site; lack of evaluation of project profit yearly; shrinkage in construction activities; and delay in collecting debt from new political heads. This finding is in line with Josephson, Larsson and Li (2002), that emphasised that poor coordination may likely result into failure though at project level. Meanwhile the industry where these SMEs operate is project based and project success according to Faniran, Love and Li (1999) is hinged upon the effectiveness of the main contractor's (and their subcontractors and suppliers) construction planning efforts. These together explain 7.08% of the variance.



 Table 4: Factor analysis of causes of business failure

Variable	FAC1	FAC2	FAC3	Communalities
Poor business strategy				
Low profit margin of profit due to competition	.764			.767
Improper cash flow management	.790			.774
Poor estimating practices	.759			.721
Poor equipment cost and usage	.697			.589
Change work from private to public or vice versa	.822			.734
Expansion into new geopolitical zones	.790			.774
Opening of regional office	.543			.526
Owners involvement in construction phase	.693			.510
National slump in economy	.541			.655
Suspension of projects of previous government	.559			.498
Non-payment of interest on delayed certificate	.720			.619
Poor project management				
Bad record keeping		.590		.574
Lack of proper material control system		.534		.534
Lack of using project management techniques		.551		.547
Lack of labour productivity and improvement		.689		.591
Lack of good book keeping practice		.683		.586
Lack of proper way of dealing with variation orders		.849		.813
Lack of well-structured training and re-training programme		.689		.591
Financial demands by political heads		.849		.813
High cost of construction material		.857		.800
Poor managerial experience				
Lack of experience in the line of work			.764	.723
Bad decisions in formulating and regulating company policies			.592	.628
Sudden death of company owner			643	587
Inappropriate procurement practises			.696	.559
Owners absence from the company			.815	.762
Non completion of construction work on schedule Lack of managerial development and maturity as the company			.749	.621
grows			.662	.590
Dealing with increase in the size of projects			.532	.527
Initial Eigenvalues	11.90	6.80	4.278	
% of Variance	24.79	14.18	8.91	
Cumulative %	24.79	38.96	47.87	



Table 4 cont'd: Factor analysis of causes of business failure

/ariable	FAC4	FAC5	Communalities
Poor organisational administration			
Delay and improper claim submission process Neglect of issues/action that can cause the company	.558		.467
losses	.635		.768
Bad company organisation	.738		.719
Lack of employee benefit and compensation	.848		.828
Delay in collecting bills/payment	.738		.719
Weak construction industry regulations	.738		.719
Change in government policies	.848		.828
Poor coordination			
Poor communication system Assigning of unqualified/incompetent project leader at the		.867	.829
site		.770	.854
Lack of evaluation of project profit yearly		.582	.601
Shrinkage in construction activities		.867	.829
Delay in collecting debt from new political heads		.770	.854
Initial Eigenvalues	3.63	3.40	
% of Variance	7.56	7.08	
Cumulative %	55.44	62.51	

Cronbach alpha of the whole scale: 0.93

KMO: 0.87.

Barlett test: O2=427.240 gl. 105 sig. 0.000

Strategies to minimise business failure

The study employed the PCA approach adopting varimax rotation to extract possible factors, and Kaiser's criterion (i.e. Eigenvalue-greater-than-one) to ascertain which factors to retain from the analysis. Table 5 indicates three factors having initial Eigenvalues greater than 1 which were extracted from the variables used in determining the strategy SMEs can adopt in guiding against business distress. The Table shows that the first component is capable of explaining approximately 3% of the variation, the second extracted component explains 13%, while the last factor extracted explains 36% of the variance. The three components combine to explain 47% of the total variance. Each of the factors had at least four variables loaded on them after being rotated using varimax method. The rotation was executed in 25 iterations to eliminate multidimensional variables and ensure that the variables were loaded onto only one factor (Field, 2013). The clustered factors are: Financial issues, management issues and human/organisational issues.

Financial issues: the variables that converge to explain these are, proper financial practices, effective cash flow practices, proper material control systems, good Management team, adequate balance of assets and Liabilities. This strategy becomes necessary as most of contracting organisation experience major problems in cash flow, capital and harsh competition in a very difficult situation



(Enshassi et al., 2006). Enshassi et al. (2006) further stated that it is general knowledge that most SMEs have no dedicated accounting department that make public the company's financial reports on a regular basis (they are not obligated by law in Nigeria if they are quoted on the Stock Exchange) and thus, effective monitoring of financial ratios become rather difficult. This is underscored by Ibn-Hamoid and Tijani (2015), who after review of literature on construction business failure, posited that the major factor causing business failure is financial management. Wong and Ng (2010) therefore asserted that there is need for construction companies to assess their financial performance on a regular basis so that timely and appropriate strategies can be instituted to maintain their survival in the construction business.

Management issues: six variables clustered to explain the variance and these variables include: easy access to capital; transparent and effective tendering systems, good and proper record keeping procedure, effective purchase system, adequate capital Structure and business expansion at gradual speed. Yin (2006) attributed lack of access to capital to finance the construction works by the contractors as one of the factors of the failure. Enshassi et al. (2006) also contended that taking more projects by contractors beyond their capability is a recipe for failure. To mitigate these problems and ensure survival of companies in the turbulent business environment, there is the need for effective management. We argue here that management of financial related issues and other processes will help organisations overcome factors that may lead to distress and stunted growth.

Human/organisational issues: four variables including compensation and bonuses packages, training programmes for contractors, separation of business activities from family matters, ensuring regular and accurate valuation of work combine to explain approximately 36% of the variance. This implies that ccompany's human resources and managerial capabilities are the main factors that ensure sustainable competitive advantage and hence profitability (Spanos, Zaralis and Loukas, 2004). According to Cheah and Garvin (2004), the essence of human resources is to offer an efficient organisational system that will lead to recruiting, training, mobilizing and managing the human assets of an organization to systematically carry out business operations and new business enterprises. The nature of the construction industry which is project-based requires a number of individuals to get work done.



Table 5: Strategies for survival of SMEs contractors business

Variable	FAC1	FAC2	FAC3
Financial issues			
Proper Financial practices	.558		
Effective cash flow practices	.796		
Proper material control systems	.829		
Good Management team	.600		
Adequate balance of assets and Liabilities	.829		
Management issues			
Easy access to capital		.624	
Transparent and effective tendering systems		.831	
Good and proper record keeping procedure		.511	
Effective Purchase system		.631	
Adequate Capital Structure		.516	
Business expansion at gradual speed		.831	
Human/organizational issue			
Compensation and bonuses packages			.725
Training programmes for contractors			.613
Separation of business activities from family matters			.864
Ensuring regular and accurate valuation of work			.776
Initial Eigenvalues	5.119	23.267	23.267
% of Variance	2.929	13.316	36.583
Cumulative %	2.382	10.829	47.411
Cronbach alpha of the whole scale: 0.67			
KMO and Bartlett's Test		.626	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		415.079	
Bartlett's Test of Sphericity	df	91	
	Sig.	.000	

6.0 Conclusion

Construction business failures are not only extremely disruptive to the industry but it may pose a threat to the economy of the nation. Business failure reports provide the much needed assistance to businesspersons who are thinking to start a construction business, because it makes known the likely threat to company's survival in the industry. The main objective of this paper is to explore the factors that have the potential to cause business failure of SMEs in the Nigerian construction industry and to determine their level of severity from SME's perspective and possibly group them under different headings. The identified variables by the study were categorised under five main heading: lack of managerial experience; poor business strategy; poor project management; poor organisational administration, and poor coordination, while strategies clustered into three factors. The most important causes of business failure as indicated by the SMEs are lack of access to capital and undervaluing of construction works, poor estimating practices, and lack of evaluation of project profit yearly and dealing with high magnitude of project. Therefore, the strategies that SMEs can employ to neutralize the potential causes of business failure to ensure survival in the industry



include efficient financial management, effective management strategies and human/organisational resources management.

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