FACTORS AFFECTING CONTRACTORS' BIDDING DECISION FOR CONSTRUCTION PROJECTS IN NIGERIA

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Abstract

Bidding is the most common means by which the contractors obtain works. The construction industry accounts for about three quarter of the GDP in the country. It is generally believed that wrong bidding practice is a major contributor to the construction industry's inefficiency. This means that any improvement in bidding has the potential to enhance the industry's performance, improve the quality of the decision-making process, increase and assist in achieving the strategic objective of contracting organizations. In an effort to uncover the main factors that characterize the bid/no bid decision of contracting organizations, a study to evaluate the factors that affect contractor's decision to bid for a project and to evaluate the importance of the identified factors to decision makers was carried out. A structured questionnaire was used as the principal instrument for collecting data from respondents. A total sample of one hundred (100) was drawn from these collections of construction contractors from Lagos state. Fifty (50) were completed and returned representing a 50% response rate. Frequency, percentage, mean score and spearman correlation were used in analyzing data collected for the study. The results indicate that financial capability of clients, availability of capital and availability of material are the most important factors contractor consider when taking bid/no bid decision. The study also reveals that competition (number and identity of competitors) does not have significant influence on contractors' bidding decision. The study recommends that contractors should also increase their reputation in the construction industry by acquiring technical competencies and capabilities as these qualities have become important considerations in assessing contractors' competiveness, and key indicators of successful tendering in construction projects.

Keywords: Bidding, competition, contractors, decision making, tender.

Introduction

In most countries, the construction industry is a competitive business environment driven by a lowest cost mentality (Dulaimi & Shan, 2002). Most construction projects are awarded on the basis of the lowest tender sum, though a number of other factors are considered apart from cost. Most construction projects are let through competitive bidding which requires that roles of the client and contractor be duly defined in black and white. The construction industry contains many buyers and sellers, even for construction projects, hence the need for some form of competition/bidding.

One of the most crucial decisions that is regularly exercised by construction contractors is to determine whether to bid or not to bid on a certain project (El-Mashaleh, Al-Jundi, Mattar, Ali & Al-Hammad, 2014). The preparation and submission of bids for construction work is a means by which contractors obtain construction works and their likes. Competitive bidding is the route for obtaining a sizeable proportion of construction business by contractors in the world. It is said to be achieved in a fair way, set out to produce the lowest commercially viable tender price in the current market condition (Harris & McCaffer, 2000). Few contractors carry out construction activities without actually winning a tender but most contractors will only survive and make profit in the industry by winning tenders.

Bidding involves contractors making strategic decisions as it concerns the financial, managerial, manpower and physical resources of the firm before considering embarking on the project (Odusote & Fellow, 1992). Most significant decisions required to be made by contractor's firm will centre on whether to bid or not to bid (Egemen & Mohammed, 2007).The ability of contractors to deal with various bidding situation is an important ingredient for survival especially in today's competitive market. The different bidding situations together with the decision involved in the conversion of the estimate into a tender bid is often considered to be the most important step in the bidding process.

Lifson and Shaifer (1982), argue that knowing the importance of the factors influencing the decision making process would allow key and major decision to be reviewed and discussed regularly. The management of contracting organizations are expected to take firm decisions on bidding in order to achieve the long term objectives of the organization. Contractors tend to make strategic decisions in respect of project selection, whether or not to bid for a job (Oo, Drew & Lo, 2008, Shash, 1993; Lowe and Parvar, 2004). The judgement process takes into consideration the different factors affecting tendering in a bid to arrive at an informed decision which will rob on positively on the organization as a whole.

Contractors need to take into consideration numerous factors when evaluating their bids (Dozzi, AbouRizk & Schrooeder, 1996). A number of factors are critical in the

decision making process of whether to bid or not to bid. Different researchers have presented factors that affect bid/no bid decision. Odusote and Fellow (1992) highlighted 10 important factors that affect the bid/no bid decision; identity and reputation of the client, physical resources necessary to carry out project, present state of company's workload, ability of client to pay. Others include margin of profit involved, availability of work (both current and potential), financial resources necessary to carry out project, identity of consultants, time available in which to tender, and type of work. Shash (1993) conducted a study among top UK contractors and mentioned that project size, owner promoter, contract conditions, type of contract, project cash flow, current workload, past profit in similar projects, need for work, tendering method, number of competitors tendering, experience in projects are some of the factors that affect their project selection decision; he identified need for the work, number of competitors and experience as the three major factors that affect contractor's decision to bid. In a study of the bidding behaviour of contractors in Egypt, Hassanein (1996) presented the most important bid/no bid factors to include financial source, project type, project monetary size, project owner, expected competitors, contractor's own strategic objective, current work in hand, degree of hazard/difficulty, prestige of the project, local expertise/labour availability. According to a survey findings of contracting firms in Northern Cyprus, Egemen and Mohamed (2007) highlighted a number of other factors to some of the other above mentioned factors and they include; completeness of bid document, risk due to current inflation, exchange rate in the country, stability of the exchange rate, policies and legislation regarding licenses, permits and tax policy of government in the country, threat due to new entrant into the market increasing competitiveness, monetary and fiscal of government against economic fluctuations, mention but a few.

Table 1: ***Factors affecting contractors' decision to tender as identified by some studies***

Author	Country	Project type	Factors affecting decision to tender
Odusote &Fellows (1992)	UK	Building/civil engineering	Identity and reputation of the client, physical resources necessary to carry out the project, present state of company's workload, ability of clients to pay, margin of profits involved, availability of work.
Shash (1993)	UK	Building/civil engineering	Need for work, number of competitors, contractor's experience in the project, current workload, client's identity, project type, project size, tendering method, risk, and project location.

Hassanein (1996)	Egypt	Building/civil engineering	Project type, project monetary size, expected duration, project owner, financing source, degree of hazard difficulty, prestige of project, contractor's own strategic objectives, and current work on hand.
Fayek, Ghoshal and AbouRizk (1999)	Canada	Civil engineering	Type of project, likelihood of winning the project, desire for the project, familiarity with market, familiarity with geographical area, size of project, and company's strength
Wanous, Boussabaine & Lewis (2003)	Syria	Building/civil engineering	Fulfilling the to tender conditions imposed by the client, financial capability of the client, relations with and reputation of the client, project size, availability of time for tendering, availability of capital required.
Lowe & Parvar (2004)	UK	Building/civil engineering	Company's objectives and policies, contract conditions/details, workload, type of work, resource availability, tender documentation, cost of preparing tender, contract size, project location, and the contract buyer or client.
Banki, Esmaeeli & Ravanshadnia (2008)	Iran	Building	Internal factors-expertise, experience, resources, capabilities. External factors-number of bidders, bidding risk, type of project, cash flow requirements. Environmental factors-availability of other projects, availability of qualified labour, availability of equipments.
El-Mashaleh, Al-Jundi, Mattar, Ali & Al-Hammad (2014)	Jordan	Building/civil Engineering	Financial capability of the client, reputation of the client, identity of the client, project size, amount of work currently at hand and project type

Against this backdrop, the research has set out to examine the factors affecting contractor's decision to bid for construction projects in Lagos, Nigeria. The study had set out to test the under-mentioned research question;

(1) How significant is the difference of the type of contractors on the factors affecting bid/no decision?

(2) Do indigenous and expatriate contractors agree on the factors that affect bid/no bid decision?

Research method

Specifically, a cross-sectional research design was used where samples were drawn from the population of study at one point in time. This study was carried out through questionnaire survey to elicit data on the factors affecting contractors' decision to bid. The study was conducted in Lagos which is economically an important city in Nigeria. As the economic and commercial nerve-centre of the country, Lagos has a high volume of construction activities as well as a large concentration of building and civil engineering contractors of various categories and sizes. The targeted population comprised construction firms of all categories (small, medium and large) based in Lagos or conducting construction activities there as the time the study was conducted. It is worthy of note that contracting organization are classified based on the level of management personnel and ownership. Indigenous contracting organization are classified thus when the majority of management personnel and ownership is fully indigenous. While, expatriate contractors have majority of management personnel and ownership as foreigners; partly expatriate/partly expatriate contracting organizations have both locals/foreigners on its management personnel. Specifically, managing directors, estimators, contracts managers, construction or project managers, site managers, commercial managers and other key personnel involved in tendering activities of these construction firms were the targeted respondents.

Convenience sampling method was adopted in order to arrive at the sample size for the study. The convenience sampling technique was set out because there was no updated list of contracting organizations within the study area and the tendency of organizations refusing to attend to the research instrument. Out of the 100 copies of research questionnaire distributed, 55 were completed and returned representing a 55% response rate. The returned copies were scrutinized for errors, omissions, completeness and inconsistencies. Fifty questionnaires were found to be adequately completed.

Respondents were requested to measure the level of importance their firms attach to forty eight identified factors that determine contractors' decision to tender and also the mark-up size decision on a five-point scale (1= not important, 2= of little importance, 3= moderately important, 4= important, and 5= very important).

Results and Discussion

Data collected from the questionnaire responses were analyzed and presented here in tables. Table 2 shows the summary of the demographic characteristics of the respondents. Chief estimators constitute the highest proportion (28.0%) of the

respondents indicating their high involvement in bidding process of construction firms. Both managing directors and chief estimators account for 44% of the total population. Site professionals such as architects, quantity surveyors, engineers accounts for about 24% of the sample that participated in the survey. This confirms that bidding practices are carried out by senior management people (Hassanein, 1996; Pearl et al, 1999 and Lowe & Parvar, 2004).

A sizeable proportion (41%) of respondents is within the age bracket of 41years and above. About 98% of the respondents received formal education, which put them in the right stead to provide valuable information. About 52% of respondents have working experience of 11years and above which implies that they are sufficiently knowledgeable in construction matters to take active part in decision making. Quantity Surveyors constitute 47.9% of the respondents- the highest proportion, indicating their involvement in the bidding process of construction firms

Table 2 Demographic data of Respondent

	Frequency	Percent (%)	Cumulative Percent
Designation of Respondent (N=50)			
Chief estimator	14	28	28
Project Manager	13	26	54
Managing Director	8	16	70
CEO	3	6	76
Contract/Site Professionals	12	24	100
Age of Respondent (N=49)			
21-30years	4	8.2	8.2
31-40years	25	51	59.2
41-50years	10	20.4	79.6
51-60years	9	18.4	98
Above 60years	1	2	100
Academic qualification (N=49)			

OND	1	2	2
HND/BSc	30	61.2	63.3
PGD	5	10.2	73.5
MSc/MBA	10	20.4	93.9
PhD	1	2	95.9
Others	2	4.1	100
Professional qualification(N=38)			
NIA	1	2.6	2.6
NSE	11	28.9	31.5
NIOB	6	15.8	47.3
NIQS	19	50	97
Others	1	2.6	100
Construction experience (N=50)			
1-10years	24	48	48
11-20years	10	20	68
21-30years	12	24	92
31-40years	4	8	100
Professional Background (N=48)			
Architect	2	4.2	4.2
Quantity Surveyor	23	47.9	52.1
Builder	6	12.5	64.6
Civil Engineer	6	12.5	77.2
Electrical Engineer	9	18.8	95.9
Mechanical Engineer	2	4.2	100

Table 3 shows the characteristics of the responding firm. Most of the responding firms (70.2%) are involved in main contractor's work, and about 79.6% of the respondents

are limited liability companies. 78.0% of the contracting firms operate a fully indigenous firm, while the remaining 22% of the firms are either expatriate or partly expatriate. It is clear that a greater percentage of contractors operating within Lagos are fully indigenous in its ownership and

Table 3 Characteristics of Responding Firms

	Frequency	Percent (%)	Cumulative Percent (%)
Class of contractor (N=47)			
Main contractor	33	70.2	70.2
Nominated sub-contractor	13	27.7	97.9
Others	1	2.1	100.0
Types of ownership (N=49)			
Sole proprietorship	7	14.3	14.3
Partnership	1	2.0	16.30
Limited liability company	39	79.6	95.90
Public limited company	2	4.10	100.0
Organisation ownership and management (N=50)			
Fully indigenous	39	78.0	78.0
Fully expatriate	11	22.0	100.0
Organisation activity (N=47)			
Building Only	7	14.9	14.9
Civil Engineering Only	2	4.3	19.1
Building & Civil Engineering	24	51.1	70.2
Electrical Only	1	2.1	72.3

Mechanical and Electrical Only	12	25.5	97.9
Others	1	2.1	100.0
Construction activity (N=41)			
New Works	7	17.1	17.1
General Contracting	31	75.6	92.7
Others	3	7.3	100.0

management system. 51.1% of respondents are building and civil engineering contractors, 25.5% of them are both electrical and mechanical contractors; building contractors alone constitute 14.9% of the population. It is evident that majority of contractors do not specialize in a single type of construction such as building or civil engineering.

The construction activity as engaged by the respondent is given in Table 3, 75.6% of the contractors undertake general contracting, while 17.1% of them are involved in new works.

Table 4: Client source

Client source	N	Mean	Rank
Corporate bodies	49	4.14	1
Individual	48	3.83	2
Government	49	2.86	3

Table 4 indicates the mean score of client source of contractors in Lagos state. Private organizations with a mean score of 4.14 are the major source of construction for contractors. This is followed closely by individuals with a mean rating of 3.83, while government and public agencies with mean score of 2.86 are less frequent source of construction work for the contractors. This appears to go contrary to the generally held knowledge that government and public sector clients constitute the major source of construction contracts

Factors that affect contractors' bid/no bid decision

In Table 5, the factors affecting the bid/no bid decisions are highlighted. The mean scores of the factors that affect bid/no bid are shown in table below. The mean limit is 4.00, any factor equal and above 4.00 is considered as important in making the bid/no bid decisions while factors below the mean limit is regarded as less important.

Table 5: Factors affecting the bid/no bid decisions

Factors affecting the bid/no bid decision	N	Mean	Rank
Financial capability of the client	48	4.56	1
Availability of capital	49	4.53	2
Availability of materials	44	4.39	3
Fulfilling the "to tender" condition	48	4.33	4
Chances of getting the job	46	4.33	4
Project size	49	4.29	6
Need for work	49	4.29	6
Profitability(profit potential)	50	4.28	8
Availability of labour/equipment	48	4.21	9
Relations with and reputation to client	49	4.20	10
Experience in similar project	48	4.19	11
Type of contract	49	4.18	12
Project type	50	4.16	13

Site accessibility	48	4.15	14
Degree of hazard/safety	50	4.14	15
Type of owner/client identity	50	4.10	16
General overhead	46	4.09	17
Method of construction	47	4.09	17
Site condition	48	4.08	19
Anticipated rate of return	49	4.08	19
Risk involved in investment	49	4.06	21
Technological difficulty of project beyond the capability of the firm	48	4.02	22
Owner's requirement	49	4.02	22
Risk of fluctuation in material price	49	4.00	24
Prequalification requirement	50	4.00	24
Imported materials and equipment	48	3.96	26
Completeness of documents	47	3.91	27
Project location	50	3.90	28
Duration of project	49	3.86	29
Project's possible contribution to break into new markets	48	3.83	30
Government legislation	49	3.82	31
Tendering duration	50	3.72	32
Tendering method	50	3.72	32
Requirement of bond capacity	47	3.68	34
Current workload	49	3.67	35
Value of liquidated damages	49	3.61	36
Market direction	46	3.59	37

Availability of other projects	48	3.56	38
Tax liability	49	3.55	39
Bidding document price	49	3.51	40
Site clearance of obstruction	48	3.48	41
Competitiveness of competitors	49	3.45	42
Insurance premium	49	3.43	43
Competitive environment	48	3.42	44
Number of competitors	49	3.39	45
Uncertainty due to weather condition	48	3.38	46
Portion subcontracted to others	48	3.15	47
Identity of competitors	50	3.08	48

Table 5 indicates that financial capability of the client with a mean score of 4.56 is the most important factor considered by contractors when arriving at a decision on whether to bid or not to bid for a construction project. Other important factors include availability of capital, availability of materials, fulfilling the "to tender" condition, chances of getting the job, project size, need for work with mean scores of 4.53, 4.39, 4.33, 4.33, 4.29, 4.16 respectively. The number of competitors, uncertainty due to whether condition, portion subcontracted to others are shown in the table to be less important to the bid/no bid decision; while the identity of competitor with a mean score of 3.08 is said to exert least importance on the bid/no bid decision.

This study identifies financial capability of the client as the most important factor considered for bid/no bid decisions by contractors when bidding for a construction project. Research carried out by El-Mashaleh et al (2014) confirmed in their research to evaluate the key bidding factors considered by top Jordan contractors that financial capability of the client is the most important factor affecting contractors. Studies by Wanous et al (2000) reveals the capability of the client to pay as a very important factor influencing contractors' decision to tender for a project, although it was not considered as an important factor in contractors' bidding decision in the research findings of Shash (1993), Lowe and Parvar (2004) and Fayek et al (1999).

Availability of capital, availability of materials, fulfilling the to tender condition, chances of getting the job, project size and the need for work also emerge in this study as important factors in contractors' bidding decisions. While Wanous et al (2000) identified fulfilling the "to tender" conditions, availability of capital, availability of materials and project size as important factors. Shash (1993) and Hassanein (1996) reveal only project size as important factor in contractors' bidding decisions. Another interesting finding of the study is that need for work and number of competitors tendering, which ranked as the two most important factors in bidding decision in research carried out by Shash (1993) were not considered important in the current study. Nigerian contractors appear to play down on competition since it is considered that other factors related to performance on past projects and most importantly their relationship with project stakeholders may influence their chances of getting the job.

Significant difference of type of contractors on the factors affecting decision to bid

This section set up to test the significant difference of most important factors considered by the two classes of contractors (comparison between indigenous and expatriate contractors) when taking the bid/no bid decisions. The most important factors affecting bid/no bid decisions according to indigenous and expatriate contractors are shown in Table 6. From this table, the mean score shows that the most important factors affecting the bid/no bid decisions of indigenous contractors are availability of capital, financial capability of client, fulfilling the "to tender" conditions, degree of hazard and availability of materials. Similarly, the result as depicted by the mean score in Table 6 indicates that expatriate construction firms consider first, the client's ability to pay, followed by the organisation's chances of getting the job, the project size, type of owner/client identity and the site condition as important factors affecting the choice of projects to bid or not to bid for. More significantly, as shown in Table 6, at p-value < 0.05, the two categories of contractors consider financial capability of the client, number of competitors, current workload and project size as important factors that influence their bidding decision.

The financial capability of the client is considered important by the two classes of contractors because it reviews the ability of the client to pay for the construction work to be executed. This is however in contrast to availability of capital which is considered important only by indigenous contractors. The availability of capital in preparation for construction projects is important to reduce the tendency of late and/or non-payment by client which will hinder the progress of work and ultimately might cause the abandonment of the project.

Table 6: Mann-Whitney statistical test of significant difference of type of contractors on important bid/no bid factors

Bid/no bid factors	Indigenous		Expatriate		Mann Whitney U	Z test	P value	Sig.
	M	R	M	R				
Need for work	4.32	**5**	4.40	**6**	1.00	**-0.787**	**0.86**	**NS**
Current work load	3.70	**39**	3.60	**23**	2.00	**-1.067**	**0.034**	**S**
Portion Sub-Contracted to others	3.35	**47**	3.60	**23**	4.00	**-2.140**	**0.09**	**NS**
General overhead	4.12	**19**	3.80	**17**	2.00	**-1.589**	**0.16**	**NS**
Relations with and reputation to client	4.26	**10**	4.40	**6**	1.00	**-1.02**	**0.908**	**NS**
Profitability (profit potential)	4.25	**11**	4.40	**6**	1.00	**-2.22**	**0.34**	**NS**
Experience in similar project	4.00	**26**	4.40	**6**	2.00	**-1.16**	**0.23**	**NS**
Fulfilling the "to tender" condition	4.41	**3**	3.60	**23**	4.00	**-0.356**	**0.913**	**NS**
Method of construction	4.00	**26**	4.20	**11**	1.00	**-1.262**	**0.54**	**NS**
Project size	4.07	**20**	4.80	**2**	1.00	**-1.789**	**0.04**	**S**
Project type	4.07	**20**	3.60	**23**	2.00	**-0.617**	**0.111**	**NS**
Project location	3.89	**29**	4.00	**16**	4.00	**-1.444**	**0.384**	**NS**
Duration of project	4.0	**25**	3.6	**23**	2.00	**-2.10**	**0.378**	**NS**

	4		0					
Type of owner/client identity	4.25	**11**	4.80	**2**	3.00	**-1.89**	**0.555**	**NS**
Degree of hazard (safety)	4.36	**4**	4.20	**11**	1.00	**-0.453**	**0.67**	**NS**
Site condition	4.07	**20**	4.60	**5**	2.00	**-2.03**	**0.134**	**NS**
Project possible contribution to break into new markets	3.78	**37**	3.00	**37**	1.00	**-0.233**	**0.46**	**NS**
Financial capability of the client	4.52	**2**	5.00	**1**	2.00	**-0.444**	**0.02**	**S**
Tendering method	3.75	**38**	3.80	**17**	1.00	**-0.367**	**0.96**	**NS**
Tendering duration	3.89	**29**	3.60	**23**	1.00	**-0.978**	**0.36**	**NS**
Prequalification requirement	4.29	**8**	3.60	**23**	3.00	**-0.890**	**0.10**	**NS**
Number of competitors	3.59	**42**	3.00	**37**	1.00	**-0.456**	**0.03**	**S**
Identity of competitors	3.25	**48**	2.40	**48**	3.00	**-1.477**	**0.78**	**NS**
Availability of other project	3.63	**40**	3.00	**37**	2.00	**-0.904**	**0.571**	**NS**
Requirement of bond capacity	3.81	**34**	2.50	**47**	3.00	**-0.889**	**0.108**	**NS**
Bidding document price	3.89	**29**	2.60	**44**	2.00	**-0.178**	**0.345**	**NS**
Competitiveness of competitors	3.61	**41**	3.00	**37**	1.00	**-0.08**	**0.555**	**NS**

Competitive environment	3.56	**44**	3.00	**37**	2.00	**-0.216**	**0.98**	**NS**
Chances of getting the job	4.31	**7**	4.80	**2**	2.00	**-0.777**	**0.340**	**NS**
Availability of capital	4.75	**1**	4.20	**11**	3.00	**-1.346**	**0.321**	**NS**
Risk involved in investment	4.18	**14**	4.20	**11**	1.00	**-2.111**	**0.708**	**NS**
Anticipated rate of return	4.18	**14**	3.40	**33**	3.00	**-1.569**	**0.93**	**NS**
Government legislation	3.79	**35**	3.60	**23**	1.00	**-2.111**	**0.221**	**NS**
Tax liability	3.79	**35**	3.20	**35**	2.00	**-0.222**	**0.55**	**NS**
Availability of labour/equipment	4.14	**14**	3.80	**17**	1.00	**-0.494**	**0.89**	**NS**
Market direction	3.88	**32**	3.00	**37**	1.00	**-0.555**	**0.19**	**NS**
							0.861	**NS**
Availability of materials	4.32	**5**	4.20	**11**	1.00	**-0.324**		
Type of contract	4.29	**8**	3.80	**17**	2.00	**-0.197**	**0.57**	**NS**
Completeness of documents	4.07	**20**	3.40	**33**	2.00	**-1.89**	**0.69**	**NS**
Owner's requirement	4.14	**14**	3.80	**17**	3.00	**-2.198**	**0.371**	**NS**
Value of liquidated damages	3.82	**33**	3.80	**17**	1.00	**-1.111**	**0.789**	**NS**
Risk of fluctuation in material price	3.93	**28**	4.40	**6**	2.00	**-0.346**	**0.315**	**NS**
Insurance premium	3.5	**43**	3.6	**23**	1.00	**-**	**0.088**	**NS**

	7		0			**0.676**		
Site accessibility	4.21	**13**	3.60	**23**	2.00	**-0.743**	**0.89**	**NS**
Uncertainty due to weather condition	3.39	**46**	2.60	**44**	2.00	**-1.86**	**0.02**	**NS**
Imported materials and equipment	4.07	**20**	3.20	**35**	2.00	**-0.677**	**0.443**	**NS**
Technological difficulty of project being beyond the capability of the firm	4.18	**14**	3.00	**37**	3.00	**-0.967**	**0.777**	**NS**
Site clearance of obstruction	3.46	**45**	2.60	**44**	2.00	**-1.26**	**0.91**	**NS**

M=Mean; R=Rank; Sig. =Significant; NS=Not Significant

Moreover, Table 6 shows the mean score of the factors which are least considered by indigenous and expatriate contractors. For indigenous contractors, uncertainty due to weather conditions, portion sub-contracted to others and identity of competitors make up the list. However, expatriate contractors agree with indigenous contractors that identity of competitors is one of the least important factors considered. Uncertainty due to weather, requirement of bond capacity and bidding document price are the other factors least considered by expatriate contractors during tendering process. More significantly as shown in Table 6, at p value < 0.05, no factor was considered least among of the highlighted factors by indigenous and expatriate contractors

Agreement of contractors on the important factors affecting bidding decisions

This section examines the level of agreement of indigenous and expatriate contractors on the factors affecting bid/no bid decisions for construction projects. Kendall co-efficient of concordance was used to test the level of agreement between the two contractors. The result is presented in Table 7 as depicted below.

Table 7: Test of agreement on ranking of important bid/no bid factors

Comparison of contractors	Rs	t-cal	t-tab	Agreement	P-value

Indigenous and expatriate	0.61	5.22	1.679	No	P < 0.05

Table 7 shows the result of the combination of spearman's rank correlation coefficient, t-values, the decision rule of agreement between contractors on the factors affecting the bid/no bid decisions within the industry. From Table 7, it can be observed that the t-cal 5.22 is greater than the t-tab of 1.679 with 46 degrees of freedom (v =46) at p < 0.05 significance level, it can then be concluded that there is no agreement between indigenous and expatriate contractors on the factors that affect the bid/no bid decision.

This study advocates that no agreement exist between expatriate and indigenous contractors on the important factors that determine bid/no bid decision. The study is similar to the one carried out by Hassanein (1996), which added his voice on the non agreement of factors affecting indigenous contractors and foreign contractors in Egypt.

Conclusion and recommendation

The findings of this study serve as a basis for making the following conclusions and recommendations. The purpose of this paper is to evaluate important factors local and expatriate contracting organizations consider in bidding decisions in the Nigerian construction industry. This paper highlighted the major factors considered by contractors and compared them with related researches in other parts of the world.

Furthermore, this paper tested the significant differences of mean of factors affecting indigenous and expatriate contractors in bidding decisions for construction projects. Mann Whitney U statistical test revealed that three bid/no factors are significant to both indigenous and expatriate contractors in bidding decisions. These factors include; financial capability of client, project size and number of competitors. This is in agreement with Hatush and Skitmore (1997) which considered the number of competitors as a very important factor in bidding decisions of construction companies.

Finally, Kendall concordance of co-efficient was used test the level of agreement among indigenous and expatriate contractors regarding the 48 bid/no bid decision

factors for construction projects. Kendall's coefficient of concordance provided sufficient evidence to conclude that there is no significant degree of agreement among local and foreign contractors concerning bid/no decisions for construction projects in Nigeria.

When considering tenders for construction projects, building contractors should give primary attention to the client capability to pay for the work, project size and the number of competitors if known amongst other factors peculiar to the project. Contractors should also increase their reputation in the construction industry by acquiring technical competencies and capabilities as these qualities have become important considerations in assessing contractors' competiveness, and key indicators of successful tendering in construction projects. Finally, contractors should not rely solely on their relationship with the project stakeholders in order to get construction contracts as this may not be sufficient to guarantee their chance of winning tenders, but should rather build reputation, performance, technical competence and managerial capabilities.

Suggested area of future studies could include but not limited to examining the association between bid/no bid factors and bidding decisions in real life construction projects within the six geographical zones of the country.

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