

1 **Objectives of Competitive Bidding in the UAE**
2 **Construction Industry**

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6 **Abstract.** Competitive bidding is one of the main methods for procuring
7 construction work. Contractors compete based on bid prices where the lowest
8 responsible bidder is selected. Competitive bidding is both costly and time-
9 consuming without a guarantee of contract award. Therefore, contractors are
10 selective on which projects to bid on. Contractors have several objectives from
11 participating in the bidding process. The aim of this research is to identify and
12 assess the key objectives of bidding in the UAE and internationally. The main
13 objectives are identified through literature review. A questionnaire was used to
14 get the perceptions of construction professionals in the UAE construction
15 industry. Sixty five questionnaires were collected. The most common objectives
16 for bidding in general are building a reputation with the client, followed by the
17 company need of work and survival. The most common objective for bidding in
18 the international market is to target an international market when its economy is
19 expected to boom, followed by bidding internationally to gain advantage of the
20 opportunity offered by global market. This paper sheds the light on some of the
21 key practices of contractors in the UAE construction industry and may be
22 beneficial to those international companies who wish to compete in the local
23 market.

24 **Keywords:** Bidding, Construction Industry, UAE, International Construction.

25 **1 Introduction**

26 Contractors can potentially have multiple objectives of competitive bidding, ranging
27 from normal economic profit goal to the need for survival [1]. Ravashadnia et al. [2]
28 highlighted that for some construction companies, bidding is a strategic decision to
29 ensure survival. After all, the only promising approach for a contractor firm to survive
30 and obtain its aims is winning bids and achieving profit [3]. Friedman [4] addressed the
31 existence of multiple bidding criteria by listing objectives of profit maximization,
32 maximizing return on investment, minimization of loss expectation, minimizing
33 competitor profits, and maximizing operational continuity. Another objective for
34 bidding is to enter a new market and win project for its strategic value [5]. These
35 objectives are influenced by factors internal to the company, such as the company's
36 need for work and its availability of resources, and external factors, such as the degree

37 of the competition, the prevailing economic conditions, and the availability of future
38 work [6].

39 Contractors compete internationally for several reasons counting to enhance long-
40 term profitability, to balance company growth, and to alleviate the cyclical impact of
41 construction demands in established construction markets [7]. Also, contractors have a
42 better chance to balance their growth by expanding to new overseas construction
43 markets [8]. For international projects the objective of bidding might be to win a project
44 because of its characteristics, expand geographically by entering a new region and
45 capitalize on the profit [6].

46 The construction industry witnessed an increase in the size and complexity of
47 construction projects during the past years [9]. Competitive bidding is one of the main
48 methods for procuring construction work. The most commonly used system is the low
49 bid system where clients choose the successful bidder based on the lowest price [10].
50 Contractors compete based on bid prices where the lowest responsible bidder is
51 selected. Competitive bidding is both costly and time-consuming without a guarantee
52 of contract award. Therefore, contractors are selective on which projects to bid on.
53 Contractors have several objectives from participating in the bidding process. The aim
54 of this research is to identify and assess the key objectives of bidding in the UAE and
55 internationally.

56 **2 Methodology**

57 The first step was to identify the main objectives of competitive bidding based on the
58 review of related literature. A questionnaire was used to get the perceptions of
59 construction professionals in the UAE construction industry. Sixty five questionnaires
60 were collected. The survey targeted bid mangers, estimators, planners, general
61 managers and business development mangers. Therefore, 92% of the respondents had
62 more than 10 years of experience. 97% of the respondents work in projects greater than
63 AED 100 million in value (US\$ = 3.67 AED - 2019 Currency). The respondents were
64 asked to indicate level of agreement with the identified objectives using a 5-point Likert
65 scale. The scale ranged from 1 (strongly disagree) to 5 (strongly agree). The weighted
66 average of the responses was then calculated for each objective.

67 **3 Results**

68 Based on the review of related literature, the objectives for bidding include: profit
69 maximization, need for work and survival, keep presence in the market, resource
70 utilization, entering new market, reputation, and experience. In the construction
71 industry, the bidder's goal is not purely to be the lowest bidder, but also to acquire the
72 contract at a profit [11]. Bidding in the construction industry is a strategic decision that
73 assists a contractor to survive [2]. The only possible way for construction firms to
74 achieve their goals is through winning bids and making profit [3]. The need of work is
75 the most frequent factor making a construction company believe that they have to win
76 this work [5]. A construction firm might have a desire to be seen as competitive in the

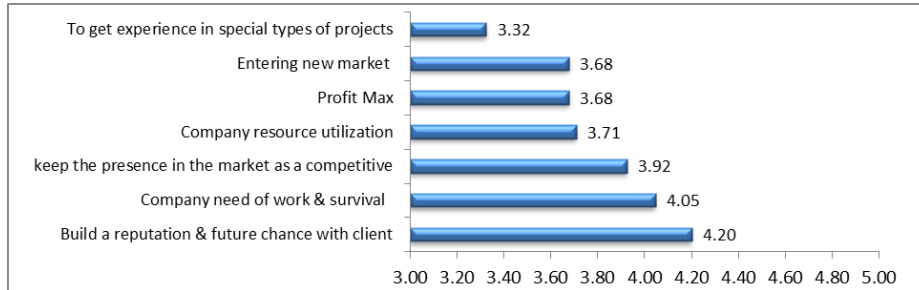
77 construction market and build a good reputation with the owner or consultants which
 78 will establish a good relationship with them [5]. For some construction firms, it may be
 79 very important to win the project if, for instance, it needs to generate revenue and to
 80 utilize their idle resources [5]. As keeping the resources idle without working is a costly
 81 process and terminating them might not be a wise decision. Some researchers have
 82 mentions that there are many objectives for bidding for a project, such as resource
 83 utilization and maintenance of cash flows [2].

84 Due to the Globalization pressures contractors headed to enter new
 85 international construction markets [12]. Contractors have a better chance to balance
 86 their growth by expanding to new overseas construction markets [8; 13]. For
 87 international projects, the objective of bidding might be to win a project because of its
 88 characteristics, expand geographically by entering a new region and capitalize on the
 89 profit [6]. Another objective is to balance risks. Construction companies respond to
 90 risks by adopting various risk management practices [13]. One of which is to expand
 91 internationally. Construction projects are naturally risky and there is a need to address
 92 risks properly [14]. Contractors who have bidding experience are more competitive in
 93 bidding than inexperienced contractors [15]. Contractor's experience in special type of
 94 projects may affect client selection of the bidder, where measuring the contractor past
 95 experience is one of the vital measurements for bid evaluation [16]. Table 1 shows the
 96 various objectives of bidding and their literature sources.

97 **Table 1.** Objectives of Bidding (Literature Sources)

Objectives of Bidding	Sources
Profit maximization	[4]; [17]; [5]; [18]; [19]; [6]; [7]; [20]; [21]; [1]
Company need of work and survival	[1]; [5]; [19]; [18]; [20]; [6];
Keep the presence in the market as a competitive	[5]; [12]; [8]
Company resource utilization	[19]; [22]; [21]; [5]; [2]; [23]
Entering new markets	[2]; [5]; [24]; [23]; [19]; [6]; [12]; [8]
Build a name and future opportunity with the client	[12]; [5]; [19]
To get experience in special types of project	[12]; [19]; [16]; [15]

98 Respondents were asked to evaluate the different objectives for bidding using a scale
 99 from 1 (strongly disagree) to 5 (strongly agree). Figure 1 shows the objectives of
 100 bidding ranked according to their weighted averages.



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Fig. 1. Objectives of Bidding (Ranked)

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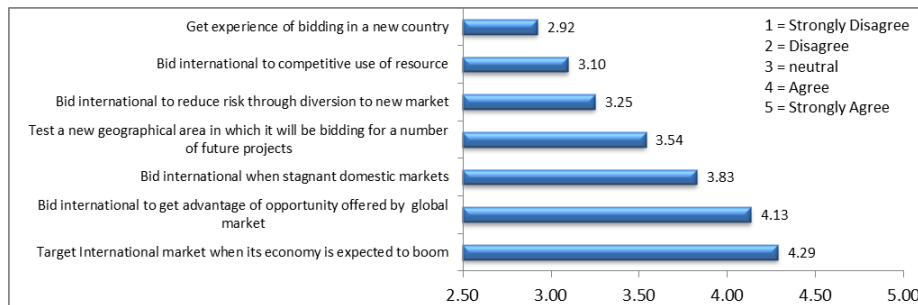
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There are several reasons for bidding internationally. One of the important factors that make a local contractor divert to international market is the company need of spreading and reducing risk [23]. In the current economic situation, contractors need to focus on the global markets and opportunities offered in their growing markets in order to survive and accomplish advance growth [25]. Some contractors adopt a strategy of operating in more than two countries. This is to ensure that a recession arising in one country can be balanced by a boom or stability in the other country [23]. Some international markets might have a promising future, where the construction boom occurs in the form of a very high demand on construction projects. This also allows contractors to include a high profit margin to their project due to the higher levels of confidence in winning the project [26]. One of the main objectives of bidding is to gain and enhance experience [19]. Table 2 shows the various objectives of bidding internationally and their literature sources. Figure 2 shows the objectives of bidding internationally ranked according to their weighted averages.

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Table 2. Objectives of Bidding Internationally (Literature Sources)

Objectives of Bidding	Sources
Bid international when stagnant domestic markets	[23]; [25]
Bid international to reduce risk through diversion to new market	[23]; [26]
Bid international to competitive use of resource	[23]; [5]
Bid international to get advantage of opportunity offered by the global market	[23]; [25]; [5]; [27]
Target international market when its economy is expected to boom, thus higher profit	[7]; [6]; [5]; [19]; [24]; [23]
Break into a new market	[7]; [5]; [19]
Test a new geographical area in which it will be bidding for several future projects	[6]; [5]; [19]; [23]
Get experience of bidding in a new country	[6]; [5]; [19]



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Fig. 2. Objectives of Bidding Internationally (Ranked)

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4 Discussion

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As seen in Figure 1, Building reputation and future chance with clients have the highest weighted average and ranked as the most important objective for bidding. This result reflected the concern of a majority of UAE contractors to be well-known in the market in order to get the trust of the clients and consequently increase their chance of obtaining projects. The second most important objective is the company's need of work and survival. The current stagnant construction market in the UAE made contractors focus on surviving and keeping their presence in the market. Those objectives were ranked as the second and third important objectives. The fourth ranked objective is company resource utilization, where many construction firms in the UAE try to avoid termination of their resources in order to avoid losing qualified employees. Thus, companies try to win projects to utilize their resources and not to be idle. Profit maximization is ranked fifth. This result contradicts with the results obtained in the top objective of bidding in the Canadian market [5], where profit maximization was ranked as the second most vital factor. This difference is explained by the fact that the current construction market makes contractor think more about building a good reputation and surviving even with the minimum amount of profit. Entering new markets and enhancing their experience in special types of projects was ranked last. However, these are still relatively important objectives as they have a weighted average above 3 (i.e. the average importance). Entering new markets and getting experience in special types of project allows the contractor to have a wider knowledge and experience. In fact, some contractors bid with high mark-up value just to be present in the list of bidders and be qualified in the international country.

As seen in Figure 2, the main aim for construction companies to bid for international projects is to target markets expected to boom. Thus, several contractors in the UAE are targeting Saudi Arabia, Qatar and Oman markets due to the construction movement in those regions. The second factor is gaining some of the perks that are contingent upon international opportunities. For example, many contractors nowadays are trying to get opportunities in Qatar as the country is hosting the FIFA world cup 2022, signalling a potential high boom in construction. The third ranked objective is to bid internationally when the local UAE market is stagnant. The fourth ranked objective

151 is to get to know a new construction market in which the UAE contractor will bid for
 152 future projects. The fifth ranked objective is to reduce the risk the company may face
 153 because of the construction situation in the UAE. The lowest ranked objectives are to
 154 effectively use of company resources and to gain experience of bidding in a new
 155 country.

156 **5 Conclusions**

157 Contractors have several objectives in competitive bidding. It is important to
 158 understand the key objectives of competitive bidding as this this helps understand the
 159 bidding environment in the UAE. The most common objectives for bidding are building
 160 a reputation with the client, followed by the company need of work and survival. The
 161 most common objective for bidding in the international market is to target an
 162 international market when its economy is expected to boom, followed by bidding
 163 internationally to gain advantage of the opportunity offered by global market. This
 164 paper sheds the light on some of the key practices of contractors in the UAE
 165 construction industry and may be beneficial to those international companies who wish
 166 to compete in the local market.

167 **References**

- 168 1. Paranka, S.: A competitive Bidding Strategy: A procedure for Pre-Bid Analysis. *Business*
 169 *Horizons*, 14(3), 39-43 (1972).
- 170 2. Ravashadnia, M., Rajaie, H. and Abbasian, H.: A Comprehensive Bid/No-Bid decision
 171 Making Framework for Construction Companies. *Trans. Civil Environmental Eng.* 35(C1),
 172 95–103 (2011).
- 173 3. Egemem, M. and Mohamed, A.: A Framework for Contractors to Reach Strategically correct
 174 bid/no bid and Mark-up Size Decisions. *Building and Environment*. 42, 1373– 1385 (2007).
- 175 4. Friedman, L.: A competitive bidding strategy. *Operations Research*. 4(1), 104-112 (1956).
- 176 5. Fayek, A., Ghoshal, I. and Abourizk, S.: A Survey of the Bidding practices of Canadian
 177 Civil Engineering Construction Contractors. *Canadian journal of Civil Engineering*. 26(1),
 178 13–25 (1999).
- 179 6. Fayek, A.: Competitive Bidding Strategy Model and Software System for Bid Preparation.
 180 *Journal of Construction Engineering and Management*. 124(1), 1-10 (1998).
- 181 7. Oo, B., Drew, D. and Po-Lo, H.: A Comparison of Contractors' Decision to bid Behaviour
 182 According to Different Market Environments. *Int. J. Project Management*. 26, 439–447
 183 (2008).
- 184 8. Han, S., Kim, D. and Jang, H.: Strategies for contractors to Sustain Growth in The Global
 185 Construction Market. *Habitat Int.* 34, 1–10 (2010).
- 186 9. El-Sayegh, S. and Al-Haj, R.: A new framework for time-cost trade-off considering float
 187 loss impact. *Journal of Financial Management of Property and Construction*. 22(1), 20-36
 188 (2017).
- 189 10. El-Sayegh, S. and Rabie, M.: A Modified Cost plus Time Bidding Model Incorporating Float
 190 Loss Impact. *International Journal of Construction Management*. 16(4), 267-280 (2016).
- 191 11. Cook, P.: *Bidding for the General Contracting*. Kingston: R.S. Means Company, Inc. (1985).

- 192 12. Han, S., Diekmann, J. and Ock, J.: Contractor's Risk Attitudes in the Selection of
 193 International Construction Projects. *Journal of Construction Engineering and Management*.
 194 131(3), 283-292 (2005).
- 195 13. El-Sayegh, S.: Project Risk Management Practices in the UAE Construction Industry.
 196 *International Journal of Project Organization and Management*. 6(1/2), 121-137 (2014).
- 197 14. El-Sayegh, S.: Risk Assessment and Allocation in the UAE Construction Industry.
 198 *International Journal of Project Management*. 26(4), 431-438 (2008).
- 199 15. Fu, W., Drew, D. and Lo, H.: The Effect of Experience on Contractors' Competitiveness in
 200 recurrent bidding. *Construction Management and Economics*. 20(8), 655-666 (2002).
- 201 16. Watt, D., Kayis, B. and Willey, K.: Identifying key Factors in The Evaluation of Tenders
 202 for Projects and Services. *Int. J. Project Management*. 27, 250-260 (2009).
- 203 17. Tan, Y., Shen, L. and Langston, C.: Contractors Competition Strategies in Bidding: Hong
 204 Kong Study. *Journal of Construction Engineering and Management*. 136(10), 1069-1077,
 205 (2010).
- 206 18. Shash, A.: Factors Considered in Tendering Decisions by top UK Contractors. *Construction
 207 Management and Economics*. 11, 111-118 (1993).
- 208 19. Fayek, A., Young, D. and Duffield, C.: A Study of Tendering Practices in The Australian
 209 Construction Industry. *Eng. Management Journal*. 10(4), 29-34 (1998).
- 210 20. Dulaimi, M. and Shan, H.: The Factors Influencing bid Mark-up Decisions of Large-and
 211 medium- Size Contractors in Singapore. *Construction Management and Economic*. 20, 601-
 212 610 (2002).
- 213 21. Seydel, S. and Olson, D.: Multi-criteria Support for Construction Bidding. *Mathematical
 214 Computer Modeling*. 34, 677-702 (2001).
- 215 22. Banki, M., Esmaceli, B. and Ravanshadnia, M.: The Assessment of Bidding strategy of
 216 Iranian Construction Firm. *Int. J. Management Science Eng. Management*. 4(2), 153-160
 217 (2008).
- 218 23. Gunhan, S. and Arditi, D.: Factors Affecting International Construction. *J. Construction
 219 Eng. Management*. 131(3), 273-282 (2005).
- 220 24. Oo, B., Drew, D. and Po-Lo, H.: Modelling Contractors' Mark-up Behavior in Different
 221 Construction Markets. *Eng., Construction Architectural Management*. 14(5), 447-462
 222 (2007).
- 223 25. Tiong, R. and Yeo, K.: Project Financing as a Competitive Strategy in Winning Overseas
 224 Jobs. *Int. J. Project Management*. 11(2), 79-86 (1993).
- 225 26. Baldwin, A., McCaffer, R. and Oteifa, S.: *International Bid Preparation*. Geneva:
 226 International Labour Organization. (1995).
- 227 27. Ling, Y. and Liu, M.: Factors considered by Successful and Profitable Contractors in Mark-
 228 upsize Decision in Singapore. *Building and Enviormnt*.40(11), 1557-1565 (2005).