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BALANCED APPROACH FOR TENDERING PRACTICE AT THE PRE-CONTRACT STAGE: THE UK PRACTITIONER'S PERSPECTIVE

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Abstract. Tender documents often lack clarity and are incomplete, making it difficult for contractors to appropriately price projects. A general view is that the quality of tender documents has declined, which has affected the bidding strategies of contractors. However, the academic literature has focused mainly upon the views of contractors. To obtain a more balanced view of tendering practices, in-depth interviews were conducted with 10 practitioners (client, consultant, and contractor) who are involved in a common project at the same time in the UK construction industry. The contractor was satisfied that the quality of tender documents had been consistent. By contrast, both the client and the consultant agreed that the quality of tender documents is an ongoing issue. During the study it was revealed that tendering practice is influenced by the relationship between stakeholders or the unbalanced access to information rather than the accuracy and analysis of tender documentations. Tendering practices and proposed efficient ways of improving the bidding environment were examined. Using the awareness of other project stakeholder's perspectives, this study can help the contractor to establish suitable tendering practices, and to mitigate tender risk at the bidding stage, which could effectively be implemented in the UK construction industry.

Keywords: risk management, tender document, tendering practice, bidding.

Introduction

The tendering stage for proposal construction projects is an important phase for all project stakeholders., The client will assess many criteria throughout the tendering process in order to select the best tender offer. Clients consider various factors in the selection process other than lowest price, such as the contractor's ability to hand over a project on time and to manage the risk (Puri & Tiwari, 2014; Cheaitou et al., 2019; Reza Alavipour & Arditi, 2018). Contractors win projects on many criteria, other than just offering the lowest price. Having a well-developed design with reliable tender information is important for all the stakeholders involved in the bid process. However, the initial information provided by the client may not always be sufficiently well developed for the contractor to confidently price a project. Every project involves uncertainty and risk; the tender documents must be transparent and be explicit about the project. The poor quality of tender documents has been identified as one of the critical factors affecting the bidding strategy of contractors during the tender stage, from bid/no-bid decisions through to markup apportionment (Laryea & Lubbock, 2013; Liu et al., 2016; Hastie et al., 2017; Urquhart et al., 2017). Poor quality tender documents can lead to additional administrative processes, such as tender queries, qualified tender offers, and unreliable pricing. Poor tender documents are likely to hinder the reliability of the overall bidding process (Arabiat et al., 2007; Laryea & Hughes, 2011).

Research on the quality of tender documents is based on studies that have only considered the contractors' perspective. It would be informative to investigate how document producers, such as clients, and design team consultants perceive this issue of the quality of tender informa-

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tion. Research on the perspectives of professional quantity surveyors on factors that affect construction costs at the tender stage showed that the overall project cost will be affected by the design information produced by consultants (Adafin et al., 2016). A balanced view is needed by gathering opinions from both the client and design team stakeholders, and the production stakeholders comprising the contractor and supply chain (Tarhini et al., 2015; Saaidin et al., 2017).

Contractors argue that the poor quality of tender documents hinders them from accurately pricing a project. Tenders must state the basis of their evaluation on price, and technical issues with the weighting being used. Lack of detailed information leads to contractors adding risk contingencies into the pricing to cover for the uncertainty. A balanced view that will help all participants in the tendering process is unlikely to be obtained unless all stakeholders are included (Heravi et al., 2015). The purpose of this study is to investigate views on current tendering practice, to demonstrate the lack of a balanced view, and propose a more efficient bidding environment in the construction industry.

1. Literature review

1.1. Tendering practice

The construction sector is price-oriented (Chan et al., 2011; Zhang et al., 2018). Clients assess a wide range of criteria to select the optimal offer. Watt et al. (2010) noted that the conventional lowest-price-wins practice has been weakened by the adoption of multiple selection criteria against which clients evaluate broader aspects of the tender, such as the management skills of the contractor, safety record, environmental performance; this is sometimes referred to as the most economically advantageous tender (MEAT). However, many clients are still focused on lowest price, in a survey more than half of clients consider price to be more important than other tender evaluation criteria. According to the Cheaitou et al. (2019), even in the public sector where there are strict rules on the evaluation of tenders more than half of the projects are awarded using the principle of accepting the lowest price. The research found that assessing tenders based on the lowest price is one of the foremost causes of project delivery problems. EU procurement rules stipulate that just focusing on cost considerations may lead to quality, performance, and social issues. The selection of the most appropriate contractor should be based upon a set of criteria including, but not limited to the cost reflecting different project stakeholder's perspectives (Yuan et al., 2010; Simon et al., 2020).

Tan et al. (2010) studied the price-oriented nature of bidding by surveying 42 Hong Kong contractors. The study revealed that, although high-tech and management innovation are recognized as important criteria in the tendering strategies of contractors, the low-price principle is still prevalent in Hong Kong; a "low bid" is ranked as the primary consideration by contractors. With the complex procurement and technology issues, the trend in contractor selection has been shifted to where the influence of the low-price principle is diminishing in favour of a balanced approach. O. Alptekin and N. Alptekin's (2017) analysis, showed the lowest price as the 5th criterion among 12 criteria in the middle east and Turkey projects. Their research showed multiple decision criteria should be utilized to evaluate the contractor's attributes; the weighting of the attributes reflects the client's priorities. These criteria can be summarized as tender price, time performance, financial strength, technical competence, environmental performance, quality assurance and control, and health and safety performance, thus reflecting the project stakeholder's perspectives (Bochenek, 2014; Krishna Rao et al., 2018; Xia et al., 2018).

The competitive nature of the market means that any risk contingency allowances incorporated into the unit pricing must be balanced by how competitors may view the same uncertainty. Some contractors may price low to win the tender, in the hope that costs can be recouped through contractual claims (Alavipour & Arditi, 2018). Ahmed et al. (2016) argued that poor estimation of the project, with the cost at the tender stage results in significant consequences for the contractor, with the likelihood that the contractor will face cost overruns throughout the project.

A factor that the literature does not fully embrace is the importance of supply chain pricing. The contractor uses prices supplied by specialty contractors, manufacturers, and suppliers to build the tender price. Supply chains can be long and interdependent. If the contractor relies upon unrealistic pricing from enterprises in the supply chain, that can cause financial difficulties. The supply chain will use the tender information to base their prices, poor or inadequate information can lead to higher prices.

1.2. Risk in tendering process

Bagies and Fortune (2006) undertook research for developing a bid/no-bid decision model, they felt that because tendering is an expensive and highly complex process, the bid/no-bid decision-making stage is very important. Based on experience from previous projects, contractors are aware that inappropriate bidding practice may result in cash flow problems and ultimately financial failure of the project (Urquhart & Whyte, 2018). Laryea and Hughes (2008) revealed that various risk factors are considered: payment conditions, complexity of design and site production, ground conditions, weather, and project location. All contractors who participated in this study agreed that clients attempt to transfer the majority of the risk to the contractors. They also stated that the priced risk is likely to affect the likelihood of winning a bid, even if the director at the firm adjusts the risk margins at the final stage of the bidding process (Asgari et al., 2016; Alavipour & Arditi, 2018). In addition, the risk is highly likely to be transferred onward in the supply chain to other entities

such as subcontractors and suppliers. In a follow-up study, Laryea and Hughes (2011) investigated how contractors manage the price risks from the bidding stage. They found that the risk margin is often reduced by managerial staff at the construction firm at the pre-submission stage in the bidding process to increase the likelihood of winning the tender (Mbachu & Cross, 2015; Ahmed et al., 2016; Love et al., 2019), suggest that contractors are often reluctant to increase the risk contingency margin because it influences the likelihood of winning a tender. The ability of the contractors to manage risk from the early tender stage, such as through an exhaustive detection of tender documents, is crucial for contractors to secure projects (Yuni et al., 2017).

1.3. Quality of tender documents

Contractors rely on their analysis, intuition, and experience when they determine the final tender offer (Low et al., 2015). For contractors to produce a realistic and competitive offer, the quality of information provided by the tender documents is considered critical. Jarkas (2013) studied the factors that influence the profit margin decisions of contractors by investigating 40 identified factors which can influence profit mark-up size among Kuwait general contractors bidding on construction projects. It was found that the completeness of tender documents is a critical factor that affects the markup decision from the perspective of the local construction environment, which is driven by the lowest cost mentality. A similar study conducted by Laryea and Hughes (2011) revealed that tender documents lacked clarity. They insisted that the contractor tends to request an extension to the tender period because of incomplete tender documents and makes changes in the later tender stage, which are highly likely to impact the overall project sequence and its efficiency. Contractors stated that almost 20% of activities undertaken during the tender period were related to analyzing tender documents. They had to analyze more than 1,000 pages of tender documents within a short period of time. As a result, there were unexpected changes to those documents in the later stages. The incompleteness of information in the documents was the main factor leading to a longer tender process than originally planned.

Elhag et al. (2005) investigated the factors that affect construction costs at the pre-contract stage by interviewing UK quantity surveyors. To overcome these problems, the selection of the most appropriate contractor should be carried out and based on a set of criteria including, but not limited to, cost. They found that the completeness and quality of the project information is ranked as the main factor influencing construction costs. This study showed that quantity surveyors share the same views as contractors with regard to the quality of tender documents. However, it lacks information on the extent to which the poor quality of tender documents affects estimating of construction costs, which are likely to differ from the actual construction cost prepared by estimators and commercial managers in construction firms. It would be meaningful to gather information from different stakeholders in construction projects, such as clients, consultants, and contractors (Love et al., 2017; Hassim et al., 2018).

A study on the quality of tender documents in construction projects conducted by Laryea (2011), involved shadowing a project team at the bid stage for more than six weeks. The contractors in this study noted that there was considerable information to review and price in a short timeframe. They argued that the inadequate quality of tender documents made it even more challenging for them to price projects appropriately. In the same vein, various studies (Laryea, 2011; Urquhart et al., 2017; Cheaitou et al., 2019; Bohari et al., 2021) have stated that major issues associated with tender documents are normally inappropriate or inadequate information. Zhou et al. (2021) revealed different causes leading poor quality of tender documents including missing information, insufficient detail, impracticable design details, large blocks of provisional information that lacked detail. A significant number of tender queries (requests for information) were raised owing to the lack of clarity and missing information in the tender documents. Although previous studies have addressed the poor quality of tender documents, a balanced view of the opinions of the main project team, that is, the client, the consultant, and the contractor, is lacking.

A caveat should be added because the design team consultants are paid a fee for their professional services. The development of the design and engineering is an iterative process. If the fee for professional services is based upon a fixed price which is very low, this must ultimately impact the quality of the information that can be produced at the tender stage. It is a false economy from the client's perspective to reduce professional fees in the belief that it is a cost saving for a project. Poor quality tender information will lead to an increase in the tender price because of the need to add a contingency allowance for the unknowns.

2. Data collection and data analysis approach

This study analyzed the integrated views among the client, consultant, and contractor on the quality of tender documents. Considering the purpose of this study, this study focused on specific project stakeholders who can influence on the biding practice in the early project stage. To achieve a purposeful research result, a qualitative research method was considered, which aims to obtain through a sophisticated understanding of all dimensions of the subject matter (Chairul et al., 2019). Because the purpose of this study is to identify and analyze the stakeholder's perspectives of the bidding practice, a detailed and in-depth interview is considered more important rather than large numbers of general samples. According to Queirós et al. (2017) and Asenahabi et al. (2019), the selection of research method depends on the research scope and objective. A combina-

tion approach of literature reviews and semi-structured interviews can provide different benefits including flexibility, the possibility to specify, and motivation to participate in more depth. In qualitative research, an interview is a one of the most suitable options by offering the practical opportunity to obtain descriptive research data from the professional's knowledge, expertise, and experiences in specific areas. A mixture of open-ended and closed questions, which is one of the interview structures can not only probe into the topic, but can also encourage the interviewees to delineate and elucidate regarding the topic, which can result in an unexpected answer for the researcher (Oltmann, 2016).

This study was carried out by interviews with the different perspectives on the tendering practice and the quality of the tendering document. In order to hear the in-depth insight and practical experiences from the interviewees, a themed interview approach was used, by which there was no need to set up a strict frame for interviews to continue the flexible conversation and analyze with inductive content analysis. For interview, three parties and three or four professionals from each category (client, consultant, and contractor) would have been selected as a sample. Only the firms who carried out a common project were considered among CIOB (The Chartered Institute of Building) membership companies. A total of 27 companies who participated for 9 common projects with each other were offered an interview; three companies who were involved in one common project voluntarily participated in the interview. Thus, they would be likely to give a more balanced view of the bidding practice and quality of tender documents. In addition, it is advantageous to hear their opposite perspectives on a common project. From the three companies, the 10 practitioners included: one general manager and two principal managers at a client organization (hereafter referred to as the client); two senior project managers and one commercial manager at a contractor firm (hereafter referred to as the contractor); and four quantity surveyors at a consultancy firm (hereafter referred to as the consultant), as shown in Table 1. The 10 sample cases can be considered as representatives of the stakeholders in the construction industry, reflecting their experiences, and comprehensive analysis was obtained from their projects.

It is difficult to obtain approval for participant observation during the tender process and to analyze the actual tender documents of specific projects because of confidentiality considerations (Laryea & Hughes, 2011). The interviews were planned to obtain their views on the quality of tender documents according to their project role. The interview questions covered both overall tendering practice and specific issues faced during the tender stage on the common project they carried out: the timeframe set by the client, the bidding environment, perceptions of tender documents, contractor's tender queries and client's clarifications, contractors' bid/no-bid decision, perception of e-tendering, and suggestions for a better tendering environment. The questions were divided into four parts: preliminary, general, design stage, and tender stage questions.

Interviews were semi-structured using the mixture of open-ended and closed questions, the list of questions, together with the information sheet, was distributed prior to the interview date. For the interviews with the client and consultant, the focus was on the design and tender stage, whereas the contractor was mainly asked questions regarding bidding practices. Interviews were conducted on a one-to-one basis at the interviewees' company premises. Each interview lasted between 1.5 and 2 hours. Transcripts were produced after the interviews using audio recordings for further analysis.

Table 1. Characterization of the interviewee

	Client	Consultant	Contractor
Business sector	Historic conservation	Financial/Tax advisory, Asset management, Real estates, Construction cost consultancy	Fit-out, Construction, Engineering
Annual turnover (UK)	£15–20 Million	£4.5–5 Million (Profit for cost consultancy only)	£1.2 Billion
Staff (UK)	800 (20 in construction division)	14,000 (35 staff in cost consultancy)	2,000 (Globally)
Project type	Conservation (£300,000 worth in average)	Commercial, Residential, Mixed use, Fit-out, Conservation	Fit-out (£8–20 Million worth in average), New build
Main client	Internal	Property developer, Housing association, Local council	Corporates, University
Contract type	Joint Contracts Tribunal (JCT): Constructing Excellence, Measured term, Intermediate, Minor works	Joint Contracts Tribunal (JCT): Construction Management, Design and Build	Joint Contracts Tribunal (JCT): Design and Build
Interviewee (Years of experience)	General manager (15), Principal manager (21)	Senior quantity surveyor (12), Junior quantity surveyor (5)	Senior project manager (13), Senior commercial manager (15)

3. Findings

3.1. Tender practice

Although they were involved in a common project, their organization's overview and business characteristics were as different as their respective roles in that project as seen in Table 2. Interviews were carried out with a wide range of contents regarding the tendering practice and documents. However, their interview answers are generally on the same line with the features of their organization and their roles mainly as a client, consultant, and contractor.

Interview with the contractor. Interviews with senior project managers at one of the UK contractor firms covered current tendering practices in construction projects. With regard to the tender period, the contractor claimed that it can last more than eight weeks if the project value is sufficiently large. The contractor insisted that the number of tenderers for a project makes a difference to their bidding strategy, which affects their probability of winning the tender (De Schepper et al., 2015; Oyeyipo et al., 2016). The contractor would not participate in bidding if there were more than five competitors. Although clients generally do not notify the contractor of the number of tenderers, contractors can obtain this information from their supply chain. In addition, there are always tender queries on every project to clarify any ambiguities in tender documents. Such tender queries can also be used to build a relationship with the client team in the early stage of the project. The contractor explained this in more detail as follows:

> *…So tactically, it is a good decision to go back and ask questions, and also, generally, there are things you need to know as well. You will ask some genuine questions, but you also ask a lot of fishing questions, so you are fishing for more information that will help you develop your tender…*

A contractor who receives a tender invitation for a project that he/she cannot bid for finds it difficult to decline the bid opportunity outright. They give several excuses when declining an invitation to tender: current workload, geographical location, timescale, and type of work. The interviewee recounted how he had received a tender invitation with a short tender period of only two weeks, which was insufficient time to review and analyze the information provided by the client. It was understood that tender submission is normally at the last minute, just before the deadline. This was explained as "human nature" by the contractor:

> *…It's just human nature when it comes to a deadline, isn't it? If you are finishing off some other elements of a tender. Again, that's people simply juggling their workload to suit the deadline. It's the way to manage your workload, isn't it? You have to do it. It is not deliberately postponed. You are managing what you've got in front of you.*

Therefore, it is apparent that contractors are unlikely to commit to the entire tender period. They tend to have several ongoing bids at the same time and plan their workload in accordance with each tender's submission date (Laryea, 2011; Wibowo et al., 2015). Complicated administrative procedures, for instance, excessive information requirements in the pre-qualification questionnaire process, can make contractors less interested in a project and may eventually affect the quality of the bid.

Interview with the consultant. The perspectives of the consultant were slightly different from those of the contractor. According to the consultant, the tender period is not only dependent on the project value, but also on the procurement route. A project under a design and build contract takes more time to analyze than a standard building contract with a firm bill of quantities (Al-Reshaid &

Table 2. Tender practice compares

	Client	Consultant	Contractor
Tender period	Between 4 and 6 weeks	Between 4 and 6 weeks depending on procurement routes	About 6 to 8 weeks depending on the project value
Number of tenderers	6 for sizable projects; normally 4 or 5	3 or 4 for Design and Build contracts; 5 or 6 for standard building contracts	Generally unknown but can be found out via supply chain
Response time for tender participation from tender invitees	Normally within a week	On the first day of tender documents sent-out	Within a week
Tender queries	Queries arise in every tender	Depends on the quality of tender documents; low quality tender documents result in a high number of queries	Queries on every project
Time taken for responding to tender queries	Within two days or a week depending on the amount of queries	Within a week; takes a long time to get responses/clarifications from other consultants	A good client team gets back quickly
Extension of time for tender submission	One in three tenderers asks for an extension	Around 75% of the time there is a request for an extension to the tender period	Sometimes
Tender arrivals	Arrive at the last minute	On the last day of submission; sometimes late	Generally submitted at the last minute

Kartam, 2005). The consultant would reveal the number of tenderers to contractors if there were only three, as it would motivate the contractors to prepare quality bids. If there are five or six tenderers, by contrast, the consultant would not reveal the number of competitors to keep the tenderers motivated. However, regardless of the procurement route or the number of competitors, contractors normally request an extension in about two-thirds of the cases, and the consultant did not agree that it was due to the short tender timeframes.

> *…I think contractors tend not to look at contracts until the last week. We had an occasion just the week before; we were tendering online on E-tendering and the contractor requested an extension to tender on the very first day of the tender being received, before they had even opened the tender because we could see online that they hadn't opened the tender. How can a contractor know that they need an extension before opening the tender? It must be down to a lack of resources.*
>
> *They know that they don't have time. So I think if they are not going to be able to tender properly, to provide a good tender, they shouldn't accept the tender invitation in the first place. So, there's probably a disconnect between bid managers and estimators that needs to be addressed…*

Sometimes contractors accept tender invitations without carefully considering their current workload and resource availability. More importantly, contractors who ask for an extension to the tender period, even before opening tender documents, may negatively affect their relationships with the consultant and client even before preparing a contract. In addition, it can lead to unnecessary tender queries that are related to the quality of tender documents. The consultants do not want any queries because it shows that the tender documents are of poor quality. However, they admitted that some queries are welcome, as it proves that contractors are committed to the project.

> *…But then again you kind of accept that there should be some queries because you want to know if contractors are looking into it. If you don't get any queries back at all, it might show that they are not even looking at it properly. So you probably want a couple, a few just to show they are looking at it.*

Interview with the client. The client explained that there were an average of six tenderers and a four- to six-week tender period for sizable jobs. This approach is designed to add adequate levels of competition to the tender process and is part of the organization' s strategy. Regarding the bid or no-bid decisions of contractors, the client revealed that contractors are fairly prompt in notifying the client of their decision. The client claimed that contractors who declined the tender invitation were not penalized, it is important to know whether they have enough time and resources for the job. This view is not shared by the contractor. Like the consultant, the client admitted that there have been instances in which tenderers requested an extension, with price documents often arriving at the last minute. The client acknowledged that tenderers may not use the entire assigned tender period because of their on-going tender priorities.

> *…Because they are probably pricing several jobs all the time trying to win work. Thus, if they are going to win one job out of every six, they've got to be pricing stuff all the time. Therefore, there will be other priorities within their office and they are not just going to start it straight away, and therefore, request an extension for tendering because they are a bit behind or... they've got another deadline just before ours and they want to get that one out of the way first. So there will be good reasons why it's at the last minute…*

3.2. Quality of tender documents

Interview with the contractor. The views on the quality of tender documents are different, as Table 3 shows. The contractor revealed that the quality of tender documents is sometimes poor. The contractor insisted that the quality of a document varies depending on who prepared it. A lack of time and budget limitations for producing tender documents were pointed out as some of the factors that affect the quality of tender documents. Unsurprisingly, it was strongly stated that poor tender documents have a considerable impact on tender prices (Laryea, 2011; Hosny et al., 2019). In particular, quotations from subcontractors are not likely to be consistent when the information provided by the client is not clear.

> *…It has a significant impact on bidding prices. Poor quality documents make it harder for me to get subcontractors to tender the price. The job is broken down into 20 or 30 packages. For each of them, there is a bit of information that they are looking for that isn't there, they've got all their questions coming back, which is a lot of information to process. All*

Table 3. Different views on the quality of tender documents

	Client	Consultant	Contractor
Quality of tender documents	Declined; Poorly coordinated; Not integrated; Errors and duplication	Declining	Consistent; There has always been significant variance (both good and bad tender documents)
Factors that affect the quality of tender documents	Inappropriate resources (Trainees conducting important tasks)	Low professional fees, short timescales and lack of proper resources (graduates checking critical parts of tendering)	Low professional fees and short timescales to produce documents

those questions we have to pass on and ask again. There are many questions. If you are asking people to price your documents, and it's not there, it's not complete and it's not sufficient...instead of getting a price range of 5% to 10%, you may get a price range of high as 50% to 80% variance between the lowest price and the highest price…

The wide variation in the offers of the tenderer is likely to bring uncertainty, as it will be difficult to determine which tender is priced accurately. However, the contractor does not consider the poor quality of tender documents as a risk during the tendering process. Instead, the contractor focuses on contractual risks related to contract period, payment, and liquidated damages (Zhang et al., 2016; Schuhmann & Eichhorn, 2017; Benítez-Ávila et al., 2018). In terms of the declining quality of tender documents, the contractor believed that the quality has been consistent over time.

…I'm personally not sure if they are declining. Overall, it's difficult to say that there is a pattern of decline there. What you're probably seeing is maybe a tighter budget for consultants and pressure on people to get things cheaper and quicker. I would say that the quality has been consistent. So, I've seen bad tender docs and good tenders as well. I still see both. I would say, on average, it's consistent…

Interview with the consultant. The consultants admitted that they often had to send out incomplete tender documents because of insufficient time set by the client and other consultants, such as designers and engineers, who did not meet their own deadlines (Lopez & Love, 2012; Khalifa & Mahamid, 2019). The consultant shared the view held by the contractor that the quality of tender documents significantly affects the bidding price.

…So there needs to be a fully completed design. I suppose it depends on the contract; for a design and build contract, there needs to be a full, clear idea of what they want to build. For a standard building contract, a fully designed building that works is coordinated. And often it isn't complete. Quantity surveyors often leave it too late to do tender documents, and the information is incomplete. The instructions are not clear, and the form of tender is not clear. And what happens is you get loads of queries back from the contractor and it just automatically gives them an idea that the client who they are going to be working for isn't organized and competent. So if you get a complete set of documents, and it is really good quality, you send them out. The contractor sees that they are going to be really keen to work for that client, you are going to get a really good price back. If the design is poorly defined, they will price a lot of risk into it. Thus, you will get higher prices back or they won't price parts of it, or they'll price the wrong parts of it. So you will just get prices all over the place that you can't compare. And you will get prices that are hard to interpret…

Owing to the poor quality of tender documents, tenderers end up taking on high risks, as they are uncertain about the design aspects of the project. Consequently, this will increase the overall tender price, which means it may be difficult for the client to expect to receive a competitive tender. Therefore, coordination between the client and other consultants is important to produce good quality information so that contractors can price the project appropriately. However, unlike the contractor, the consultant stated that the quality of tender documents is deteriorating because of insufficient project timescales, low professional fees, and slower decision making by local authorities who seem burdened with increasing bureaucratic procedures.

…So it's always going to decline…The client reduces the timescale and fees so you've got too much stuff to do at once. So what happens is that the work is pushed down to the lower levels, to the graduates on their systems, and work isn't checked properly, and then the work is of lower quality. I think it's tightening time scales and fees…

Interview with the client. The client is not satisfied with the quality of tender documents, which are poorly worded, and contain many errors and duplications. The client believes that this phenomenon may be related to professional fee levels. Unlike the consultant, the client argued that professional fees have not been cut and reflect the work involved in providing professional services.

…I think quality has declined…they are not coordinated and integrated properly. Whether that's a client's problem, in which case we haven't built a team properly, or whether it's just an individual discipline's problem… I do find documents aren't well-coordinated. I don't think it's related to the timeframes for producing the document, and I think it might be related to the fee. The fees on specialist historical building works for an architect are still between 10 and 12%, which is quite high, they haven't cut their fees … Certainly, the percentage fee hasn't come down at all… I don't think the structures in lots of organizations are as in-depth. So you are not getting the progression through the office of training and learning. Therefore, there are not enough school leavers or recent graduates. The cheap labor, like trainees, are placed to pick up some of the checking and doing…

4. Discussion

The regulatory system for tendering practices has improved significantly. Bid rigging is a type of illegal cartel activity. As well as bid rigging, business cartels can also involve other illegal practices such as sharing commercially sensitive information, fixing process (keeping them artificially high) and dividing up markets with competitors. Bid rigging is illegal and there can be significant financial and personal consequences for breaking the law. The number of tenderers and their details can be obtained

from the enterprises in the supply chain, even when this information is not furnished by the consultant. According to the consultant, information on the number of tenderers can sometimes be shared with contractors if there are only a few, to keep the contractor's interest. However, this number will not be revealed if there are more than six tenderers competing for a single project, as the contractors will not be motivated to bid. The contractor would not consider bidding on a project when there were more than five competitors. This result agrees with Bagies and Fortune (2006), who found contractors scrutinize the market competition and react accordingly. This finding also corroborates Laryea and Hughes (2008), who suggested that the likelihood of winning a tender is low, at around one in six. The argument put forward by the contractor indicates that contractors plan their bidding strategies in accordance with the project information from consultants. Contractors are provided with only selective information from consultant, which mean there could be intentionally exposing information that is favorable to the client or/and consultant and concealing information that is unfavorable to the contractor. It may be another significant risk for contractors to make bid/no-bid decisions with distorted project information.

Contractors always access the limited information and to analyze all latent risky factors within short period of bidding stage, contractors carefully assess their approaches when making bid or no-bid decisions (Jarkas et al., 2014; Olawale & Sun, 2015; Chisala, 2017). In the UK, contractors can make contact with consultants relatively easily during biding stage. Based on experts' interview, this study found that contractors rely heavily on consultant's information and try to strengthen the relationship with client than analysis the tendering documents during bidding stage, which are unexpected and somewhat conflicting finding with previous studies that have found that contractors complain of short tender periods, and it is challenging to accurately interpret and analyze all tender documents within the limited timescale set by the client (Alavipour & Arditi, 2018).

This study found that contractors balance their workload within the full tender period. Resources are managed across a number of different bids at the same time and prioritize their workload regardless of the timescale set by the client. The finding was corroborated by the consultant, who stated that contractors generally wait to look at the tender documents after they are issued. Thus, it cannot be argued that contractors are initially given a short timescale.

One finding is that the contractors in the sample did not confirm that the quality of tender documents has declined. The senior project and commercial managers from the UK contractor insisted that the quality of tender documents has been consistent. This contradicts the findings in the literature (Xiang et al., 2015; Mohammed et al., 2019) which suggest that the quality of information provided by the client has been deteriorating in terms of clarity and completeness. It was recognized that the client and consultant admitted that the quality of tender documents is poor, as this admission highlighted a lack of professionalism in the industry. Like Laryea and Lubbock (2013) and Love et al. (2017) argument, poor tender documents influence construction costs and, in particular, hinder contractors from obtaining accurate quotations from the supply chain. Therefore, from the finding of this study, the reason why contractors aware that there has been no decline in the quality of tender documents can be interpreted that how much they have relied on the supply chain's information rather than on accuracy and analysis of tender documents. The tender document which is recognized significantly to the client and consultant is not actually regarded as such important to contractors who will analyze and utilize it as the basis for bid/no-bid decisions.

Conclusions

This study provides a balanced view on tendering practices and the quality of tender documents by gathering the perspectives of the principal stakeholders in the construction sector: the client, the consultant, and the contractor within the supply chain. The findings reveal that there are similarities and differences in the perspectives on tendering practices held by the 10 interviewees. The contractor perceives that the quality of tender documents has been consistent, albeit not commenting the tender documents are sufficient, whereas the client and the consultant share the view that the quality of documents has declined. Low professional fees, short timescales, and lack of coordination at the design stage are considered the main factors affecting the clarity and completeness of tender documents. However, behind it, the information obtained from the supply chain seems to have a greater impact on the bid/no-bid decisions than the quality of the tender documents. The consultant responds to a significant number of tender queries, which are normally caused by poorly worded tender documents. By contrast, the contractor issues tender queries to build a good relationship with the client in the early tender stage regardless of the clarity of the tender documents. The client acknowledges this phenomenon; therefore, it is suggested that the workload of the contractor and availability of unofficial information are important factors affecting the quality of bids.

Bidding is a practice in which each project stakeholders try to minimize risk based on limited and incomplete tendering information (Adafin et al., 2016; Asgari et al., 2016; Bohari et al., 2021). Therefore, bidding strategy of each stakeholder is commercially sensitive, making it difficult to conduct honest and in-depth study. In addition, it is not a common opportunity to study different stakeholder's tendering perspectives on a common project. It is beneficial to examine the points of view of other project stakeholders, including those of clients and consultants, to obtain more reliable data regarding the quality of tender documents.

This study gathered different perspectives on the quality of tender documents and bid/no-bid decisions during

the tendering process. Furthermore, it examined specific tendering strategies of client, contractor, and consultant in current tendering practices and proposed efficient ways of improving the bidding environment. With the understanding of other's tendency and behavior, each stakeholder can improve their practical strategy in tendering practice. Research findings and analysis are based on UK construction industry where contractor can obtain unofficial data and information from supply chain during bidding stage. Thus, unlike literature reviews of this study, the most critical factor for tendering practice may not be the quality of tender documents, but other factors in the UK, such as the establishment of a special relationship between contractor and client or consultant during. The findings of this study may have been different if the samples had been collected from other sectors and geographical locations. Future studies can gather the viewpoints of other entities in the supply chain to produce more practical tendering practices and approaches that could effectively be implemented in the UK construction industry. In addition, it can be studied further that whether the viewpoints of client, contractor, and consult are differentiated in other construction industries where different procurement system is shaped according to its own legislation.

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