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AN INVESTIGATION INTO THE IMPROVEMENT

of tendering processes and the level of competition for

PFI CONSTRUCTION PROJECTS

Lee Hayes

Network Rail, UK

Amr Sourani

Liverpool John Moores University
a.sourani@ljmu.ac.uk

Begum Sertyesilisik

Istanbul Technical University
begum_sertyesilisik@hotmail.com

ABSTRACT

The Private Finance Initiative (PFI) since its inception has grown in its use particularly by the UK government. Despite its popularity it has been considered controversial. The focus for this research is the practical issues associated with PFI at the pre-construction stage. The research derives its data from interviews with nine people from the construction industry with experience of PFI tendering. The research investigates issues relating to the PFI tendering process and the bidding strategies of main contractors within the PFI market. It evaluates the impact they have on the public sectors ability to generate greater competition for PFI projects. The results confirm that many of the issues highlighted in the literature still remain. These issues include the poor performance of the public sector team during tendering and the lack of political support for some projects. The research confirms that there are typically considerable economies of scale in relation to tender costs when compared to the capital value of PFI projects. The research also identifies that certain main contractors do not necessarily use all available opportunities to exhaust the funds available to bid on PFI projects. The research also discovers that construction companies often use market intelligence to avoid bidding for PFI projects with intense competition. The research concludes that the use of the competitive dialogue procedure for projects such as PFI can do little to increase the levels of competition due to the construction industry's ability to regulate the competition levels. A return to the former negotiated procedure system is recommended if after the selection of the preferred bidder costs can be controlled more effectively.

1. Introduction

Tendering can influence cost efficiency [1] as tenders which have been well designed can enable savings [2]. The private finance initiative (PFI) has been introduced by Norman Lamont in 1992 [3], [4].

PFI has been designed to increase the utilisation of private finance in the procurement of capital projects and services for the government [5], [3]. Prior to 1992, utilisation of private finance was restricted greatly by the "Ryrie rules", the guidelines set down regarding the use by government of private sector finance [3]. Since 1992, PFI has evolved and developed into a procurement system. However, the definition of PFI is still blurred. For instance, Bousabaine [6] suggests the

term PFI can be used interchangeably with the term Public Private Partnerships (PPP). Others regard PFI as just one particular type of PPP [4]. This research analyses PFI's usage for procurement in a construction project. This research aims to discover how PFI, during the pre-construction phase, might be improved to the benefit of the public and private sector participants involved in this form of procurement.

2. Issues surrounding PFI

Since PFI's inception in 1992 much analysis and debate has taken place regarding the process in the general media, academia and by government watchdogs. Issues arisen include:

- Accounting treatment by government of PFI projects.
- Refinancing of PFI deals by the private sector provider.
- High cost of external advisors to the public sector team.
- Protracted time spent at preferred bidder stage of tenders where substantial changes can be made in an environment that lacks any competitive tension [7].
- The way the government can test a bid for value for money (VFM) at an early stage. (During the tender process the public sector team must test the tenders put forward for VFM. This is performed by comparing the project against a public service comparator (PSC) which is effectively a way of demonstrating whether PFI is a better option than other government approved procurement routes. The usefulness and the application of this public sector comparator has been criticized [8]. Often PFI tenders are more expensive than the PSC until the prices for each option are risk adjusted. The way in which these risk adjustments are made has fuelled concerns regarding the comparator as these adjustments are to a degree subjective and therefore open to possible manipulation.)
- The knowledge that PFI is inefficient

and lacks competition is in the public domain [7].

Ezulike et al. [9] listed the following barriers to entry into the PFI market:

- PFI requires contractors to provide services such as financing and operating that they are typically unfamiliar with. This presents more of an issue to smaller contractors than large ones who see this requirement as an opportunity to use their competitive advantage. As the market for PFI matures and those within it gain more experience, this issue, will become more of a barrier to those outside the market.
- High bidding costs represent a barrier to all participants in the construction industry regardless of their size.
- Value of the PFI contracts represents too much exposure to the small contractors on one job.
- PFI projects represent unknown risks to small contractors.
- Size was again an issue that was a factor here as larger contractors would have more credibility.
- All contractors regardless of size felt that PFI placed larger demands on management time than other procurement methods. Much of the time was devoted to negotiating the contract. The contract documents for PFI were at the time of writing Ezulike et al. [9]'s research, developed on a project by project basis.

Dixon et al. [10] identified high bid costs; high legal fees; poor awareness of PFI by the private sector, falling profit margins, and unsuccessful projects as further barriers to the market. Li et al. [11] listed the following factors associated with PFI that are perceived as negative from the point of view of the private sector: too much management time in contract transaction; lengthy delays in negotiation; high participation costs; and confusion over government objectives as well as valuation criteria.

Ezulike et al. [9] point out that risk transfer is perceived by contractors as

a major benefit of this type of procurement. Li et al. [11] conclude that this might be due to the fact that risk transfer may represent an opportunity to generate profit by the private sector. The department for education [12]'s research suggested that contracts that were relatively small would be more attractive to the private sector if they were bundled together as larger capital investment projects are considered to be more worthy of the cost of bidding expected by the private sector. The conclusion of the report was that private sector bidders would prefer a minimum value for projects of £20 million and preferably £50 million. This report though does not indicate the size of contractors that they had consulted. Ezulike et al. [9] suggested that large projects are a benefit only of the bigger contractors and are certainly not something that has been welcomed by the smaller contractors that have an interest in the PFI market.

The government now requires that PFI contracts have a minimum capital value of £20 million as less than this is considered unsuitable for PFI procurement [7]. Allen [3] highlights that private companies do not like the high bid costs associated with PFI.

The National Audit Office [7] listed main issues relating to tendering within PFI as follows:

- Procuring authority staff lacked the project management skills required for the process.
- The number of projects that have produced only two viable bids has increased.
- Lengthy tendering periods and inadequate preparation of projects have put off some bidders
- The number of developed bids is unrelated to the project size.

Discussions with private contractors and advisors in this report highlighted the fact that there were two principal reasons for bidders being

more selective in developing detailed bids for PFI. These were:

- High bid costs and lengthy tendering periods limiting the number of projects they would bid for in any one year.
 - Greater international opportunities which led to some companies reducing their exposure to the UK market.
- Further to these points the NAO report identified the four main reasons why contractors withdrew from competitions or avoided them all together. It states that:
- Contractors would assess the level of skill of procuring authorities before deciding whether to bid.
 - They made decisions based on the perceived standard of preparation of the project specifications.
 - Pre Official Journal of the European Union notification was lacking reducing the contractor's time to prepare for a bid.

Geographic location plays an important role. Contractors liked to work in familiar areas where they had good connections with sub-contractors. They also identified the fact that certain geographic locations attracted greater competition than others.

The NAO report also suggested that the introduction of new procurement regulations may make bidders more selective, which echoes Allen's view [3]. Interestingly, it also states that there is no correlation between the time taken to tender a deal and the capital value of that deal. The type of project though did have a significant impact. The report also states though that the number of contractors bidding in the PFI market was healthy. However, it goes on to say that the number of bidders for each PFI project is falling. 85% of pre 2004 projects received three or more bids whereas between 2004-6 only 67% did.

The NAO [8] states that oversupply of PFI deals has led to weak competition in the past and it highlights that:

- The credit crunch has hindered potential providers from financing projects which is hindering competition.
- High bid costs are putting off potential bidders.
- The cost of tendering in PFI reflects the length of time taken to tender.
- There are a healthy number of PFI

bidders in the market but the number of bids for projects is falling.

Therefore, if as this report states: the length of time it takes to tender has a correlation with cost, but the time taken to tender bares no correlation to the capital value of the project; then perhaps the cost of tendering bears no correlation with the capital value of projects. This possibility is something that perhaps needs further clarification as it may have significant ramifications for the validity of the £20 million limit for PFI projects. This value limit may only perhaps serve to exclude small and medium sized contractors from the PFI market whom might otherwise be able to increase the levels of competition within this market if it can be shown that bid costs are viable below this limit.

3. Research Methods

This research aims to discover how PFI, during the pre-construction phase, might be improved to the benefit of the public and private sector participants involved in this form of procurement. With this aim, objectives of this research were to:

- update previous research that has identified key issues that are affecting the PFI tendering process.
- gain a greater understanding of the factors affecting the level of participation of construction main contractors within this market.
- evaluate the research findings in terms of how they affect the level of competition for PFI contracts.

The data collected for this research was derived from semi-structured interviews to allow for more in depth questions to be asked or to clarify responses given to the core questions. The sample consisted of the main contractors involved with PFI. Li et al (2005) [11] have previously identified that there is no definitive list available of companies involved in bidding for PFI projects. Having attempted to see if there were any lists that had become available since Li et al (2005) [11]'s research it had to be concluded

that there still did not appear to be any definitive list in the public domain. As the HM treasury Website (HM treasury 2009) [13] listed all companies that had an equity stake in PFI projects, this list formed this research's data population. A random selection of contractor names has been taken from the list. This list would form a telephone contact list which would be used to call the contracting companies to arrange interviews. These interviews for reasons of practicality would be conducted by telephone and where permission was granted they have been recorded so that interviews could be transcribed after the call. Where this was not permitted then notes have been taken during the call. All recipients were informed that the contributors would remain anonymous. Nine interviews were conducted of which eight were conducted by telephone and one was conducted in person. Eight of these nine interviews were recorded. The raw data that has been recorded for the purposes of this research is not presented anywhere within this research for reasons of confidentiality. All interviewees had firsthand experience with PFI. As the target group were main contractors within construction, six of the interviewees worked for this type of company. The other interviewees were a consultant involved with PFI, a senior level director for a company that had recently moved out of the PFI market and a former MD of a main contractor that was, until recently, involved with PFI. All interviews were transcribed except one in which notes were taken. All the transcriptions and notes were then analysed. The result of this analysis was that certain categories of response were identified. These categories were then used to group similar responses together.

4. Results

Responses to preliminary questions

- **Experiences of the interviewees:** One out of eight interviewees had

less than three years of experience (Table 1). The majority of those asked had in excess of twelve years of experience.

TABLE 1: Length of time that interviewees have been involved with PFI procurement

0-6 yrs	6-12 yrs	12-18 yrs
1	2	5

- **Turnover of the interviewees' companies:** £100 million was by far the smallest company turnover of those interviewed but it should be noted that this was a regional subsidiary of a larger parent company (Table 2).

TABLE 2: Turnover (£'s Millions) of interviewees' Companies per year

Lowest	Highest	Number of interviewees data collected on
100 (Subsidiary)	8,500+ (Main contractor) 15,000 (Non Contractor Company - Parent Company)	7

- **Sectors of the PFI market that interviewees have worked in:** Sectors of the PFI market that interviewees have worked in is presented in the Table 3.

TABLE 3: Sectors of the PFI market that interviewees have been involved in

Response categories	Number of interviewees providing this response
Health	5
Housing	1
Ministry of defence	1
Roads	1
Street lighting	2
Education	6
Non-specific e.g. general, all, any; given as a single response or in addition to other responses	2
Most excluding housing	2
A couple of general ones	1

- **Positions of the interviewees:** All interviewees were at the managerial levels in their companies (Table 4)

TABLE 4: Classification of Interviewees position within their respective companies

Interviewees	Management or higher	Senior management or higher	Main contractor strategic level decision maker
1	Yes	Yes	Inconclusive
2	Yes	Yes	No
3	Yes	Yes	Yes
4	Yes	Yes	Inconclusive

5	Yes	Yes	Yes
6	Yes	Yes	Inconclusive
7	Yes	Unknown	No
8	Yes	Yes	Inconclusive
9	Yes	Yes	Inconclusive

Responses relating to the PFI tendering process

- **Causes of cost and time related problems in the PFI bidding process:** Principal causes of cost and time related problems in the PFI bidding process have been presented in the Table 5. Among these causes design information requirements and external costs had higher frequencies.

TABLE 5: Principal causes of cost overrun and delay in the PFI bidding process

Response category	Number of times response given
Design information requirements	4
External costs	4
Process itself	3
Putting the finance package together	1
Unsupported public sector Client	1
Time spent in engagement and stakeholder meetings	1

In relation to this topic, the following points have been made by the interviewees:

- The design elements were largely produced for the interviewees by external consultants.
- Two interviewees pointed out that designers were generally unwilling to provide their work at risk. It was suggested that this situation had been exacerbated by the competitive dialogue procedure as designers were now keener to protect their "intellectual property". It was also pointed out though that this stance by the designers would also be influenced to some degree by market conditions.
- Another key point raised by an interviewee which is related to the intellectual property issue is that client teams within the competitive dialogue procedure are selecting the best elements of the different designs and communicating this to the various bidders. This is then creating a homogenous design solution which as one interviewee points out is effectively "diluting the importance of good design" as a competitive advantage for a particular contractor.
- Lack of support provided to the public sector client was raised. It was stated that this was a result of an insufficient number of public sector project managers to assign to clients at the present time.
- There were conflicting relationships within the Special Purpose Vehicle (SPV) itself caused by different parties within this group having different drivers. It was suggested that the main contractor made their profit during the construction period whereas the SPV made their profit over the whole concessionary period. It was suggested then that the builder would be primarily concerned with trying to produce a low

cost, high profit construction whereas the SPV wanted a building of greater quality which would have lower maintenance costs. It is interesting that this interviewee regarded the SPV and the main contractors as separate entities.

- Clients were changing the risk profile during the tendering process. This is a particular issue of concern for contractors as their tender costs are at their own risk up until financial close. It was suggested that there was little opportunity to recoup these losses if the public sector has a change of heart during the process unless the contractor has sufficient media influence that they may be able to damage the PFI market for the government.
- **Suggestions for improvement:** Among the improvement suggestions, “reducing the level of design before preferred bidder” has been stated with higher frequency by the interviewees (Table 6).

TABLE 6: Most common suggestions for how the PFI bidding processes can be improved

Response	Frequency of the responses given
Reduce the level of design before preferred bidder	7
Reduce the number of competitors	2
Reduce the number of stages within the process	2
Ability of the public sector team needs to be improved	3

In relation to design it had been suggested by several interviewees that the design requirements should be brought back to the Royal Institute of Building Architects (RIBA) plan of work stage C. However, some of the interviewees who suggested this said also that they understood why clients need such levels of detail for contractual purposes.

One interviewee pointed out that the system previous to competitive dialogue, which was the negotiated procedure, was perhaps more weighted in favour of the contractor but the existing competitive dialogue system needs to find a better balance than it currently has.

In relation to the ability of the public sector team it was stated by an interviewee that certain public sector teams were “nervous” about providing feedback to contractors for fear of being seen to show favouritism. He said though that others were much more forthcoming in telling you what they liked or disliked about your design which helped move the process forward. Another interviewee points to the need for the client to have a clearer view of what they want from the project at an earlier stage. Some other comments from interviewees included:

- “Tinkering with the system won’t help” suggesting a more fundamental change approach is needed.
- The competitive dialogue process itself is putting off bidders before it starts as a result of the number of bidders involved.
- The pre-qualification process is wasteful and might be helped if a standardisation of this process were introduced.
- The lack of available finance is holding up the process particularly for sub top ten contractors and that this problem is further compounded by the fact that

banks are demanding more complete information regarding the project before releasing funds.

- A lack of clarification at the outset regarding who owns specific risks is an issue.

Responses relating to tendering strategies

Bidding budget: Three of the respondents specifically indicated that their bidding budget was flexible. Of these, all also indicated that the level of budget was governed by the level of good opportunities that they had identified in the market place. Seven of the eight interviewees asked indicated that the budget level was directly linked to perceived opportunities in the market place.

TABLE 7: Responses relating to main contractors’ bidding budgets for PFI projects.

Response category	Interviewee no							
	1	2	3	4	5	6	7	8
Budget is flexible	X		X		X			
Budget is set								
Have reserves of funds to increase budget		X		X				X
Level of budget set is governed by the level of opportunity	X	X	X	X	X		X	X
Dependent on risk appetite							X	
Differentiated on sector by sector basis				X				
Limited by resources available to develop bid				X	X			X
Set dependent on turnover and overhead requirements	X							

Factors influencing interviewees’ decision to bid: Interviewees were then asked to list factors considered significant in their decision to bid (Table 8).

TABLE 8: Factors affecting decision to bid

Factor	Frequencies of the answers
Perceived ability to win job	6
Geographic location	2
Perceived profitability of job	1
Public sector team ability	6
Political support for the job	3
Internal resource	1
Output specification	2

- In terms of geographic location this was important for two of the interviewees but for different reasons. One felt that this was significant as the company would have to consider what areas it needed to win work in whereas the other interviewee felt that it was significant because they recognised that the level of competition was different in different

locations and also that they were stronger in a competitive sense in certain areas than they were in others. Importantly though two other interviewees specifically stated that they regarded geography as having very little significance.

- The public sector team was considered important for varying reasons which included:
 - Were their expectations realistic?
 - How easy would they be to work with?
 - Have they worked with them before and was this relationship successful?
- Political support was considered to be a highly important issue and that this issue was particularly relevant at the present time due to upcoming elections. It was a major concern for these interviewees as they were unsure whether projects would continue to be supported after the UK general election.
- Output specifications for the job and the complexity of the job were frequently considered to be linked by the interviewees. Two of them regarded these factors as significant. However, one respondent regarded it as being a potentially negative issue in that if output specifications were too onerous it would be a “key criteria to walk away” from a potential job. The other respondent though regarded greater complexity and higher specification requirements as being a positive factor as he felt that his company were better suited to that type of project.

Influence of cost or time reduction on the tendering budget Answers regarding to the perceived impact of a reduction in cost or time on construction contractors’ overall tendering budget for PFI projects have been provided in the Table 9.

TABLE 9: Impact of a reduction in cost or time on construction contractors’ overall tendering budget for PFI projects

Interviewee number	Response
1	Likely to bid more PFI
2	Would bid more PFI
3	Would not necessarily bid more as level of bidding activity limited by other resources needed to develop bid.
4	Likely to bid more but unsure if budget would increase.
5	N/A
6	Would bid more but budget would remain the same.
7	N/A
8	N/A

In addition to these responses one interviewee that represented a company that had pulled out of the PFI market in the traditional Design Build Finance Operate sense, said that a reduction in bidding costs would not facilitate their re-entry into this market. The reason for this was given as partly due to a change in company strategy and also because they would find it difficult to compete in this field against major contractors.

Impact of the competition on bidding activities: Interviewees were then asked what impact increased competition would have on their bidding activities within the PFI market. Four out of the seven interviewees asked said they would categorically bid less. Three interviewees stated their strategy would be dependent on market conditions. Another pointed out that under present conditions they would be forced to bid for jobs they would not normally get involved with. He went on to say though that under normal market conditions they would bid less. Another interviewee said that at the moment market conditions require them to commit more funds to PFI but that this approach was not sustainable in the long term. Three interviewees pointed to the fact that their decision to bid would be based on market intelligence in that they would find out from the market place who and how many other contractors were involved in bidding on a job and base their decision to bid on that information too.

Responses relating to project capital value and tender cost

Relationship between bidding costs and project capital values: The interviewees asked to provide their feedback regarding to the economies of scale and diseconomies of scale (Table 10). Where interviewees have stated for example “We would say that the bigger the project the better in terms of bidding costs” these responses have been classified as economies of scale. Where others have stated for example “Sometimes a small job will cost you twice as much percentage wise as big jobs...” these have been classified as large economies of scale. The responses from the interviewees also suggested that the complexity of the job had some influence on this issue as did the type of sector the job could be classified in for example roads projects as oppose to general construction.

TABLE 10: Relationship between bidding costs and project capital values

Cat.	Large Diseconomies	Dis economies	Neutral	Economies	Large Economies
Totals	0	0	0	5	4

Tendering costs have been perceived as high as the majority of the interviewees (Table 11). Two respondents stated that “costs” would be prohibitive. One respondent stated that at low capital values it would be difficult to find an FM provider interested in being involved in the project. This re-affirms the findings of the Department for Education’s research (2000). Most respondents concluded that the main issue for projects of this size would be the resultant tender costs.

TABLE 11: Perceived Issues for PFI projects between £5 million and £20 million capital value

Response category	Lack of Interest	Tendering costs too high	Costs prohibitive
Total	1	4	2

Target project capital value ranges for main contractors in PFI market and the comments for target ranges have been provided in the **Table 12**.

TABLE 12: Target project capital value ranges for main contractors in PFI market

Target range (£'s Millions)	Key Comments
20-40	None given.
50-100	Sub 50 potentially but dependant on cost of bidding versus potential return.
20+	None given.
50+	None given.
20-200	This was their entire range but they had a better chance of winning at the 20-50 range.
50-100	Below 50 and the tender costs are not feasible. Also their niche is within these limits and where they are most confident of winning.
50+	None given.
50+	Figure is sector dependant but 50+ limit is also due to large economies of scale in relation to bid costs.

5. Discussion

Analysis of responses relating to the preliminary questions

The level of experience that the interviewees have in relation to the research subject is strong.

Samples consisted of the interviewees from companies within the PFI industry acting as main contractors. The experience of the interviewees is predominantly within the sectors of health and education. As a significant number of the projects listed by the HM treasury [11] are Health sector or education sector contracts, the interviewees reflected broadly the distribution of contracts by sector that exists within the PFI industry. The position of the respondents within their company was predominantly senior level management. All respondents were privy to either some or the entire strategic level decision making processes in relation to the research topic.

Analysis of responses relating to the PFI tendering process

The analyses of the principle causes of costs and time identifies design and particularly the level of design required

before selecting the preferred bidder, as being the most commonly cited concerns of those interviewed. The issue of design is to some degree a contributory factor in other issues cited in relation to the tendering process such as; the length of time spent in engagement meetings the requirement for design information to meet due diligence requirements for the project funders. The level of design required before the selection of the preferred bidder is ultimately driven by the European Union Directives [5]. These directives were designed to improve the level of competition throughout the tendering process. As this previous research points out (*Ibid*), significant changes to costs were common under the old system after a preferred bidder had been selected. This meant that changes were being made without any competitive tension being present. Another issue raised is that of cherry picking of elements of different bidders' designs. Although this is designed to provide the best solution for the contracting authority, this process seems to be pushing design costs up as designers are more inclined to demand a fee upfront for their design rather than produce their designs at risk, as suggested in this research. Therefore, disregarded designs will ultimately need to be paid for by the contracting authority as well as those designs that have been chosen. However, if designers chose to offer their designs at risk then they would have to incorporate the cost of wasted designs into the price of successful ones to retain their profits. Therefore, if costs in this respect balance out somewhere along the line anyway then the fact that the best elements of each design can be chosen by the contracting authority for a similar cost means that this system provides a net benefit to the public sector. However, as has been pointed out in this research by one interviewee, if homogenisation of the design occurs under competitive dialogue what benefit is there to a competing contractor to really invest heavily and gamble on creating a winning design when other competitors can hitch a free ride off the design anyway? Therefore, this net benefit to the public sector may in the end balance out through a lack of investment by competitors in relation to design due to them being disinsentivised by the competitive dialogue process itself. The public sector team and their performance, which was identified in the NAO's research [5] as being a significant issue remains a significant issue for main contractors in relation to the tendering process. Other key elements identified as being problematic were the number of stages within the process and the level of competition. The level of competition though is reduced over the course of these stages and the level of design is developed stage by stage. Therefore, these issues can be regarded as not only interlinked but are again linked to the level of design required. When the current competitive dialogue system is compared to the superseded negotiated procedure system which was considered as being geared more towards the main contractor by one interviewee, it would seem that the number of stages in each system remain broadly similar. The crucial difference though is the point at which competition for the process is removed.

Although the research has not been able to specifically identify how far the PFI procurement process can be improved, the information provided by the interviewees in answer to other questions has provided information in relation to this. The issues relating to the public sector can largely be regarded as being issues that may be corrected without fundamental changes to the process. For example, if the level of projects that are put out to the market is matched more carefully to the level of expertise that the public sector has to support these projects, then improvements can be made in this area without fundamental change. However, this is perhaps the limit of what can be improved from the point of view of the interviewees without fundamental change to the whole process. All other issues cited such as; the level of design required, the number of bidders and the level of design required before selecting a preferred bidder; are all fundamental to the competitive dialogue procedure.

The competitive dialogue procedure should be implemented, according to the European directive, for all complex projects that are to be procured by the public sector. What constitutes a complex project is defined as those projects where the contracting authorities "... are not objectively able to define the technical means capable of satisfying their needs or objectives and/or are not objectively able to specify the legal and/or financial make-up of a project" [12]. As it is difficult to imagine any PFI project not satisfying this criterion, the competitive dialogue procedure is intrinsic to the PFI process. If the competitive dialogue procedure then is intrinsic to the PFI process then all issues related to the competitive dialogue process are inextricably linked then to PFI itself. Another point though is that if the public sector reduced their design requirements or the competitive dialogue process was somehow adapted to allow for a reduction in the level of design before preferred bidder the detailed design information may still be needed by the project funders, at least where certain contractors are involved,

as has been stated by an interviewee during this research. Therefore, without both of these parties reducing their requirements for design information, improvements and savings in relation to PFI tendering costs prior to the selection of preferred bidder may not be possible. As most of the suggestions for improvement put forward by the interviewees can be regarded as representing a fundamental change to the PFI and/or competitive dialogue process it may be concluded then that the extent to which the PFI process can be improved without fundamental change is limited. This research also points out that these improvements are themselves limited to improvements that can be made in regard to one specific issue; and that is the performance of the public sector.

Analysis of responses relating to tendering strategies

For most of the respondents the budget is not a set figure which they then go on to spend on the most potentially worthwhile opportunities until the budget is exhausted; but rather the opportunities are identified and the budget set accordingly. This suggests then that if these criteria that are required to indicate a worthwhile bidding opportunity are more abundant then perhaps the budget could increase to meet this. Three of the respondents specifically stated that this was indeed the case. Although to some degree all contractors must have a finite budget limit, the findings of this research contrast with the NAO's [5] previous research that stated contractors had a fixed budget for PFI tendering that they would not exceed.

In relation to PFI most of the interviewees companies are not necessarily operating at maximum output, in terms of available funds at least, when it comes to bidding for PFI work. Some are though limited, as specifically pointed out by two interviewees, by the level of their own resources, such as employees, available to put bids together. This internal resource though is itself something that could be invested

in and increased if of course it was felt that it would be beneficial to do so. In one instance when one interviewee was asked it was stated that this had happened to some degree but it was not looking to increase their level of internal resources to help manage more bids.

Therefore, if internal resources can be increased to support a greater level of tendering activity and companies seem to have at least a certain level of funds available with which to do this, then another factor must outweigh these factors when considering the level of a company's bidding activity. Seven out of the eight interviewees asked, regarded the level of opportunity as being a significant factor in governing their company's bidding budget.

Perceived ability to win the project is the most commonly cited factor that will affect a company's bid decision. It is also linked strongly with other factors mentioned such as geographic location and the public sector team. Five interviewees also specifically stated that "winability" was the most important factor influencing their decision to bid.

The main contractors' perception of whether or not they can win the job has been identified in this research then as being the most important factor affecting a contractor's decision to bid. It is also an extremely influential factor in setting a company's budget for PFI tendering. Many other factors identified in this research are related to or subordinate to this factor.

Most of those interviewed stated that a reduction in cost and time in the PFI bidding process would likely mean that their company would bid for more PFI work although the budget would likely remain at similar levels. This suggests then that a significant strategic shift towards the PFI market would not necessarily follow a reduction in time and cost for bidding for PFI projects.

A decrease in costs and the resources needed to fund the bid would likely result in a relatively proportionate increase in the number of jobs they would be prepared to bid on.

If competition were increased for PFI then it was regarded by the interviewees generally that this would result in their company bidding less for PFI projects. This is in line with earlier findings in this research in relation to strike rates and the “winability” factor. However, it was pointed out that if other opportunities outside of this market were not available then increased competition may not necessarily reduce the level of activity of companies within this market. Therefore, the market supply of projects and the need to win work are both important factors in the decision making process when opportunities are scarce.

Analyses of responses relating to tender costs and their relationship with project capital values

The results suggest that economies of scale tend to be prevalent within PFI procurement in regard to tender costs when compared to the project’s capital value. Indeed it is suggested that these economies of scale are generally large. The extent of these economies of scale means that for all those asked, projects with a capital value under £20 million would not be financially viable or attractive to potential bidders. In discussing the rationale for the interviewees’ target range of project in terms of capital size. The economies of scale with regard to tender costs was a significant factor in setting these limits. However, this was not the only factor as a company’s “niche” area in terms of project capital value was also regarded as significant. This element is again linked strongly to the “winability” factor identified as significant in influencing the decision to bid and the budget level. Therefore, it seems that all companies balance bid costs against their success rate at certain project capital value levels. Therefore, if strike rates are good enough then, generally speaking, bid costs are feasible at least for some companies at above £20 million project capital values. However, what is less clear is whether the level of competition at these levels is strong enough to ensure value for the public sector.

6. Conclusions, and recommendations

This research aimed to discover how PFI, during the pre-construction phase, might be improved to the benefit of the public and private sector participants involved in this form of procurement. With this aim, following to the literature review, interviews have been carried out with the staff experienced in PFI projects. This research has identified factors considered by companies when deciding whether to bid for a PFI project. These factors include:

- The perceived ability of the public sector and political support for the project in accordance with NAO [5] findings
- The perceived ability to win the work.
- The tender costs in relation to project value.
- The quality of other opportunities outside of this market.
- The need to win work.

If there are too many competitors or the competition is too strong then contractors have the option to pull out of the competition, provided they have the market intelligence to inform this decision. However, it is not possible for contractors to join a competition midway through the process if it becomes known that there are few or weak bidders involved. Therefore, this information transfer seemingly only impacts negatively for the public sector and conversely is a benefit to the private sector as it limits the amount of money they would spend on bids they cannot or may not win.

Construction companies need to win work. It may be then that in lean times greater and greater gambles are taken on tenders to ensure that fixed costs can be covered. This then means that competition will be increased for the limited amount of work available in the market. This increased competition would seem to be positive for the public sector as they will be able to ensure a greater degree of competitive pricing.

If the PFI market typically afforded large returns to contractors then it seems that it would be surprising to see that this market was not being plundered to the full by the construction industry as this research suggests.

Perhaps then PFI is not “The golden Egg” it is perceived to be, as one interviewee puts it. At least not for the construction contractor as pointed out by another interviewee. Also the cost of lost bids is not simply recovered within the price of winning bids particularly when the construction industry is in a recession as it is today. The reason for this perhaps is that in order to survive construction companies operate at losses during downturn periods in order to meet at least some of their fixed costs. The alternative would be to pack up during a downturn and start again when things picked up, which simply isn’t feasible for large companies. PFI and ultimately the public sector though need large contractors as a great deal of expertise and a great variation in areas of expertise are required to deliver this type of complex project. Equally however, companies that remain solvent for the concessionary period are also vital if value is to be achieved for the public sector.

Self regulation of competition for PFI projects may not be as dangerous as it often seems. The NAO [5] regards the number of competitors within the PFI market as “healthy”. Therefore, it may be said that the level of competition during normal market conditions is perhaps at a level that is near optimal in terms of balancing the private sectors need for profit and the public sectors need for value. Only in times of recession can much greater levels of competition be generated but this might put at risk the long terms security of certain projects which will ultimately impact adversely the public sector.

If competition for PFI cannot be improved significantly to anyone’s great benefit then other ways need to be considered for the improvement of the procurement system and minimisation of waste not only to the construction industry but to the public sector.

The research findings, cannot be generalized as the number of the interviewees is small The findings, on the other hand, reflect the tendencies of the staff experienced in the PFI. Further research is recommended to be carried out with more interviewees from different groups involved in the process.



Lee Hayes (BSc (Hons), MSc, MCIPS) Bachelor of Science Degree, Quantity Surveying, Liverpool John Moores University. Master of Science Degree, Strategic Procurement Management, University of Plymouth. Currently employed by Network Rail as a Senior Commercial Manager within Infrastructure Projects.



Dr. Amr Sourani is a Senior Lecturer in Construction Management. He worked before as a structural engineer for an engineering consultancy and as a site engineer for a contracting company. Amr has a BSc in Civil Engineering, MSc in Engineering Project Management (with Distinction) from the University of Manchester Institute of Sci-

ence and Technology and PhD from Loughborough University. He has published refereed conference and journal papers and is also a referee for a number of these. His main expertise is in the areas of construction management and sustainable procurement.



Begum Sertyesilisik - Associate professor in the Department of Architecture at the Istanbul Technical University. She has been awarded a PhD at the Middle East Technical University, a MSc, MBA, and a BSc at the Istanbul Technical University. She has been specialized in the areas of construction project management, sustainability, safety, contract and dispute management.

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