



Can claims and disputes (in construction contracts) be prevented or reduced?

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Abstract

The topic of this paper is claims and disputes in construction, mainly from the perspective of the client in the context of the client/contractor relationship. The causes of claims and disputes are examined from the perspective of transaction cost economics (TCE) theory due to its focus on contracting problems and in particular its suitability for complex, long-term and dynamic relationships which are found in construction contracts. Consideration of TCE theory in the context of construction suggest that the root causes of conflict, claims and disputes are:

- Contractual incompleteness; and consequent "post-contract" adjustments.
- Asset specificity, mainly in the form of the client's investment in respect of purchase/assembly of the land for the project and the costs of design/construction.
- Opportunistic behaviour, in particular on the part of the contractor.

A brief case study drawn from Hong Kong's Airport Core Programme is used to illustrate the presence of contractual incompleteness and opportunism. Measures for preventing/reducing the incidence of claims and disputes are proposed. Conclusions are drawn that the actual incidence of claims and disputes is largely governed by the client in determining the balance of his priorities for the project and his consequent selection of procurement system, and design and construction teams.

Keywords: Conflict, claims, disputes, transaction cost economics.

Introduction

To consider a response to the above question it is necessary to reflect upon the possible causes of claims and disputes and the extent to which those causes can be addressed.

A review of the literature reveals confused usage of basic terms. The terms "conflict" "claim" and "dispute" are used separately or in pairs and frequently without clear indication of the precise meaning of each use. There is often a lack of clarity as to whether the researcher is referring to "claims" *per se* (i.e. claims which are resolved between the parties and do not therefore become disputes), to "disputes" (i.e. those claims which are not resolved and graduate into disputes), or to both "claims and disputes" (that is, the "conflict spectrum" — see Figure 1).

A number of writers, however, adopt similar broad definitions for these terms.

Gardiner and Simmons (1992) define conflict as "any divergence of interest, objectives or priorities between individuals, groups or organisations".

A claim is defined by Powell-Smith and Stephenson (1989) as "an assertion of a right to money, property, or a remedy and can be made under the contract itself; for breach of the contract, for breach of a duty in common law; or on a quasi-contractual basis."

A dispute is defined by Brown and Marriot (1993) "as a class or kind of conflict, which manifests itself in distinct, justiciable issues. It involves disagreement over issues capable of resolution by negotiation, mediation or third party adjudication."

Brown and Marriot also cite the definition given by D. Foskett QC in *The Law and Practice of Compromise*: "An 'actual' dispute will not exist until a claim is asserted by one party which is 'disputed' by the other." (Brown and Marriot 1993)

In similar vein Fenn et al (1997) suggests that "Conflict exists where there is an incompatibility of interest. When a conflict becomes irreconcilable and the mechanisms for avoiding it are exhausted, or inadequate, techniques for resolving the dispute are required."

Kumaraswamy and Yogeswaran (1997) refer to the UK Institution of Civil Engineers arbitration procedure which states: "A dispute can be said to exist when a claim or assertion made by one party is rejected by the other party and that rejection is not accepted."

Combining these definitions with relevant terminology in standard forms of contract and recognised construction industry practice, it could be said that a conflict occurs at the same point in time as when a notice of a claim is given and exists until the claim or dispute is resolved.

It is, of course, theoretically possible that a claim submitted by the contractor and immediately accepted and agreed to, without amendment, by the Architect/Engineer would not necessarily give rise to conflict. Equally, it could be argued that a conflict comes into existence in the mind of the Contractor at the

point in time when he becomes aware that the relevant event has occurred and a potential claims situation exists, even though the Architect/Engineer may be unaware of it. However, for all practical purposes, and certainly of the purposes of this paper, it is assumed that the genesis of a claim and a conflict are synonymous.

Figure 1 combines these definitions of conflict, claim and dispute and illustrates the "spectrum of conflict" which ranges from the notification of a claim at one end of the spectrum, to the resolution of a dispute at the other.

The "intensity of conflict" curve illustrates the increasing strength and intensity of feeling between the parties as the conflict progresses through the various stages of a claim which, if unresolved, develops into a dispute and proceeds through the various dispute resolution stages until it is ultimately resolved. (A model depicting the increasing cost of a conflict through the same stages would be more or less identical to the "intensity of conflict" curve).

Causes of conflict, claims and disputes: a transaction cost economics perspective

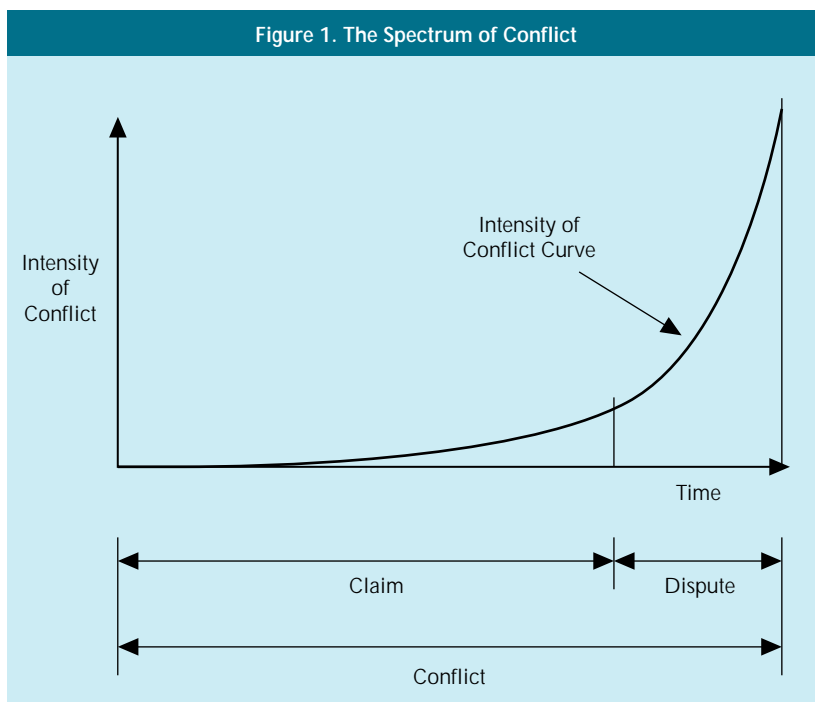
In recent years, four studies in particular: Doree (1994), Alsagoff (1996), McDermott and Alsagoff (1996) and Yates (1998) discuss the application of transaction cost economics (TCE) theory to the issue of causation of conflict, claims and disputes in construction.

This approach suggests that the root causes of conflict, claims and disputes are *contractual incompleteness* and *opportunism in the presence of asset-specificity*.

Contractual Incompleteness

Many contracts which take place over an extended period of time can be described as incomplete in the sense that, at contract formation (*ex ante*), the obligations of the parties cannot be fully and unambiguously specified to take account of all future "states of the world" which may be encountered during contract execution (*ex post*). In theory, a construction project tendered on the basis of a fully completed design (or, in the case of design/build procurement, a full and precise statement of the Employer's Requirements), having no errors or omissions in tender documentation and requiring no changes or variations during the construction phase, could be described as a "complete" — that is, fully contingent — contract.

Figure 1. The Spectrum of Conflict



In reality, however, in view of the complexity of the construction process and time necessary for overall delivery, all but the smallest of projects are inevitably incomplete.

In "traditionally" procured projects contractual incompleteness is usually manifest in one or more of three categories:

1. At contract formation stage in the form of Prime Cost Sums (PC Sums), Provisional Sums, Provisional Quantities, and the like, all of which are "adjusted" during the construction phase depending on the client/design team's actual requirements.

2. A contractual mechanism — namely, the right to instruct variations — which allows the client/design team optimum flexibility in decision-making (either by leaving decisions as late as possible and/or changing decisions made previously).

3. Ambiguities, errors or omissions in the *ex ante* contract documentation, which come to light *ex post*, necessitating clarification of the client/design team's requirements and leading to *ex post* "adjustments". (Usually classified as variations.)

According to TCE theory there are three factors which give rise to contractual incompleteness: bounded rationality; risk and uncertainty; and complexity.

Bounded Rationality

Bounded rationality is described as the cognitive constraints on humans, which prevent the preparation of fully contingent contracts at contract formation stage. The constraints are limits of knowledge, ability, experience and competence, which are exacerbated, on occasions, by limited time.

Risk and Uncertainty

Uncertainty as to future "states of the world" can also influence the nature and extent of post-contract "adjustments" whenever contingencies arise which, in accordance with the contract, are at the risk of one of the parties or shared between them. (For example: injury to persons and damage to property, which are usually insurable; inflation; shortages of labour and materials; adverse weather conditions; unforeseen ground conditions; and other matters, which are wholly beyond the control of the parties.)

Complexity

The complexities of construction compared with other industries (particularly manufacturing) are summarised by Casson (1987):

- Unlike most manufacturing, construction output is normally a sequence of "one-off" projects each of which is customised because of the requirements of the particular client and the idiosyncratic constraints of the particular site.

- Most construction work takes place "out of doors" and is, therefore, subject to the vagaries of the weather. In this respect construction is like other weather-related activity such as agriculture and tourism.

- Intermediate inputs are immobile. The division of labour within construction creates many separate tasks within the production process. Different tasks call for different specialist skills, as in manufacturing. However, unlike manufacturing, most of these tasks have to be carried out on the same site, because their output is embodied continuously and directly into the structure. Subcontractors do not, therefore, work on their own premises but on the main contractor's premises. Moreover, they work in close proximity to each other. Unlike manufacturing, therefore, subcontractors work "under the eye" of the main contractor and "under the feet" of other subcontractors.

- Construction is labour intensive. The division of labour creates many activities for which the only input of any significance is labour itself.

- Many activities cannot be begun until others have been completed. Punctuality in starting and completing each activity is therefore crucial for the prompt completion of the overall process.

Opportunism

Contractual incompleteness *ex ante* sets the stage for potential problems *ex post*. When events/circumstances arise that are not fully and unambiguously covered by the contract provisions, one or both parties may have incentives to behave "opportunistically" by taking actions that will increase the costs or reduce the revenues of the other party.

Opportunistic behavior involves making "false or empty, that is, self-disbelieved, threats and promises in the expectation that individual advantage will thereby be realized." (Goffman 1969.) It involves subtle forms of deceit and also

includes stronger, more blatant forms of behaviour such as lying, stealing and cheating. The notion that, in certain circumstances, "contractual" man will behave opportunistically is entirely consistent with one of the basic concepts of neoclassical economic theory, namely "the motivating force in the economic system is self interest." (Galbraith and Salinger 1981).

More generally opportunism refers to the incomplete or distorted disclosure of information, especially to calculated efforts to mislead.

TCE theory does not insist that individuals (and/or firms) are opportunistic continuously, or even largely given to opportunism. Williamson (1985) merely assumes that "some individuals are opportunistic some of the time".

There appears to be a spectrum or scale of opportunism, with nil or insignificant opportunistic behaviour at the low end of the scale and extreme behaviour, possibly involving criminal activity, at the top.

It may well be that a "reputable" contractor, in normal circumstances on a contract, which promised a reasonable margin of profit, would be placed on the lower reaches of the opportunism scale. However, faced with the prospect of a significant loss — due, for example, to the occurrence of an event which is at its sole risk — the contractor, at a stroke, could jump several notches up the scale to such an extent that it would be prepared to spend significant additional sums of money on legal advice and "take its chances" with a full arbitration.

Theoretically, it is possible that a claim genuinely made by one party could genuinely be disputed by the other involving no opportunistic behaviour by either party. In practice, however, contractors' claims are often opportunistically inflated, exaggerated or even spurious and clients (and their staff/consultants) frequently respond with reciprocal opportunism, by rejecting contractors' claims out of hand.

Asset Specificity

Transaction cost economics theory assumes that markets are competitive *ex ante* (that is, there are many buyers and sellers). Opportunism can emerge *ex post* because certain characteristics of the transaction give one or both of the parties some "monopoly" power when certain contingencies arise. The primary source of monopoly power is the presence of transaction-

specific investments (asset specificity). Given contractual incompleteness, the higher the levels of asset specificity, the greater the potential for opportunistic behaviour.

Transaction-specific investments generate a series of potentially appropriable "quasi-rents" equal to the difference between the value in the use to which the investments are committed and the next best use. The presence of transaction-specific investments creates incentives for one party to behave opportunistically and "hold up" the other *ex post*, which can lead to conflict and "costly haggling". (Klein et al 1978.)

Masten et al (1991) identify a particular type of asset specificity, temporal specificity, which is described in the context of shipbuilding and construction where the need for precise scheduling of activities raises the potential for strategic hold-ups by key contractors/subcontractors. Williamson (1996) subsequently describes temporal specificity as "akin to technological non separability and can be thought of as a type of site specificity in which timely responsiveness by on-site human assets is vital."

TCE theory identifies contractual incompleteness as the key to opportunism. Without contractual incompleteness construction contracts would be fully contingent, and there would be nothing for the contractor to behave opportunistically about (except for opportunistic cheating on quality/specification requirements, the subject of which is outside the scope of this paper). The presence of transaction-specific investments by one or both parties is a condition precedent to opportunism. "Absent asset specificity, and the parties go their way whenever transactional difficulties ensue". (Williamson 1975.)

From the perspective of the client, the assembly/purchase of the land for the project and the cost of design/construction represent significant transaction-specific investments. The client cannot realise the return on this investment until the project is completed. The time taken for design and construction of the project, is thus, a critical factor. The threat of delay to completion of the project, therefore, gives the contractor significant potential for hold-up/opportunistic behaviour.

Transaction-specific investment by the contractor is less apparent, and possibly varies from time to time during the construction period

depending on the incidence of payments by the client. For example, one month into the construction period, the contractor has invested in tendering costs and site-team assembly, mobilisation of plant and equipment and site offices, but has not yet received the first interim payment.

Masten *et al* (1991), however, express the view that, unlike manufacturing, investment in plant and equipment used in construction is less likely to be specific to a particular contract. "To the extent that each construction project takes place on a unique site, the assets themselves are more likely to be mobile... and adaptable for use in varying applications". Nevertheless, the purchase of specialised equipment (such as a tunnelling machine designed and manufactured for a specific project) obviously involves substantial transaction-specific investment by the contractor. However, the hold-up potential afforded to the client by such asset specificity is reduced progressively as work advances and interim payments are made. Any advance payment or lump-sum payment made when the particular item of equipment is mobilised on site further diminishes the client's hold-up potential.

In view of the imbalance in transaction-specific investments, the contractor's potential for opportunistic behaviour and hold-up is significantly greater than is that of the client.

Case study — Hong Kong's Airport Core Programme

In 1989, the Hong Kong Government announced the intention to construct Hong Kong's new airport on the northern coast of Lantau Island at Chek Lap Kok, together with related infrastructure, all of which was to be completed in 1997. Upon opening, the new airport would be capable of handling 35 million passengers and 3 million tonnes of cargo annually.

The Government of the People's Republic of China, which was due to resume sovereignty of Hong Kong from Britain in 1997, expressed concern at this announcement mainly because it had not been consulted and, in particular, was apprehensive that the future Government of the Hong Kong Special Administrative Region would inherit potential cost and time over-runs and the related debt.

After a series of high-level meetings between the British and Chinese Governments, a Memorandum of Understanding, which confirmed China's support for the new airport and its related infrastructure, was agreed and signed in Beijing by Prime Ministers John Major and Li Peng on 3rd September 1991.

The Airport Core Programme (ACP) was an unusually large scale and complex undertaking, the primary objective of which was the



procurement of the new airport at Chek Lap Kok, together with extensive supporting infrastructure comprising reclamation, new expressways, tunnels, bridges and a completely new railway system connecting the new airport with Hong Kong's central business district.

Due to the delays in obtaining agreement between the British and Chinese Governments completion dates were modified such that the opening and full operation of Chek Lap Kok and the airport railway took place in July 1998. The remaining seven ACP projects together with the Western Harbour crossing, were completed on programme in 1997.

The following article, which appeared in the *Sunday Morning Post* on 8th June 1997, illustrates both contractual incompleteness in the form of "design changes, schedule variations and delays" and opportunism by the contractor in "demanding millions to finish their contracts on time". Reference is also made to an earlier "\$1.9 billion payout" which was evidently "paid despite little supporting paperwork," suggesting a negotiated settlement of earlier claims and illustrating the significant "hold up" potential on the part of the Contractor.

Chek Lap Kok Builders want \$1.6b for extras
Building contractors on the \$12 billion passenger terminal at Chek Lap Kok are claiming an extra \$1.6 billion from the Airport Authority — just nine months after a \$1.9 billion payout for other added costs.

The Sunday Morning Post understands the claims, as a supplemental agreement to the initial contract, have just been lodged



with the authority by BCJ, the Britain-China-Japan joint venture responsible for construction of the terminal.

They cover design changes, schedule variations and delays which have arisen since a previous supplemental payment was agreed last September.

"The group got the building weather-tight just about on schedule while getting other elements ahead of schedule. It is doing a good job, but there is a cost to that," an on-site source said.

BCJ consists of Amec and Balfour Beatty from Britain, Kumagai Gumi (HK), China State Construction Engineering and Maeda of Japan.

In September, BCJ and AEH — the building services installer — were paid \$1.9 billion to settle outstanding construction wrangles on the project.

The payments angered legislators who demanded that senior authority executives give a full explanation for them.

The wrangle recently resurfaced after suggestions the claims were paid despite little supporting paperwork setting out a precise cost schedule for the delays and other problems suffered by BCJ and AEH.

There also have been allegations the authority is being "held to ransom" by contractors demanding millions to finish their contracts on time.

The authority's corporate development director, Clinton Leeks, said the initial supplemental agreements were made at an extremely high level in both the authority and the contractors.

A second newspaper article from the *South China Morning Post* of 12th March 1998 gives overall ACP data on numbers of claims submitted and resolved to date; the values actually agreed as compared with the much higher values originally claimed; further illustrating the scale of contractors' opportunistic behaviour on the ACP.

Large contract claims 'usual'

Hefty claims are a natural part of large-scale construction contracts, a senior official said.

In a written reply to Eric Li Ka-cheung, acting Secretary for Works Lee Shing-see said 20,923 claims against 152 airport contracts had been received.

According to the Quarterly Report on the Airport Core Programme Projects submitted

to the Finance Committee, the Airport Authority and the Mass Transit Railway Corporation had resolved 6,047 claims at a cost of \$2.87 billion against an original claim amount of \$10.8 billion by the end of December, leaving 14,876 claims unresolved.

"Given the scale, complexity, multiple contractual interfaces and tight programme [of airport core projects], the number and amount of claims submitted are not unusual," said Mr Lee.

Delays in the possession of sites, variations in design and limitations on certified construction methods contributed to legitimate claims.

This second newspaper article illustrates not only the nature of the contractors' opportunistic claims strategy — whereby initial grossly inflated/exaggerated claims are submitted which are subsequently reduced significantly as part of claims evaluation and negotiation — but that this opportunistic behaviour is considered by a senior government official, the acting Secretary for Works, as "not unusual".

Measures for preventing/reducing claims and disputes

Contractual incompleteness and opportunism are identified as the root causes of conflict, claims and disputes in construction.

Therefore, a client who perceives conflict, claims and disputes as a problem and wishes to lessen their incidence should proactively endeavor to:

- a) limit or reduce contractual incompleteness, and/or
- b) attenuate the opportunistic inclinations of the contractor.

Limit/Reduce Contractual Incompleteness

The singular most effective way of reducing contractual incompleteness is for the client and his staff/consultants to comply with accepted construction industry "good practice" conventions. The Latham Report (Latham 1994) contains the most comprehensive "good practice" recommendations made in recent years. Whilst the report is directed at the UK construction industry, many of its findings are applicable to the construction industries of other countries.

Issues that are of particular relevance are:

- Adequacy of client organisation and briefing process;
- Choice of the most appropriate procurement system (not necessarily the traditional approach, particularly if time is short);
- Selection of experienced, reputable and capable design consultants (particular attention should be paid to the design and coordination of building services); and
- Contractor selection based on quality (including reputation and experience) as well as price.

Attenuation of Opportunism

Reputational factors

Some contractors value their "claims averse" reputations. Other considerations (that is, quality, price, and so on) being equal, such contractors are to be preferred. The term "claims averse" is used to describe contractors who value their reputations for restraint in the submission of opportunistic (that is, spurious or exaggerated) claims. In TCE terms, such contractors perceive their "claims averse" reputation to be of greater (long-term) value than the potential gain to be made from (short-term) opportunistic claims. However, as discussed earlier, a contractor who in normal circumstances may be claims averse can, at a stroke, move several notches up the opportunism scale when suddenly faced with the prospect of a substantial loss on a particular project.

There has been an abundance of literature in recent years on the subject of "partnering" (for example, NEDC Construction Industry Sector Group 1991, Uher 1994, Bennet and Jayes 1995, Godfrey 1996). Closely related topics are "relational contracting" (Alsagoff and McDermott 1994); and informal "clan relationships" which exist between consultants and contractors who frequently work together on the same projects, albeit that there is no contractual tie between them (Reve and Levitt, 1984).

Such "relational" factors and "partnering" arrangements, wherein the prospect of future work for a contractor is almost guaranteed (in other words, the current project is part of an ongoing series of projects — what Bennett and Jays refer to as "strategic" partnering), have the effect of attenuating opportunism. In TCE terms, the prospect of the future contracts is perceived by the contractor to have greater value than the potential gain of making an opportunistic claim

on the current project. (Consequently, from a TCE perspective, the suggestion that similar benefits might accrue from a partnering arrangement for a single, one-off, project — that is, “project” partnering — is illogical.)

It could be argued, from a sociological point of view, that any procedure which brings the parties together in the early stages of the project (for example, partnering and value engineering workshops) can have a positive influence on working relations and teamwork, which also may have the effect of attenuating opportunism.

Institutional factors

Williamson’s (1985) analysis of commercial trust, which includes trust in the context of institutional environments (such as societal culture, trading networks, the professions and corporate culture), as a “check” on opportunism, has significant relevance in the construction field. As an illustration of societal culture Williamson refers to trading trust in Japan which “is said to be much higher than in Great Britain.” This particular cultural characteristic may begin to explain not only why the incidence of claims and disputes is comparatively low in the Japanese construction industry but also why Japanese contractors working overseas are known to have “claims averse” reputations.

Alsagoff and McDermott (1994) in a study of relational contracting refer to the Japanese concept of “amae”, meaning “cooperation and dependency”, wherein clients, contractors and subcontractors maintain an ongoing relationship throughout a long series of projects. Any disputes, for example, over vaguely-worded contracts or the execution of additional work, are resolved by negotiation between the parties. An illustration is given, furthermore, of contractors taking the initiative to accelerate the project in the clients’ interests, but at the contractors’ expense, in the knowledge that the award of future contracts will reward this cooperation. “The overall result will be in a manner such that the short term losses incurred are compensated in the end”.

An efficient and “well-informed” Client

According to TCE theory information impactedness or the deliberate withholding of information, to create a situation of differential knowledge/intelligence, is a form of opportunistic behaviour. It is advantageous for an opportunistic contractor to have superior knowledge than the

client of the true facts.

Conversely, a client who is efficient and well-informed, has the effect of curbing an otherwise opportunistic contractor. A contractor will only spend time and money on the submission and pursuit of opportunistic claims and disputes if the contractor is of the view that his “chances of getting away with it” are good. A knowledgeable and well-informed client has the effect of reducing the contractor’s “chances”.

Alternative Dispute Resolution

The use of certain alternative dispute resolution (ADR) procedures, in particular those involving the appointment of an adjudicator (or similar) at the outset of a contract — in addition to their value in resolving disputes — can also have the effect of attenuating opportunistic behaviour by the parties. The presence within the project team of an experienced and well-informed, neutral third-party, whose sole objective is the successful outcome of the project (with minimal conflict/disputes) often has the effect of discouraging both parties from engaging in “one-upmanship” and spurious conduct.

The concept of ADR techniques assumes that the parties genuinely want their disputes resolved by alternative methods to arbitration. However, this assumption is not necessarily always valid. Sometimes an opportunistic contractor may decide there is little to be gained in resolving matters economically and efficiently. “In such circumstances realism might dictate the full majesty of the adversarial (arbitration) process in the hope of the return that a well briefed legal representative might deliver”. (Clegg 1992.)

Economic factors

The prevailing macro-economic climate has a direct influence on contractors’ profit margins, and hence their inclinations to behave opportunistically.

“Virtually all who are engaged in the construction industry are profit-oriented. Invariably, this orientation stems not so much from inherent avariciousness but from the basic need for survival. Each firm must make a profit to survive, and all the individuals involved in the quest for profit are eager to prove their particular self-worth.” (Hohns 1979.)


A questionnaire-based investigation of UK contractors’ tendering strategies during the construction industry recession in the mid-1990s

demonstrated that the profit margins of five out of six leading contractors were less than one percent. (Pasquire and Collins 1996). The study also found that 65 percent of contractors would consider tendering at tight or even negative margins, during such difficult times.

In such circumstances it is hardly surprising that contractors are opportunistic. Indeed, Latham (1994) warns "when contracts are won on a price which can only produce loss for the main contractor, the likelihood of a contract dominated by claims is extremely high".

Conclusions

Given the "incomplete" nature of most construction projects, this study suggests that claims and disputes, to a greater or lesser degree, are inevitable.

The actual extent of claims and disputes, on a particular project, is largely governed by the client in determining the balance of his priorities — especially regarding time and cost — and through his selection of procurement system, client organisation, consultants and the contracting team. 

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