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Fairness in interorganizational project relations: norms and strategies

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There is a strong preference for fairness in human interaction, so that people who experience unfairness tend to react with anger, resentment and loss of motivation. Concerns to appear fair influence the behaviour of both individuals and firms. Perceptions of fairness are susceptible to framing and may be influenced by various norms for outcome distribution as well as by decision processes and interpersonal relations. This paper deals with causes and effects of fairness perceptions in construction project relations, mainly fixed price contracts procured by competitive tendering. In such projects, uncertainty results in continuous post contract award problem-solving and negotiations, and fairness concerns may have incremental but significant influence on the terms of exchange. Case studies of client–contractor interaction in two projects are used to discuss of how fairness norms relate to strategies and industry culture. It is concluded that that an intuitive cost-based norm of fair pricing shapes interaction in construction projects, but that consequences vary between projects. The norm may favour contractors, but is also related to poor risk management and client distrust. To improve performance, clients need to design procurement practices and communication so that perceptions of contractor losses are counteracted.

Keywords: Construction contracts, conflict, procurement, fairness, winner's curse

Introduction

In construction projects, complexity and uncertainty combine to raise the requirements for a well-functioning interorganizational communication, and alliances and other types of partnerships are often employed to promote collaboration. However, fixed price contracts, often resulting from procurement mainly based on lowest price, are still most common. Such contracts are often considered adversarial and conflict-ridden. This paper investigates the background of conflicts arising in client–contractor relations in fixed price contracts, and argues that an important explanation can be found in perceptions of fairness.

Shared fairness norms may facilitate exchange and reduce the need for information processing (Grandori and Neri, 1999), and it is often emphasized by both practitioners and researchers that contractual terms should be perceived as fair, especially in relational contracting and partnering (Ring and Van de Ven, 1994; Bennet and Jayes, 1998) but also in more traditional construction contracts (Scott and Billing, 1990). Research on fairness in organizations and economic exchange relations, however, has shown that there are numerous alternative fairness norms and that perceptions of fairness are susceptible to framing effects. The following research questions can therefore be formulated: (1) what norms are influential in shaping perceptions of fairness in construction contracts? (2) what conflicts and strategies can be related to these norms? and (3) what can be done to reduce conflicts caused by perceptions of unfairness?

The analysis is based on two deep qualitative case studies of construction projects, where the interaction between the client and the contractor during the contract period (more than 2 years for each project) was followed continuously by non-participant observation during meetings. Also, 10–15 interviews per project were made with central decision-makers representing different parties. The paper is organized as

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follows. First, theory describing reactions to unfairness, fairness norms and factors that may influence perceptions of fairness is summarized. Next, specific features of construction contracts and procurement are outlined and related to fairness theory. Then, the cases are described with a focus on fairness aspects and, finally, the cases are analysed and conclusions drawn.

Fairness perceptions and their effects

It seems to be of great importance to people that exchanges are perceived as fair. Although norms of fairness may vary between contexts, it is never questioned that transactions are evaluated in terms of fairness (Folger and Cropanzano, 1998). Gouldner (1960) found that a norm of reciprocity existed all over the world, and concluded that such a norm is a vital stabilizing factor in any society.

Individuals who experience unfairness tend to react with strong emotion. Perceived injustice seems to be connected to self-esteem—a good and valuable person is entitled to fair treatment—and it is therefore hard to tolerate. In this, people react to unfairness affecting not only themselves but other people, and tend to punish perceived harmdoers also at their own expense (Fehr and Gächter, 2002). Researchers have discussed emotional responses to perceptions of injustice under various labels: moral outrage (Bies, 1987), wounded pride, spite and anger (Pillutla and Murninghan, 1996) and resentment (Folger *et al.*, 1983). Perceived injustice is often associated with a general loss of trust, loyalty and motivation, and employees who feel mistreated by an employer may work less hard or even steal or engage in sabotage to restore fairness. Consequently, literature on perceptions and management of justice within organizations (e.g. Bies, 1987; Folger and Cropanzano, 1998) emphasizes that organizational decision-makers and decision processes need to be perceived as fair. What, then, characterizes a fair relation? Research has identified two major dimensions of fairness: outcome justice or distributive justice, which deals with the fair allocation of resources, and procedural justice, which is related to decision processes and interpersonal relations. Below, these aspects are described more in detail.

Outcome justice/distributive justice

The simplest norm for distribution of outcomes is equality: all participants receive equal shares. Often, however, some parties contribute more than others to the outcomes of a joint project, and it is then considered more fair that rewards are distributed in proportion to investments, costs and merit, i.e. equitably rather that equally. Distributive justice may then be defined as 'the perceived proportion of individuals' inputs into and outputs derived from the relationship in comparison with the inputs and outcomes of relevant others' (Brockner and Wiesenfeld, 1996, p. 189). In an employer–employee relation the individual's inputs are, for example, hours of work, age, education, experience and personality, while outcomes are aspects such as wages, status, interesting assignments and autonomy (Homans, 1961; Adams, 1965). Clearly, judgements of distributive justice may vary considerably depending on what information is available, which referent others are chosen for comparison, and how different inputs and outcomes are valued. In many cases it becomes so complicated to distribute rewards (or sanctions) according to the principles of equity that it is considered most fair to use the simple equality norm. As Grandori and Neri (1999) note, to agree on an asymmetric allocation requires more justification, discussion, calculation and bargaining than more egalitarian ones. Equality-based solutions thus are attractive because they are both easy to administer and easy to justify. A third fairness principle that should also be mentioned is need, so that resources are distributed according to the needs of different parties.

Procedural and interactional justice

A further development in the theoretical understanding of fairness perceptions deals with the fact that people's judgements of fairness do not depend on distributive justice alone, but also on the processes deciding outcomes. It has been found that the fairer a person perceives a process to be, the more tolerant that person tends to be about the consequences of the process (Folger and Cropanzano, 1998). A fair process, then, should be consistent, bias free, accurate, correctable in case of error, representative of all concerned and based on prevailing ethical standards (Leventhal, 1980).

Interactional justice, or the social aspects of the decision processes, is also important. Using social accounts such as justifications and explanations, the perceived harmdoer may avoid blame, reproach and punishment. A decision-maker can, for example, refer to actions by third parties or technical failures, or encourage comparison with other referent persons or situations (Bies, 1987). General politeness and respectfulness in interpersonal relations have been found to strongly influence perceptions of justice. Folger and Cropanzano (1998) suggest that this is because

judgments concerning distributive and procedural justice are complex and difficult to make, while there is much less ambiguity as to what is to be considered rude behaviour. Also, there seem to be combination effects, so that an individual's negative emotional reaction is amplified when a low outcome justice is accompanied by disrespect or unfair formal procedures (Brockner and Wiesenfeld, 1996).

Because of the susceptibility to framing, fairness judgements tend to be biased in a self-serving direction (Thompson and Loewenstein, 1992; Diekmann *et al.*, 1996). However, decision-making is to a great extent intuitive, and cognitive shortcuts play an important role (Cialdini, 1993; Marsch, 2002). People attend to norms that are perceived as more salient (Pillutla and Chen, 1999) and established rules are generally considered more fair (Samuelson and Zeckhauser, 1988). Thus, it should be of great importance which norms most readily come to mind when interpreting the fairness of a particular situation.

Fairness in economic exchange

Most of the research cited above deals with fairness in relationships between individuals or within organizations. However, fairness perceptions interfere with self-interest to shape behaviour also in business relations. In an influential study, Kahneman *et al.* (1986) investigated implied perceptions of fairness concerning the setting of prices, rents and wages. A number of imaginary cases were presented to test persons, who were requested to evaluate the fairness of the behaviour of hypothetical merchants, landlords and employers towards customers, tenants or employees. A typical question concerned whether the respondents found it fair of a hardware store to raise the prices of snow-shovels the morning after a major snowstorm, behaviour the respondents perceived to be unfair.

People are generally loss averse, which implies that we tend be more risk averse when evaluating possible gains but more risk seeking in mitigating losses (Kahneman and Tversky, 1979). The 1986 study by Kahneman *et al.* showed that losses, in accordance, were perceived as more unfair than foregone gains. A major conclusion was that a *reference transaction* was used to determine fairness. When there existed a history of similar transactions between the same parties, the latest transaction functioned as a reference, while for new transactions references were sought among comparable transactions. A dual entitlement principle was identified, according to which the buyer was entitled to the reference price and the seller to the reference profit. The respondents considered it acceptable that prices were raised if the seller's costs increased, for example, due to increased wholesale prices or operating costs, and the seller could then pass on the entire cost increase to the customer without the risk of being perceived as unfair. But if the seller's cost for some reason were reduced, people did not consider it unfair that prices were not reduced correspondingly. This, suggested Kahneman *et al.* (1986), was because the price did not exceed the reference price and, consequently, the buyer was not perceived as experiencing a loss. On the other hand, sellers were not entitled to raise prices and increase profit when demand increased. Because the reference price was changed, this would be coded as a loss for the customer. Thus, selling at a market-clearing price was generally considered unfair, especially when market conditions strongly favoured one party. Auctions were only accepted when there was a resale market for the goods and the price could be seen as reflecting a higher value that the buyer could recuperate. Other studies have confirmed that information about causes of price increases and setting prices influences perceived price fairness, and that cost-based pricing is generally considered fair (Maxwell, 2002). However, this effect seems to diminish when the information suggests that cost increases are within the volitional control of the seller (Vaidyanathan and Aggarwal, 2003).

Because different moral standards are applied depending on if an action is motivated by a concern to avoid a loss or if the aim is to improve profits, it is important how outcomes are coded. Kahneman *et al.* (1986) maintain that firms adhere to implicit norms of fairness and frame their actions in a way to make them seem fair. For example, price reductions are labelled 'discounts' in order to avoid the perception that the reference price is changed.

Implications for construction projects

In construction, it is common to appoint contractors by competitive tendering on a lowest price basis. However, incomplete or incorrect specifications, owner-initiated specification changes, unknown weather and ground conditions, political processes, etc., often result in numerous post contract award negotiations (Cox *et al.*, 1999). Contractors have considerable opportunities to improve their financial situation both by overpricing claims and shirking on quality. Further, the client is dependent on the contractor to participate in preventing and solving problems over and above the explicit contractual requirements, and it should be hard to maintain such communication and cooperation if fairness norms are too strongly violated.

The findings of Kahneman *et al.* (1986) highlight an important problem of competitive tendering and lowest price selection in relation to cooperative interaction. A project is unique, and the construction market is notorious for its cyclical nature. In these situations, winner's curse scenarios (Bazerman and Samuelson, 1983), where the winning contractor has submitted an unrealistically low tender, are to be expected. The study by Kahneman *et al.* (1986) suggests that the contract sum will not gain a strong standing as a fair reference price if it results from a procurement auction where the lowest bid is selected, and even less so if the buyer is perceived as taking advantage of a favourable market situation. Thus, if costs exceed the contract sum the contractor will easily be seen as experiencing a loss, entitled to pursue a more opportunistic strategy. To the extent that buyers representing client organizations react in the same way as the consumers studied by Kahneman *et al.* (1986) did, these fairness concerns may significantly influence the terms of exchange.

Such effects have been observed in other longer term business relations. A study of the car industry showed that if competition was high in procurement, production level buyer representatives protected the supplier from losses by, for example, accepting low quality or late deliveries, so that 'the suppliers slowly win back what they had to concede in the initial negotiation of the deal with the Purchasing Department' (Friedberg and Neuville, 1999, p. 84). A broader study of IT-outsourcing established that winner's curse effects caused severe strain on the relationship, 'to the point where renegotiation or early termination became the only option' (Kern *et al.*, 2002, p. 67). Construction project relationships, however, are shorter and competitive tendering is well established as a contract award principle. Based on the case studies, the next part of the paper will discuss how norms of fairness influence strategies and relations in individual construction projects as well as the culture of the companies and the industry.

Case 1: the residential building

The first case study concerned a residential building that incorporated several experimental research projects concerning low-energy technology and dwellings adapted to the needs of elderly people. The client was a housing cooperative association. The project was the result of a design contest, and many aspects had been negotiated for some time in order to keep costs down and receive research funding from central government. A fixed price design-build contract was used, where the contractor had to assume the responsibility for detailed design already prepared by the client (a novation contract). The client had a system for handling procurement and project management of residential buildings, including a standard list of specifications of those systems, components and even trademarks that contractors were entitled to use.

Specific performance requirements for energy consumption and indoor climate were listed in a special document which was included in the contract. Because of the experimental character of many systems, the design-build contractor could not be perfectly sure that all these requirements would be possible to fulfil. The design-build contractor's project manager objected to some requirements and made some investigations to assess risks and costs, but he did not perceive the special requirements as a big risk. The people involved knew each other well, and after negotiations with client representatives the contractors' project manager stated that he was confident that any problems would be sorted out in a cooperative atmosphere. Construction started and other construction-oriented staff took over the client project management. Almost at once, there were disagreements as to what had been decided in the final negotiations. The contractor's project manager maintained that several changes had been agreed that were not reflected in the updated version of the specific performance requirements, while the client organization denied the very existence of any additional agreements. This gave rise to conflicts and negotiations which did not end until the final performance measurements showed that all the disputed requirements were in fact fulfilled.

Another conflict related to the client's standard specifications. These were placed low in the ranking of contractual documents, so that the client organization would be sure that none of their regular requirements were left out but could avoid the trouble of adapting their standard documents to this unique project. The final agreements were negotiated in a hurry, and this document was included at a very late stage in the process. The design-build contractor reviewed the standard specifications and found them very basic and un-objectionable. However, soon after the contract was signed it was found that the heating and plumbing subcontractor (also a design-build contractor) had not checked the contents of the standard specifications exhaustively. The client's building services inspector, who had not previously participated in the project, discovered that the design proposed by the heating and plumbing contractor included simpler equipment that did not comply with the standards and requested that the system should be changed (to a more expensive solution). The subcontractor found this very unfair and argued that the client's team should have called attention to

the problems earlier. They maintained that their system was as good as the one the client prescribed and, as construction had started already, chose to build the system according to their original design while trying to convince the client to accept it. The client's inspector, however, stated that the future member-dwellers were entitled to the same standard as in other projects procured by the client organization. The discussions became very emotional and personal as the heating and plumbing contractor accused the client's inspector of being unethical, prestigious and conservative. The conflict was much discussed by many project participants, and the subcontractor was generally pitied while the client was perceived as answerable for the subcontractor's difficult situation. The negotiations continued after the project was finished, and the final outcome was not decided when the case study ended.

Case 2: the education building

Case background and history

The second case study concerned an education building of high standards for materials and architecture, and the client was a large public property owner. A traditional DBB contract was used, and the procurement took place in a deep recession. It was a fixed price contract, and selection was based on lowest price under public procurement regulations. For the client organization, an in-house project manager was responsible for the execution of the project. The client team further consisted of four inspectors in the areas of building work, electrical services, other building services and site work. The three latter were the consultants who had designed the building. The architect was also represented in the group, but not as an inspector.

The project started out in relative harmony. Because of the shortage of work, the main contractor's project manager could pick the best staff for the project, and the client team was very satisfied with the quality of the work performed on site. However, after 6 months of the 2-year period of construction it became obvious that the contractor had underestimated the complexity of the project. Many systems were advanced, and the building also had a complex geometric form with non-standard and circular concrete walls. The casting of the load-bearing concrete structure took much more time than the main contractor had foreseen. The contractor's staff tried hard to increase their efficiency and cut costs, but continuously discovered further complications. In the end, the project was completed largely on time and within the client's budget, but the main contractor made a substantial loss. The financial problems, however, had great impact on project relationships and the strategies of the parties.

Strategies and negotiations

At the heart of the largely successful client strategy was a formal system that the client's project manager had developed for keeping record of project communication and decision-making. The inspectors visited the site regularly and discussed with contractors, but both contractors and inspectors were given strict instructions that all communication that could result in change orders and financial settlements should be put in writing and filed. The client team then held scheduled meetings to discuss these issues and decide their response. The client's project manager emphasized the importance of strictly punishing opportunism, but also of being fair and consistent. Thus, the client team had to figure out the background of each issue: was the contractor driven by opportunistic motives or was the problem more likely caused by missing information or lack of competence? However, in contrast to the client's strong focus on the formal communication with the contractor, the main contractor's attention was primarily directed towards the site activities. There were no regular meetings for discussing the formal communication on the contractor side and different persons, sometimes subcontractors, handled different questions. This meant that the client team could not be sure that the person who wrote a note had read the previous communication, and they had to pursue a rather forgiving strategy not to risk damaging the relationship.

At the first sign that the main contractor was having problems, the client team was alarmed. The client project manager especially was convinced that the contractor would attempt to compensate for their losses in different ways, and instantly became more suspicious toward all claims and suggestions coming from the contractor. Steps were taken to prevent claims in later stages and, although the inspectors were more understanding than the project manager, the client strategy became considerably less tolerant.

The main contractor's site management staff were optimistic at the start of the project, but as the problems increased they came more and more under stress. They submitted more claims and issued complaints about the bad quality of the blueprints and specifications documents, but continued to produce work of high quality and generally gave the impression of working hard to solve problems. The contractor's site manager attributed the schedule and budget overruns to estimation failures rather than to inefficiencies or mistakes in site work. He argued that in a recession, contractors are less likely to make

elaborated risk assessments of the costs of non-standard designs and include them in their tender. Common remarks by the contractor staff were that 'round buildings should be forbidden' and that 'the architect has had far too much influence in this project'.

The main contractor's staff, as well as many other project participants, considered the client's project manager too harsh. In response to this criticism, the client's project manager emphasized that he had been careful to follow ethical codes for procurement and that it was the contractor who had set the price. He also argued that it would be unfair to the other tenderers if the client would be more willing to compromise if the winning contractor's bid turned out to be too low.

Discussion

In both projects studied, fairness arguments played an important part in negotiations and project interaction. In line with the findings of Kahneman *et al.* (1986), the cases illustrate the tendency that a fair deal intuitively implies that a seller is compensated for incurred costs (provided that cost increases are not caused by obvious carelessness, mismanagement or lack of competence). Contractor losses produced general uneasiness among project participants and the contractors in trouble easily gained sympathy. By contrast, the clients' attempts to justify their strategies using social accounts (Bies, 1987), referring to the fair treatment of future member-dwellers or other tenderers, or to the contractors' own responsibility for their situation, seemed to require more conscious reframing. In both projects considerable pressure was exercised on the clients to be more open for compromises, and in the residential project the heating and plumbing contractor based their strategy on an expectation that the client would ultimately agree that fairness required that the contractor should not be made to install a more expensive system than they were paid for, no matter what the specifications said. Many clients can be expected to submit to such strong pressure and agree to compromise to reduce contractor losses, either because they share the underlying fairness perceptions, or to avoid retaliation. This happened in the settings studied by Friedberg and Neuville (1999) and Kern *et al.* (2002), both mentioned above. That intuitive fairness norms make contractors expect that they will manage to renegotiate contract requirements that they find unreasonable can also explain why the contractors in both case projects were less concerned about formal contract agreements than the clients.

In the cases studied, however, the clients chose quite offensive strategies. The client in the residential project was comparatively hard-nosed, probably because the organization regularly procured rather standardized buildings and had standard specifications and technical competence to ensure that the client goals would be met regardless of contractor opportunism and hostility. In the education building case, the client was more dependent on the contractors' commitment and good will to carry out the project successfully. Here, the client's organization was designed to make it possible to sustain reasonably collaborative contractor relationships also when there were conflicts between the contractual parties. Closer relations and contacts with contractors, or interactional justice concerns (Bies, 1987), were sustained by the inspectors while the project manager himself avoided personal contacts with the contractors outside formal meetings. Decisions were made in the client's office and although these relied heavily on the inspectors' expertise and general knowledge of what was going on at site, the project manager signed all responses and could be blamed for controversial strategies. This separation of personal communication from decision-making inserted a degree of freedom in the client–contractor relationship that increased client power in an unobtrusive way. It can be noted that although it was formally organizations that interacted, in both case projects it was primarily the individuals who were blamed and victimized. This implies that interpersonal relations are important for the organizational outcomes.

The cases also show that it is not evident that clients become more willing to compromise when a contractor is threatened by a loss. As in the education building case, contractor losses may lead clients to expect opportunism and become *less* collaborative, which can actually reduce the opportunities for contractors to negotiate favourable deals. Such client suspicion is also likely to occur independently of whether the contractor chooses to act opportunistically or not. A contractor in trouble then has to cope not only with the risk of a loss, which is stressful in itself, but also with client distrust. Such a combination of low outcome justice and low interpersonal sensitivity is likely to amplify perceptions of unfairness (Brockner and Wiesenfeld, 1996). Under these circumstances it is hard for a contractor project organization to maintain employee motivation and reach a high level of performance. Indeed, considerable professionalism and personal maturity are required from both contractors and clients to handle losses without a negative impact on both relations and results.

The existence of a cost-based norm of fairness may tempt contractors to emphasize their role as victims and try to improve their position by submitting claims or persuading clients to change quality requirements. Also, as shirking on quality and inventing and overpricing claims is not perceived as equally unethical if

the aim is to avoid a loss compared to if employed to increase profits, contractor ethics tend to vary according to the financial situation. Thus, this norm may also inhibit contractors from developing adequate risk management and pricing practice as well as a strong culture of responsibility and reliability.

Conclusions

It may be concluded that an intuitive cost-based norm of fair pricing shapes interaction in construction projects. In some cases this norm serves to reduce the risk that a contractor takes on in a competitive tendering procedure, but in other situations the client will, rather, become more suspicious and intensify control when a contractor is threatened by a loss. A major problem is that the cost-based fairness norm contradicts the dominant contract allocation and pricing mechanism of competitive tendering, which makes it hard to develop shared perceptions of fairness. Instead, trust and constructive cooperation is likely to collapse when problems arise and they are most needed (Loosemore, 1999). On the industry level, this norm ambiguity counteracts the development of a culture that inspires trust and favours learning and innovation. Altogether, fixed price construction contract procurement seems to be a case where fairness concerns, rather than facilitate cooperative interaction, tend to produce conflicts and hinder an efficient negotiation outcome (Grandori and Neri, 1999).

What practical recommendations to clients can be derived from the discussion? One way to proceed is to avoid the contradiction in norms by using cost-plus contracts, which is common in partnering projects and in projects with exceptional uncertainty. Also, to consider not only price but also contractor competence and attitude will somewhat shift the focus from price aspects. When fixed price contracts and lowest price selection are chosen, a more elaborated risk assessment by contractors could be favoured if clients as a group managed to act in a more rigorous and consistent way. In countries where construction disputes are handled frequently by the legal system, case precedence concerning ruling for claims, if consistent over time, should also contribute to aligning contracting parties' perceptions of fairness of outcomes and procedures. In Sweden, however, construction conflicts are generally resolved by the parties themselves without involvement of either courts or arbitrators. Also, clients vary too much in competence and attitude to establish a consistent practice.

Thus, for many clients the most relevant question is how collaborative relations can be developed and maintained in individual projects procured on a lowest price basis. A key issue, then, should be to strengthen the status of the contract sum as a fair reference price. This requires, first, that the procurement process fulfils procedural fairness requirements concerning objectivity and other ethical aspects. Further, the price as tendered should be validated in relation to independent cost estimates, and the winning contractor asked to analyse and explain differences. If the contractor still prefers to offer a price that is much lower than the estimates, it can be explicitly established that losses are expected. To mitigate winner's curse effects and help contractors make proper risk assessments, the client has to express in the tendering documents that such tender validation will be undertaken. If these kinds of measures are not taken, there is a risk that the contract sum is perceived as unfair only because it is the result of competitive tendering.

Finally, it should be kept in mind that this paper is based on Swedish cases. Fairness norms differ between cultures (see e.g. Gelfand *et al*., 2002) and in international projects variations in norms pertaining to the social aspects of decision processes and interpersonal interaction may further complicate relations.

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