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Negotiating cultures in corporate procurement☆

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ABSTRACT

In a repeated procurement problem, the incumbent can undertake a relationship-specific investment that generates opportunity costs of switching for the buyer. We investigate the impact of the negotiating culture on investment incentives, favoritism in the procurement contract allocation, and buyer profit. We compare a stylized competitive negotiating culture with a stylized protective culture. The cultures differ in the way the buyer uses the entrance threat to exert pressure on the incumbent. Our main result is that the relative performance of the cultures depends non-monotonically on the expensiveness of the investment.

1. Introduction

In many corporate procurement processes all over the world, buyers face similar challenges. Procurement is typically repeated; switching from an incumbent to an entrant causes opportunity costs; the size of these costs can be affected by non-contractible relationship-specific investments; and there is little long-term commitment power. Despite these similarities, negotiating cultures differ strongly across the world. In some regions exerting competitive pressure seems to be the overriding objective. In other regions the buyer seems to protect the incumbent from direct competitive pressure. In order to gain a better understanding of the role of the negotiating culture in procurement processes, we compare a stylized competitive culture with a stylized protective culture. In particular, we investigate how the negotiating culture affects investment incentives, favoritism in the allocation of procurement contracts, and buyer profit.

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A prominent example is the automotive industry.[1] The U.S. car industry differs substantially from the Japanese car industry in the way competitive pressure is exerted on incumbents. According to McMillan (1990), "United States industry [. . .] has traditionally been less willing than Japanese industry to forego the benefits of bidding competition. [. . .] Incumbents and outside bidders were treated equally [. . .]. Lowering the price was the overriding objective." He argues further, "[In Japanese procurement] there is considerable stability in the contractor/supplier relationship, implying that new contracts are not simply awarded to the lowest bidder, but that incumbents receive some sort of special treatment."

With respect to the implied effects, the stylized facts suggest that in the U.S. car industry incentives to make relationship-specific investments are low and the identity of the incumbent changes frequently over time. By contrast, in the Japanese car industry incumbents are willing to make significant relationship-specific investments and relationships tend to be long term. Although the differences may largely be rooted in the industry histories and business cultures, both procurement systems can by now be seen as complex systems of incentives to which firms respond rationally.[2] The recurring historic attempts of Western car producers to imitate their Japanese counterparts indicate that they view the Japanese system as being superior.[3]

We interpret a negotiating culture as a precommitment to a certain way of allocating procurement contracts. For a given negotiating culture, we analyze the infinite repetition of a procurement cycle consisting of a production phase followed by a contract renewal phase. During each production phase, the current incumbent supplier can undertake measures that generate relationship-specific benefits but are not contractible ex ante; for instance, this might be improvements in just-in-time production. Such measures often have three distinct features: they can only be undertaken within an enduring relationship, they can be undertaken at different degrees, and a substantial part of the implied benefits is backloaded and is realized only when the relationship is continued. Thus, we model investment as a continuous decision by the incumbent that generates additional benefits for the buyer if the buyer continues her relationship with the incumbent.[4] In each contract renewal phase, the buyer knows the extent to which the continuation of the relationship generates additional benefits and designs a procurement mechanism that governs her decision to continue the relationship or to switch to the entrant. Each supplier privately learns his cost of producing in the next production phase, the selected mechanism is played, and the procurement cycle starts anew.

Our interpretation of the negotiating cultures is as follows. In the competitive culture, the buyer faces no restrictions in her procurement mechanism choice. She can use the entrant at will to exert competitive pressure on the incumbent. In the protective culture, the incumbent is protected from direct competition with the entrant. The buyer negotiates first bilaterally with the incumbent and approaches the entrant only when the negotiations with the incumbent break down. Roughly speaking, the competitive culture relies on simultaneous negotiations whereas the protective culture relies on sequential negotiations.

The buyer's expected profit in each procurement cycle is affected through two channels: profits from investment and contract allocation, which can be attributed to the current cycle, and rents from future cycles, which can be extracted in the current cycle. As the buyer is limited in the protective culture in how she can use the entrance threat to exert pressure on the incumbent, the contract allocation is generally better for her in the competitive culture, but investment incentives and future rent extraction might be better in the protective culture.

As we are interested in procurement problems in which each player behaves opportunistically at any point in time, we study Markov perfect equilibria. Our main result shows that the optimal negotiating culture depends non-monotonically on the expensiveness of the investment. At the extremes, that is, where the investment is very cheap or expensive, the competitive culture performs best. If investment is expensive, competitive pressure is directly beneficial, whereas if investment is cheap, competitive pressure encourages investment. By contrast, if the investment is intermediately expensive, the protective culture is superior. Significant investments require the security that comes with protection. The repetition of the procurement problem adds non-trivial effects through future rent extraction, but we find that the non-monotonicity result holds for any importance of the future as measured by the discount factor.

2. Literature

Our article is related to the literature on investment incentives in procurement problems in which a single supplier can make a cost-reducing investment.[5] In Laffont and Tirole (1988) the buyer designs the procurement mechanism before an

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[1] See Hahn et al. (1986), McMillan (1990), Dyer and Ouchi (1993), Dyer (1996a), and Liker and Choi (2004) for stylized facts and empirical evidence.

[2] For the United States, such an interpretation is evident. McMillan (1990) also interprets Japanese procurement in this way: "There need be nothing mysterious about how Japanese business practices work, nor need the success of the Japanese system be explained by reference to things uniquely Japanese like the Shinto–Confucian ethic or Japan's consensus culture. [. . .] Rather, Japanese industry can be understood as having attained, as the end-point of an evolutionary process, a complex system of incentives to which firms respond rationally."

[3] See Liker and Choi (2004) for an overview. See Hahn et al. (1986) and McMillan (1990) in particular for the attempts of U.S. manufacturers to implement just-in-time production at the beginning of the 1980s and Dyer (1996b) for Chrysler's attempt in the first half of the 1990s. See also Helper and Sako (1995).

[4] This is in line with McMillan (1990), who emphasizes that "there are actions an incumbent can undertake during the course of the initial contract that improve productivity or quality."

[5] See Dasgupta (1990), Tan (1992), Piccione and Tan (1996), and Bag (1997) for procurement problems in which ex ante symmetric suppliers can all make unobservable investments.