

Pure Reciprocity under Alternative Procurement Mechanisms

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Abstract: Almost all procurement contracts fail to specify standards for all possible supplier performance dimensions, making moral hazard a ubiquitous presence in supply chain relationships. To explain the widespread use of such incompletely specified contracts and accompanying lack of supplier malfeasance standard theory relies upon models of repeated strategic interactions and reputational equilibrium. We argue that gift exchange and reciprocity is an alternative force that supports this phenomenon.

Behavioral economists have identified gift exchange and reciprocity as key principles of labor contracts in which employers pay higher than required wages to workers and workers respond by providing greater productivity than necessary. Controlled laboratory experiments have confirmed this hypothesis with designs that rule out the possibility of dynamic relationships and reputation building. We test for this presence and relative strength of this gift exchange hypothesis in stylized procurement setting under alternative auction mechanisms.

We consider a setting in which buyer wishes to acquire a single object from a set of possible suppliers. The buyer's valuation of the object depends on a quality level the contracted supplier chooses after the price is set. The supplier's cost is increasing in this quality level. This setting is a simple change of labeling of the classic studies of Fehr et al (1993 and 1998). We conduct experiments for this setting using two forms of a buyer determined auction, one in which the profile of supplier bids is revealed and the other where it is not. We also conduct a replication treatment using the mechanism of Fehr et al. where buyers post an offer to potential sellers. Notice the buyer determined action offers a different mode of activating the gift exchange, sellers demanding a gift rather than buyers offering a gift. Our results indicate that buyer determined action surprisingly leads to greater levels of gift exchange and a stronger price-quality relationship than found with the posted offer mechanism, also buyer and supplier realized surpluses are higher, and these effects are greater when the bid profile is public. In these cases, suppliers reciprocate more strongly when they know they won the auction despite not submitting the lowest bid.

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