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Employee types and endogenous organizational design: An experiment☆

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ABSTRACT

When managers are sufficiently guided by social preferences, incentive provision through an organizational mode based on informal implicit contracts may provide a cost-effective alternative to a more formal mode based on explicit contracts and active monitoring. This paper reports the results from a stylized laboratory experiment designed to test whether subjects in the role of firm owner rely on the social preferences of other ('employee') subjects with whom they are matched when choosing which payoff version of a simple trust game these employee subjects should play ('the organizational mode'). Our main finding is that they do so, albeit in a different way than theory predicts. The importance of the first mover's social preferences for trusting behavior is recognized by the owner subjects, but the significant (first order) impact second movers' social preferences have on trusting behavior of first movers seems to be overlooked.

1. Introduction

A major research theme within organizational economics is how to motivate employees to exert well-directed effort. This issue is typically addressed using the principal-agent model as point of departure. In the standard version of this model the agent is assumed to solely care about his own monetary compensation and to dislike effort. Similarly so, the principal just wants to maximize her own net profit and does not care about the agent's well-being. Given these assumptions it is derived how explicit incentive contracts should be optimally designed as to motivate the agent to put in sufficient effort.

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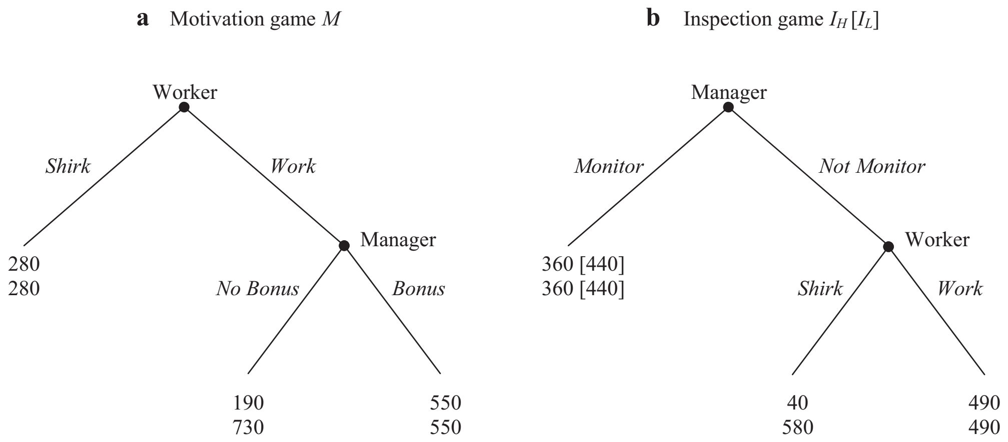

Fig. 1. (a) Motivation game M and (b) inspection game I_H [I_L].

Many empirical studies have found, however, that people may have alternative motivations that go beyond material self-interest. Fairness, altruism, empathy and a preference to react in kind to friendly or hostile actions of others (reciprocity) are among the various alternative motivations identified. The presence of such 'social preferences' may have profound implications for the provision of effort incentives. One of these is that they may make cost-effective alternatives based on non-enforceable, 'implicit' contracts feasible. Workers are more easily motivated to exert effort when they know that their manager cares about their personal well-being and thus will reward higher effort with a larger (non-contractible) bonus. In that case higher effort levels can be induced without having to bear the costs of a formal performance measurement and evaluation system. For this reason it may actually pay for firms to hire 'empathic' managers who do not solely care about profit maximization. The manager's personality type may help in overcoming a difficult incentive problem with the workers; see Rotemberg and Saloner (1993), Rotemberg (1994), and Hermalin (2001, Section 4.2) for formalizations of this intuitive idea.

Relying on social preferences as implicit-contract enforcement device requires that those who hire managers ('owners') recognize two important behavioral forces. First, the *direct* impact of the manager's social preferences on his *own* behavior should be well understood. Second, the *indirect* impact of the manager's social preferences on the behavior of those he manages should be appropriately recognized. Especially the latter behavioral force is crucial. It requires that owners understand that the manager's preferences are potentially key for worker behavior and that workers' own social preferences may be of second order. Intuitively, both selfish and more socially oriented workers alike are (much) stronger motivated by a manager committed to reward high effort than by a manager who always behaves opportunistically. Finally, owners should also recognize that an organizational mode based on informal implicit agreements is viable only if managers are sufficiently empathic. If not, a more formal mode characterized by explicit contracts and active monitoring by managers is likely to perform better.

In this paper we intend to test the (recognition of the) above behavioral forces. We do so in a stylized laboratory experiment, making use of simple trust games to capture in highly reduced form the main characteristics of the firm owner's decision problem: (i) to choose the optimal incentive scheme ('organizational mode') and (ii) to appoint the right manager capable of obtaining the best outcome for the owner, given the organizational mode chosen. The main focus is on how owner subjects take account of the social preferences of those with whom they are matched and to what extent they are able to optimize accordingly. In particular, we investigate to what degree subjects are able to backward induct in view of the observed social preference characteristics of others in their group.

The two trust games on which our experiment is based are depicted in Fig. 1. Although subjects were confronted with an entirely neutral and abstract framing, for ease of presentation here we discuss these games in terms of the particular application that motivated their choice. In motivation game M on the l.h.s. a worker first decides whether to shirk or to work.[3] In case the worker shirks, he does not get a reward (on top of his wage). If, however, the worker exerts effort, the manager decides whether to reward him with a bonus or not. Because the bonus is non-contractible, a selfish manager will not pay it and, anticipating this, the worker will not work. But if the manager could credibly commit to pay the bonus (only) when the worker exerts effort, the worker would be motivated to do so. Therefore, in this organizational mode the main

[3] This game corresponds to the trust game used by Kreps (1990) to model corporate culture and also to a simplified version of the game used by Rotemberg and Saloner (1993) to study the impact of leadership style on workers' incentives to innovate. In spirit the M-game also corresponds to the 'loose supervision' regime in the model of supervision and workgroup identity studied by Akerlof and Kranton (2005). The inspection game I (to be discussed shortly) then corresponds to their 'strict supervision' regime.