Discussion of:

The Economics of the “Trust Game Corporation”

by Leonardo Becchetti
The paper proposes a new representation of the firm based on trust games + production of relational goods

From the observation that:

1) Production depends on the combination of non-overlapping skills and infos of different workers. The firm represented as series of superadditive trust games.

2) Workers have relational preferences.
This helps explaining firm practices, e.g.:

- Why firms spend money in order to enhance relations among workers = produce relational goods

- Why pay for performance schemes are less widespread than predicted by incentive theory

- Why incentive schemes based on single winner tournaments are seldom used
Production Trust Game

NS: competition between A and B based on individual contributions $h_a, h_b$ – contribution of the looser is lost

S: if B abuses (appropriates A’s contribution) $h_a + h_b$ is produced

if B does not abuse $h_a + h_b + e$ is produced and shared
If \( h_a + h_b < e \) cooperation:

\[(S,NA)\] is the unique SPNE

If \( h_a + h_b > e \) non cooperation:

\[(NS,A)\] is SPNE

when \( h_a > h_b \) it is unique

when \( h_a < h_b \) \((S,A)\) is also a SPNE

in any case there is a social surplus loss
High superadditive component $e$ induces NA from B after S which in turn makes S profitable for A

Presence of relational good lowers the value of $e$ that makes NA profitable for B because abuse results in loss of relational good (both present and accumulated)

Production trust game used to represent situation between two players owning the firm
Comments:

- Seems more appropriate to represent two independent individuals than two owners of a firm (e.g., two architects) – why should the “looser” contribution be lost with NS inside the firm?

  Independent individuals might value independence more than relational good

  Trust game in which players get their contribution in case of NS would have same results
• (S,A) equilibrium when $e < h_a + h_b$ and $h_a < h_b$ could be eliminated by:

- considering the psychological cost of being abused, i.e. making A’s payoff negative after A

or

- modifying the payoffs in case of NS, e.g. considering the case where no contribution is lost and payoffs are $(h_a, h_b)$
EXTENSIONS

Repeated Game

• **Two periods**: equilibrium different from the repetition of uniperiodal equilibrium?

• **Infinitely repeated**: Folk Theorem applies if $h_a > h_b$:
  cooperation for $\delta$ high enough but equilibrium is not renegotiation proof

  after abusing B may offer a side payment to A conditional on A’s choosing S
Comments:

• Relational good should ease cooperation even in the infinitely repeated game context

• Non renegotiation proofness seems to depend on trigger strategy – guess: there may be other equilibria (based on strategy which alternate punishment and cooperative phases) that might be renegotiation proof

alternatively:

- introduction of cost of being abused
Imperfect information:

- Each player is uncertain whether the other player values the relational good but positive valuation from both is needed to enjoy the good. The threshold level of the relational good is raised.

- Uncertainty about the relative value of $h_i$ does not alter the results but eliminates $(S,A)$ equilibrium when $h_a < h_b$. 

Players do not own the firm:

• Pay for performance schemes are neutral in trust games but they raise the level of the relational good needed to obtain cooperation this may trigger switch from cooperation to non cooperation

• Promotions based incentive system (being a single winner tournament) offset incentive to cooperate because the trustee always abuses after S - result mitigated by the presence of relational good
Comments:

• Pay for performance schemes are not needed in this framework (neutral) – they are usually related to effort motivation which should be modeled – probably leading to trade-off between effort motivation and cooperation

• Promotions tournaments are usually proposed for workers in the same position, i.e. for workers whose performances can be readily compared not for individuals with “overlapping tasks”
Presence of relational goods very important in explaining workers’ and consequently firms’ behavior

Trust game appropriate to study cooperation among workers but trust relationship are usually intertwined: repeated game with individuals alternating in trustor / trustee position – would this enhance cooperation?

Individuals differ in their valuation of relational goods different types of firms/organizations