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Managing Relational Contracts

A wide range of important economic activities depend on self-enforcing informal "relational" contracts. For instance, a firm may buy a good knowing that it cannot sue the other firm if the quality is low – instead high quality is maintained through threat of the firm not making any future purchases. Relational contracts are typically modeled as being between a principal and an agent, such as a firm owner and a supplier. Yet in a variety of organizations, relationships are overseen by an intermediary such as a manager. Such arrangements open the door for collusion between the manager and the agent. We develop a theory of such managed relational contracts. We show that managed relational contracts can be both more and less efficient than the principal agent ones. In particular, kickbacks from the agent can help solve the manager's commitment problem. When commitment is difficult, this can result in higher quality than the principal could incentivize directly. However, making relationships more valuable enables more collusion and hence can reduce quality.

Introduction

In 2006, the American retailer Aéropostale accused its chief merchandising manager Christopher Finazzo of receiving more than $25 million in kickbacks from a supplier, South Bay. Aéropostale argued that Finazzo had paid inflated prices to South Bay in exchange. Finazzo responded that he had favoured South Bay since they provided higher quality and a willingness to adapt to Aéropostale's procurement needs. He argued that Aéropostale often remained *"loyal"* and *"committed"* to long-time *"vendors even when those vendors charged higher prices"* (Droney, 2017). In 2013, a jury found Finazzo and South Bay guilty of fraud. They appealed the restitution amount and in 2017 the Court of Appeals for the Second Circuit demanded a recalculation. Judge Droney argued that it was possible that Aéropostale did not lose money as a result of the kickback scheme. He argued that instead Finazzo's *"conduct may have reduced transactions costs for South Bay"* and the relationship may have made it profitable for South Bay to pay kickbacks even at non-inflated prices (Droney, 2017).

Relational contracts between organizations are ubiquitous and are crucial for enforcing promises. Indeed, *"lack of trust and commitment"* is behind most supplier collaboration failures (Webb, 2017). The task of maintaining these relationships is often delegated to a manager like Finazzo. As illustrated by Aéropostale's case, the firm can never guarantee that the manager will exclusively act in the firm's best interest. Managers can exploit the (otherwise very valuable) trust relationship with their suppliers to collude with them. Does collusion between the manager and agent crowd out quality? Is collusion always detrimental for the principal?

In a new paper (Troya-Martinez and Wren-Lewis, 2018), we develop a theory of managed self-enforcing relational contracts.

Our model features a manager and an agent who have a bilateral relational contract over time (Levin, 2003). To model that the relationship is managed on behalf of a third party, we assume that profits are shared between the manager and a principal. Every period, the agent privately exerts costly effort to produce a quality which cannot be formally contracted on. To motivate effort, the manager promises to reward high quality with a price premium. This price is paid in part by the principal and in part by the manager. The manager and agent can also make side payments (which represent kickbacks, bribes or other favours) after the quality has been realized. The payment of both the price and side payments needs to be self-enforced.

Kickbacks as an enforcing mechanism

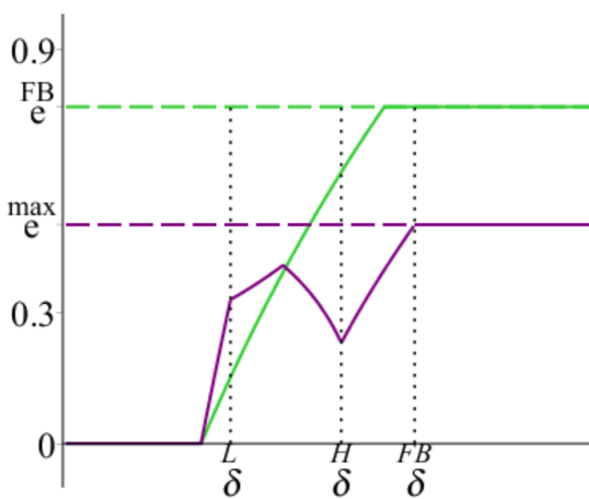
We find that collusion resulting from a managed relational contract can disincentivize quality if the manager pays a discretionary price premium regardless of quality. In particular, she may do so when she *trusts* that the agent will respond by making a side payment. More surprisingly, side payments can enhance a manager's ability to commit, and hence allow higher quality. This is because the supplier will renege on paying side payments if the manager reneges on the promised price. This is consistent with evidence that side payments can help contract enforcement. Cole and Tran (2011) analyse informal payments in an Asian country and find that when contract payments are dependent on non-contractible quality, *"the kickback is paid only after all contract payments have been made"*. In a similar case, Paine (2004) describes how *"a purchasing official called about an overdue payment for items already received, [explaining] 'we can get you a check by next week if you can give us a discount -- in cash so we can distribute it to employees'"*.

Side payments are thus not necessarily detrimental for the firm when commitment is scarce. This theory thus provides an instance of the *"reduced transaction costs"* mentioned by Judge Droney.

More trust is not always better

Another interesting implication of a managed relational contract is the non-monotonicity of the relation between trust and efficiency. In the standard principal-agent model of relational contracts, more trustworthy relationships produce higher quality. In managed relational contacts, we show that the opposite may happen.

Figure 1. Effort (or quality) with and without delegation to a manage



Source: Troya-Martinez and Wren-Lewis (2018). This figure plots the effort incentivized by the manager (in purple) and by the principal (in green) as a function of the discount factor (delta), which is a measure of how valuable the future is.

Figure 1 depicts the effort (and hence quality) exerted by the agent when the manager is in charge (purple) and when the principal is in charge (green). It depicts the effort as a function of the time discount factor delta, which is a measure of how valuable the relationship is (i.e. a larger delta implies a more valuable future). More valuable relationships produce higher effort, and hence higher quality, only up to a point. Once the relationship is sufficiently valuable, extra value facilitates collusion, which reduces effort. In particular, it allows the manager to pay the agent a high price in exchange for a side payment even when quality is low. This non-monotonicity result is consistent with evidence on firms' use of guanxi, a system of trust-based "*informal social relationship"* in China which is often used to ensure *"that a contract is honored"* (Chow, 1997). Vanhonacker (2004) observes that *"it would be naive to think---as many Western executives do---that the more guanxi you have on the front lines in China, the better"*. Instead, he argues too much guanxi can *"divide the loyalties of the sales and procurement people"*.

This result has important implications for policies designed to reduce fraud or corruption in contexts where relational contracts are valuable. Many such policies involve disrupting relational contracts in order to reduce manager-agent collusion, for instance by encouraging competition or increasing personnel rotation. The results of the analysis suggest that, in some circumstances, weakening manager-agent relations may simultaneously cut corruption and improve output. In other circumstances, however, there will be a trade-off, and reducing corruption may come at the cost of holding back potentially productive relationships.

Conclusion

The paper summarized by this brief is the first paper that studies the impact of collusion on relational contracts. The main take away messages are the following: First, when trust is a scarce resource, managed relational contracts are more credible and can incentivize more quality than direct relational contracts.

Second, collusion can crowd out productive effort when the relationship between manager and agent is too strong. In this case, trust is used to overpay the agent when quality is low.

Before the most recent Aéropostale judgment, it was common to use *"the value of the kickbacks"* as *"a reasonable measure of the pecuniary loss suffered"* by the third party (Droney, 2017). Judge Droney, however, argued that this *"negative correlation"* between kickbacks and loss should not be taken for granted. Indeed, our model has shown when this negative correlation may not exist. Hence, our conclusions may help explain why politicians and firm owners frequently turn a blind eye to employees accepting side payments (Banfield,

1975). On the other hand, our model also identifies when side payments undermine effort. In other words, it emphasizes the complex relationship between kickbacks and productive relational contracts. This complexity needs to be accounted for in policymaking.

References

Banfield, Edward C. 1975. "Corruption as a Feature of Governmental Organization." *The Journal of Law & Economics*, 18(3): 587-605.

Chow, Gregory C. 1997. "Challenges of China's economic system for economic theory." *The American Economic Review*, 87(2): 321-327.

Cole, Shawn; and Anh Tran. 2011. "Evidence from the Firm: A New Approach to Understanding Corruption." In International Handbook on the Economics of Corruption Vol. II. , ed. Susan Rose-Ackerman and Tina Soriede, 408-427. Edward Elgar Publishing.

Droney, J. 2017. "United States v. Finazzo." 14-3213-cr, 14-3330-cr.

Levin, Jonathan. 2003. "Relational Incentive Contracts." *American Economic Review*, 93(3): 835-857.

Paine, Lynn S. 2004. "Becton Dickinson: Ethics and Business Practices (A)." *Harvard Business School* Case 399-055.

Troya-Martinez, Marta; and Liam Wren-Lewis, 2018. "Managing Relational Contracts", CEPR Discussion Paper Series DP12645 (v. 2).

Vanhonacker, Wilfried R. 2004. "When Good Guanxi Turns Bad." *Harvard Business Review*, 82(4): 18.

Webb, Jonathan, 2017. "Why Do Supplier Collaborations Go Wrong? What Can Be Done About It?", Forbes, 28 September 2017.

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