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Delegation of Monitoring, Transparency, and Reputation

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Introduction

Firms frequently rely on a third party to certify product quality when it cannot be observed by consumers before purchase (Dranove and Jin 2010). For example, third parties conduct a large and growing share of food safety inspections. Third party certification is also common in manufacturing and service industries such as childcare. While many certification schemes take the “pass-fail” form, transparency of the outcomes of third-party certification varies across industries and products. Sellers of inputs can test product quality themselves or hire independent certifiers but frequently have discretion over reporting the results of monitoring to downstream parties (Ollinger 2011; FDA 2013). On the other hand, labels and certification marks can provide consumers with information about some third-party certification outcomes (Albersmeier et al. 2009).

Quality certification schemes tend to rely on information that is costly to obtain and that can be misrepresented. For example, manufacturers can conceal unfavorable results of laboratory tests of product quality and inspections of production facilities (Duflo et al. 2013). Costly acquisition of presale information and the possibility of strategic manipulation create a double moral hazard problem. In the absence of sufficient reputational concerns and legal liabilities, firms will shirk on the efforts to obtain presale information to save costs and will misrepresent it to increase sales.

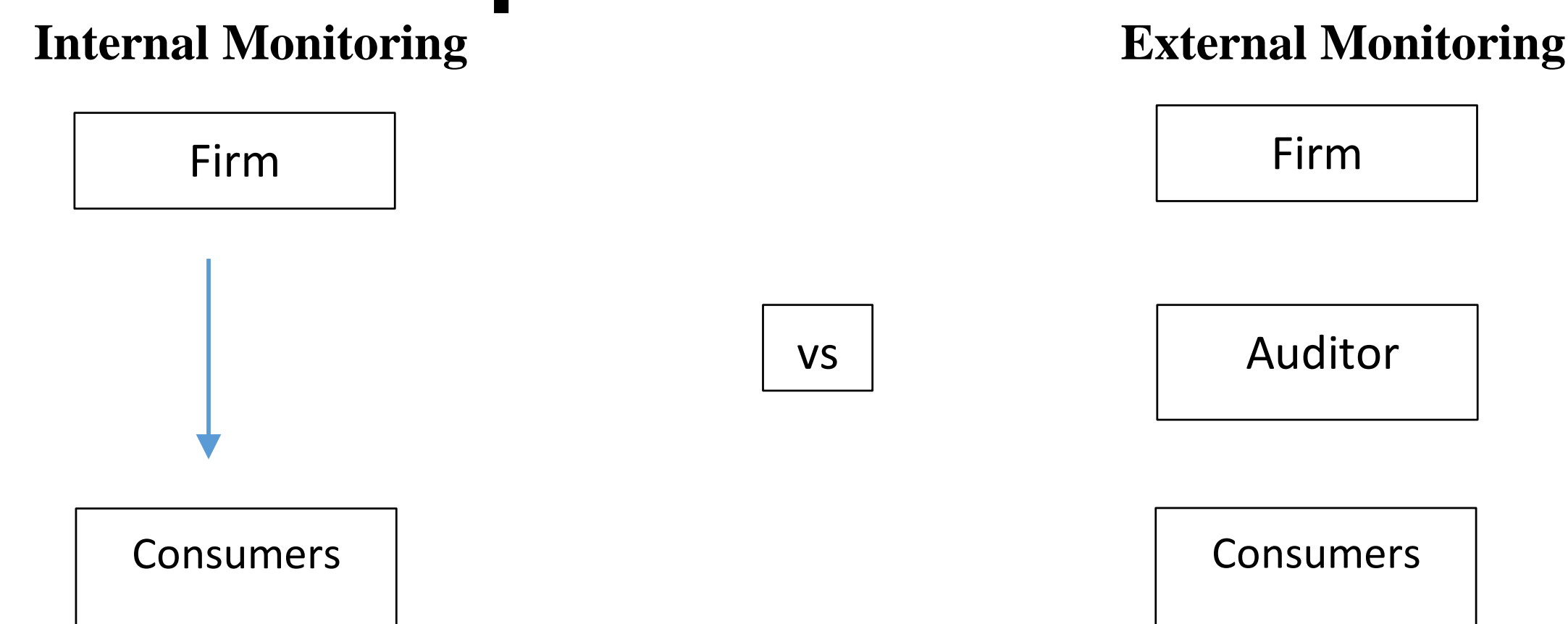
Research Question

In this paper we focus on reputational incentives and study how the choice between internal and third-party monitoring of product quality depends on the observability of certification outcomes to final consumers.

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Model of Monitoring of Product Quality with Reputational Effects



- Uncertain quality, consumers observe quality only after purchase
- Presale information is private, the monitor can conceal that quality is low
- Internal monitoring
 - the firm decides to (1) monitor or not, and (2) announce whether quality is high or low
 - consumers decide to buy or not to buy
- Third-party monitoring with private reporting:
 - the auditor decides to (1) monitor or not, and (2) announce to the firm whether quality is high or low
 - the firm decides to offer the good for sale or not
 - consumers decide to buy or not to buy
- Third-party monitoring with public reporting:
 - the auditor decides to (1) to monitor or not, and (2) announce to the firm and consumers whether quality is high or low
 - the firm decides to offer the good for sale or not
 - consumers decide to buy or not to buy

Main findings

When the auditor’s reports are not disclosed to consumers, delegation has two effects on firm reputation:

- (1) monitoring-incentive effect: the auditor is not concerned with sale revenue and has less to gain from approving uninspected goods for sale
- (2) allocation-incentive effect: the firm is less concerned with future profit loss from offering low quality because incentivizing external monitoring is costly and the firm has to share sale revenue with the auditor

Delegation of monitoring does not increase profits unless the auditor’s reports are announced publicly

Collusion does not eliminate benefits of delegation when the auditor’s reports are announced publicly

Conclusions

In this paper we analyzed a model of firm reputation where product quality can be certified internally or by a third party. In both internal and external monitoring regimes, there is a moral hazard problem since the monitor needs to have adequate incentives to spend the effort to monitor the quality of the products and truthfully reveal its findings. Our analysis shows that third-party certification is profitable only if the failures to meet the product quality standard and obtain certification are publicly disclosed. It is also demonstrated that public third-party certification is profitable even when the firm and the auditor can collude to approve uninspected goods for sale.

To study the effects of external certification on reputation building we made several simplifying assumptions. First, we assumed that presale monitoring technology is perfect. If presale signals of quality are imperfect, reputation can also be managed by the choice of a grading standard and the difficulty of the grading standard may affect the choice between internal and external monitoring. Second, we assumed that the distribution of quality shocks is exogenous and there is no persistence in shocks to quality. If the firm controls product quality, the benefits of delegation of monitoring can increase because there will be less room for sophisticated deviations such as joint shirking on efforts to provide quality and to monitor shocks to quality. On the other hand, firm’s own reputational concerns and incentives to provide quality can also decrease under external certification because providing adequate incentives to an external monitor is costly. Finally, we assumed that there is no concentration in the certification market. If one auditor certifies several firms, external certification will not necessarily perform better. As shown in Cai and Obara (2009), in the presence of imperfect post-sale monitoring of quality, increasing the market base may make it more difficult to maintain a good reputation.

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