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TRANSACTION COST ECONOMICS AND DIRECTIONS FOR RELATIONAL GOVERNANCE RESEARCH

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ABSTRACT

Transaction Cost Economics (TCE) has formed the basis of interorganizational governance research for the past thirty years. This paper summarizes TCE and explores some of its criticisms, namely its restricted solution set and its ignorance of trust-based behaviors. Some of these concerns are addressed by the relational view of interorganizational governance, although a more compelling solution appears to be a hybrid of these theories. Suggestions for future research and highlights of prominent IS research utilizing these theories are included.

Keywords

Transaction cost economics, TCE, relational view, hybrid view, organizational governance, review

INTRODUCTION

The study of organizational governance is also a study of organizational strategy. This paper aims to trace the foundation of modern governance theory from the explosion of Transaction Cost Economics to the relational view of the firm and the eventual hybridization of the two approaches.

TRANSACTION COST ECONOMICS (TCE)

This exploration of organizational governance theory begins with Transaction Cost Economics (TCE), which focuses on organizational transactions as its unit of analysis. Exposed to decades of review and analysis, TCE has been called “an empirical success story” (Carter & Hodgson, 2006; Williamson, 1999, p. 1059), and has been the subject of multiple review articles, including Carter & Hodgson (2006), and as a part of a broader review of inter-organizational theories, by Robey, Im and Wareham (2008). TCE is a lens useful for examining build/buy operational decisions, contracts, and organizational structure (human asset governance). In general, TCE defines a continuum between regulated hierarchical structure and open, market-driven behavior, and provides guidance for how a transaction might best be structured based on its internal and external coordination and control costs. In other words, TCE posits that organizations perform optimally by reducing the costs of the transactions they engage in, and this, in turn, drives the transaction’s governance mechanism. (See Figure 1.)

Assumptions of TCE

Arguing convincingly that proper theory must account for the behavior of “human nature as we know it”, Williamson (1981, pp., p. 553) bases TCE first on human bounded rationality, and second on “the assumption that at least some agents are given to opportunism.” *Bounded rationality* describes the finite ability of humans to access, store, and process information. This means that contracts must necessarily be incomplete (Williamson, 1981). In general, although the assumption of bounded rationality seems largely accepted by TCE theorists, the specific consequences of this assumption have been given very little attention. *Opportunism*, described as self-interest with guile (Williamson, 1996), moves beyond the traditional economic definition of self-interest and allows agents to behave deceitfully in a strategic way, by cutting corners, issuing false promises, and renegeing on contracts. One example of opportunism is agency costs, such as when the actions of an employee or contractor are not in the best interest of the principal due to misaligned incentives. Because of opportunism, TCE posits that stewardship and good faith behavior cannot universally exist, and accepts that curbing opportunism imposes control costs. Although not ubiquitous, opportunism is unknowable in its strength or frequency (Ghoshal & Moran, 1996).

Dimensions of TCE

The critical dimensions for describing transactions are (1) uncertainty, (2) frequency, and (3) the degree to which transaction-specific assets are required (Williamson, 1981).

Uncertainty

Uncertainty refers to any sort of unknown or unknowable variables in a transaction. A common facet of uncertainty, particularly in IS literature, is *technological uncertainty*, meaning future changes in technology required for the transaction are unknown and could significantly alter the cost of the transaction or render it wholly moot (e.g., Choudhury, 1997; Song &

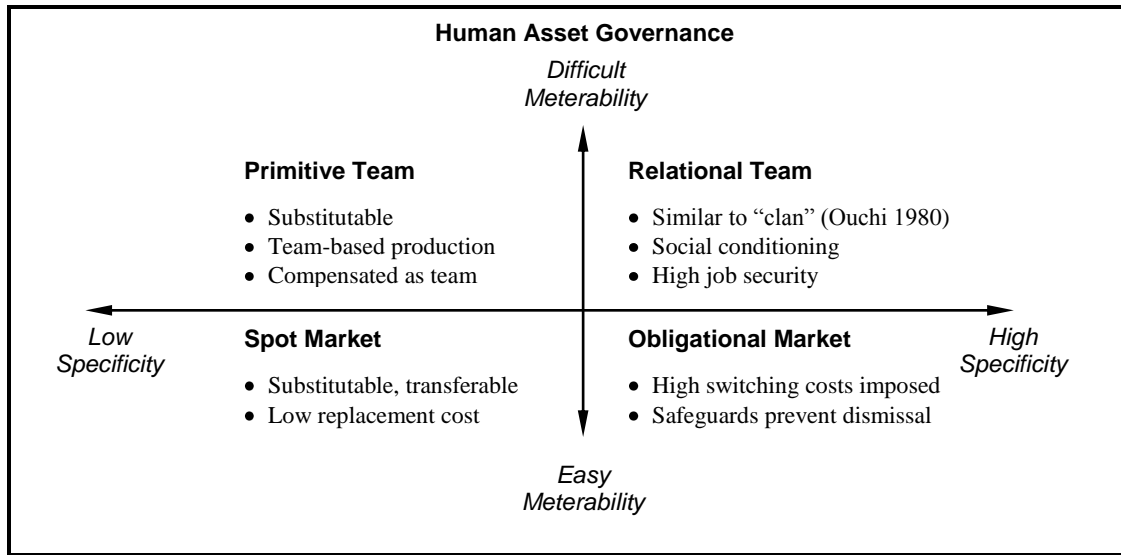


Figure 2: TCE Applied to Human Asset Governance; adapted from Williamson (1981)

Easily measured and easily replaced, examples of *spot market* human assets include custodial and farm workers, and some professional careers. In a spot market, “Neither workers nor firms have an efficiency interest in maintaining the association” (Williamson, 1981, p. 564). Workers in a *primitive team* are non-specific, but their output cannot be easily measured on an individual level, such as with manual freight loading. An *obligational market* includes employees requiring highly specific knowledge or skills, such as accountants. Because their specificity makes the employment relationship valuable to both parties, structures will be in place to prevent either party from terminating the employment relationship arbitrarily. Such structures may include long vesting periods for retirement or due process termination procedures. Finally, a *relational team* is both highly specific and difficult to meter, and, according to Williamson (1981) correspond to the clan organization proposed by Ouchi (1977). Firms will offer these employees a high level of job security. (Williamson, 1981)

TCE and Information Systems

In a review of governance literature, Robey, et al. (2008) recognized that some studies in the IT field (e.g., Brynjolfsson, Malone, Gurbaxani, & Kambil, 1994) “support the hypothesis that increased levels of IT lead to smaller firms” (p. 503), suggesting that the resulting reduced governance costs allowed firms to take advantage of the benefits of hierarchical governance (e.g., better information and control) in areas previously relegated to market solutions. Argyres (1999) also argued for the value of IT for reducing governance and coordination costs, showing a case where the implementation of an information system enabled social conventions and a complex technical grammar resulting in improved coordination and reduced governance.

Opposition to TCE

TCE did not emerge without opposition. Along with others, Ghoshal and Moran (1996) cautioned that the assumptions underlying TCE narrowed its scope so much as to be less useful than claimed. Arguing by analogy, they recognized that when governance decisions were being made using TCE heuristics as a reference, the solution space was constrained to the continuum between hierarchy and market, with no accounting for strategic inputs (e.g. innovation, although Williamson might simply consider such inputs to be externalities of the transaction that provided either a cost or benefit) or options that had been assumed away, such as franchising, joint ventures. Ghoshal and Moran (1996) argued that although TCE had its uses, these limiting assumptions crippled the use of TCE as a decision-making tool. “Our primary objective,” they said, “... is to caution against this growing frequency of applying the TCE logic for such normative purposes. (p. 15)”

Ghoshal and Moran continue their critique of TCE by examining its underlying assumptions. Opportunism, according to their understanding of Williamson, is necessary to predict transactional governance. They argue that this suggests increased hierarchical governance acts to counter the effects of opportunism. More specifically, Ghoshal and Moran argue that Williamson intends governance to control opportunism through sanctions, this creates a feedback loop where the controls designed to hedge against opportunism instead encourage it: “For example, even though sanctions can undoubtedly promote specific types of behavior and deter others, elements of governance mechanisms such as surveillance and fiat have consistently been shown to have negative effects on individual attitudes toward the specific behavior that is targeted. (p. 30)”

They conclude, "The consequence of these negative feelings [engendered by behavioral controls] for both controller and controlee is a 'pathological spiraling relationship', (p. 25)" and quote Enzle and Anderson (1993, p. 263) "Surveillants come to distrust their targets as a results of their own surveillance and targets in fact become unmotivated and untrustworthy. The target is now demonstrably untrustworthy and requires more intensive surveillance, and the increased surveillance further damages the target. Trust and trustworthiness both deteriorate."

However, this argument is incomplete as it assumes the level of opportunism is knowable and that such knowledge drives (rather than tangentially affects) the governance determination.

Opportunism is perhaps even more unpredictable than either Williamson or Ghoshal and Moran (1996) acknowledge, particularly when the companion assumption of bounded rationality is included. Although opportunistic behavior might be predicted, whether the actor has fully considered the long-term as well as short-term consequences of the opportunistic behavior is unknowable (in part, due to the assumption of bounded rationality). Thus, its likelihood is similarly unknowable, and provides a common level of uncertainty to all transactions. This supposition holds even if Hill's argument (1990) that market participants avoid habitual opportunists is accepted.

Separate from the concerns of opportunism, Williamson (1996, p. 55) undermines his own work when he acknowledges that "poor management can undo the advantages that accrue to correct alignments, and good management can sometimes compensate for incorrect alignments." This goes counter to the proposition that TCE predicts the optimal alignment of a transaction in two ways. First, if costs of "misalignment" can be mitigated through human action, it means the "misalignment" may actually be "more optimal" by deriving similar effects at a lower transaction cost. At the very least, such a circumstance allows for the possibility of multiple optima, something not considered by TCE. Second—and this is perhaps the most crucial objection—Williamson's is acknowledging TCE is missing some crucial factor that accounts for the behavior of managers.

RELATIONAL VIEW

With clear roots in both Transaction Cost Economics (TCE) and the Resource-Based View (RBV) (Barney, 1991), the relational view of the firm further explores sources of sustainable competitive advantage. Agreeing with Williamson (1981) that the typically arm's-length transactions of markets provide little opportunity for sustained competitive advantage (or more specifically, what they refer to as "economic rents"), Dyer and Singh (1998) proposed that a firm needs to consider not only the transaction, as TCE does, but the long-term series of transactions a firm may require. Further, they argued that by creating alliances and investing resources, firms with complementary resources can reduce their per-transaction cost (Dyer & Singh, 1998), similar to how a manufacturer might move resources to fixed costs in order to reduce variable costs. Thus, in addition to a longitudinal perspective on transactions, the relational view of the firm considers complex inter-firm governance beyond the dichotomous hierarchy/market framework imposed by TCE, and thus addresses an admitted blind spot of TCE.

The relational view predicts competitive advantages from strategic alliances seem to fall into four categories: "(1) investments in relation-specific assets; (2) substantial knowledge exchange, including the exchange of knowledge that results in joint learning; (3) the combining of complementary, but scarce, resources or capabilities (typically through multiple functional interfaces), which results in the joint creation of unique new products, services, or technologies; and (4) lower transaction costs than competitor alliances, owing to more effective governance mechanisms" (Dyer & Singh, 1998, p. 662). Each of these elements presents a way to either reduce uncertainty or increase productivity of specific assets in a transaction without resorting to the high-cost governance controls suggested by TCE.

Part of the reason for examining relation-specific assets is that TCE only seemed to examine one side of the transaction. As examples of their perspective, Dyer and Singh (1998) cited several studies showing that a seller's investment in location-specific assets provided significant benefit to both parties: the buyer incurred lower supply chain costs. Firms that invested in other relation-specific assets tended to also see "greater product differentiation, fewer defects, and faster product development cycles" (Dyer & Singh, 1998, p. 664). Subramani and Venkatraman (2003) found that domain-specific knowledge arising from relationship-specific intellectual capital investments by suppliers in asymmetric relationships with powerful retailers was more predictive of governance than investment in specific physical assets, and allowed suppliers greater input into joint decisions.

HYBRID VIEW

Based on the concepts presented in TCE and the relational view, some researchers proposed that opportunism was minimized in long-term relationships (as it would be irrational when longitudinal consequences were considered, although this discounts the core assumption of bounded rationality) so the need for formal contracts—which supposedly added significant cost to the transaction—could be substituted with trust (e.g., Ghoshal & Moran, 1996; c.f., Poppo & Zenger, 2002). In contrast, Poppo

and Zenger (2002) argued that well-specified contracts lower risks and promote relational longevity by increasing costs for violation. Consistent with TCE literature (Williamson, 1991), they also argued that good contracts should include custom measures for adaptation and dispute resolution, and are a necessary mechanism for limiting the conditions for opportunism. Their research showed good evidence that trust and contracts functioned as complements, not substitutes, thus holding intact the TCE structures within the relational view. As an example, two companies would be more likely to make strategic investments that highlighted their mutual dependence with the intent of perpetuating the relationship indefinitely if a contract is in place. Such actions would both require and engender trust, and lead to behavior from both parties that further solidified the relationship. This suggests claims of governance mechanisms as a signal of distrust leading to greater opportunism (resulting in further distrust and governance in a negative feedback loop, such as argued by Ghoshal & Moran, 1996) are not strongly supported.

Continuing the stream of hybrid relational/TCE research, Carson, Madhok and Wu (2006) more closely examined the relationship between contracts, uncertainty, and opportunism, and found relational contracts to be a robust safeguard against volatility (but not ambiguity), and formal contracts to be a robust safeguard against ambiguity (but not volatility). They, along with Goo, Kishore, and Rao (2009) found support for Poppo and Zenger's (2002) determination that trust was important in constraining opportunism under both forms of contracting, as it facilitated information sharing, harmonious conflict resolution, and mutual dependence. Thus, both the hierarchical governance proposed by TCE and the preference for "softer" trust-based mechanisms advocated by relational governance are considered by researchers adopting the hybrid view as compliments rather than as substitutes.

CONCLUSION

Transaction Cost Economics has offered researchers a solid foundation for exploring governance issues, but has perhaps attempted too much by attempting to be both predictive and prescriptive (although application of a prescriptive theory necessarily increases its predictive ability). Most notably, the useful assumption of opportunism and the TCE dimension of asset specificity have been the basis of most governance work for the past thirty years. However, the relational view adds value to the exploration of interorganizational governance by addressing some of the human issues pointedly ignored by TCE. More recently researchers have adopted a hybrid view, combining the two approaches. This may prove especially useful when examining relationships in IS that are recognized as more difficult to contract for, such as agile development (Wang, Lane, Conboy, & Pikkarainen, 2009). Examining interaction effects and building prescriptive theory regarding the application of these complementary but opposing views of governance is a promising area for future research.

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