
7 Trust, transaction cost economics, and mechanisms

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Introduction

Organizational scholars increasingly recognize trust as an important factor in intra- and inter-organizational relations, significantly influencing everything from the behavior of teams to the performance of strategic alliances and supply chains.

Ten years have passed since the publication of two early articles on organizational trust: Bromiley and Cummings (1995) and Cummings and Bromiley (1996). In reflecting on the scholarly impact of these papers – and what such an impact might mean for future work in organizational trust – we discuss the concept of trust, briefly revisit the papers, consider the different ways in which the research has been used, and offer thoughts on the relevance of trust to organizational research.

Bromiley and Cummings suggest that the inclusion of trust would expand and extend the research framework of transaction cost economics (TCE). Yet this call for TCE research to include the concept of trust has been largely ignored. Why? We summarize and analyze the apparent justifications for omitting or ignoring trust, leading to a critical examination of several theoretical aspects of TCE. We distinguish between TCE's calculativeness, based on assuming others are self-interest-seeking with guile, and trust, which we define as beliefs or actions not determined by such calculativeness.

Defining trust

All research on organizational trust faces the question of how to define trust. What do scholars mean when they use the term trust? Trust's many meanings in common usage have complicated the scholarly discussion. These alternative meanings make it difficult to clearly and rigorously define a scholarly construct. Trust researchers have responded to this complexity by defining trust in differing ways or by sub-dividing trust into a multiplicity of sub-constructs that attend to the different meanings that trust has for people and for organizations.

Therefore, scholars conceive of intra- and inter-organizational trust in many ways. Some define trust as intended or potential behavior. For example, Gambetta (1988, p. 217) defines trust as an assessment of another's likely behavior based on its influence on the probability of our choice of future actions:

When we say that we trust someone or that someone is trustworthy, we implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him.

In contrast, some see trust primarily as a dispositional capacity of the trustor (Dasgupta, 1988; Hardin, 1993); or as being reciprocal or relational in nature (Hardin, 1991; Zaheer and Venkatraman, 1995).

The target of trust has also been discussed: scholars have defined trust based on where the trust is directed or in whom or what it is placed. For example, Ben-Ner and Putterman

(2001) separate trust into its self-regarding, other-regarding and process-regarding aspects. Trust has been connected to conceptions of morality (Baier, 1986), satisfaction with another's fairness (Ring and Van de Ven, 1994), or as a derivation of institutional (Shapiro, 1987) and cultural (Lane and Bachmann, 1996) influences. All of these conceptions capture important elements of trust.

In attempting to extend TCE, Bromiley and Cummings (1995) developed a trust construct addressing critical issues in TCE, defining trust as the answer to three questions. First, do you believe the other agent is honest in negotiations? Second, do you believe the other agent will make a good-faith effort to behave in accordance with its commitments? Third, do you believe the other agent will not take undue advantage of you should the opportunity become available? The answers to these questions comprise beliefs about the trustee's honesty, keeping of commitments, and forbearance in exploiting unanticipated advantages.

However, Bromiley and Cummings's (1995) trust construct allows for both calculative and non-calculative components. In their terminology, we could trust someone because we knew it was in that person's self-interest to keep commitments to us. We might trust bank tellers because we believe they operate in a system that makes their cheating us unlikely. At the same time, their definition also allowed trust to rest on non-calculative assessments. While useful in identifying three different components of trust, Bromiley and Cummings's (1995) trust definition does not discriminate trust from calculativeness, making it hard to use in an ongoing scholarly debate aimed at differentiating the two.

Williamson (1993b, pp. 458–9) suggests calculativeness is 'pervasive', and that calculative behavior which incorporates the TCE assumption of others' opportunistic 'self-interest seeking with guile' allows for 'superior deals to be made'. This analysis of self-interest assumes that everyone attempts to increase a utility function that reflects monetary returns.¹ Therefore we view economic calculativeness, for purposes of TCE, as an analytical process that assumes opportunism (self-interest seeking with guile) on the part of other actors.

To clarify the discussion, we revise Bromiley and Cummings's original definition of trust by restricting trust to beliefs that do not derive from a calculation that assumes the other's opportunism. Beliefs about another's likely behavior can derive from (i) a calculation of the actions most in the other's interests assuming opportunism, or (ii) a variety of other factors, including analysis that makes different assumptions or includes non-analytical beliefs about the other. A person's behavior toward another could reflect either trusting or calculative beliefs, or both. This means that trust and calculativeness are not necessarily mutually exclusive; rather, we argue simply that they are qualitatively different constructs and each is potentially influential in distinct ways.

Consequently, we define trust as one's *non-calculative* belief in another's honesty in negotiations, good-faith efforts to keep commitments, and forbearance from opportunism.

Background: trust and transaction costs

Bromiley and Cummings (1995) claim that trust reduces transaction costs. This assumes, contra Williamson (1985), that others can assess – to some extent – the degree to which an individual or an organization can be trusted. Whereas Williamson (1975) suggests that organizations must act as if individuals cannot be trusted, Bromiley and Cummings assume

that varying degrees of trust exist and can be estimated, subject to some level of error. Employing this modified assumption, the authors invoke the basic logic of transaction cost economics to form a theoretical framework connecting transaction costs and trust.² By treating trust as a variable rather than an ‘all-or-nothing’ constant set at zero, they claimed to extend the TCE framework. If agents can assess approximately how trustworthy others are, then the optimal governance structure should vary depending on these assessments. Economic actors should build less costly control systems for relatively trustworthy people than for less trustworthy people. Accordingly, Bromiley and Cummings (1995) predict that, all else constant, trust will influence organizational behavior and performance.

Subsequently, Cummings and Bromiley (1996) developed and validated the Organizational Trust Inventory (OTI), an instrument for measuring trust within and between organizations. The authors formulate and test the instrument based on their explicit, three-pronged definition of trust, clarifying exactly what they mean by ‘trust’ and how it influences organizations. The authors’ data analysis confirms that these three distinct aspects of trust can be captured and measured.

These two articles have appreciably influenced research in the area of intra- and inter-organizational relations. Scholars have drawn on the two papers in a variety of ways, and at least 66 citations have been recorded in publications such as *Organization Science*, *Academy of Management Journal*, *Academy of Management Review*, *Business Ethics Quarterly*, *Journal of International Business Studies*, *Strategic Management Journal* and others (see Table 7.1 for a summary of the citing articles). Among the citing articles, theoretical pieces outnumber empirical studies nearly two to one; indeed, only three studies actually employ all or modified portions of the OTI instrument itself (Ferrin and Dirks, 2003; Kostova and Roth, 2002; Saporito et al., 2004). The other empirical pieces primarily draw on Bromiley and Cummings’s definition of trust (e.g. Jarvenpaa and Leidner, 1999; Zaheer et al., 1998), which is also the primary use of their research in the theoretical articles (e.g. Hosmer, 1995; McKnight et al., 1998). Articles citing Bromiley and Cummings’s construct definition use it in various ways: some adopt the multifaceted definition of trust – generally referring to the three-pronged definition as a belief in another’s reliability, predictability and fairness (e.g. Zaheer et al., 1998) – while others make only passing reference to the work in their literature review. The articles cover a variety of contexts, including e-commerce (McKnight and Chervany, 2001), strategic alliances (Das and Teng, 1998; Ring and Van de Ven, 1992), international joint ventures (Currall and Inkpen, 2002), corporate law (Mitchell, 1999), and human resource management (Whitener, 1997).

The most curious and interesting finding in Table 7.1 is that, while Bromiley and Cummings extended TCE and the work is widely cited, it has had little or no influence on TCE research itself. The vast majority of the citing articles appear in management journals and only a few even mention transaction costs. Only six of the articles even employ a TCE theoretical framework (e.g. Sutcliffe and Zaheer, 1998; Young-Ybarra and Wiersema, 1999) – and these primarily reference the trust definition without explicitly testing trust as a mechanism. Among the research drawing on the work of Bromiley and Cummings, one theoretical paper (Noorderhaven, 1996) explicitly argues for introducing trust into TCE, and only one case-study-based article (Ring, 1997) actually attempts to test basic TCE assumptions versus trust mechanisms.

Nooteboom (1996) models the distinct roles of both trust and opportunism in influencing interfirm relations. This has been shown empirically by demonstrating that

Table 7.1 Scholarly research drawing on Bromiley and Cummings (1995) and Cummings and Bromiley (1996)

Author(s) and year	Journal or other location
1. Husted and Folger (2005)	<i>Organization Science</i>
2. Saparito et al. (2004)	<i>Academy of Management Journal</i>
3. Bussing and Moranz (2003)	<i>Zeitschrift für Arbeitswissenschaft</i>
4. Ferrin and Dirks (2003)	<i>Organization Science</i>
5. McEvily et al. (2003)	<i>Organization Science</i>
6. Olson and Olson (2003)	<i>Economics of Innovation & New Technology</i>
7. Perrone et al. (2003)	<i>Organization Science</i>
8. Pizanti and Lerner (2003)	<i>International Small Business Journal</i>
9. Currall and Inkpen (2002)	<i>Journal of International Business Studies</i>
10. Jutla et al. (2002)	<i>Internet Research – Electronic Networking Applications & Policy</i>
11. Kostova and Roth (2002)	<i>Academy of Management Journal</i>
12. McKnight et al. (2002)	<i>Information Systems Research</i>
13. Pavlou (2002)	<i>Journal of Strategic Information Systems</i>
14. Zaheer et al. (2002)	Chapter in Contractor and Lorange (eds), <i>Cooperative Strategies and Alliances</i>
15. Adler (2001)	<i>Organization Science</i>
16. Brinkman and Seifert (2001)	<i>Zeitschrift für Soziologie</i>
17. McKnight and Chervany (2001)	<i>International Journal of Electronic Commerce</i>
18. Möllering (2001)	<i>Sociology</i>
19. Currall and Inkpen (2000)	Chapter in Faulkner and DeRonde (eds), <i>Cooperative Strategy</i>
20. Gottschalk (2000)	<i>International Review of Law, Computers & Technology</i>
21. Lazar (2000)	<i>Journal of Management in Engineering</i>
22. Olson and Olson (2000)	<i>Human–Computer Interaction</i>
23. Blois (1999)	<i>Journal of Management Studies</i>
24. Bowie (1999)	Book, <i>Business Ethics: A Kantian Perspective</i>
25. Bussing and Broome (1999)	<i>Zeitschrift für Arbeitswissenschaft</i>
26. Dirks (1999)	<i>Journal of Applied Psychology</i>
27. Jarvenpaa and Leidner (1999)	<i>Organization Science</i>
28. Kostova (1999)	<i>Academy of Management Review</i>
29. Kramer (1999)	<i>Annual Review of Psychology</i>
30. Leana (1999)	<i>Academy of Management Review</i>
31. Mitchell (1999)	<i>The Journal of Corporation Law</i>
32. Young-Ybarra and Wiersema (1999)	<i>Organization Science</i>
33. Bigley and Pearce (1998)	<i>Academy of Management Review</i>
34. Darley (1998)	<i>Business Ethics Quarterly</i>
35. Das and Teng (1998)	<i>Academy of Management Review</i>
36. Dean et al. (1998)	<i>Academy of Management Review</i>
37. Hagen and Choe (1998)	<i>Academy of Management Review</i>
38. Jarvenpaa et al. (1998)	<i>Journal of Management Information Systems</i>
39. Jones and Bowie (1998)	<i>Business Ethics Quarterly</i>
40. McKnight et al. (1998)	<i>Academy of Management Review</i>
41. Monge et al. (1998)	<i>Organization Science</i>

Table 7.1 (continued)

	Author(s) and year	Journal or other location
42.	Sako (1998)	Chapter in Lane and Bachmann (eds), <i>Trust Within and Between Organizations</i>
43.	Sheppard and Sherman (1998)	<i>Academy of Management Review</i>
44.	Sutcliffe and Zaheer (1998)	<i>Strategic Management Journal</i>
45.	Whitener et al. (1998)	<i>Academy of Management Review</i>
46.	Zaheer et al. (1998)	<i>Organization Science</i>
47.	Bowie (1997)	<i>Philosophical Studies</i>
48.	Lazar (1997)	<i>Journal of Management in Engineering</i>
49.	Leeuw (1997)	<i>Rationality and Society</i>
50.	Ring (1997)	<i>Journal of Management Studies</i>
51.	Whitener (1997)	<i>Human Resource Management Review</i>
52.	Creed and Miles (1996)	Chapter in Kramer and Tyler (eds), <i>Trust in Organizations</i>
53.	Kipnis (1996)	Chapter in Kramer and Tyler (eds), <i>Trust in Organizations</i>
54.	Mishra (1996)	Chapter in Kramer and Tyler (eds), <i>Trust in Organizations</i>
55.	Noorderhaven (1996)	Chapter in Groenewegen (ed.), <i>Transaction Cost Economics and Beyond</i>
56.	Ring (1996)	<i>Business & Society</i>
57.	Sheppard and Tuchinsky (1996)	<i>Research in Organizational Behavior</i>
58.	Currall and Judge (1995)	<i>Organizational Behavior and Human Decision Processes</i>
59.	Hosmer (1995)	<i>Academy of Management Review</i>
60.	Zaheer and Venkatraman (1995)	<i>Strategic Management Journal</i>
61.	Anderson et al. (1994)	<i>Academy of Management Review</i>
62.	Hudson et al. (1994)	<i>Entrepreneurship: Theory and Practice</i>
63.	Ring and Van de Ven (1994)	<i>Academy of Management Review</i>
64.	Zaheer and Venkatraman (1994)	<i>Management Science</i>
65.	Parkhe (1993)	<i>Organization Science</i>
66.	Ring and Van de Ven (1992)	<i>Strategic Management Journal</i>

trust – as distinct from calculativeness – has an effect on perceived dependence (Berger et al., 1995; Nooteboom et al., 1997). Some recent studies (Jap and Anderson, 2003; Lui and Ngo, 2004; Saporito et al., 2004) also empirically demonstrate that trust does not have to be calculative – and, therefore, that calculativeness and trust differ – yet the concept of trust has not been embraced by TCE researchers. Thus, Bromiley and Cummings's research has influenced the theoretical development of trust as a construct within the management literature, but has had no appreciable influence on TCE theory. Why?

Led by Williamson's writings, TCE scholars have offered three justifications for ignoring trust. First, they argue that individuals and organizations cannot discern the trustworthiness of other actors *ex ante* and so must act as if others cannot be trusted. Second, they argue that trust *per se* does not manifest itself in economic exchanges; rather, economic actors are always calculative whereas trust is reserved for very special social

relations. Third, they assert that trust does not add any explanatory power to organizational research. We consider each of these justifications in turn, arguing that they are not only inconsistent and incorrect, but also inadequate reasons to ignore the intra- and inter-organizational implications of trust.

Trust: assumed away

TCE rests on three assumptions: bounded rationality, opportunism and asset specificity (Williamson, 1975, 1985). Due to bounded rationality, firms cannot forecast perfectly, nor can they write complete contracts. Opportunism means individuals and firms may lie to advance themselves, behavior termed 'self-interest seeking with guile' (Williamson, 1985, p. 30). Asset specificity means that investments can create positive returns in a given transaction but have less value outside that transaction. Efficient operation of a given transaction may require investments that have little value outside that relation, but the assumptions dictate that the parties cannot trust one another, nor can they write a perfect contract. Thus, for transactions with high asset specificity, bringing both parties to the transaction into the same hierarchy may offer greater efficiency than a comparable market transaction. The benefits of hierarchical organization may increase with the level of uncertainty.

Williamson's opportunism assumption eliminates trust. Specifically, he assumes that trustworthiness cannot be discerned, requiring economic actors to treat all others as opportunists:

I do not insist that every individual is continuously or even largely given to opportunism. To the contrary, I merely assume that some individuals are opportunistic some of the time and that differential trustworthiness is rarely transparent *ex ante*. As a consequence, *ex ante* screening efforts are made and *ex post* safeguards are created. (1985, p. 64)

While Williamson refers to screening, he almost exclusively emphasizes the creation of safeguards through internalization and similar factors. That is, he mentions screening, but then proceeds as if it were impossible. If screening were taken seriously, TCE would need to address appropriate responses to differential levels of trustworthiness.

Williamson further notes that the difficulty of determining trustworthiness implies that forms of economic organization that assume high levels of trust and good intention are 'fragile'; that is, unscreened opportunists can enter and take advantage of the organization. Therefore viable cooperatives must take care whom they admit and must otherwise defend themselves against free-riders or other individuals who might exploit them.

In responding to criticisms of the opportunism assumption (e.g. Ghoshal and Moran, 1996), Williamson acknowledges that opportunism may be infrequent:

My insistence that opportunism be accorded co-equal status with bounded rationality does not imply that I believe that most economic agents are engaged in opportunistic practices most of the time. Rather, most economic agents are engaged in business-as-usual, with little or no thought to opportunism, most of the time. (1993c, p. 98)

However, Williamson also deviates from this position. For example, shortly after the passage above, Williamson instead asserts that opportunistic behavior is pervasive, rather than rare:

Opportunism is a less technical term than adverse selection and moral hazard. It suggests, correctly, that the troublesome behavior in question is not an arcane economic condition but is familiar and pervasive. (Ibid., p. 101)

These types of contradictions make it difficult to specify Williamson's position precisely; regardless, the frequency of opportunism is a peripheral issue. The ability to estimate trustworthiness matters more, since that ability lets agents modify their behavior based on the perceived trustworthiness of their exchange partners. At the core of the theory, Williamson assumes no one can tell whether others are trustworthy. Unable to discern another's level of honesty, agents must always assume the worst.

Why does TCE assume that agents cannot detect trustworthiness? It is more plausible – and certainly more consistent with TCE's bounded rationality assumption – to assume that, although individuals cannot perfectly recognize or predict trustworthiness, they can identify it to some extent, some of the time. Just as optimal insurance expenditures depend on the probability of an accident, optimal control systems depend on the probability of cheating. Yet, once again, the TCE reasoning is unclear; often Williamson implies that agents cannot detect trustworthiness, but also suggests that differential trustworthiness may be detectable, but only at great cost:

Thus, if agents, though boundedly rational, were fully trustworthy, comprehensive contracting would still be feasible . . . Such devices will not work, however, if some economic actors (either principals or agents) are dishonest (or, more generally, disguise attributes or preferences, distort data, obfuscate issues, and otherwise confuse transactions), and it is very costly to distinguish opportunistic from nonopportunistic types *ex ante*. (1981, p. 554)

By assuming a high cost to detect trustworthiness, Williamson attempts to avoid explicitly acknowledging a more nuanced position on the detection of opportunism. Such a nuanced position formed the basis of Bromiley and Cummings (1995); they argued that scholars should treat the detection of opportunism as a continuous variable subject to empirical testing, rather than as a theoretical constant that assumes away the variation. Bromiley and Cummings (1995) argue – and Frank (1988) demonstrates – that individuals can judge the trustworthiness of others, *ex ante*, with a certain amount of reliability and without great cost.

Furthermore, Williamson's own discussion of reputation deviates from his strict opportunism assumption. In his response to Ghoshal and Moran (1996), for example, Williamson (1996) relates the metaphor of a hiker who, when traveling in a dangerous wilderness, will choose traveling companions with a reputation for cooperative behavior over those with bad or unknown reputations. This clearly deviates from the TCE assumption that all actors should treat others with equal suspicion as a safeguard against possible opportunists.

In his eagerness to avoid the term trust, Williamson offers another example of reputation-based integrity, wherein a Norwegian ship owner needs to pay for something immediately and calls his London banker who guarantees the payment: 'I would argue that the London banker's deep knowledge of the personal integrity of the Norwegian shipowner merely permitted him to improve his estimate of integrity' (1993b, p. 470). Here, Williamson clearly recognizes both that people differ in their willingness to be opportunistic, and that such differences can be apparent and discernible. Williamson's analysis implies that the London banker would behave differently depending on which client had called, even if the substantive facts of the described situation were similar.

TCE advocates might justify trust-like behavior by arguing that the individual being trusted has a valuable reputation for honesty. Since deception would damage such

a reputation (and one assumes that damage would cost more than the benefits of cheating in this one transaction), one can count on the individual's word. However, neither Williamson's hiker nor banker examples fit this case. Consider the hiking example: if calculation rules supreme, even those with good reputations would behave badly if they knew their misdeeds would not influence their reputations – if they could be sure you would not return to tell on them.

In the banker example, Williamson emphasizes deep knowledge of personal integrity, which clearly indicates integrity as a personal trait, not good behavior to protect a reputation. Williamson's use of the term integrity implies being trustworthy, a meaning consistent with common usage. For example, the Funk and Wagnalls *Standard College Dictionary* (1963) begins its definition of integrity with '1. Uprightness of character; probity; honesty.' Thus integrity includes even more than honesty; it implies honesty and probity. By definition, integrity implies trustworthiness, not opportunism and guile. If we assume individuals differ in integrity, we can easily define and justify a common concept of trust as a perception of the integrity or honesty of the other actor. Williamson's use of 'integrity' instead of 'trust' seems like an attempt to invoke the concept of trust while assiduously avoiding the use of the word.

In sum, Williamson's work evidences difficulty in consistently defining and applying the TCE assumption of opportunism. Trust is sometimes invoked indirectly. TCE arguments sometimes invoke concepts that appear as trust, only stopping short of using the word. Yet instead of empirically addressing the issue of whether individuals can judge if others merit trust, TCE simply assumes it away. If, as Williamson (1996, p. 50) suggests, 'a more veridical and predictive theory of economic organization will recognize that the propensity for opportunism varies among individuals and between cultures', TCE continues to miss the opportunity to extend itself and become the type of predictive theory he describes. Recognizing the variability of opportunism, and studying trust creation, detection, and the implications for governance choice, would significantly refine and extend the research agenda of TCE.

Trust: not 'permitted' in business

The second justification for ignoring trust in TCE work simply asserts that trust *per se* has no place in economic exchanges. Williamson asserts that economic actors are strictly calculative, and trust is reserved for special social relations that lie outside of business dealings. Williamson says:

it is redundant at best and can be misleading to use the term 'trust' to describe commercial exchange for which cost-effective safeguards have been devised in support of more efficient exchange. Calculative trust is a contradiction in terms. (1993b, p. 463)

Wherein is trust implicated if parties to an exchange are farsighted and reflect the relevant hazards in the terms of the exchange? Indeed, I maintain that trust is irrelevant to commercial exchange and that reference to trust in this connection promotes confusion. (Ibid., p. 469)

Williamson maintains that what might be called 'trust' in the setting of economic exchange is merely the cost–benefit analysis of risk. Real trust, then, is reserved for social relations that are 'nearly non-calculative'; Williamson claims such trust is impossible in

economic relations.³ Trust, therefore, ‘should be concentrated on those personal relations in which it really matters’ (ibid., p. 483). He argues:

Personal trust is therefore characterized by (1) the absence of monitoring, (2) favorable or forgiving predilections, and (3) discreteness. Such relations are clearly very special . . . trust, if it obtains at all, is reserved for very special relations between family, friends, and lovers. Such trust is also the stuff of which tragedy is made. (Ibid., p. 484)

Personal trust is made nearly non-calculative by switching out of a regime in which the marginal calculus applies into one of a discrete structural kind. That often requires added effort and is warranted only for very special personal relations that would be seriously degraded if a calculative orientation were ‘permitted’. Commercial relations do not qualify. (Ibid., p. 486)

This argument is hard to reconcile in a theory that subscribes to bounded rationality. It assumes that – in contrast to their social behaviors – actors in the economic arena make only unbiased, quasi-rational calculations. Boundedly rational agents’ analyses of commercial matters should include individual biases, including heterogeneous tendencies to trust or to cheat. Williamson assumes employees can check trust at the corporation door, since it is not ‘permitted’ in the realm of business. This prescribed banishment of trust from economic exchange seems arbitrary and normative.

In discussing other research opportunities, Williamson notes that the issues of ‘dignitary values and trust’ are better attacked by lawyers and organization theorists than by most economists. He notes that the completely instrumental approach of the economists (where people have no inherent value and are seen merely as things to use) is not an accurate description of most humans, and he points out that ‘thinking about economic organization exclusively in an instrumentalist way can spill over into a treatment of individuals as instruments. Such excesses of instrumentalism have to be checked’ (1985, p. 405). Williamson offers no suggestions on how to deal with this problem.⁴ This also sets up an odd contrast by arguing that the world of economics can spill over into personal matters – with potentially detrimental effects – yet still assumes that social perspectives on trust cannot spill over into the business world.

Williamson (1993b) argues that the institutional environment only impacts the cost–benefit analysis of economic opportunism; economic actors have relations embedded in networks such that reputation effects reduce opportunism. This reduction in opportunism, however, comes solely from a calculative analysis rather than being a product of institutionalized trust. Williamson analyzes societal culture as just another kind of institutional process, an institutional environment within which firms make solely calculative assessments.

This offers an interesting opportunity to examine norms versus calculation. If calculation drives behavior, firms moving from one cultural environment to another should immediately adopt the new culture. For instance, if cultures differ in social norms regarding opportunistic behavior (e.g. misrepresentation), then a relocating or expanding company should immediately adopt the new norms. However, if social effects matter, we would expect cultural effects to linger. For example, someone moving from a culture with strong norms against misrepresentation to a culture without such norms would still tend to avoid misrepresentation, at least initially, due to resilient social effects. TCE assumptions predict immediate adoption of norms that increase profitability.

Yet Williamson at times appears to assume social norms can influence economic behavior directly, despite his generally strong assertions to the contrary. For example, he suggests that heterogeneity in opportunistic behavior may itself derive from differences in underlying social values, citing the fact that ‘opportunism does not continuously intrude’ as evidence that ‘many economic agents are well-socialized’ (1993c, p. 98).

This is problematic. Williamson describes agents who can employ personal trust and trustworthiness in social relations, yet cannot introduce these non-calculative elements to their economic activities. At the same time, he allows the idea of some economic agents being ‘well socialized’, implying a non-calculative effect on economic behavior, contradicting the asserted separation between economic and social matters. These arguments start to look like acrobatic contortions, intended to preclude the conceptual acknowledgement of trust at all costs; the assumptions employed to justify ignoring trust appear ancillary and *ad hoc*. Recall the first type of justification previously discussed: although opportunism may vary, one assumes individuals cannot discern it *ex ante*. The second justification allows trustworthiness in personal matters but assumes it out of economic affairs. TCE’s economic actors can therefore vary in their undetectable opportunism, but by assumption must always be calculative – an implausible juxtaposition.

Husted and Folger (2005) make a compelling case that institutional norms involving justice and fairness fundamentally impact economic transactions. Furthermore, assuming that trust has no place in economics yet exists in social relations contradicts even casual observation. Various collectives have different norms about opportunistic behavior. Indeed, many groups define inappropriate opportunistic behavior quite differently depending on the object or target of the behavior. Members of a particular social group may have no qualms about persecuting individuals who are not members of the group, whereas they may view the same actions as inappropriate if directed at other group members. On the economic side, a community may happily exploit tourists while following strong norms against cheating one another. Some opportunists may even attempt to take advantage of most people, but not their friends. Specific examples are innumerable but the case is general – social and economic actors make differential judgments about trustworthiness. Most people would more willingly lend money to nuns than to convicted felons.

Trust: no explanatory power

The third justification for ignoring trust in TCE argues that trust does not add any explanatory power. Notwithstanding scholarly work that demonstrates the positive effect of trust on both macroeconomic development (Fukuyama, 1995; Zak and Knack, 2001) and organization-level strategic performance (Dyer and Chu, 2003; Sako, 1998; Zaheer et al., 1998), TCE theorists assume that trust cannot improve explanation at all in economic matters.

Defenses of this position follow a standard pattern. The author first poses a particular example that appears to imply that trust matters. The author then makes *ad hoc* assumptions to justify the example within the calculative TCE perspective. The author seldom if ever tests the assumptions. TCE apologists then argue that opportunistic calculative behavior explains the phenomenon, which makes including trust in the analysis unnecessary.

This line of defense reveals a bias: it assumes that theoretical explanations of a given behavior based on TCE are inherently *superior* to explanations of the same behavior

based on trust. Thus, if calculative explanations explain the same phenomenon as trust-based explanations, the calculative explanation is automatically better – ostensibly because it offers a more rigorous underpinning. However, such analyses seldom if ever rigorously test the alternative explanations.

Williamson (1993b) asserts that calculative explanations of behavior are inherently better than non-calculative alternatives, taking numerous examples of trust-like behavior and offering calculative explanations for the behaviors. For example, in discussing a farmer lending equipment to a new neighbor, he says:

If almost-automatic and unpriced assistance is the most efficient response, provided that the practice in question is supported by sanctions and is ultimately made contingent on reciprocity, then calculativeness obtains and appeal to trust adds nothing. (1993b, p. 471)

For TCE, explaining something as a result of a quasi-rational calculation is clearly preferred to explaining it as a result of other factors such as trust.

Williamson ignores both the *correctness of the assumptions* and the *correctness of the mechanism* in judging explanations. He arbitrarily assumes that ‘the practice in question is supported by sanctions and is ultimately made contingent on reciprocity’, without evidence. Whether such facts hold is critical; with arbitrary factual assumptions, many different theories can offer *post hoc* justification for almost any observation. Williamson’s position also ignores whether the mechanism he offers actually operates in the situation in question. When scholars offer an explanation, they implicitly claim that the mechanisms of the explanation hold in the situation.

The correct mechanism matters. While two mechanisms may appear to make the same prediction with respect to a particular example, predictive differences often lie just beneath the surface explanation. For example, Williamson’s calculative explanation for lending farm equipment implies that the farmer takes the availability of sanctions into account, refusing to lend whenever such protections do not exist. In contrast, a norm-based explanation suggests an initial following of the norm (lending), followed by a cessation of following the norm if the other does not also follow the norms (reciprocity). Norm-based explanations might also suggest that violation of other norms (even while complying with lending norms) might result in cessation of cooperation.

Some who question Williamson’s ideas agree with him in preferring calculative explanations above those involving trust. For example, Craswell (1993, p. 493) criticizes pieces of Williamson’s arguments, but supports without question the inherent superiority of calculative explanations to other types of explanations:

On closer examination, however, Williamson finds that almost all of these choices are in fact consistent with the actor’s calculated interests (when those interests are comprehensively understood) and that these choices can therefore be explained without having to posit any noncalculative forces.

This suggests that the key to uncovering the underlying – and supposedly superior – calculative explanation for economic behavior comes from ‘comprehensively understanding’ the true interests of the economic actor. Yet Craswell and other proponents of this view offer no hint that they might validate or test their assumptions about those interests; Craswell merely asserts that an absence of a calculative explanation indicates a lack of understanding.

Although Williamson (1993a) goes so far as to label trust a tautology, it appears that the reverse may in fact be more likely: TCE scholars can generate assumptions to justify almost any behavior as calculative – making such frameworks true by definition. As Sen says, the self-interested egoist model can fit almost any observed behavior because ‘It is possible to define a person’s interests in such a way that no matter what he does he can be seen to be furthering his own interests in every isolated act of choice’ (1977, p. 322).

Therefore TCE shares a major problem with other rational or quasi-rational models – the results rest on largely untested factual assumptions. With such untested arbitrary assumptions, the calculative analysis can *post hoc* describe almost any behavior. This directly reverses the traditional view of how theory relates to empirical work. Instead of striving for correct assumptions in tandem with theory to develop testable predictions, here scholars select assumptions to fit the previously determined outcomes.

Additionally, in debating the relative merits of trust as a theoretical component of economic choice, proponents of the calculative view often depict trust as a straw man. Some TCE advocates imply the sociological view that includes trust may be cheery and flattering, but is too sanguine and non-descriptive. Along these lines, Williamson suggests that ‘the object is not to describe human actors in a user-friendly way but to understand complex economic organization’ (1993c, p. 99). In contrast, the assumption of unbridled opportunism is described as a reasonable and wise defense mechanism, an alternative to the weak myopia of trust and altruism:

Whereas myopic parties must rely on altruism when a bad state realization occurs, lest one party take advantage of the other, farsighted parties who take hazard-mitigating actions in advance are less subject to the same vicissitudes. (Williamson, 1996, p. 54)

Such an argument paints trust as blind altruism and weakness, and calculative opportunism as wise, strategic thinking.

This misrepresentation of the positions of trust researchers includes claiming that trust scholars naïvely assume that everyone is trustworthy all the time. Trust critics offer a caricature of the arguments of trust advocates by claiming such advocates reject the very idea of calculation. For example, Williamson (1993c, p. 97) states that because ‘opportunism corresponds to the frailty of motive “which requires a certain degree of circumspection distrust”’, many ‘interesting problems of economic organization are missed or misconstrued if opportunism is ignored or suppressed’.

Here, Williamson defends the complete opportunism assumption by pretending that trust advocates argue for the ignoring or suppressing of opportunism altogether. As far as we know, no trust researcher has suggested the possibility of zero opportunism. Rather, trust scholars merely question the need to view all economic actors as completely opportunistic, suggesting that a discernible variance in trustworthiness will matter to economic actors and organizations.

The contention that trust has little explanatory power is therefore premature and unfounded, because – like the other justifications for ignoring trust – it comes via the use of *ad hoc* assumptions rather than empirical inquiry. This raises legitimate questions about the other assumptions employed by TCE, including the assumption of bounded rationality.

TCE's inadequate use of bounded rationality

Bounded rationality implies that choices deviate from rationally calculative behavior. People often have limited information, and they cannot process the information they do have in a way that would allow them to make what traditional economists refer to as rational choices. Williamson (1985) explicitly accepts this description of individuals and positions it as fundamental to TCE theory.

However, TCE frequently lapses from this assumption, most commonly when discussing governance mechanisms. TCE analyzes commercial exchanges among boundedly rational individuals under the assumption that they can optimally calculate appropriate governance mechanisms, but in all other respects they are limited by bounded rationality. Therefore the rational choice of governance structure in TCE ignores the two *primary* ways by which boundedly rational individuals make decisions: satisficing and routines (March, 1994).

Satisficing (March and Simon, 1958; Simon, 1997) means that individuals and organizations look for solutions that are good enough: outcomes that exceed their aspiration levels as formed by historical experience and social comparison. With respect to transaction costs, satisficing implies that organizations and even entire business systems may never consistently make optimal choices.

For example, we would expect that firms in an industry in which all firms make reasonable profits would be slow to take risks in trying out potentially better organizational structures. Thus we expect industries with the greatest problems of vertical integration and with profitability difficulties to most quickly adopt a multidivisional (M form) structure. We would also expect to see sequential adoption. A poorly performing firm will try out something new; if it works, others learn from the adopters and move to the new structure. This kind of sequential learning, while completely consistent and a very standard component of bounded rationality analyses, has been ruled out of TCE by the assumption that firms can calculate and understand optimal governance procedures. Armour and Teece's (1978) study of the multidivisional hypothesis in oil companies found sequential adoption, not quick moves to the optimal structure.

In addition to satisficing, boundedly rational agents make decisions by routines (Cyert and March, 1963; Nelson and Winter, 1982). Indeed, organizations cannot function without routines. Trust – a belief about others' honesty, commitment-keeping, and forbearance from opportunism – may appear as a routine or 'rule of appropriate behavior' (March and Olsen, 1989, p. 27). This does not imply that trust is a routine, but rather that individuals may have routinized ways of exhibiting trust or trustworthiness.

For example, individuals may, based on generalized reputations, assume that certain types of individuals (e.g. police officers, ministers, etc.) are honest without specifically investigating the honesty of a *particular* individual. We stereotype to simplify our lives; this gives us general rules. Thus we may routinely trust certain people in certain situations based on routines or norms, rather than calculation.

Consider again the example where a farmer might offer to loan some equipment to another farmer who has just bought a property nearby. Williamson (1993b) explains the behavior as a calculative analysis, based on the positive expectation that such a neighbor will return the favor at some future date. Such an act resembles an investment in a future benefit. However, in many cases is it not simply an example of a trusting norm or routine? In other words, until someone demonstrates they will not behave appropriately, the

resident farmer may see loaning equipment to neighbors in need as appropriate behavior. He would feel that he had behaved inappropriately if he did not make that offer.

In short, part of the perceived need for TCE to reject trust comes from the inconsistent use of bounded-rationality assumptions in the theory. True bounded rationality implies satisficing and using routines or norms to direct behavior. Both decision processes can lead to trust mattering. Bounded-rationality assumptions rule out the calculative, quasi-rational model of behavior framed by TCE to reject trust.

Despite these arguments, the TCE advocate (e.g. Craswell, 1993) might still reply that it does not matter, so long as the model predicts the behavior correctly. Let us consider this argument.

Empirical testing, calculativeness and trust

Much of the previous discussion comes back to problems in taking seriously the mechanisms proposed by a theory. Explanations involve preconditions and mechanisms; the mechanisms interact with the preconditions to generate predictions or explanations. The explanation inherently includes both the preconditions and the mechanisms. Good testing of an explanation thus involves testing both the preconditions and the mechanisms.

Following Friedman (1953), some scholars argue that it does not matter if their models make implausible assumptions; all that matters is that the model predicts well. This is both philosophically and scientifically incorrect. If we want to explain behavior, the scientific test of our explanation should attempt to verify whether the explanation matches reality. In everyday life, we would automatically reject explanations of behaviors based on assumptions we know to be incorrect or implausible.⁵

Good explanations offer a mechanism by which something actually occurs. One could attempt to invent an explanation based on calculative interests regarding nutrition, but if an Orthodox Jew or a devout Muslim refuses to eat pork for religious reasons, we should not imagine that the appropriate explanation has anything to do with the health benefits or detriments of pork or an analysis of such. Such a believer follows the dietary restrictions even when they do not positively influence health. A health-based explanation might explain historical evolution of religious practices, but cannot explain the current believer's behavior.

Care about mechanisms means that a theory's merit does not solely depend on its predictive power in one single dimension. Some have argued that prediction is the test of a theory, but philosophers of science have come to reject this naïve positivist approach, since it does not require any meaningful belief in the mechanism's underlying explanation. Furthermore, it does not even require what we would normally call an explanation. If we know that things do not or cannot occur the way that the so-called explanation says they do, then we must consider such an explanation inadequate.

Social science is not simply *post hoc* fitting some data, or even prediction of variables; rather, we wish to explain the mechanism by which something occurs. Whether the farmer is being calculative or simply following norms matters; the underlying mechanism differs. As scholars we want to *explain* things, which means that the causal mechanism we assert matches the causal mechanism in the field. As such, it matters whether people behave in a given way because 'it is the appropriate way to behave in our community' or whether they do so because they calculate that it pays off.

Understanding the mechanism can improve prediction. For example, understanding the underlying mechanism may dramatically influence the predicted effect of a change of circumstances. TCE analyses that explain someone acting honestly as the result of calculation must also predict that the individual will act dishonestly as soon as the situation changes to make such behavior profitable. On the other hand, if we explain honest behavior based on compliance with norms, we would predict continued honesty even if dishonesty became profitable, at least until the temptation became too great. Good prediction requires an understanding of the correct mechanism.

The TCE arguments also assume a causal direction without evidence. For example, Williamson (1993b, p. 479) argues that corporate culture simply folds into calculativeness by claiming that corporate culture influences performance outcomes. However, just because something influences performance does not mean that its influence on performance *explains* that thing's existence. Having a very large, quick child positively influences the chances that that child becomes a good basketball player; however, it does not normally explain the given child's size. Without additional evidence, just because Z is desirable and X leads to Z, we cannot conclude X was chosen to increase Z. While Williamson (Williamson, 1996, p. 55) claims TCE is an 'empirical success story', few of the empirical studies make any effort to test the underlying causal mechanisms. That the aggregate predictions of TCE fit the data does not differentiate between TCE and other explanations, including trust, nor does it justify the claim that these other explanations are eclipsed or subsumed by calculativeness.

Indeed, recent work in trust has begun to model and test how calculativeness differs from trust. For example, Saporito et al. (2004) distinguish between goodwill-oriented 'relational trust' and calculativeness, finding that relational trust mediates the relations between supplier firm customer service and customer firm loyalty, even after controlling for calculative factors. Thus trust can influence inter-organizational relations over and above instrumental motivations; such trust influences outcomes and changes the structure of the inter-organizational relation. Other research (e.g. Jap and Anderson, 2003) demonstrates that opportunism and trust differ empirically (but correlate -0.54) and interact in influencing performance and other outcomes. Trust can help minimize the negative effects of opportunism (Saporito et al., 2004).

Lui and Ngo (2004) divide trust into 'goodwill trust' and 'competence trust'. These authors conceive of both types of trust in terms of risk assessment; goodwill trust associates with aspects of the relation itself, whereas competence trust estimates another's transactional reliability. Their results indicate that the two types of trust moderate the relations between contractual safeguards and firm performance in different ways; goodwill trust serves as a substitute for contractual safeguards, whereas the more calculative assessment of the other party's competence functions as a complement to contracting.

These examples of recent scholarly work in organizational trust demonstrate that trust means something more than just calculativeness. Bearing this in mind, and contrary to the previously described TCE justifications for ignoring trust, we argue that trust has a meaningful place in explaining behavior, over and above calculativeness. Unlike Williamson's arguments for calculativeness that attempt to debunk trust, our argument in favor of acknowledging trust does not claim that calculativeness does not exist, but simply that the two concepts are distinct and both useful in explaining behavior. As such, we argue that trust is one's *non-calculative* belief in another's reliability, predictability and fairness.

Certainly, calculativeness explains some behaviors. Sometimes, we rely on someone's behavior strictly due to calculation – at times even assuming the person is opportunistic. Such reliance does not require trust. For example, we do not necessarily trust some of the organizations and individuals we deal with if we believe the system they operate under makes it hard for them to cheat us, and this may explain a certain amount of our behavior.

However, research on intra- and inter-organizational trust demonstrates behaviors and outcomes where non-calculative trust adds to the explanation offered by calculativeness. Many scholars have argued that trust is not simply encompassed by calculativeness (Granovetter, 1985; Kramer and Tyler, 1996; Nooteboom et al., 1997). Intuition and common experience reinforce this notion; colloquial usage typically attaches different meanings to the two ideas. We support both the common intuition and the scholarly view that trust – in addition to (and distinct from) calculativeness – meaningfully describes beliefs and behavior within and between organizations, influencing organizational outcomes.

Conclusions

Trust exists, not only in special interpersonal, social relations, but also in business arrangements and economic transactions. In cases where trust and calculativeness make some similar predictions, scholars need to empirically compare the two mechanisms. In other cases, trust can add explanatory power to certain individual and organizational actions that calculativeness alone cannot adequately explain. Indeed, Sen (1970; 1977) argues that our economic system would collapse and organizations could not viably exist in the absence of trust. Annette Baier eloquently refers to trust's prevalence and importance:

The starry heavens above and the moral law within had better be about the only things that matter to me, if there is no one I can trust in any way. (1986, p. 231)

We inhabit a climate of trust as we inhabit an atmosphere and notice it as we notice air, only when it becomes scarce or polluted. (Ibid., p. 234)

We suggest that the pervasiveness of trust she refers to exists in the world of commerce and economic organization, substantially influences organizational action, and – specifically – can have a profound influence on economic transaction costs.

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Notes

1. Allowing non-monetary factors in the utility function would vitiate most of the TCE analyses. The assumption of strictly monetary objectives simplifies the analysis greatly. However, if we allowed individuals to have non-monetary objectives, then we could have individuals who greatly value telling the truth. This violates the 'self-interest seeking with guile' assumption. The expression 'self interest seeking with guile' is used to refer to individuals who define self-interest largely in monetary terms, place no weight on moral values, and think strategically.

2. Several other authors (for example Jones, 2001 and Chiles and McMackin, 1996), using slightly different frameworks, have also called for the integration of trust and TCE.
3. Curiously, Williamson allows that even 'nearly noncalculative' relations can be intendedly so, and therefore, calculative (Williamson, 1993b, pp. 481–2).
4. This has interesting implications for management education. Williamson states that the principles that *theoretically* govern behavior in the TCE framework are antithetical to healthy or desirable *actual* human interaction. What does this mean for our teaching practices? Instructing students in theories that assume everyone is wholly opportunistic and self-interest-seeking could have serious implications. If educators teach students that unbridled opportunism motivates all decisions, business schools may contribute to establishing this kind of behavior as a norm. If so, we should not be surprised if the students then follow such norms. Ghoshal and Moran (1996) allude to this possibility with specific reference to TCE, and research indicates that the likelihood of people making selfish choices increases with their exposure to economic assumptions (Frank, 2004; Frank et al., 1993; see also Ghoshal, 2005 and Ferraro et al., 2005).
5. See Bromiley (2004) for additional, detailed discussion of these issues.

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