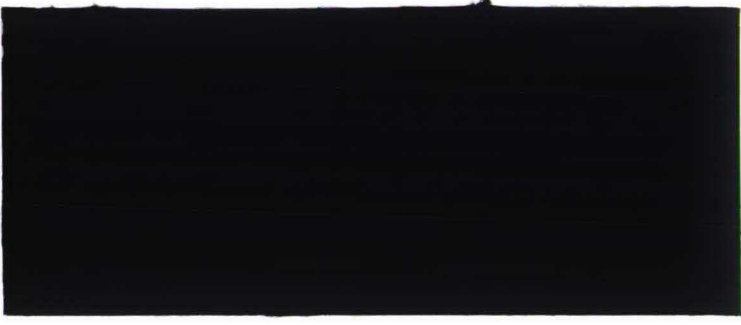
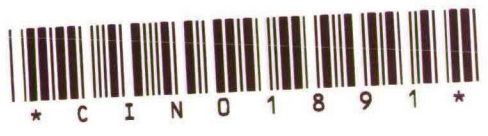


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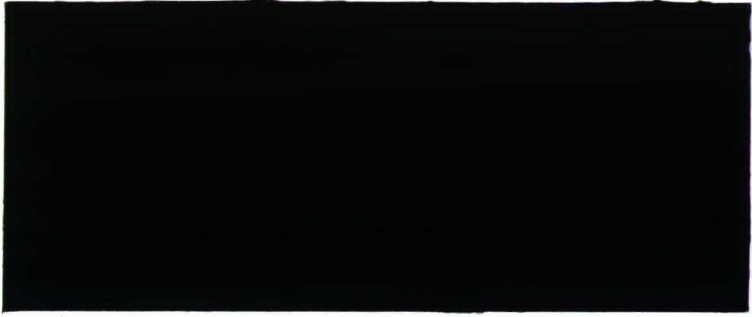
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Transaction costs

DEPARTMENT OF ECONOMICS
RESEARCH MEMORANDUM



TRUST AND TRANSACTIONS; TRANSACTION
COST ANALYSIS WITH A DIFFERENTIAL
BEHAVIORAL ASSUMPTION

Niels G. Noorderhaven

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**TRUST AND TRANSACTIONS; TRANSACTION COST ANALYSIS WITH A
DIFFERENTIAL BEHAVIORAL ASSUMPTION**

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ABSTRACT

Two kinds of trust can meaningfully be distinguished: situational trust and behavioral trust. The first kind of trust is associated with characteristics of (the context of) a transaction, the second kind of trust with characteristics of the transacting parties. The possibility of situational trust is already implied in received transaction cost economics (TCE). The incorporation of behavioral trust however calls for the adoption of an assumption of differential opportunism, which is not a part of received TCE. Differences in opportunism associated with behavioral characteristics of a firm can be assumed to stem from differences in reputation, or from differences in institutionalized behavior within organizations. If a differential opportunism assumption is adopted, new hypotheses can be generated, that can not be derived from received TCE.

TRUST AND TRANSACTIONS; TRANSACTION COST ANALYSIS WITH A DIFFERENTIAL BEHAVIORAL ASSUMPTION

1. INTRODUCTION

The assumption of opportunistic behavior has an important place in transaction cost economics (TCE) as developed by Oliver Williamson (1975, 1985, 1991). Without opportunism, the problem of economic organization would be substantially mitigated. For every situation a simple contract could be drawn, covering the most likely contingencies, and containing a 'general clause' to deal with unforeseeable circumstances that may develop (Williamson 1985: 65).

In this paper the consequences of the adoption of a slightly different opportunism assumption, *differential opportunism*, are explored. The purpose of this exercise is to enable TCE to incorporate the concept of 'trust'. 'Trust' in this paper indicates the willingness of a firm to engage in a transaction in the absence of adequate safeguards. In doing so, the trustor typically runs the risk of incurring costs that outweigh the immediate benefits sought, and may become dependent on the course of action chosen by the trusted.¹ By adding an epithet to the noun 'trust' we can distinguish between two different grounds for trust: 'situational trust' and 'behavioral trust'.

The urge to bring the concept of 'trust' into TCE stems from the observation in various empirical studies of inter-firm relations that these relationships are often of an informal, non-contractual nature (Beale and Dugdale 1975; Galanter 1981; Macaulay 1963). Instead of formal contractual arrangements, trust is said to be often the glue that keeps business partners together (Barber 1983; Lorenz 1988; Palay 1984). The same comments are made in more casual accounts of inter-firm relations (Bhide and Stevenson 1990; Van Empel 1988; Johnston and Lawrence 1988).

The relationship between trust and opportunism is obvious. If all agents are opportunistic, the scope for trust is very limited. Only if the other party acts in its own interest by not betraying our trust, can trusting behavior be rational. Thus a monopsonist may expect its suppliers to honour their commitments for fear of going out of business. This kind of trust is grounded in characteristics of the transaction situation, and not in the characteristics of the other party (for all agents are identical in their opportunism). Thus we may speak of 'situational trust'.

If on the other hand an assumption of differential opportunism is adopted, trust can conceivably be based on the degree of opportunism (or its opposite: trustworthiness) that is seen to form an inherent characteristic of the behavior of the agent in question. This kind of trust, which is relatively independent of the situation (although one will trust few agents in all situations), may be dubbed 'behavioral trust'.²

A concept of trust encompassing both situational trust and behavioral trust appeals to our intuition, and is in line with the use of the word 'trust' in everyday language.³ If the concept is reduced to only situational trust, it is all but emasculated. Below I will contend that TCE as developed by Williamson in effect, if not in principle, assumes uniform opportunism. Only situational trust is consistent with this behavioral assumption. Thus it is worthwhile to explore the possibility of adopting a differential

opportunism assumption in TCE, and try and open up the analysis for trust in the full meaning of the word.

The remainder of this paper is built up as follows: in Section Two I will first discuss Williamson's view on opportunism, and next investigate the role of trust in different situations under assumptions of uniform and differential opportunism. Section Three focuses on possible sources of differences in opportunism of organizations: reputation, institutionalization, and culture. In Section Four two categories of general propositions are put forth that can be generated by TCE with a differential opportunism assumption, but not by received TCE. Section Five summarizes the argument of the paper.

2. UNIFORM OPPORTUNISM AND DIFFERENTIAL OPPORTUNISM

Williamson does not propose an outright uniform opportunism assumption in his version of TCE. Instead, he assumes 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' (Williamson 1985: 64). However, the main thrust in TCE is to explain existing safeguards in transaction relations as a response to the problems of opportunism, the possibility to screen successfully for opportunism and consequently of being able to renounce from safeguards is hardly worked out.⁴ Thus differences in opportunism are de-emphasized in TCE. The line of reasoning is that if it is very difficult or impossible to recognize an opportunistic agent ex ante, those who design a governance form must reckon with opportunism all the time. The representative agent is an opportunistic agent. For all practical purposes, then, TCE employs a uniform opportunism assumption.

Below, I will explore the differences with regard to the explanation of transaction relations between firms of applying a uniform and a differential opportunism assumption.⁵ I will start with a simple case, and abstract from reputation effects. Let us depart from the following assumptions:

1) Transactions entail asset specificity.

2) Asset specificity leads to dependency.

Dependency can exist in all kinds of gradations, and the concept must be understood in a very broad sense, running from the very limited 'dependency' caused by the nuisance of having to find another buyer or supplier if a transaction relation turns sour, to the very intense dependency of the case in which a rupture of a transaction relation would endanger the survival of the firm in question.

3) Under the assumption of uniform opportunism a firm will always exploit dependency when it pays to do so, under the assumption of differential opportunism some firms will always exploit dependency when it pays to do so, other firms will only exploit when it pays 'enough', and still other firms will not exploit (the exploitation of dependency will be called the strategy of 'defection', not to exploit means following a strategy of 'cooperation').

4) Firms can distinguish ex ante between more and less opportunistic partners.

- 5) The question whether or not it pays to defect depends on the balance of dependencies (in the absence of safeguards).
- 6) If the dependencies of the parties (in the absence of safeguards) are in balance, it does not pay to defect (call this 'situation B'), if there is imbalance of dependencies, defection is attractive to one of the parties ('situation A').⁶
- 7) Firms know with certainty in which type of situation they are or will be.
- 8) Safeguards have as their purpose the neutralization of imbalances of dependencies.
- 9) Safeguards are costly.

If we differentiate between two situations and two behavioral assumptions, four different cases can be distinguished (FIGURE 1). Under the assumption of uniform opportunism in situation A transactions are possible only if adequate safeguards can be installed. Trust makes no sense in this situation: each party knows with certainty that the other will defect if he gets the chance. In situation B on the other hand no (costly) safeguards will be installed, for the other party can be 'trusted' to act in its own interest and cooperate. This trust is clearly of the 'situational' kind, and has nothing to do with the specific characteristics of a given transaction partner. As stated in the introduction: if differences between agents are not explicitly taken into account, only situational trust can enter the analysis.

If we now turn to the case of differential opportunism, in situation A the concept of 'adequate safeguards' assumes another meaning. Whereas adequate safeguards have to be tight enough to restrain from defection the average or representative agent in the case of uniform opportunism, if differential opportunism is assumed, safeguards only have to be adequate for the individual agent in question. Thus, the safeguards installed in the exchange relation with X may be looser than those in the relationship with Y. In the first relationship, the loose safeguards are supplemented with behavioral trust. In situation B no safeguards are installed, and the transaction relation is based on trust. Since the characteristics of the situation are such that cooperation pays, behavioral trust is actually redundant here. That is, as long as it is assumed that the firms concerned know with certainty in which situation they (will) find themselves.

FIGURE 1: Safeguards and Trust Under Two Behavioral Assumptions

Behavioral Assumption Situation	Uniform Opportunism	Differential Opportunism
(A) Defection Pays	(1) Adequate Safeguards No Trust	(2) Adequate Safeguards and/or Behavioral Trust
(B) Cooperation Pays	(3) No Safeguards Situational Trust	(4) No Safeguards Situational and/or Behavioral Trust

This assumption should now be relaxed. In real-world transactions parties do not know with certainty - neither *ex ante* nor *ex post* - whether there is or will remain a balance of dependencies, and hence whether they are and will remain in situation A or B. In the case of uniform opportunism adequate safeguards are now necessary also in situations of type B, if a shift of dependencies leading to a type A situation may occur. In the case of differential opportunism, behavioral trust makes the truster indifferent as to the situational characteristics of the transaction relation. Therefore less tight safeguards may be expected in many cases. More importantly, in one and the same type of situations safeguards will vary between transacting dyads, in accordance with variations in trust and trustworthiness.

By also dropping the assumption that the level of trustworthiness of a firm is recognizable *ex ante* the differential opportunism model is made more plausible. Individuals can form an opinion about the trustworthiness even of complete strangers on the basis of subtle, unconscious clues emitted in verbal and nonverbal communication (Frank 1988). But an opinion based on these clues only must obviously be less than perfect, in personal relations, and *a fortiori* in inter-firm relationships. If the first impression is supplemented with experience gained in protracted interaction, the assessment of the other party's inclination to opportunism can be made much more reliable. Thus the differential opportunism model makes us expect loose safeguards in relatively stable dyads of trustworthy parties. Relationships in which at least one opportunistic party is involved will on the other hand be characterized by less stability and tighter safeguards.

Adoption of an assumption of differential opportunism has theoretically and

empirically interesting implications. But is the assumption also plausible? In the next section three possible sources of differences in opportunism in the behavior of firms will be discussed: reputation, institutionalization, and culture.

3. SOURCES OF DIFFERENCES IN OPPORTUNISM

Reputation and Opportunism

Reputation effects occur if a firm refrains from opportunism because it does not want to endanger future transactions, with the partner in question or with third parties (Dasgupta 1988; Klein 1985; Weigelt and Camerer 1988; Wilson 1985). Although reputation effects are no panacea for all transaction problems caused by opportunism (Williamson 1985: 396), they should certainly be taken into account in a TCE-like analysis.

It is clear that incorporation of reputation effects calls for a differential opportunism assumption. If reputation plays an important role in a certain market, reputed firms are selected because they are expected to be less prone to opportunistic behavior. Or, put differently, in dealing with a reputed firm less tight safeguards will be demanded.

In principle, reputation can lead to differential opportunism without there being any intrinsic difference between firms. A firm may ostensibly follow a rule of honouring commitments, in order to build a reputation that allows other firms to trust it. In this way its options for profitable exchange will be enlarged. This is the line of thought developed by Rowe (1989). A reputation is like an investment which only pays a profit if the agent is persistently trustworthy. Consequently, differences in reputation can cause otherwise identical rational agents to respond in divergent ways to the same situation. The reputed agent will be less easily tempted to defect, not because of the opportunities for defection foregone in the past (these are sunk costs), but because of more profitable future transactions that are jeopardized.

Note that the concept of reputation used in this way is circular: agents guard their reputation because it influences future trading opportunities, and it has this influence because agents guard it (Kreps 1988: 107). This circularity is caused by the fact that no inherent differences are assumed to lie at the basis of reputations. Through the agency of reputation the existence of differences in the degree of opportunism displayed in behavior can be conciliated with the principle of rational maximization of self-interest (cf. Hardin 1991; Rowe 1989), but I must admit that this explanation strikes me as rather contrived. It seems much more plausible that the propensity to invest in reputation is not present in all agents to the same degree, and that this propensity correlates with genuine differences in behavioral characteristics.

The next subsection deals with possible grounds for such inherent differences. I will take for granted the existence of behavioral differences leading to differences in opportunism at the level of the individual. Not only are behavioral differences the subject of an important branch of psychology, personality theory, experimental data also strongly suggest that opportunism is not a characteristic of all people to the same degree (Antonides 1991; Deutsch 1973; Etzioni 1988; Frank 1988; Kahneman et al. 1986; Petermann 1985). The issue here is whether differences in the intrinsic trustworthiness

of firms - or more generally: organizations - can be made plausible.

Institutionalization and Opportunism

In small firms a direct link between differences in opportunism at the level of individuals and differences at the organizational level can be assumed. These organizations to a considerable degree are reflections of their top managers (Hambrick and Mason 1984; Mintzberg 1979). Personal differences in trustworthiness may thus result in differences in organizational trustworthiness.

However, larger organizations are much more than just a reflection of their top managers. In these organizations the behavior of participants is institutionalized: patterns of interaction are passed on from one role incumbent to the next, and the organization is perceived as something over and above the individuals that happen to embody it at a given moment (Berger and Luckmann 1966).

Decision-making in an institutionalized context is to a large extent governed by rules, procedures and routines (Cyert and March 1963; March and Simon 1958). The process of institutionalization in which these rules, etc. are formed is path-dependent, and involves irreversible events and choices (Selznick 1957: 38-40). Therefore every organization forms a unique configuration of institutionalized behavior, the idiosyncrasies of which form its own individual 'character'. The degree of trustworthiness or opportunism displayed by an organization in its interaction with other organizations is a reflection of this 'character'.

In the context of inter-organizational relations the concepts of 'trust' and 'trustworthiness', do not have exactly the same meaning as in the case of relations between individuals. What do we mean if we say that we 'trust' an organization? What do we mean if we say that an organization displays 'trust'?

Trust in an organization occurs if that organization is seen as a system functioning in a consistent, reliable way (Luhmann 1979). This kind of trust may be quite independent of the personal motivation inferred to the individual participants of the organization one happens to deal with. But particularly in the case of a small organization, trust may also be based on personal characteristics of the representative one happens to deal with. If that representative is the top-manager, trust will be strongest if the decision-making structure is centralized. If one deals with a lower manager, trust will be strongest if the decision-making structure is decentralized.

When an organization displays trust, it is by the definition employed in this paper prepared to engage in a transaction in the absence of adequate safeguards. This willingness may stem from a favourable perception of the other party maintained by a dominant agent in the trusting firm (top-management-reflection view), or from a set of rules, etc., that make the organization under certain circumstances routinely transact in this way.

It is very unlikely that a firm would trust every agent indiscriminately, though. Such a set of rules would be suicidal, both in the world of uniform and in that of differential opportunism. Therefore it is to be expected that routine trust is placed only in certain types of relationships, e.g. those of long standing, in which favourable experiences have accumulated (Klijn and Noorderhaven 1992).

The consequences of adopting the institutional view of organizations depend on the branch of institutionalism with which alliance is sought. Above I have reproduced the argument of the school of thought that concentrates on the internal processes of institutionalization. These processes will arguably result in differences in the behavior displayed by firms vis-à-vis their business partners. According to other scholars, however, processes of institutionalization in the environment of organizations cause these organizations to become more and more isomorphic (DiMaggio and Powell 1983; for an overview of both schools of thought see Zucker 1987). According to the latter view, intrinsic differences in opportunism between organizations within the same institutional context are unlikely to be significant.

However, even if this were the case a differential opportunism assumption could still be fruitful, if the focus is shifted to the comparison of transaction relations in different institutional contexts. I will return to this point in the penultimate section of the paper.

Organizational Culture and Opportunism

The concept of institutionalized behavior within an organization as used here is closely related to that of organizational culture. Hofstede (1991: 180) defines organizational culture as "the collective programming of the mind which distinguishes the members of one organization from another". One difference between both concepts is that institutionalized behavior is predominantly rooted in rules and procedures that at the moment of their conception reflected rational decision making. Organizational culture is largely the product of unplanned and unconscious processes of socialization. Another difference is that the concept of institutionalization seems to refer more to patterns of observable behavior, and the concept of organizational culture to the shared perception of these patterns of behavior (Hofstede 1991: 182).

The important correspondence between both concepts is that organizational culture, too, can form the basis of genuine differences of 'character' between organizations. This is expressed in the definition employed by Hofstede, and in Kreps' (1988: 126) assertion that "corporate culture (...) gives identity to the organization".

Just as with the institutionalization argument, the implications of acknowledgement of the importance of organizational culture depend on whether one assumes the source of these cultures as internal or external to the organizations in question. The first perspective emphasizes differences between organizations within one particular national culture, the second stresses differences between the average organization in different cultures. Both views generate interesting hypotheses, as we will see in the next section.

5. HYPOTHESES BASED ON DIFFERENTIAL OPPORTUNISM

What difference does it make if a differential opportunism assumption is adopted in TCE? I think that two categories of hypotheses can be generated on the basis of TCE

with differential opportunism that cannot be produced by received TCE. The first category of hypotheses is based on the assumption of differential opportunism of firms within a specific cultural-institutional environment, e.g. a specific industry in a specific country. The proposition that can be formulated is:

Lower levels of opportunism of agents are associated with less tight safeguards, other things being equal.

From this general proposition more specific refutable hypotheses can be derived. An obvious problem here is the measurement of opportunism. It is next to impossible to measure the degree of opportunism expressed in actual behavior. But it is possible to measure an agent's attitudinal opportunism by asking what kind of actions vis-à-vis his transaction partners he sees as acceptable (cf. John 1984; Provan and Skinner 1989). Assuming that a opportunistic attitude somehow transpires in actions observable to the other party, the hypothesis can be put forth that an opportunistic attitude of at least one of the parties is associated with more stringent safeguards, other things being equal.

Alternatively, the degree of opportunism of a transaction partner as perceived by the other party can be measured (Berger et al. 1993). The hypothesis is then that there is a positive relationship between the perceived level of opportunism and the tightness of installed safeguards, other things being equal.

If direct measurement of opportunism is seen as too unreliable, the trustworthiness of the parties can be measured indirectly by taking into account the 'age' of a transaction relation. If a transaction relation remains intact during a considerable period of time it may be assumed that at least a modicum of mutual trust exist.⁷ Thus we would expect a negative relationship between the age of a relationship and the tightness of safeguards, at a given level of asset specificity. A variant of TCE generating this kind of hypotheses would contain the rudiments of the dynamic perspective lacking in received theory (Noorderhaven 1993; Nooteboom 1992).

The second category of hypotheses is based on the assumption that the average level of opportunism varies between different cultural-institutional environments. The general proposition that can be formulated on the basis of this assumption is:

A lower average level of opportunism within a cultural-institutional environment is associated with on average less tight safeguards, other things being equal.

Again, various more specific hypotheses can be derived. For instance, subcontracting relations in Japan are often seen as different from those in western economies (Cusumano and Takeishi 1991; Florida and Kenney 1991). A controversial explanation of these differences is based on alleged cultural differences between Japan and the West, which could lead, among other things, to different levels of average trustworthiness of transaction partners (Dore 1983). A TCE perspective with a differential opportunism assumption generates the hypothesis that the parties in a transaction relation (other things being equal) display lower levels of opportunism in Japan than in the West. The establishment of a reliable intercultural measure of opportunism will doubtlessly prove problematic, however.

Likewise, transaction cost reasoning can perhaps most fruitfully be applied to the phenomenon of 'flexible specialization' and its purported influence on economic localities (Piore and Sabel 1984) if regional differences in behavioral parameters are allowed. In its received form, TCE is seen as too restricted (Sayer 1989). Regional differences in cultural norms and institutions should be given adequate weight (Moulaert and Swyngedouw 1989).

As a final example, the effects of extreme social stratification like the caste system in India can be taken into account if different levels of opportunism between-groups and within-groups are allowed. The psychic chasm between members of the upper and lower castes prevents the formation of stable exchange relationships that would on economic grounds be expected (Knorringa 1992).

6. CONCLUSION

The conclusions to be drawn from the discussion in this paper can be summarized as follows:

- * Two kinds of trust can meaningfully be distinguished, situational trust and behavioral trust;
- * Received TCE, although ostensibly departing from a differential opportunism assumption, analyzes transactions as if a uniform opportunism assumption were applied;
- * Situational trust is already incorporated into received TCE;
- * Incorporation of the concept of behavioral trust is possible only if a differential opportunism assumption is adopted;
- * Even if the existence of genuine differences of character between agents is denied, differences in opportunistic behavior can be assumed, stemming from differences in reputation;
- * However, it is plausible that differences in institutionalized behavior and differences in organizational culture cause firms to vary with regard to the opportunism displayed in their behavior;
- * A version of TCE applying a differential opportunism assumption, and incorporating the concept of trust, leads to propositions that can not be derived from received TCE.

Incorporation of the concept of behavioral trust is an important change in TCE. The theory becomes more complex, and the number of variables that have to be measured in empirical research increases. The version of TCE with a differential opportunism assumption will have to prove itself in competition with the more parsimonious model of received TCE. My expectation is that by taking behavioral trust into consideration significantly more of the variance in governance forms can be explained than on the basis of received TCE. If this proves not to be the case, for instance because trust is after all only a relatively unimportant 'smoothing device' (Semlinger 1991), it would be more profitable to discard the concept.

NOTES

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1. This definition of trust corresponds largely to those used by Baier (1986), Deutsch (1973), and Luhmann (1979).
2. The distinction between behavioral trust and situational trust parallels the distinction between "adverse selection" and "moral hazard" in the insurance literature (Arrow 1970; Spence and Zeckhauser 1971). The adverse selection problem does not arise if reliable information concerning the agent's inherent characteristics is available. And moral hazards arise in some situations, but by definition not in those in which situational trust is warranted.
3. In The Concise Oxford Dictionary of Current English, 6th edition, 1976, trust is described as the 'firm belief in reliability, honesty, veracity, justice, strength, etc., of person or thing; (...); confident expectation'. The first meaning is clearly connected to what we call 'behavioral trust' in this paper, the second meaning could also be a description of 'situational trust'.
4. The 'insurance example' (Williamson 1975: 15) is an exception.
5. This analysis is analogous to Dopfer's (1990) exploration of 'x-efficiency' under uniform and differential behavioral assumptions.
6. Situation 'B' is that described in the literature on 'self-enforcing agreements' (Telser 1980) and on the 'folk theorem' (Fudenberg and Maskin 1986). Situation 'A' is more crucial for the argument contained in this paper.
7. Heide and Miner (1992) suggest that stable relationships of distrust are also possible. This however is likely to be the exception rather than the rule.

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