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Endogenous and Exogenous Determinants of Trust in Inter-Firm Relations: A Conceptual Analysis based on Institutional Economics

ABSTRACT

This paper investigates the factors that affect the availability and robustness of trust as a governance mechanism in inter-firm relations. By adopting a broad 'embedded' perspective, the analysis focuses both on the factors that affect trust within the inter-firm relation (endogenous determinants) and those related to the business environment that influence trust from the outside (exogenous determinants). By means of conceptual analysis based on a broad literature review focusing on institutional economics, the aim of the paper is to provide an overview that can be used as a basis for further theoretical discussion and operationalisation in empirical research especially concerning the governance of inter-firm relations in different sectoral and regional environments. For the purpose of illustration, the paper concludes with an example of a conceptual model that applies the concepts analysed in the paper.

Key words: *Trust; embeddedness; inter-firm relations; governance; institutional economics*

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1. INTRODUCTION

Disregarding whether a firm is engaged in consumer or industrial markets, its strategy and marketing operations are dependent on a network of more or less stable relations with other business actors. These range from vertical relations with suppliers, intermediaries and customers to horizontal relations with competitors. Institutional economics subsumes inter-firm relations in the category of hybrid forms of organisation, which are located between market and hierarchy (Williamson, 1991; 1996). Hence, inter-firm relations differ from arm's length market transactions by being long-term oriented, which means that they consist of a sequence of transactions and thus have a history and a future (Håkansson & Snehota, 1995). Similarly, inter-firm relations differ from hierarchies, because instead of vertical integration they involve two legally independent business firms.

A substantial body of literature has focused on the governance of inter-firm relations in general, and the role of trust as a governance mechanism in particular (e.g. Dyer, 1997; Lorenz, 1988; Lyons & Mehta, 1997; Nooteboom, 2002). The governance discussion, which is based on Williamson's (1985) transaction cost economics, addresses the problem of achieving effective coordination of transactions at minimal transaction costs while accounting for bounded rationality, uncertainty and asset specificity, which give rise to a risk of opportunism. In recent literature trust has been attributed a significant role in this context based on a number of arguments. These include cultivation of open communication and facilitation of flexibility, which enhance learning and make planning future operations and solving business conflicts easier (Nonaka & Takeuchi, 1995; Parkhe, 1998; Sako, 1992; Zaheer, McEvily & Perrone, 1998); reduction of transaction costs (Dyer, 1997; Lyons & Mehta, 1997; Nooteboom, 2002); and enhancement of strategic focus, specialisation and commitment in the inter-firm relation (Jarillo, 1993; Morgan & Hunt, 1994; Parkhe, 1998).

However, even though the literature is relatively consistent in attributing such positive characteristics to trust, there is considerable ambiguity as to what trust actually is. Numerous contributions across disciplines such as economics (e.g. Dasgupta 1988; Frambach, 2003; Williamson, 1993), management and marketing (e.g. Ganesan & Hess, 1997; Sako, 1992; Six, 2005), philosophy (e.g. Baier, 2001), political science (e.g. Hardin, 2002; Offe, 2001), psychology (e.g. Becker, 1994) and sociology (e.g., Coleman, 1990; Luhmann, 1979) have analysed trust, yet there is no single comprehensive definition to which all would agree. This calls for more conceptual analysis to enable the development of a more coherent research programme if not on a generic level, then at least within disciplines or in specific inter-disciplinary research areas.

The analysis in the present treatise contributes to the conceptual development of trust in the context of the governance of inter-firm relations, focusing in particular on the perspective of institutional economics in a broad inter-disciplinary sense: while the foundation of the analysis is in transaction cost economics (the microanalytic branch of new institutional economics, see Williamson 1985; 1996), the complementary streams of literature that are integrated into the discussion include, in particular, the historically oriented work of Douglass North (1990), contributions from the field of evolutionary economics (Herrmann-Pillath, 2002; Koch, 1998; Nelson & Winter, 1982) and economic sociology (especially Granovetter, 1973; 1985; 1993). Moreover, concepts and ideas are derived from literature which has applied the aforementioned theoretical foundations especially in the field of business management. Although integrating the idea of embeddedness into transaction-cost economic analyses is not new as such (e.g., Bradach & Eccles, 1989; Dyer, 1997; Powell, 1990), only few authors have gone beyond the "Granovetterian" perspective of social and structural embeddedness, and ventured to treat embeddedness as comprising also the political, juridical and cultural environment surrounding the inter-firm relation (e.g., Bachmann, 2001; Kautonen & Welter, 2005; Welter et al., 2004). While the latter, empirically-founded treatises add considerably to our understanding of the embeddedness of trust in the context of the governance of inter-firm relations, there is nevertheless a clear need for a comprehensive review of these topics, which results in a conceptual framework that provides a solid starting point for future research. The present paper sets out to respond to this need.

Acknowledging the multi-faceted nature of the concept of trust, the analysis in this paper particularly concentrates on the issue of the determinants or sources of trust, that is, *which factors determine the availability and robustness of trust as a governance mechanism in inter-firm relations*. While the discussion in the governance-related literature has mostly focused on trust as an endogenous characteristic of inter-firm relations, this paper approaches the determinants of trust from a broader 'embedded' perspective. Hence, trust in a dyadic inter-firm relation (the unit of analysis) is not only a product of the characteristics of and interaction in the relation itself, but it also depends on the influence of the surrounding social, cultural, legal and political environment (Bachmann, 2001; Granovetter, 1985; Halinen & Törnroos, 1998). Trust derived from the external environment provides initial trust even when the business partners do not have 'any kind of experience with, or firsthand knowledge of' each other (McKnight, Cummings & Chervany, 1998, p. 474), and it also sets the framework within which trust in the inter-firm relation itself evolves. While most of the analysis operates on a high level of abstraction, the paper concludes with an application of the concepts in a conceptual model suitable for a study using structural equation modelling.

2. TRUST AS A GOVERNANCE MECHANISM IN INTER-FIRM RELATIONS

2.1. Trust, formal contracts and assurance

Before discussing the actual determinants of trust, it is necessary to establish what is meant by trust in the context of the governance of inter-firm relations. Governance mechanisms are a means to cope with and safeguard against the risk of opportunism in inter-firm relations. Opportunism is defined as 'a self-interest seeking assumption that makes allowance for guile' (Williamson, 1989, p. 139). Although it can take obvious forms such as cheating and lying, more often opportunism is sophisticated and even subtle such as withholding information or other 'calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse' (Williamson, 1985, p. 47). Since there is a degree of interdependence inherent in inter-firm relations by definition, opportunism is a greater concern than in arm's length market transactions due to the positive costs of switching to an alternative business partner.

Parallel to Williamson's (1985) concept of court ordering, one governance mechanism is the *formal contract*. This is an explicit agreement between the business partners regarding their duties and obligations, which is usually done in writing. Formal contracts rely on the judicial system for enforcement, and they deter opportunism effectively in an adequate legal environment because actors are unlikely to engage in outright illegal operations through a direct breach of a contract (Nooteboom, 2002). However, contracts have a number of drawbacks including the costliness of setting up, monitoring and enforcing, the unavoidable incompleteness as well as possible adverse effects on relationship-building if elaborate contracts are interpreted as a signal of mistrust (Macaulay, 1963; Nooteboom, 2002).

The second governance mechanism proposed in this paper is *assurance*, which is akin to private ordering in Williamson's (1985) conceptions. In essence, assurance refers to a range of governance instruments, which can be implemented by the management to manipulate the payoff structure surrounding the business relation (Yamagishi & Yamagishi, 1994). Two categories of assurance can be distinguished. The first one refers to manipulating specific investments so that a one-sided dependence is transformed into an interdependence, which means that opportunism does not pay off as long as its benefits do not exceed the costs of switching to an equivalent alternative transaction partner.

The second assurance category refers to retaliatory instruments such as hostages (Williamson, 1985). An example of a hostage is after-sale maintenance services in industries where these are an essential element of the aggregate product concept, as these can be cut off to retaliate the customer's opportunism such as failure to keep up with scheduled payments (Shapiro, Sheppard & Cheraskin, 1992). Again, opportunism is attractive only if its benefit exceeds the harm or cost caused by the retaliation. Assurance is less expensive than formal contracts and also less sensitive to contingencies. However, implementing assurance often requires power and, similarly to formal contracts, demanding an assurance may signal mistrust.

Disregarding the name under which the concept of assurance appears in the literature (e.g. 'egoistic trust' in Williams, 1988; 'self-interested trust' in Lyons & Mehta, 1997; 'relational contracting with incentives from self-interest' in Nooteboom, 2002), the most common basis for distinguishing it from trust has been the motives underlying cooperative (as in 'non-opportunistic') behaviour. In case of assurance, the motive is said to be the general economic assumption of self-interest, whilst trust is conceptualised as a product of altruistic motives. However, this distinction is problematic for two reasons. Firstly, as Kirchgässner (1999) argues, real altruism, which is defined as integrating the partner's interests into the firm's own utility function based on intrinsic motives, occurs very seldom in economic contexts. Hence, the present treatise assumes that behaviour in inter-firm relations is mostly self-interest motivated, but it simultaneously recognises that such behaviour is a product of not only purely economic or material, but also social and emotional motives.

Secondly, a motive-based distinction between assurance and trust neglects a central managerial dimension of governance, namely whether the governance mechanism can be installed and modified at will. This dimension is embraced here. Hence, assurance comprises such instruments of governance that can be installed by the management in order to modify the incentive structure surrounding the inter-firm relation. *Trust*, on the other hand, refers to such aspects of governance that the firm can influence over time, but not install or modify at will. Trust can be available as a feature of the environment in which the inter-firm relation is embedded and it can develop endogenously over the course of interaction in the inter-firm relation. In either case, trust is beyond managerial control.

Trust has the same benefits over formal contracts as assurance, that is, it is less expensive and less sensitive to contingencies. Moreover, trust does not require such a power position as assurance and it is more pleasant and satisfactory than applying one of the other two governance mechanisms (Gambetta, 1988; Nooteboom, 2002; Sztompka, 1999). Trust is also convenient: if an actor can trust, there is no need to start thinking about contractual clauses or ways to achieve assurance. The downsides of trust include, besides the characteristic that it cannot be created and installed at will, being more fragile than assurance or formal contracts (Bachmann, 2001). Thus, according to the definition of fragility presented by McKnight et al. (1998) in this context, trust is likely to undergo more dramatic changes – increases as well as decreases – within a given time frame than the other governance mechanisms. How robust (resistant to change) trust is depends on the endogenous and exogenous determinants that are discussed later in this treatise. Moreover, the endogenous development of trust, even if successful, often takes longer and is less foreseeable than drawing up a contract, committing a relation-specific investment or installing a retaliatory assurance mechanism.

2.2. Trust – a knowledge-based perspective

Now that we have defined trust in terms of the other governance mechanisms, the next topic concerns how business actors determine to what extent to trust and to what extent to rely on the other governance mechanisms. Here, it can be assumed that trust is preferred to the alternative governance mechanisms as long as trusting is perceived to be prudent. The justification for this assumption is the aforementioned characteristic of trust being more convenient and pleasant than implementing either formal contracts or assurance. Hence, the following discussion assumes a trust-based perspective.

Event though decisions about trust and governance are not necessarily decisions as such, but rather a mix of conscious deliberations and habitual behaviour based on routines, it is useful to begin the examination by assuming that trust is based on a rational decision. Trust can be described as an informed bet with a certain level of risk and certain stakes (Coleman, 1990; Sztompka, 1999). Stakes reflect the perception of what can be gained or lost by trusting, while risk refers to the likelihood of the trustee breaching trust. In other words, risk indicates the likelihood of the gain or loss determined by the stakes actually occurring. The assessment of risk can be described as reflected trustworthiness (Nooteboom, 2002). Hence, the level of perceived risk in a bet of trust is based on the trustor's assessment of the reasons why the trustee would behave in a trustworthy manner. This assessment can be analysed in terms of information about the trustee's past behaviour and information related to the environment in which the inter-firm relation is embedded, as well as expectations concerning the trustee's future behaviour. Reflected trustworthiness implies that the trustor views the situation from the trustee's point of view, that is, how the trustee assesses the potential gains and losses associated with opportunism as opposed to keeping trust.

From this perspective to governance, formal contracts and assurance are, in effect, implemented to diminish the risk in the bet of trust. When a bet of trust is considered too risky, but the potential gain is sufficiently high for the firm to want to carry out the transaction, the risk of trusting can be decreased by implementing formal contracts and/or assurance. If these alternative governance mechanisms cover a part of the risk in the transaction, there is less risk left for trust to cover, and thus carrying out the transaction may become feasible.

Abandoning the convenient but unrealistic assumption of fully rational decisions, the concept of knowledge becomes central in analysing trust. Whilst the concept of bounded rationality in transaction cost economics focuses on the quantitative dimension of imperfect information and our limited capacity to process it, the knowledge-based perspective adopted here also acknowledges a qualitative dimension to rationality (Koch, 1998). Hence, information in form of external stimuli becomes knowledge through interpretation, and it is this knowledge that individuals use as a foundation for their actions. The interpretation of information, on the other hand, is based on the cognitive schemata of the individual, which act as filters for information and are a product of the individual's cumulative knowledge to date. Thus, an individual's interpretation of a trust situation is not only subjective, but also highly path-dependent.

This 'background knowledge' has been found to play a crucial role for trust (Alesina & LaFerrara, 2000; Nuissl, Schwarz & Thomas, 2002). Firstly, it determines the individual's general disposition to trust. For example, if an individual's trust has been betrayed in certain situations in the past, he is likely to be wary about trusting in similar situations in the future. Secondly, the more overlap there is between the background knowledge of the business actors, the shorter the cognitive distance to overcome and the easier it is, ceteris paribus, to develop trust (Nooteboom, 2002). A large share of the background knowledge is tacit, which leads to routine-based behaviour. In fact, Nelson & Winter (1982) argue that conscious choices are required only when a problem cannot be solved based on routines.

2.3. Extrinsic and intrinsic sanctions

In addition to the trustor's knowledge, the trustee's reasons for trustworthy behaviour were argued to be a central concept in the analysis of trust decisions. The reasons for trustworthy or, more generally, non-opportunistic behaviour can be analysed in terms of sanctions, which refer to the negative consequences that the trustee would potentially face as a result of opportunism. Hence, the central preference of the trustee is to maximise the benefit from an inter-firm relation while minimising the cost or harm of sanctions. For some readers this may sound an awfully bleak view of the world, for of course trust is commonly given more positive associations and, indeed, trusting a person can be rewarding as such (Nooteboom, 2002). Moreover, as will become apparent as the discussion progresses, many of the sanctions associated with trust could be viewed from another angle and described as rewards. The reason for analysing trust in terms of sanctions in the governance context is simply analytical convenience: sanctions allow the analyst to study behaviour effected by the different mechanisms of governance from the same perspective and with the same terminology. In essence, formal contracts are based on (the threat of) legal sanctions, while assurance relies on economic sanctions by means of increasing the costs of switching to an alternative business partner by creating interdependence or causing harm to the business through retaliation. But what motivates people to behave in a trustworthy manner when neither formal contracts nor assurance is available?

The sanctions relevant in the context of trust can be approached by dividing them first into intrinsic and extrinsic ones (e.g. Bénabou & Tirole, 2003; Frey, 1992). Intrinsic sanctions are enforced internally by the trustee, while extrinsic sanctions are enforced from the outside by another individual or organisation. *Extrinsic sanctions* can be analysed along two dimensions. The first one divides them into material and social sanctions, while the second one concerns whether the sanctions are enforced within the inter-firm relation by the trustor (endogenous sanctions) or externally by a third party (exogenous sanctions). Material sanctions essentially refer to losing business income in the future, while social sanctions comprise social ostracism, which collides with an individual's common desire to be socially accepted (Herrmann-Pillath, 2002; Raiser, 2001). The latter dimension of endogenous and exogenous sanctions is addressed in detail in the following section. *Intrinsic sanctions* do not require enforcement by a third party, because they are enforced by the trustee him- or herself based on a loss of self-respect or a feeling of guilt (Nooteboom, 2002; Panther, 2000). Hence, intrinsic sanctions are emotionally based. There is one crucial practical difference between intrinsic and extrinsic sanctions: in order to be effective, extrinsic sanctions require opportunism to be detected, while intrinsic sanctions are effective always because compliance is striven after even if there is no risk of getting caught. As a result, certain types of opportunism, which can go on undetected for a long time, can only be avoided through intrinsic sanctions. The following section addresses the sources of sanctions that act as a basis for trust within and outside of the inter-firm relation.

3. DETERMINANTS OF TRUST

3.1. Trust within the inter-firm relation

This section analyses trust as an endogenous characteristic of inter-firm relations. An interpersonal and an inter-organisational level can be distinguished in this context (Zaheer et al., 1998). The analytical focus in this discussion is on the relationship between the boundary spanners, while the organisation is considered a context for their behaviour. This means that the organisational culture with its rules, routines and norms affects the way its members behave and thus forms a foundation for the development of interpersonal trust. In this sense, the organisation becomes an endogenous determinant of trust: the more we trust the organisation, the more we trust its members. In fact, empirical evidence from Germany (Bachmann, 2001) and the US (Zaheer et al., 1998) shows that boundary spanners often trust each other in their organisational roles rather than on a personal level. Therefore, empirical operationalisations should make a distinction between trust based on the actor's organisational role and trust based on the actual individual.

It is useful to distinguish between future-oriented (expectations) and past-oriented (information) determinants of trust in this context. The future-oriented endogenous determinants of trust relate to Axelrod's (1984) concept of the 'shadow of the future', meaning that a business actor chooses to behave cooperatively because he expects a higher payoff from future transactions than from present opportunism. This may be related to material sanctions, such as losing future business with the present partner, but it also applies to social sanctions, such as losing a friend or a pleasant business acquaintance. An effective 'shadow of the future' requires reciprocity, which in this context means that if one party behaves in a trustworthy manner, the other one responds in kind by demonstrating similar behaviour. The emergence of reciprocity can be triggered by one party offering a pre-commitment, which implies that this party purposefully limits its degree of freedom and creates a 'shadow of the future', thus making it easier for the other party to place trust (Luhmann, 1979; Sztompka, 1999). For the maintenance of reciprocity, on the other hand, it is necessary to uphold such a degree of fair dealing that both parties feel that they receive benefits that are proportionate to their input into the relationship (Macneil, 1980; Ring & Van de Ven, 1994).

Although the 'shadow of the future' is future-oriented, its roots nevertheless lie in the past. The longer the relationship, the more the parties have usually invested in it not only in financial terms, but also in terms of establishing 'comfortable' routines and social relations. Hence, the costs (both in material and social terms) of switching to another partner become higher and the 'shadow grows longer'. However, the history of the relationship does not only enhance the future-oriented determinant, but it also allows the trustor to assess the partner's intentions in the long run, which enables more accurate assessments of the partner's future behaviour (Sztompka, 1999; Yamagishi & Yamagishi, 1994). Kramer (1999) argues that an actor's assessment of another's trustworthiness evolves as the expectations drawn based on information accumulated over a series of interactions are validated or discredited. For example, if the partner's behaviour has been consistent so far, the trustor is more likely to give the benefit of the doubt if a problem occurs. Hence, endogenous trust is likely to become more robust over time. Nevertheless, if a major problem occurs and it is attributed to opportunism, it can leave a long-lasting mark on the relationship or even bring it to an end. This is why trust, even if it is relatively robust, is deemed more fragile as a governance mechanism than formal contracts or assurance.

3.2. The trust environment: networks

The first one of the broad categories of exogenous determinants of trust are networks. These are understood in a very broad definition which is loosely based on Herrmann-Pillath's (2002) brand of evolutionary economics. The core idea and implication for the present discussion is that information circulates in networks and, when reaching the trustor, alters his or her knowledge and, consequently, assessment of the trust situation. Networks in this broad sense comprise actors apart from the trustee to which the trustor is connected either directly or indirectly via a third party ('friend of a friend'), and who in some way affect the extent to which the trustor grants or withholds trust. Actors in networks can play either a passive or an active role in the emergence and maintenance of inter-firm trust.

The passive role consists of involvement in the implementation of the reputation mechanism, which refers to negative effects to the trustee's reputation if opportunism is detected and if this behaviour is observed by or successfully communicated to relevant third parties, which also have an interest in sanctioning opportunism (Vogt, 1997; Yamagishi & Yamagishi, 1994). The sanction enforced via the reputation mechanism can be either material or social. For example, potential future business partners can turn to other firms as a result of bad reputation and thus opportunism gains an economic value. Or members of a business association can begin to shun the opportunistic party or think less of him due to a poor reputation, thus sanctioning him socially. Therefore, the immediate gains from opportunistic behaviour must be traded off against the future cost or social harm caused by the diminished reputation. The economic or social value of the reputation to the trustee is one of the bases for the effectiveness of the reputation mechanism and, thus, for the robustness of trust. The other factor in this context concerns the trustor's actual ability to diminish or destroy the reputation (Vogt, 1997). This depends on whether relevant third parties can observe the trustee's behaviour or whether the trustor can communicate the act of opportunism to them successfully and credibly.

Actors in the trustor's network can also play an active role as intermediaries by taking on the role of a guarantor or an advisor (Coleman, 1990). An example of a guarantor arrangement in the German retail trade sector is reported by Kautonen & Welter (2005), who studied a retailer that mainly purchases its supplies from firms that are members of a co-operative society. The co-operative society pays the suppliers and later collects the money from the customers. Thus, the suppliers are guaranteed to receive their money, while the association suffers the loss in case of non-payment. Another active intermediary role is the advisor. Firstly, advisors provide the trustor with information regarding the trustee's past behaviour. The value of such reputation information depends on the extent to which the trustor trusts the source of this information. Sztompka (1999) describes this as 'a peculiar shift of trust' to secondary targets. Secondly, advisors can actively participate in the implementation of the reputation mechanism by transmitting information regarding the trustee's behaviour to third parties. Here, the network contact in fact acts as an advisor not to the trustor, but to the respective third party.

What kind of a network provides a favourable environment for inter-firm trust and thus affects its robustness? Three factors are particularly important in this context. Firstly, the size of the trustor's network in terms of the number of relevant actors – that is, ones that have an interest in sanctioning opportunism and/or ones that can provide information about the trustee – involved directly and indirectly. Secondly, it depends on the density of the network. Trust in general emerges more easily in close-knit small networks than in more anonymous ones (Sztompka, 1999). As Sztompka (1999) further points out, the members of a close-knit network are more visible to each other, and hence they are able to observe each other's behaviour and create an effective reputation mechanism. Furthermore, if most actors are connected to each other via 'strong' or 'weak' ties (Granovetter, 1973), reputation information is transmitted quickly to the whole network and the costs of opportunism in one relationship are likely to carry over to other relationships (Simsek et al., 2003). This further enhances the reputation mechanism, which on the other hand provides the network members with a solid foundation for robust trust and, as a result, an inexpensive means of governance. A classic example of such close-knit networks are the merchant bankers in the City of London or diamond dealers in London and New York (Coleman, 1990). Verbal agreements suffice in these communities, because reputation is quickly communicated to those parties on which the trustee's business depends.

While small, dense networks discourage opportunism and create trust, atomisation and large, more anonymous networks are disadvantageous for trust as they prevent collective action against violators (Granovetter, 1993). In other words, when the network grows too big reputation information becomes 'noisy'. A remedy against this 'noise' is to have an appropriate position in the network, which is the third factor affecting trust in this context. Networks often have one or more actors in 'node' positions, meaning that these actors can reach a large number of other actors, whereas some actors are only connected to a few or even only one other actor in the network (Burt, 2000). Hence, if the trustor has a position as a 'node', or has access to one or more of them, he or she may be able to rely on reliable reputation information and an effective reputation mechanism even in large, relatively anonymous networks.

3.3. The trust environment: institutions

The second exogenous source of trust is the institutional environment. While networks as a source of trust assume a direct or indirect connection to one or more third parties, this requirement does not apply in the context of the institutional environment. Hence, the analysis here focuses on collective behaviour based on formal and informal institutions. According to North (1990), formal institutions include political, economic and juridical rules, while informal institutions comprise values, norms and codes of conduct that are deeply embedded in culture. In fact, institutions define what is considered opportunism in a given society or community: what is interpreted as opportunistic behaviour in one community may be common practice in another.

Formal institutions are a source of material sanctions such as monetary fines imposed by courts. Informal institutions, on the other hand, give rise to social and emotional sanctions. This is apparent in Kreps' (1997) argumentation regarding why people adhere to norms. Firstly, the author maintains that even if adherence to informal institutions as such is costly, if it leads to better treatment by others than violation, then it is desirable. This is directly related to the concept of extrinsically enforced social sanctions. Secondly, Kreps argues that people adhere to norms if adherence is desirable per se. This argument is parallel with the concept of intrinsically enforced emotional sanctions.

Trust derived from the institutional environment relates to the concept of extended trust, which enables trust in previously unknown actors and thereby tends to lead to greater efficiency and growth in the economy than if trust was restricted only to the networks of directly and indirectly known people (see, for example, Fukuyama, 1995; Lagemann, 2001; Raiser, 1999). If actors in a certain region have reciprocal confidence in each other's internalisation of and continuous adherence to the institutional rules and norms, a certain general foundation of trust can obtain a taken-for-granted quality (Kramer, 1999). In fact, if a society lacks a certain degree of extended trust, which is required of an effective state-based enforcement of law in terms of people's general confidence in its credibility, also formal contracts lose their feasibility (see, for example, Kautonen & Welter, 2005; Raiser, 1999). However, it should be noted that while the law provides the foundation for contracts, there can be many rules in the law that apply even if they are not explicitly referred to in a formal contract (Bachmann, 2001). These are the rules that act as determinants of trust in the sense of the present treatise.

In order for extended trust to be available to firms in a community, its institutional framework must show a certain extent of stability and predictability (Welter & Smallbone, 2003). On the one hand, the formal components of the institutional framework – in particular legal norms, regulations and their enforcement – must support the emergence and maintenance of trust. On the other hand, formal institutions alone are insufficient, but they must be backed by appropriate informal institutions. In this context, Welter & Smallbone (2003, p. 98) argue that informal institutions are 'a culture-specific interpretation of formal rules'. In this sense, informal institutions both fill in gaps left by formal institutions and also assist in their application and enforcement in everyday life. According to Panther (2001), such informal institutions include for example norms and values that require people to treat each other as equals, be tolerant and encourage mutual solidarity. The author further points out that this does not mean that people were saints and would sacrifice their personal preferences in fulfilment of these norms and values, but he merely argues that the norms and values form a basic disposition that encourages cooperation and trust.

Institutions operate on different levels of the business environment and which ones are relevant to a particular inter-firm relation is bound to vary according to the context in which the relation is embedded. As a guiding principle and illustration, considering the dyadic inter-firm relation as the micro level of analysis, the formal and informal institutions and their sources can be roughly mapped on a continuum of meso and macro levels of the business environment in which the inter-firm relation in embedded (Figure 1).

The meso level comprises, for example, norms and standards specific to an industrial sector or a business association (see Bachmann, 2001; Lane, 1997) as well as institutions related to the local business culture and regulations imposed by local authorities. In other words, these are institutions that are specific to an identifiable category of actors such as ones who are members of a professional association or operate in a certain industrial sector or region. This affects trust if

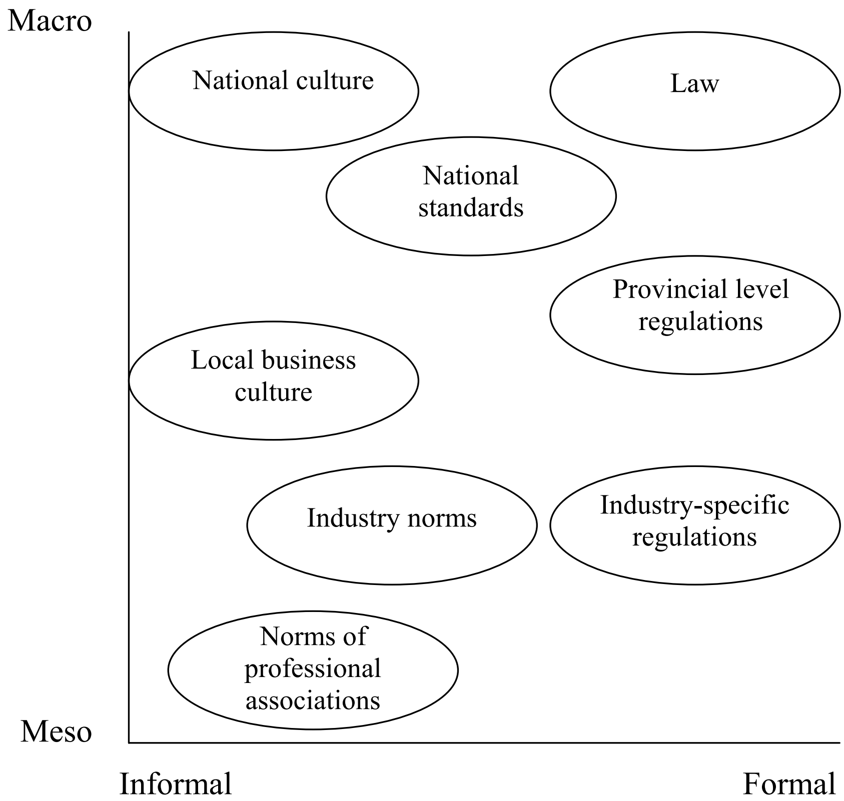

FIGURE 1. Illustration of some institutions in the trust environment

the trustor perceives the trustee to belong to such a category and if the trustor's present knowledge contains associations as to how members of these categories generally behave and which rules and norms affect their behaviour (see Berger & Luckmann, 1966). The associations are based on the trustor's previous experiences with members of these categories or analogies drawn from for example what the trustor has heard or read about them. The characteristic distinguishing institutions on the macro level of the business environment is that they apply to any member of a society disregarding memberships in any specific regional, sectoral, professional or other such categories (see Raiser, 1999; Zucker, 1986). The basic unit on the macro level is the nation state, which shares one framework of legal norms including their enforcement through a judicial system (Mummert, 2001). Moreover, a nation state also shares broad cultural norms, albeit regional variations are more likely than in the case of legal norms. There can also be technical and other standards which apply across sectors, and are thus closer to the macro than the meso level of the trust environment.

4. CONCLUSION

This paper set out to investigate the factors that affect the availability and robustness of trust as a governance mechanism in inter-firm relations. By adopting a broad 'embedded' perspective, the analysis focused both on the factors that affect trust within the inter-firm relation (endogenous determinants) and those that influence trust from the outside (exogenous determinants). So doing the discussion provided a comprehensive review of a broad perspective to the concept of embeddedness in the context of the role of trust in the governance of inter-firm relations, which had so far received limited attention in the literature. From the point of view of the trustor, trust was analysed as reflected trustworthiness, which implies that trust involves two inter-related elements. Firstly, trust is based on information that the trustor has about the trustee's characteristics and past behaviour as well as about the external environment in which the inter-firm relation is embedded. Secondly, it is based on the trustor's assessment of the reasons why the trustee would behave in a trustworthy manner. These can be analysed in terms of material, social and emotional sanctions, which determine the consequences that the trustee would face for breaching trust. The sources of trust-related information and the aforementioned sanctions were located both within the inter-firm relation itself as well as in the networks and the institutional environment in which it is embedded.

Further development of the conceptual framework laid out in this paper requires empirical investigation. Future research should seek to determine how the relative roles of the different determinants of trust vary in different business environments and different types of inter-firm relations, and for what reasons. Here, the admittedly abstract framework needs to be applied to suit the object and the context of the empirical enquiry. Figure 2 illustrates how this could be achieved in a study that uses structural equation modelling. In addition to the factors on the left-hand side which determine the nature and extent of trust in an inter-firm relation, the right-hand side of the figure features the potential effects of trust in this context. These are familiar from the economic and management literature, and can be divided into four dimensions based on which trust: 1) decreases transaction costs (partner searching costs, negotiation costs and monitoring costs) (Sako, 1992; Zaheer et al., 1998), 2) enhances strategic focus and specialisation (Jarillo, 1993; Parkhe, 1998), 3) stabilises the relationship, that is, increases loyalty and commitment (Foster & Cadogan, 2000; Morgan & Hunt, 1994) and 4) fosters learning (Nonaka & Takeuchi, 1995; Parkhe, 1998; Selnes & Sallis, 2003; Ring & Van de Ven, 1992).

The left-hand side of Figure 2 features three broad categories of determinants of trust from the preceding discussion – trust within the inter-firm relation, networks and institutions – which are further deducted into smaller, operationalisable units. Hence, the endogenous determinants of trust consist of the length and depth of the relationship (accumulated experience that provides

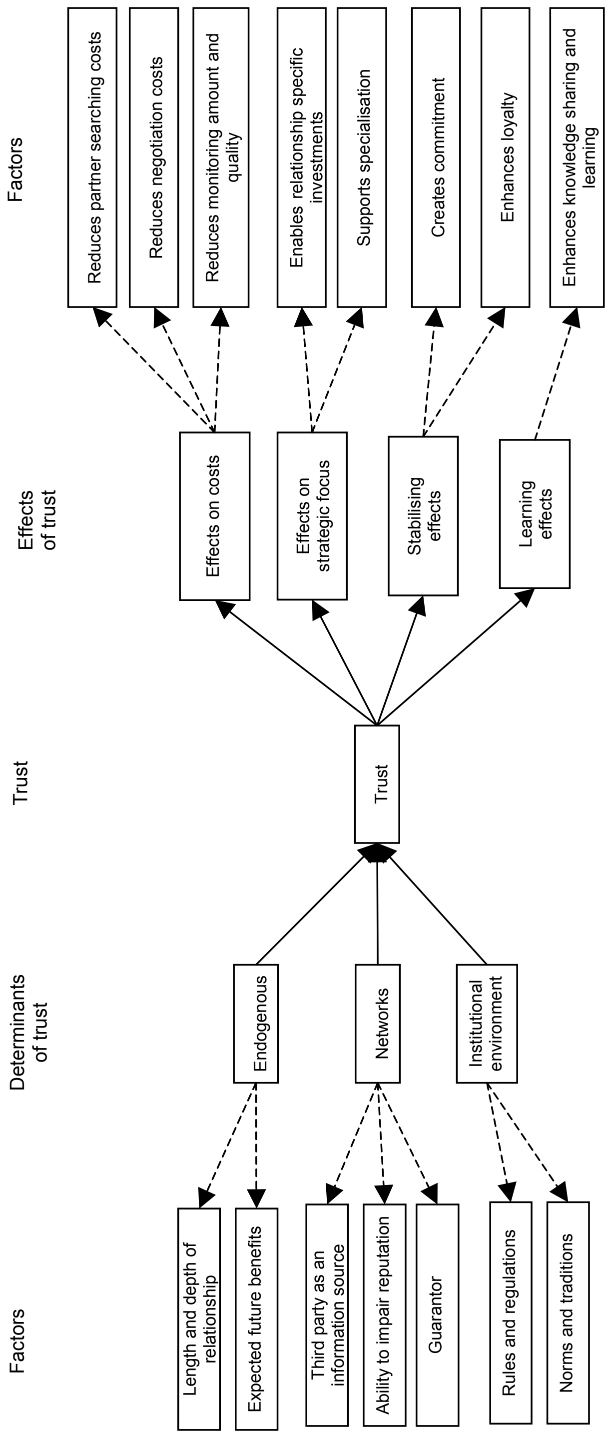

FIGURE 2. Determinants and effects of trust

information about the partner's past behaviour) and the significance of the benefit that the trustor thinks the trustee will expect from the relationship in the future (that is, the shadow of the future as reflected trustworthiness). Networks are divided into three factors based on the above discussion. One of these refers to the information about the trustee's past behaviour that the trustor receives from third parties, that is, his network connections. The other two refer to the possibilities that the trustor can use his networks in a more active sense. One is the possibility to impair the trustee's reputation by communicating opportunism to third parties who have an interest in sanctioning such opportunistic behaviour, and the other one refers to guarantor arrangements where a third party actively facilitates transactions and also suffers the consequences, should the trustee act opportunistically. The institutional environment is divided into two factors, both based on information that the trustor has about the surrounding environment: rules and regulations as well as norms and traditions, which are parallel to North's (1990) concepts of formal and informal institutions as discussed above.

The conceptual framework presented in this paper opens a number of avenues for future research. Two areas of application deserve particular attention, namely regional comparisons and analyses of cross-cultural inter-firm relations. Regional comparisons, which have considered some (but not all) aspects of our framework, have been performed for example between Britain and Germany (Lane, 1997; Bachmann, 2001), East and West European countries (Welter et al., 2004) and East and West Germany (Kautonen & Welter, 2005; Nuissl et al., 2002). We are hopeful that authors planning and implementing such research projects in the future will benefit from our framework as a starting point which allows them to consider the multi-faceted nature of trust as a regionally embedded phenomenon. Analyses of inter-firm relations between firms from different countries are also a field where our framework finds applications. For example, varying contracting practices, roles of social relations, cultural norms and codes of conduct as well as legal environments in different countries are bound to impact the characteristics of the trust-building process in inter-firm relations. ■

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