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This is an accepted version of a paper published in *Journal of Sociology*.

Citation for the published paper:

Azarian, R. (2012)

"Trade-offs in Choice of Inter-firm Transaction Structure: A Qualitative Study of Perceived Comparative Advantages of Business Relation over Vertical Integration"
Journal of Sociology

URL: <http://dx.doi.org/10.1177/1440783312467093>

Access to the published version may require subscription.

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**Trade-offs in Choice of Inter-firm Transaction Structure:
A Qualitative Study of
Perceived Comparative Advantages of
Business Relation over Vertical Integration**

Abstract

This article investigates how a plastic manufacturing firm handles the challenging task of comparing and choosing among the feasible alternative modes of structuring the flow of repeated transaction with one of its key suppliers. Qualitative interviews are used to explore the perceptions of the management of the firm concerning the advantages and disadvantages associated with each alternative, and the main findings suggest that the selection of the transaction structure intended to reduce boundary uncertainty is itself an uncertain choice. Since many of the gains and drawbacks of the alternatives are unknown and even unknowable in advance, the firm is unable to set up a conclusive comparative assessment to underpin its choice. Instead it is inclined to select the alternative that is perceived as the one allowing most flexibility.

Keywords:

Bounded rationality, Economic sociology, Inter-firm relations, Trust, Uncertainty, Vertical integration

The Issue

In the past few decades inter-firm relations have become a focal research topic in economic sociology. Beginning with the study of *director interlocks* in the early 1980s (Mintz and Schwartz 1985; Mizruchi 1982; Palmer 1983; Palmer *et. al.* 1986; Useem 1984), the investigation of linkages among firms has been stimulated further through the introduction of the relational notion of embeddedness (Granovetter 2011), and due to the intensive research that has followed economic sociologists have increasingly realised that, rather than representing some exceptional and/or marginal deviation from market, business ties are widely utilised vehicles of inter-firm trade, performing important functions in contemporary economies.

One such is the protective, uncertainty reducing function. Inspired by *resource dependence theory* (Pfeffer and Salancik 2003) a large body of empirical studies have for instance taken the view that durable, hand-in-glove relations are a common and important element of the coping strategies of firms in their struggle against *environmental* uncertainty, and shown that such relations are developed by firms to secure the in- and outflows of various assets and to enhance their resource position vis-à-vis other comparable firms (Baker 1990; Dore 2011; Hamilton and Biggart 2001; Mizruchi and Galaskiewicz 1993; Nohria and Eccles 1992; Powell *et. al.* 1996; Smith-Doerr and Powell 2005).

Furthermore, it has been widely realised that inter-firm relations not only provide some shield against market fluctuations in supply of critical resources but also have the potential of deterring what in economic literature is referred to as *behavioural* uncertainty (Akerlof 1970; Spence 1974; Williamson 1985). That is,

due to their characteristic mutual trust (Poldony and Page 1998), this kind of relations provides the trading parties with a context for transacting co-operatively rather than pursuing short-sighted self-interest and, as opportunism is thereby kept at an arm length, the flow of the inter-firm exchange can be sustained (Darr 2007; Gulati and Gardgiulio 1999; Poldony *et. al.* 1996; Uzzi 2011).

As a result, economic sociology is presently rich in detailed, empirically founded insights about the protective function of inter-firm relations, and has come a long way in identifying the particular properties that make these jointly crafted, self-sustaining, uncertainty reducing devices (Beckert 1996) not only a *distinct* mode of organising boundary transaction (Powell 1990; Thompson 1991) but also a *preferable* alternative to market mediated exchange. Yet with regard to this particular property of inter-firm relations there is one specific important issue that still remains under-investigated in economic sociology, notably the *comparative advantages* of this kind of linkages over vertical integration. Apart from a few work (Granovetter 2001; Powell 1990), there are indeed no theoretical accounts of the often-observed preference of firms for the former over the latter, and even less empirical research has been carried out to explore why firms tend to perceive long-term business relations as superior to vertical integration in respect with uncertainty reduction and how firms actually appraise the merits and demerits of these alternatives and make the comparisons that underpin their choices of boundary structure.

Against this background, this article presents the results of a study which investigates the perceptions of the management of a producer firm in order to gain a better understanding of how it actually deals with the challenge of setting up a conclusive comparative assessment to underpin its selection of boundary

transaction structure among the feasible alternatives, in particular how it goes about to settle the choice between a long-term relation with one of its key suppliers and vertical integration. The article then continues by a discussion of some implications and potential leverages of the main findings.

Complex Trade-offs and Inconclusive Comparisons

Neither inter-firm relation nor vertical integration is an unproblematic, cost free alternative to market exchange. Contrariwise, the uncertainty reducing benefits that each one of these alternatives offers come together with certain inevitable, non-trivial costs. In the case of inter-firm relations economic sociologists have increasingly become aware that the idiosyncratic properties of the object of transaction and the uniqueness of the match that often characterise the specialised inter-firm trade canalised through long-term relations tend to undermine the potential efficiency gains of competition and may give rise to under-performance. In a longer perspective such relations may also turn dysfunctional and produce significant *lock-in effects* in that beyond a certain point, they may cause inflexibility in behaviour, as the structure of interaction in such relations becomes overly fixed (Gulati and Singh 1998; Poldony and Page 1998). Furthermore, as *resource dependence theory* (Pfeffer and Salancik 2003) asserts, such relations are no simple canals for inter-firm resource transfer, but are of a dual nature in that as they reduce supply uncertainty they also often entail various forms and degrees of commitment, and obligate the engaged firms – although not always equally – to divert considerable amounts of resources to shared activities where decision-making authority is no longer the exclusive domain of any individual one of them.

The drawbacks associated with vertical integration have on the other hand been explored most industriously by transaction cost economists. According to the general and widely recognised argument originally developed by Williamson (1985) when boundary transactions between for instance a producer firm and its supplier are straightforward, happen rather sporadically and require no particular investment they will most likely occur between independent firms who find market-mediated contracts a satisfactory mode of co-ordination. When, on the other hand, the transactions are more complex, take place frequently and require substantial investments that are not easily transferable to other uses the producer firm will have sufficient incentives to seek alternative structures that offer better protection against the uncertainties involved, especially those surrounding the contractual performance of the supplier (Granovetter 2001). The solution in many cases is vertical integration which means withdrawing the transaction from market and including it into the firm where the internal authority-based organisational hierarchy allows for a more efficient control of the performance of the supplier and for a less cumbersome settlement of disputes whenever they arise.

Vertical integration however is also associated with the particular set of “organisation costs” (Joskow 2005: 574) or “bureaucratic costs” (Williamson 1985: 132) – the non-trivial costs that, generated by the internalisation of boundary transactions, put limit to the size of the firm. Some of these costs are more elaborately specified by *Property Rights Theory* (Grossman and Hart 1986; Hart and Moore 1990) which for instance emphasises that the condition that previously independent suppliers are through integration turned into employees without property rights to tangible assets may weaken their incentives and give rise to the so-called *shirking* problems (John and Weitz 1988; Joskow 1988;

McGuinness 1991; Whyte 1994). In addition, these costs may also take the form of some inefficiencies and adaptation problems. That is, not only an increase in the size of the firm may entail some rigidity in responding to an ever-changing environment but also since the firm uses internal, organisational allocation mechanisms instead of market exchange it can no longer efficiently utilise competitive market price as the most important instrument for obtaining information needed for cost and quality control as well as for adjusting to the shifting market conditions (Joskow 2005).

Thus, given the fact that neither of the two non-market alternative modes of inter-firm co-ordination is free from at least some costs, once a given firm in its pursuit of minimising uncertainties at its interfaces decides to withdraw some of its transactions from market, it faces the challenge of setting up a conclusive comparative assessment to make its choice of boundary transaction structure between these alternatives according to their attributes. That is, to make an “informed choice” (Williamson 1994: 90) the firm needs to distinguish, specify and measure the costs and benefits as well as the complex trade-offs associated with each one of the two non-market alternatives: on the one hand, the benefits that both alternatives are expected to generate in terms of reducing supply uncertainty and averting opportunism and, on the other hand, the particular disadvantages that each one of these alternatives may cause. In the case of inter-firm relation, these include in particular the potential risks of being wedged with a sub-efficient transaction and/or some loss of decision-making autonomy; and in the case of vertical integration these advantages consist mainly of the shrinking problems and/or organisational inflexibility or inferior adaptive properties to an ever-changing environment.

Yet, the most fundamental challenge that the firm confronts is that, assuming bounded rationality, it has no way of having in advance all the relevant information required for resolving such complex trade-offs and for choosing the optimal alternative. Indeed, since compared to market transactions the costs and benefits entailed by inter-firm relation and vertical integration are more elusive and harder to determine (Perrow 1986), the required calculation reaches such complexity that it begets the question as to what degree it is ever possible to set up a rational comparison between the two non-market solutions to boundary uncertainty.

Research Question and Method

The present article seeks to explore the issue empirically by examining closely the flow of repeated transaction between a plastic manufacturing firm (the Firm) and its key supplier of steel injection moulds (the Supplier). Against the theoretical account above, the specific purpose of this article is to investigate how the management of the Firm perceives the costs and benefits associated with the alternative modes of structuring this inter-firm transaction as well as the entailing trade-offs, in particular the one between the safeguarding of the inflow of a vital input versus the uncertainties associated with the integration of the Supplier.

In the qualitative research that is reported here semi-structured interviews have been used as the main method of collecting first-hand data, conducted in two rounds in the end of 2009 and the beginning of 2010. The main bulk of the collected material contains of 14 tape-recorded interviews with four of the five members of the Board of Directors and with the heads of the Production as well as the Purchase Units. The interviews vary in duration between 25 to 80 minutes,

and sum up to more than 12 hours. The interview guide, initially consisting of 12 general open-ended questions has been refined and attuned gradually during the process; and in accordance with the purpose of the study, the questions have covered areas like the perceptions of market uncertainties, advantages and disadvantages of the existing inter-firm relation as well as the expected costs and benefits of integrating the Supplier into the organisation of the Firm. Other questions have addressed the way in which the management has made its choice of the mode of co-ordination and the factors that have had most impact in deciding on the chosen option.

The main rationale of this choice of approach derives from the principal purpose of the study and from the nature of the knowledge it aims to attain. That is, semi-structured interviews have been considered to be the most appropriate method since they – in comparison to other feasible approaches – provide the researcher with a more direct and least distorted access to the object of study when the aim is to learn about the observed actors' perceptions and to penetrate more deeply into the experiences that underpin their choices of course of action (Denzin 1989; Lofland and Lofland 1995).

The Case

The Firm is a private-owned, medium-sized enterprise with 78 employees (November 2009). Originally established in the early 1970s as a small family enterprise, it was taken over in the mid 1980s by a new set of owner-managers who re-organised it as a private joint-stock company, run by the Board of Directors consisting of all the five new owners. Since the take-over the Firm has experienced a gradual diversification of its product portfolio that currently can be

divided into two major categories. Reflecting the history of the Firm, the first one includes a number of standardised PVC products of a more general use in construction and therefore more amenable to market trade. The second category consists of more specialised items produced for a few large customers with whom the Firm has long-standing relations, among them a European car manufacturer.

In selecting the case two criteria have been more important than others. First, upon deliberation it was decided that the inter-firm transaction had to involve sufficient uncertainty to induce the focal firm to withdraw it from market and seek an alternative mode of co-ordination. Second, the size and organisational structure of the focal firm had to allow an administrative path in decision-making short enough to provide direct access to the perceptions of the actors actually making the choice of boundary structure. Due to some convenient circumstances (geographic closeness, the researcher's familiarity with the industry, etc.) the search was confined to the Dutch plastic manufacturers, and from an initial list of eight suitable candidates located in the outskirts of Rotterdam one – the Firm – was finally selected, partly because it proved to be more established in its line of business than others in terms of having a relatively stable customer structure and efficient distributive channels downstream for both types of its output as well as a more or less steady supply line upstream, including two mould manufacturers.

Inadequacy of Market

The manufacturing of any given plastic item requires a specific mould which often has to be designed from the scratch according to the particular requirements of the customer's order. Not a standard, ready-made item to be found on the market, each single mould is the unique result of a complex process where the

different requirements (technical, engineering, economic, consumer utility, etc.) of all the four involved parties (the customer, the plastic manufacturer, the mould maker and the mould designer) need to be brought together through a great deal of consultative communication and operational co-ordination.

Given these conditions, the transaction with the Supplier is of utmost importance to the Firm for several reasons. The manufacturing of the object of the transaction is a costly process, making up for the largest single investment with respect to the production of a particular plastic product. It is also a process which is relatively uncertain in outcome because several specifics of the mould cannot be defined entirely in advance but have to be worked out gradually in collaboration with the other parties as the process unfolds. Furthermore, since the Firm lacks in-house competence for designing and producing injection moulds, the range and quality of the items it can produce depend on the capacities of its suppliers. An inferior quality or a too limited area of competence on the part of its suppliers will disable the Firm to deliver the relatively wide range of high quality products that make up its output menu and will constrain its possibilities to maintain the reliable performance it is known for, jeopardising thereby its reputation and its relations with the customers.

The precision of the design and construction of injection moulds is too important for the Firm to consider market transaction as a feasible alternative. In addition, the complexity of the required match among all the parties involved makes the allocation mechanism of the market unfit and unreliable. Even if market transaction were used, the Firm would potentially be exposed to the risks of opportunistic behaviour on the part of potential suppliers who may not restrain from abusing the Firm's lack of the technical competence needed for the

evaluation of the quality of the moulds. The Firm thus would not only suffer on the deal and lose the invested capital but could also risk of ending up with inadequate and poor-quality moulds that would in turn have considerable damage potentials on its output. Moreover, the particularity of the object of transaction and the subsequent absence of similar or comparable items on the market would turn market mechanism inadequate for the estimation of the adequate price of the moulds. Underlining such circumstances, the head of the Purchase Unit for instance pinpoints the difficulties involved in finding another comparatively reliable and competent supplier that can offer high-quality moulds at a reasonable price when he says

You can't just find somebody in the phone book and order this or that mould. You have to know whom you're dealing with. It is not easy. You must be sure that they can deliver what they say they will. .... You can never say in advance how much a mould is going to cost you. Each time it is different. ... If you don't know [the supplier] you can get cheated. You can end up with an expensive mould that's not even good. Then you must do it all over again ... [because] you cannot use a bad mould and still hope to keep your customers.

Disinclination towards Vertical Integration

Although the circumstances that make market an inadequate source of supply provide a prime rationale for the Firm to seek alternative ways of co-ordination that reduce the uncertainties involved and enhance its control over the supply of this vital resource, vertical integration does not appear to the Firm as an attractive

solution. Technically, the capacities of the Supplier are compatible with the core competence of the Firm and financially vertical integration is a fully conceivable option. It is rather the concern about some organisational issues – both inside the future enlarged organisation and at its new boundaries – that makes vertical integration less appealing. These are highlighted below, in accordance to the relative emphasis assigned to them by the management of the Firm.

First, the acquisition of the Supplier appears to the Firm as an uncertain move. In addition to the costs of running a larger organisation, such a move would mean having a considerable amount of capital invested in a branch far from the core competence of the Firm and entering a competitive market with which it is relatively unfamiliar – a condition that causes the Firm a troubling uneasiness about its ability to manage the new competence and operate efficiently in a new field of activity. Moreover, whereas the pay-offs of such a costly enterprise appear uncertain, the management of the Firm also perceives it as an irreversible move, with significant constraining impacts on its freedom of action in future; or as one of the owner-managers (α) expresses this concern of the Firm,

It's a big step, .. and risky too. It takes a lot of money to buy the [Supplier] and then you must be able to make profit on it ... You can't buy it just because you need moulds. You need to get into this business and start making moulds for other plastic firms like yourself ... It is a different business ... There are so many loose ends [with integration] and there is really a serious risk that one day you suddenly realise you are stuck with a unit you don't know what to do with.

Second, the integration of the Supplier would push the boundaries of the Firm one step back in the supply chain and thereby would cause the latter to engage in a new array of transactions with parties that for the present are less known or even totally anonymous to it. Taking place in the specialised business fields distant from its core competence, such transactions appear to the Firm as characterised by asymmetry of information and uncertainty. More specifically, the management feels uncertain to what degree it will be able to retain after integration those employees of the Supplier who have the necessary hand-on-job expertise, the required familiarity with the environment and the crucial business contacts. If failed to provide these people with sufficiently strong incentives, the Firm would be left without access to the knowledge, competence and relations that these people have over the years accumulated. Although there would be some sharing of these accumulated resources, the Firm is concerned that there still would be persisting uncertainties as a backward integration would cause the Firm to lose the buffer at its upstream interface that currently is provided by the Supplier. In the words of the head of the Purchase Unit,

We don't know very much about that line of business. .. We have never been involved in that. .. We have never had to, because we deal with [the Supplier] and it deals with them. They [the Supplier] have been doing this for years. They know the market, the people, everything ... It is their turf. We on the other hand have of course *some* ideas about how things work there but that wouldn't be of much help if we were to get involved directly in that business. There is simply so much we don't have the competence for.

Another discouraging consideration regards the change of the status of the current management of the Supplier and the alteration of the nature of its relation to the Firm, from a well-functioning trust-based business co-operation between two independent entrepreneurs to one between the employer and the employee based on formal organisational authority. This would mean a fundamental change in the whole set of incentives and mutual expectations of the parties who would then interact with one another in different roles and along different behavioural principles. For instance as one of the directors of the Firm (β) puts it,

These people are our *friends*. We have been working together for a long time. But if we bought their business we would then have to treat them like other employees ... watch them to see if they work hard enough for the salaries we give them and all that stuff.

For these reasons the Firm thus experiences vertical integration as a problematic option associated with a complex trade-off, since whereas it would yield a more secure supply of injection moulds, it would also expose the Firm to a new set of uncertainties both inside and outside the new organisation. Furthermore, given the complex implications of integration, the Firm finds itself in a decision situation where it has to rely principally on guessing and speculating, as the hard-to-measure nature of the entailing benefits and costs of integration do not permit any precise calculation.

The trade-off choice between market exchange and vertical integration is made even more complex by the actual existence of the long-term, non-contractual, trust-based relation that has been developed and fine-tuned over the years between the Firm and the Supplier. That is, whereas a backward integration is perceived by the Firm as a leap into uncertainty and vulnerability rather than providing shield against risk and hazard, the already-in-place and well-functioning relation with the Supplier performs the most important functions of vertical integration, and it does so *without* the costs and perceived uncertainties associated with such a move. As result, vertical integration not only seems to the Firm to be an irreversible and costly move with uncertain outcomes but also an unnecessary one. This is a point to which several interviewees frequently refer, for instance one of the owner-managers (δ) who underscores the condition that

We in the Management have discussed it ... The point is that the co-operation that we have works nicely. Of course sometimes there are problems. They pop up all the time. You have to adjust a bit here and a bit there .. Sometimes you must do the whole thing all over again [because] you weren't thinking right in the beginning. But most of the time it is about technical stuff. Like us they also want to make the best possible mould for the job. So we always manage to find a solution that works for all of us ... So there is actually no need for us to buy up the [Supplier]. They supply us with what we need and we can rely on them. When we offer a bid to customers we know what kind of competence and quality we can count on when it comes to moulds. It feels like that [the Supplier] is our *partner* in what we do. It really

feels unnecessary to change it, to buy [the Supplier]. Why change something that works and instead become big and clumsy...?

Preference for Relation

The especially tailored and fine-tuned relation originates in an earlier personal, school-time acquaintance between a pair of manager-owners of the firms, and over a relatively long period of time has evolved into an inter-firm co-operation. This relation secures the access of the Firm to the high quality injection moulds that are hard to come by in the market. By the same token the relation makes possible an important extension of the core competence of the Firm in that the reliable and creditable commitment of the Supplier to the relation enables the Firm to count on a complementary resource that although formally is outside the span of its organisational control and authority is nonetheless made promptly available to it.

Furthermore, the relation functions as an efficient and reliable shield against the risks and uncertainties that are involved in the provision of such an important input and that cannot easily be protected against through formal contracting. The existence of the relation decreases thereby considerably the relatively high search costs and contracting costs that the Firm would have to incur otherwise. The intensive inter-firm communication that this relation makes possible during the construction of the moulds offers the Firm a substantial and effective possibility of monitoring the process from the start, reducing thus significantly the uncertainties associated with the performance of its supplier and with the quality of the mould.

Yet, compared to vertical integration, the relation is an inferior choice of co-ordination structure not only because it leaves the Firm dependent on the Supplier and thus vulnerable but also because it prevents the full control of the Firm and thereby its autonomy in a technically important area. Yet, this drawback of the relation is remedied by trust. Due to a large number of mould-making projects a substantial amount of trust has been built on the both sides so that each firm has sufficient confidence in trading with the other and has a genuine interest in maintaining the good health of the relation. As the result of the history of repeated transaction, the Firm perceives almost no uncertainty regarding its access to a critical resource of idiosyncratic nature with scarce supply, and is quite confident with respect to the continuity of the transaction indefinitely, experiencing thus considerably low degree of vulnerability.

In a nutshell, once the dependence of the Firm on its supplier and the ensuing vulnerability are remedied by the mutual trust accumulated over the years, the inter-firm relation performs the main functions of vertical integration satisfactorily without the entailing uncertainties associated with the latter. That is, on the one hand, due to the creditable commitment of the Supplier, the Firm includes a vital complementary resource in its strategic core that enables it to meet the performance requirements of its customers and preserve its identity as the producer of the quality it is known for. Furthermore, the trust-based, long-term character of the relation provides the Firm with the adequate and sufficient safeguard against the potential risks of opportunistic behaviour and moral hazard involved in one-shot market transactions with anonymous suppliers. Therefore, these *comparative advantages* provide the Firm with a sufficiently strong

rationale for preferring the relation with the Supplier not only over the market mediated exchange but also over vertical integration.

Uncertain Choice

On the whole, however, because the management of the Firm lacks the relevant and reliable information necessary for deciding on the pros and cons of the alternatives, it experiences the choice of boundary transaction structure a complex and difficult one that necessarily has to be made under much uncertainty. Indeed, the Firm finds itself in a decision situation where many crucial parameters are hard to assess or even identify in advance, with the implication that a rational, comparative assessment of the advantages and disadvantages of the considered alternatives and the trade-offs involved are impossible to determine and measure with sufficient precision.

The Firm therefore seeks to reduce the complexity of the decision making situation by narrowing down the issue to one general question. That is, since both vertical integration and inter-firm relation function equally well with respect to reducing the uncertainties that potentially threaten the regular and reliable supply of injection mould, the choice between them is in effect decided by comparing the main drawbacks associated with each, as the Firm perceives them: the disadvantage of vertical integration in terms of losing some flexibility and freedom of action vs. the downside of the inter-firm relation in terms of continued dependence on an outside supplier. Once reduced to this more manageable level of complexity, the trade-off is resolved with the help of trust. That is, whereas the elimination or reduction of the most disturbing disadvantage of integration (inflexibility and constraints on future action) appears to the Firm as unfeasible,

trust remedies the main disadvantage of inter-firm relation, that is, loss of autonomy, vulnerability and dependence of the Firm on the Supplier. Using marriage as a metaphor, one of the owner-managers (λ) expresses the point as follows,

Once you buy [the Supplier] you're stuck with it. You can of course sell the unit later but things become so mixed up that is difficult to separate. ... It would be is like a divorce ... [But] with the co-operation you are free. We can rely on them and it works ... If one day we need another kind of mould that [the Supplier] can't deliver on the terms that we can accept or if for some other reason we don't want to continue [the existing co-operation] with them we can switch then. It is not written in stone ... It is not that we are married for-ever.

General Implications

The prevalence of durable, hand-in-glove relations which are often trust-based and non-contractual is a well-established fact of business life, studied industriously by students of economic organisation (Goldberg 1980; Klein 1996; Lorenz 1999; Macaulay 2011; MacLeod and Malcomson 1989; Telser 1980; Vincent 2005). These kinds of linkages are not only an old and common vehicle of inter-firm trade but is also increasingly preferred to vertical integration. Indeed recent observations suggest that vertical integration – the badge of large-scale industrialisation – appears to have lost much of its attraction and the previously dominant integrated, centralised-type of larger economic organisation is increasingly shunned and replaced by various constellations of independent yet

closely inter-connected specialised firms that prefer to restrain from direct involvement in non-core operations and choose instead to re-focus on their original competencies (Carter and Hodgson 2006; David and Han 2004; Gereffi 2005; Gilson *et. al.* 2009; Halldorsson *et. al.* 2008; von Hirschhausen and Neumann 2008; Hite and Hesterly 2001; Hitt *et. al.* 1998; Shimizu and Hitt 2004).

This particular development raises a whole array of questions which are of fundamental importance for economic organization of particular industries as well as for the performance of individual firms and which therefore should be of interest not only to economists but also to economic sociologists. This article offers some first-hand insights into the perceptions of the managing board of a producer firm of the advantages and disadvantages associated with vertical integration and inter-firm relation as well as the complex comparison upon which the Firm's choice between them rests. Although the results of a single case study are by definition of much limited generality, they nonetheless illuminate a fundamental issue that has been largely neglected in economic sociology, notably the implications of bounded rationality for the comparison of and the choice among the alternative modes of organising inter-firm transactions.

As underlined long ago by Knight (1921), economic action can be best characterised as *rationally chosen action in a state of uncertainty*. In fact, once it is acknowledged that uncertainty poses serious constraints on the possibility of knowing in advance all the possible outcomes of a given decision and of calculating their probabilities, it should also – as argued by Beckert (1996: 805) – be realised that “it is impossible for the actor to deduce rational strategies from their given goals of utility optimisation or profit maximization.”

In this regard, the decision regarding the structure of boundary transaction is no exception. Contrariwise, as the reported investigation demonstrates, the crucial choice of uncertainty reducing device is itself an uncertain choice made under bounded rationality, that is, without all the relevant information needed for a precise, detailed and specified comparative assessment. Indeed, as the investigation shows, the decision is made on rather shaky grounds in that it is based on unspecified and unmeasured concerns about the uncertainties associated with the alternative modes of organising boundary transactions and is underpinned by inevitably rough calculations, as the costs and benefits associated with each alternative are not known or even knowable in advance with any reliable precision.

Instead, whereas under the condition of bounded rationality the complexities associated with the choice induce the Firm to settle with a sub-optimal but ‘good enough’ alternative (Simon 1957), the uncertainties involved appear to cause it to fasten a special weight to the avoidance of further uncertainty and evade alternatives that constrain its manoeuvrability or action space, inclining it instead toward the alternative that is perceived as the one allowing most flexibility – a point generalised by White (2008) according to whom since the real-world conditions of action are uncertainty stemming from the complexity of the embedding environment and from the absence of a complete and clear vision, actor is more inclined to choose the course of action that offers greatest freedom of action or, put differently, when uncertainty is the main premise of action enhancing manoeuvrability appears to be the most adequate strategy.

Some Final Words

The focal question discussed in this article is of fundamental importance to economic sociology, especially since relations – lying between markets and hierarchies – are rapidly becoming the nuts and bolts of the new, more disintegrated and flexible global economy of our time. This particular development of the empirical reality calls for an adequate conceptualisation of long-term, trust-based inter-firm relations, and an important element of this task is to explore systematically and map out in detail how firms in practice go about to assess the advantages and disadvantages of this kind of relations compared to vertical integration and how they resolve the complex trade-offs in the mixed calculi that support their choices. Therefore, much further research, especially qualitative field research is needed to meet this challenge – a challenge that due to its complex nature is also an opportunity for productive and mutually beneficial collaboration between economic sociologists and transaction cost economists.

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