

HYBRID ORGANIZATION OF PRODUCTION AND DISTRIBUTION

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Abstract

This paper emphasizes the central role of arrangements called “hybrids” in the organization of production and distribution in market economies. Several forms are taken into account, such as subcontracting, supply-chain systems, distribution networks, franchising, partnerships, alliances, or cooperatives. It is argued that under the apparent heterogeneity of these forms are shared characteristics qualifying them as specific “institutional structures of production”. The paper stresses that beyond their relevance for economists wishing to understand the coexistence of alternative modes of governance in market economies, hybrid arrangements provide unique opportunities for theoretical investigation on the nature of inter-firm coordination.

Keywords: Hybrid Organizations, Transactions Costs, Modes of Governance, Assets Specificity, Contractual Hazards, Franchising, Subcontracting.

JEL Classification: D2, L2.

I. Introduction

Although long ignored by economic theory, the observation that there exist alternative ways of organizing transactions among units that maintain distinct property rights while pooling some assets and coordinating decisions is not new. Without going back to the “industrial district” identified by Marshall (1920), hybrid arrangements

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such as franchising began to attract some attention in the late 1970s. However, it is in the second half of the 1980s that “non-standard” organizational arrangements such as subcontracting, supply-chain systems, distribution networks, franchising, or alliances increasingly attracted the attention of economists.

In my view, and I will substantiate this in the paper, the introduction of the concept of “hybrid forms” by Williamson (1985; 1991) represents a landmark, in that it embedded a growing set of empirical observations in a theoretical framework that provides an explanation to their existence and gives coherence to their characteristics. Combined with previous developments on the nature and role of vertical integration, it largely contributed to the successful expansion of the industrial organization branch of New Institutional Economics (NIE) and to the fruitful reexamination of some major policy issues, e.g., competition policies or public-private partnerships. The key point of these contributions is that they propose a well-structured theory of alternative ways of organizing economic transactions in developed market economies and of what forces determine the tradeoff among these modes. As a consequence we are beginning to better understand why so many transactions are neither organized by hierarchies (‘firms’), nor arranged through ‘markets’, but rather depend on complex networks of units sharing decision rights although maintaining distinct property rights.

In what follows, I do not review the impressive literature already available on these “intermediate” forms.¹ I rather focus the attention on some fundamental characteristics that qualify hybrid organizations as a class of “institutional structures of production” of their own, which deserve the attention of economists. Section II of the paper summarizes the foundations provided by new institutional economics for building a coherent theory of organizations. Section III examines the characteristics of the specific subclass that are hybrid organizational forms. Section IV concludes.

II. Institutional Arrangements of Production and Distribution: Some NIE Landmarks

The (short) history of the theoretical developments in economics about alternative ways of organizing transactions is now well-known. We owe to Ronald Coase (1937) the initial formulation of the core problem, later summarized by Goldberg: “...which imperfect institutions should govern particular sets of transactions”? (1976, p. 46). At about the same time, Chester Barnard published *The Functions of the Executive* (1938), in which he emphasized the role of “authority” for demarcating firms from markets. Simon (1951) modeled this idea in his paper on the employment relationship, while Arrow (1964) developed the role of control in hierarchies.²

Several publications built on these preliminaries in the 1970s, shaping the NIE approach to organization. Williamson initiated the movement with his seminal paper of 1971, in which he put at the forefront the role of transaction costs in examining “Vertical Integration” and simultaneously pointed out contracts as a key organizational device.³ The controversial paper by Alchian and Demsetz (1972) followed almost immediately, re-examining the Coasian approach and interpreting firms as a

nexus of contracts. Arrow then pushed organizational issues higher on the agenda of economists with his *Limits of Organization* (1974).

However, the publication of *Markets and Hierarchies* (1975) signaled a turning point. In this influential book, Williamson assembled disparate elements (including his previous contributions) into a coherent framework that linked transaction costs, contractual arrangements, and modes of organization, thus providing a model that remains at the core of the NIE contributions on hybrids.⁴ Klein *et al.* (1978) closed the decade, focusing the attention on the role of specific investments and the risks of hold-up as the explanation to the choice of a mode of organization. A stream of research, and of controversies, was born. The heuristic model, derived from Williamson (1975; 1981), that summarizes these contributions can be decomposed in the following sequence.⁵

Its point of entry is the central problem identified by Coase: how can agents take advantage of the division of labor without losing the potential advantages of cooperation? The division of labor implies decomposition of tasks, which raises the issue of coordination, its organizational modalities, and their costs. Cooperation has to do with the behavior of agents and relates to incentives, that is, devices that can make agents with diverse goals efficiently complementing each other. The two concepts are distinct: even when cooperation prevails, coordination issues remain.

The argument supporting the model looks for the answer in the organization of transactions: in order to specialize, agents must be able to transfer rights on goods and services that they control. Therefore, economics must analyze and compare the different modes of processing and monitoring transactions. Two important consequences result: (1) there are various ways of organizing transactions, and choosing the right way is a fundamental issue; (2) all forms of organization are costly, and their respective advantages can be assessed only comparatively. In the post-coasian world of positive transaction costs, all devices for transferring rights consume resources. For example the elaboration, negotiation, monitoring, and enforcement of contracts involve costs that are most of the time non negligible (Dahlman, 1979).

Sources of these costs are twofold. *First*, transactions relate agents, so behavior matters. The model assumes agents who have a propensity to behave opportunistically. Opportunism can generate contractual hazards: costly safeguards need to be defined and implemented. *Second*, transactions develop in environments plagued with uncertainties. Although probabilities can be attached to some so that reallocation of resources can be specified ex-ante in Arrow-Debreu type contracts, 'knightian' uncertainty cannot be discarded: significant decisions remain non contractible. The combination of these two sources of hazards makes flawed all devices (including technology) required for transacting. At the micro level, these devices take shape in different modes of organization. At the macro level, they are embedded in complex institutions needed for arranging transfers of rights at acceptable costs (North, 1981; 1990).

In order to compare alternative ways of organizing transactions, the analysis focuses on the attributes of a transaction that determine variations in its costs. Following Williamson (1985, chap. 3), most new institutionalists now routinely refer to three major characteristics: the specificity of assets involved, the uncertainties surrounding

the transaction at stake, and the frequency of that transaction. *Specificity of assets* has been defined as the value of investments that would be lost in any alternative use. Highly specific assets create mutual dependence that opens the possibility of “hold-up”, defined as the detrimental ex-post appropriation of the quasi-rent by one or some partner(s) (Klein *et al.*, 1978; Alchian and Woodward, 1987, p. 114).⁶ *Uncertainties* surrounding the organization of a transaction may also involve significant costs, whether it comes out of agents’ behavior or organizational deficiencies; or from inadequate institutions or the state of nature. A third attribute, frequency, proved to be more difficult to operationalize. According to Williamson (1985, p. 76), “The frequency of a transaction matters because the more often it takes place, the more widely spread are the fixed costs establishing a non-market governance system”. However, little empirical research about frequency is available, and they show ambiguous effects on governance. Together, these attributes determine the following relationship (signs show the predicted impact of a positive variation of each characteristic on transaction costs):

$$TC = f(AS, F, U) \quad (1)$$

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These three variables are notoriously difficult to measure, and almost all the empirical literature avoids any attempts at measuring transaction costs directly, using instead a reduced-form model in which transaction costs are assumed to be minimized.⁷ Note also that all transactions involve the three variables.⁸ What differentiates them are the level of each variable and their respective weight in the determination of transaction costs. It also makes them complex, an important point for understanding why contracts are usually incomplete. Indeed, the more complex a transaction is the more difficult and costly it is to encapsulate all its characteristics (ex-ante) and to predict all adaptations required (ex-post) in a contract; a simple framework may be preferable or even the only possible solution. Moreover, this complexity suggests ways to develop a dynamic approach: attributes combine differently over time, change at different speeds, and overlap with other transactions. Not much has been done in that direction yet.⁹

The next step in the reasoning connects these transaction costs with modes of organizing production and/or distribution. If transaction costs vary with their attributes, how does this affect the choice of a mode of organization, or its comparative performance? Williamson linked the two pieces through what he called the “discreet-alignment principle” (1985, Preface): calculative agents operating in a competitive environment will adopt the mode of organization that fits comparatively better with the attributes of the transaction at stake. In doing so, Williamson provided a way for empirical studies to go around the difficulty of measuring directly transaction costs, making organizational form the dependent variable. If agents have incentives to reduce transaction costs so that these costs tend to be minimized, the attention then turns to the mode of organization chosen over alternatives in order to allow the development of contractual relationships that economize on bounded rationality while safeguarding transactions against opportunism.

One nicety of this model is that it also provides theoretical tools for better understanding characteristics of the alternative modes of organizations and why one mode could prevail over others. Moreover, many other organizational dimensions can be explored within this framework, e.g., differences across modes of organization in coordination, incentives, etc. For example, what properties of firms can make their administrative costs lower than those of hybrid arrangements, the central focus of this paper, when the assets involved are highly specific? What explains the different degrees of centralization in the modes of coordination of different hybrid arrangements, e.g. franchising systems? Can we characterize the governance structure of cooperatives as hybrids?¹⁰ And how do we explain why there are so many institutional arrangements on different markets?

A survey of the many contributions on these issues would be welcome here, but it clearly exceeds the space allowed for my contribution to this special issue. Therefore, I will rather focus on one specific aspect, namely, some major lessons learned from (mostly) NIE contributions about hybrid organizational forms. Here again, I have to make a long story short.¹¹

III. New Institutional Economics and Hybrid Arrangements

Initially, following the question raised by Coase in 1937 about “the nature of the firm”, the NIE research program that developed mostly after the mid-1980s focused on integration as an alternative to markets, paying little attention to other modes of organizations, considered unstable and transitory. This situation began to change about one decade ago. There were signals of this reversal already. In 1985 (p. 83), Williamson acknowledged that: “Whereas I was earlier of the view that transactions of the middle kind were very difficult to organize and hence were unstable, [...], I am now persuaded that transactions in the middle range are much more common”. However, the expression “middle-range” maintained some ambiguity, suggesting modes of organization with no specific content. One had to wait the 1990s to notice a significant shift among economists towards considering these modes of organization more systematically. Here again, Williamson played a leading role, particularly with his paper from 1991 in which he labeled these arrangements “hybrids”, a more appropriate although not entirely satisfying term.¹²

3.1 How can hybrids be characterized?

Indeed, the rapidly expanding literature on these “non-standard” organizational arrangements signals an increasing interest among economists for the issues at stake. Until the mid-eighties only a handful of exploratory papers were available on inter-firm agreements, franchising, and other “non-standard contracting” forms.¹³ The majority of initial contributions on these forms actually got published in non-economic journals.¹⁴

Notwithstanding more recent developments, the concepts as well as the vocabulary of these analyses remain approximate. Hybrids, clusters, networks, symbiotic

arrangements, and chain systems are used quite indifferently. The forms encapsulated by these fluctuating terms seem also heterogeneous, more a collection of weird animals than a concept.¹⁵ However, underlying this diversity of arrangements is the intuition that they participate to the same “family” of agreements among autonomous entities doing business together, mutually adjusting with little help from the price system, and sharing or exchanging technologies, capital, products, and services without a unified ownership.

Indeed, beyond the heterogeneity of cases and the fluctuating vocabulary, a growing body of empirical studies has revealed regularities that make hybrids distinctive. These regularities give flesh to the initial model, summarized in the previous section, that there is a subclass of organizational arrangements unambiguously distinct from hierarchies or markets. The first noticeable regularity is the importance of *pooled resources*. Whatever the form they take, hybrids systematically organize joint activities based on inter-firm coordination. Hybrids develop because markets are perceived as unable to adequately bundle the relevant resources and capabilities (Teece and Pisano, 1994), while integration would reduce flexibility, create irreversibility, and weaken incentives. Sharing some resources and coordinating some decisions in order to generate rents represents the fundamental motivation behind hybrids. However, it may also be a source of conflicts: distributing rents involves discretionary choices that can easily destabilize an agreement. On the other hand, pooling resources does not make sense without some continuity in the relationship, which requires cooperation. Legally distinct entities must accept to lose part of the autonomy that markets would provide without benefiting from the capacity to control characterizing hierarchies. Hence a *first problem* for hybrids: how can they secure cooperation in order to achieve coordination without losing the advantages of decentralized decisions?

The existence of *relational contracting* is a second regularity shared by hybrids. Of course contracts play a role in other modes of organization. But what distinguishes hybrids is that their contracts link activities and resources among partners who simultaneously operate transactions not related to those involved in their coordinated activities. These contracts intend to secure the relationship and, because the identity of partners matters, they create a framework for “transactional reciprocity” (Park, 1996). The relational aspect is grounded in the advantages and risks of sharing resources among independent partners (Goldberg, 1980; Williamson, 1985; Baker *et al.*, 2002). Advantages can be expected from increased market shares, transfer of competencies, and access to scarce resources (e.g., finance). However, risks are also at stake. Partners coordinate only part of their decisions, subject to unforeseeable revisions, particularly when specific investments support highly uncertain process or products, or target volatile demand (e.g., R & D alliances). Typical transaction cost problems result. Contracts tend to be incomplete, providing a simple and uniform framework¹⁶. Hence the importance of the relational dimension, and the need for governance that can fill blanks left in contracts, monitor partners, and solve conflicts without repeated renegotiation. Thus a *second problem*: how can hybrids secure relational contracts while minimizing renegotiations?

A third characteristic of hybrids is their complex relation to *competition*. Of course, competition exists among agents in a firm, e.g., job-promotion tournaments, or among firms on markets. The difference in the case of hybrids lays in the combination of interdependence and autonomy, partners remaining residual claimants in charge of their own decisions in last resort. In that context, competitive pressures have two dimensions. (a) Although they cooperate on some issues, partners also compete against each other. Even bilateral agreements with long-term contracts can be subject to internal competition since strategies of partners remain distinct (Coase, 2000). Moreover, the agreement can be designed to make parties recurrently competing, as in subcontracting (Eccles, 1981; Dyer, 1997). Activities may overlap with partners trying to attract customers from the same subset, notwithstanding restrictive clauses (Raynaud, 1997). Parties may also cooperate on some activities and compete on others, as in joint R & D projects (Baker *et al.*, 2003). (b) Hybrids usually compete with other arrangements, including other hybrids. Indeed, they develop on highly competitive markets in which pooling resource is a way to deal with uncertainties and to survive. However, if investments are moderately specific, partners may be tempted to switch among arrangements, making them highly unstable. Hence a *third problem* for hybrids: what is the best stable mechanism for delineating joint decisions, disciplining partners, and solving conflicts while preventing free riding?

Therefore, significant regularities underlie the heterogeneous set of hybrids. Aspects of these regularities exist in markets and hierarchies. What distinguishes (and plagues) hybrids is the grounding of these regularities in a mix of competition and cooperation that subordinate the key role played by prices on markets and by command in hierarchies (Jorde and Teece, 1989; Grandori and Soda, 1995; Menard, 1997). Because they cannot or can only weakly rely on prices or on hierarchy to discipline partners, hybrids depend on specific mechanisms of governance for their survival.

3.2 Why choose a hybrid arrangement?

Considering the difficulties involved, one may wonder why there are hybrid organizations at all. Williamson (1991) provides a convincing explanation, based on the model initially developed for understanding the “make-or-buy” tradeoff. The underlying idea is that when investments among partners are specific enough to generate substantial contractual hazards without justifying integration and its burdens, and when uncertainties are consequential enough to require tighter coordination than what markets can provide, parties have an incentive to choose hybrids. Empirical studies have begun substantiating this approach (Menard, 2004a, section 3). I develop these two aspects successively.

A. *Investing in mutual dependence*

A fundamental determinant already noted comes from the incentive for partners to create durable mutual dependence while keeping property and (part of) decision rights

distinct. Two investment strategies can be adopted, with distinct consequences. Each party may invest in specific assets, creating a network based on complementarities; or partners may pool resources, making joint investments for part of their activities. The first strategy was analyzed early by transaction cost economists, who highlighted the role of the duration of agreements. Most initial studies focused on bilateral contracts of that type (Masten, 1984; Palay, 1985; Joskow, 1985). The second strategy, requiring joint investments, typically develops with agreements for transferring products among organizations with different minimum efficiency scales, or involving technology transfers (Hennart, 1988; Teece, 1992; Gulati, 1998; Oxley, 1999).

These examples refer to investments in physical assets. Indeed, most empirical studies of the impact of specific investments on the choice of inter-firm agreements, particularly econometric tests, took inspiration from the paradigmatic analysis of vertical integration, with its emphasis on physical capital (site specificity, physical specificity, dedicated assets). Without ignoring this aspect, a significant contribution of the literature on hybrids is its concern with human assets (Loasby, 1994). This comes out quite naturally from the centrality of agents in charge of coordinating legally autonomous decision makers while checking their propensity to free ride. In franchising, success depends largely on the capacity of the franchisor to select and monitor adequately franchisees (Dnes, 1996; Raynaud, 1997; Lafontaine and Shaw, 1999). Specific human assets are also crucial in other hybrid forms, e.g., mutual investments in human resources among biotechnology firms (Powell, 1996) or transfer of competencies in networks confronted to rapidly changing technologies (Teece, 1992). The very existence of interdependent physical assets requires substantial investments in managers that can monitor the arrangement. As already pointed out by Palay (1985), acquiring inter-firm specific knowledge takes time and efforts, so that “go-betweens” are highly regarded as problem-solvers, contributing to the continuity of the relationship.

Another form of specific investments that creates incentives to choose a hybrid arrangement is brand name capital. The abundant managerial literature on distribution channels inspired by transaction cost economics emphasizes the strategic issue of what governance can control partners and maintain reputation (e.g., Dwyer and Oh, 1988; John and Weitz, 1988; Fein and Anderson, 1997; Fearn, 1998). Similarly, studies on collective trademarks show the importance of devices designed for guaranteeing quality and preventing opportunistic behavior. When the reputation of a collective brand depends on the quality of products highly correlated to human assets, training and network-specific competences represent a key value (Menard, 1996; Raynaud, 1997).

Hence, hybrids develop because of the advantages expected from mutual dependence. However, the level and forms of the specific investments required determine the significance of contractual hazards and the nature of safeguards needed for securing the agreement.

B. *Monitoring uncertainty*

This brings in the issue of uncertainty, the second determinant of hybrids forms. Transaction cost theory suggests that the degree of uncertainty surrounding the transac-

tions that hybrids organize also contributes to shaping the form adopted. Uncertainty is secondary to specific investments in that without some mutual dependence in assets, there would be no hybrid: parties would trade through markets. But once investment-specific relationships develop, uncertainty impregnates decisions about the level of resources pooled and their monitoring. Hybrids operate as “buffers”: the more consequential the uncertainty is, the more centralized the coordination tends to be (Menard, 1996, 1997; Nooteboom, 1999).

Internal as well as external factors of uncertainties among partners are relatively well identified. Internal uncertainty outgrows from problems with inputs, outputs, or the transformation process. Problems with *inputs* may come from non-observabilities in resources or services traded, as in supply chain systems (Fearne, 1998); from difficulties in the coordination of inputs, as in the construction industry (Eccles, 1981); or from outside suppliers with no specific commitment to the arrangement, as in the food industry (Mazé, 2002). Uncertainties about *outputs* can result from difficulties in controlling that deliverables meet the standards agreed upon: from maladjustments to consumers’ preferences; or from lack of flexibility in adapting to a changing demand. (Anderson and Schmittlein, 1984; John and Weitz, 1988). The *transformation* process itself may generate uncertainties: hybrids pool resources that may overlap with activities excluded from the agreement thus making control and planning uncertain, and complex technologies and human skills may be involved, as with joint R & D projects. Defining rules for the distribution of rents or for supporting unexpected costs then becomes a potential source of conflicts (Ghosh and John, 1999, p. 131).

The role of the institutional environment as an external source of uncertainty, influencing the choice of one form of hybrid rather than another is often mentioned, although not often analyzed. North (1981, 1990, 1991) has repeatedly insisted on the importance of the rules of the game for understanding how actors play that game Williamson (1991) went a step further, suggesting how shifts in parameters could explain changes in the modes of governance. Fortunately recent studies on hybrid forms have initiated a more systematic exploration of this issue (e.g., Khanna, 1998; Oxley, 1999).

But what really matters for understanding the choice and the form of hybrids is whether these uncertainties are consequential or not. Confronted to consequential uncertainty, hybrids must combine *adaptation*, in order to provide flexible adjustments; *control*, in order to reduce discrepancies among inputs, outputs, or quality in the process itself; and *safeguards*, in order to prevent opportunistic behavior that uncertainties make difficult to detect. The intensity of adaptation, control, and safeguards needed provides a good predictor of the degree of centralization in the governance of hybrids.

In sum, hybrids develop when specific investments can be spread over partners without losing the advantages of autonomy, while uncertainties are consequential enough to make pooling a valuable alternative to markets. It is the combination of these two dimensions that matters. If only one attribute is present, the governance leans towards contract-based arrangements. When the two attributes combine, the governance becomes more authoritarian. Therefore, it is the combination of opportunism, or the risk of opportunism, and of miscoordination, or the risk of miscoordination, which determines the governance characterizing hybrid organizations.

3.3 What governance for the hybrids?

There are basically two channels through which monitor hybrids: through contracts and/or through formal governing bodies. Both aspects have been explored by new institutional economists, although the literature on the former is much more abundant so far.

A. *Contractual safeguards*

Indeed, most studies on hybrids in a transaction cost perspective emphasize the role of contracts as safeguards against the high risk of opportunistic behavior that threatens these arrangements; they also show their limits (Masten, 1996; Menard, 2004b, vol. 3). For example, selecting partners is of utmost importance in hybrids because of what it could cost redeploying mutually dependent assets. However, competition as a selection process, e.g., through bidding, is used sparsely, mostly to “test the market” occasionally (Eccles, 1981; Menard, 1996) and to discipline partners (Knoeber, 1989; Dyer, 1997). Similarly, provisions for constraining opportunism often remain at a very general level, likely because comprehensive-binding contracts would be far too complex and/or too costly to design and implement. This likely explains the highly relational dimension of contracts in hybrids, a regularity that is noted above.

Notwithstanding these limits, there are different ways through which contracts help coordinating, and new institutional economists have substantially contributed to the analysis of these aspects. Contracts may specify criteria for selecting partners and even fix their number.¹⁷ Choosing duration of the contract also provides means for testing willingness to commit and for guaranteeing some continuity in the relationship. As a consequence, formal duration of contracts does not necessarily correspond to the actual duration of the relationship (Joskow, 1985; Menard, 1996; Dyer, 1997). Clauses determining quality standards, often complemented by annexes, also contribute thus making commitments as observable as possible (Menard, 1996; Gaucher, 2002).¹⁸ Adaptation clauses, e.g., index clauses or clauses delegating adaptation to identifiable managers or arbitrators can provide a framework that facilitates relationships among partners (Rubin, 2005). Safeguard clauses help to overcome the incompleteness of contracts (Hadfield, 1990), whether safeguards are formal (e.g., financial hostages a la Klein, 1980; mutual commitments guaranteed by specific investments a la Williamson, 1983) or informal, based on relations or reputation (Macaulay, 1963; Garvey, 1995; Baker *et al.*, 2002).

The combination of these characteristics provides tools for governing hybrids. It also generates complexity and costs, which define a central issue: how to economize on the costs of extensive contracting among autonomous partners in order to maintain some advantages in comparison to the cost of administering a broader range of assets within one single firm (Klein *et al.*, 1978)? The answer may well be that contracts provide only a framework, which must be completed by other mechanisms of governance.

B. *Private order: forms of governance*

Indeed, empirical studies reveal an array of mechanisms developed by hybrids for economizing on transaction costs while smoothing relations among partners. The issue of rent sharing, not discussed here, is particularly important in that respect (Menard, 2004a). However, these studies still lack a theoretical framework that could unify the analysis. What follows offers only a partial and provisory view.

Building on indications provided by Klein *et al.* (1978) and Williamson (1985, chap. 3; 1991), Menard (1994, 1996, 1997, 2004a) has developed evidence of the presence of regulating devices (or “authorities”, distinct from “hierarchies”) as a core element in the architecture of hybrids. These devices all share one common characteristic: they depend on the transfer by partners of subclasses of decisions to entities coordinating their action, while property and decision rights remain distinct. Thus, they rely on *intentionality and mutuality*, maintaining a formal symmetry that distinguishes hybrids from hierarchies.

Available studies mostly based on cases or on sector samples suggest that the degree of centralization adopted corresponds to the degree of mutual dependence among partners and to the complexity and turbulence of the environment (Dwyer and Oh, 1988; Menard, 1996; Park, 1996), which is consistent with the role of specific investments and of uncertainty emphasized in our model (see above). An illustration is provided in Raynaud (1997), who analyzed a brand name for high quality bread developed by a successful group of French millers. In order to prevent opportunism, the partners created a distinct legal entity holding the brand name and defining and implementing standards of quality; they also created a private “court” with peers elected as judges in charge of solving conflicts. An amazing element of this arrangement is the power delegated to these judges to penalize and even expel a partner free-riding “excessively”. Sauvée (2002) examined another pattern, implemented by a firm holding a brand name of canned vegetables of high quality. Inputs come from a diversified set of growers operating under contracts. The formal side of the contract is quite standard, in line with characteristics described above. The interesting point is that the success of the firm rapidly translated in the high transaction costs of monitoring all these contracts. In order to reduce these costs and secure the arrangement, growers have been structured in several groups with delegates for negotiating contracts and adjustments. A joint committee, with four representatives from the producers and two from the firm, is in charge of solving conflicts, deciding changes, and distributing the quasi-rents.

More generally, empirical studies show a highly variable degree of formalism and power embodied in governing entities adopted by hybrids, which likely reflects the significance of contractual hazards and the resulting transaction costs. I have suggested elsewhere that four forms deserve particular attention (Menard, 2004a; see also Oxley, 1997). At one end of the spectrum, close to market arrangements, hybrids rely primarily on *trust*: decisions are decentralized and coordination relies on mutual “influence” and reciprocity. At the other end, hybrids come close to integration, with tight coordination through quasi-autonomous *governing bodies* or “bureaus” sharing some attributes of a hierarchy (e.g., the millers). Between these

polar cases, mild forms of “authority” develop, based on relational networks or on leadership. Relational *networks* have attracted a lot of attention in organization studies (Powell, 1990; Hakansson and Johanson, 1993; Grandori and Soda, 1995). They rely on tighter coordination than trust, with formal rules and conventions based on long-term relationships, on complementary competences, and/or on social “connivance” (Powell *et al.*, 1996). By contrast, hybrids coordinated by a *leader* leave little room for autonomy although some formal symmetry can be maintained (as in the case of the canned vegetables firm). Subcontracting, particularly with long-term contractual relationships, or alliances related to R & D projects are often of that mode (Eccles, 1981; Pisano, 1990; Powell, 1996).

IV. Concluding Remarks

In this paper, I have emphasized some major contributions of New Institutional Economics to the analysis of “non-standard” organizational arrangements of economic transactions, such as subcontracting, supply-chain systems, distribution networks, franchising, partnership, alliances or cooperatives. Important questions about their nature and role in a market economy have been raised in the growing literature on these arrangements. The analysis above mostly pointed out the specific arrangements combining contracts and administrative entities that parties to hybrids developed in order to better coordinate themselves when they expect to gain from mutual dependence but need to control risks of opportunism. I have also stressed that the diversity of hybrids and the decision to adopt a specific form among them are not random choices. They most of the times obey the logic of transaction costs: in a competitive environment, forms of network adopted tend to be aligned with the properties of the transactions they are dealing with.

As established by the large set of studies on the tradeoff between markets and hierarchies and as illustrated by the less developed body of literature on hybrids, the leading property in this alignment process is the degree of specificity of assets involved. Uncertainty reinforces this effect: when it is consequential, problems of coordination combine with the risk of opportunism, pushing towards more centralization.

Observations also suggest that different forms of hybrid organizations with diversified level of integration coexist at certain times. This is puzzling from a theoretical standpoint if we endorse the view that in a competitive environment, which is the one in which most hybrid forms operate, costs minimizing strategies should eliminate less performing arrangements. A fully convincing explanation is still needed here. As with so many other human built formal and informal institutional arrangements, path dependency is likely part of the explanation: history matters when it comes to explaining the modes of governance adopted.

Notwithstanding these unsolved problems (among others), the new institutional economics approach to non-standard forms of contracting, grouped under the generic term of ‘hybrid forms’, provides unique opportunities for theoretical investigation on several issues that are increasingly viewed as central to economic analysis. Among the most important mentioned in this paper are issues regarding contractual arrangements and decision processes involved in multi-partnership agreements, enforcement

mechanisms needed to make hybrids stable, diverse forms of authority for coordinating autonomous partners, dispute-solving devices, and incentives required for guaranteeing commitment while keeping low the costs of arrangements at high risks of opportunistic behavior.

Notes

- ¹ For a survey, see Menard (2004a).
- ² Others could be mentioned, e.g., Commons (1934), Hayek (1945), Malmgren (1961), Macaulay (1963), etc. I do not pretend to develop a historical review here, I only point out major landmarks.
- ³ Amazingly, Davis and North published the book that imposed the other branch of NIE the same year.
- ⁴ Williamson (1979) and (1983) also represent outstanding contributions.
- ⁵ This sequence reflects the Coase-Williamson approach to organization and differs from the Alchian-Demsetz story. Demsetz in particular has become increasingly critical to the framework presented here, going as far as considering the coasian approach as misleading (1988, 2002). In his view, economies of scale, particularly those resulting from managerial knowledge, are the main explanation to why firms may overcome markets. However, he also challenges mainstream economists, arguing that they are wrong in seeing prices as a coordination mechanism: prices do not coordinate, they signal opportunities. The real trade-off would not be between markets and hierarchies, but between firms and households. With high transaction costs or without advantages to specialization, production would be carry on by households. Otherwise, firms organize production.
- ⁶ Coase has vigorously challenged the significance of hold-up and it remains a highly controversial issue in NIE (see Klein, 1988; Coase, 1988; Coase, 2000; Klein, 2000; and Klein, 2004).
- ⁷ See Joskow (2005) and Klein (2005).
- ⁸ In the continuity of Klein *et al.* (1978) and under the influence of the property rights approach, numerous studies consider appropriability as an important variable. However, there are few empirical tests available (see Whinston, 2003).
- ⁹ One important dimension of transaction costs that may result from the variables above is the measurement problem emphasized by Barzel (1982, section 5).
- ¹⁰ For a discussion of this issue, see Menard (2006a).
- ¹¹ In Menard (2005a) I investigate how hybrid forms differ from other organizational arrangements such as markets and firms. In Menard (2006a) the mode of governance usually characterising cooperatives is examined and some policy implications discussed.
- ¹² For an analysis on Williamson's evolution on this, see Menard (2006b).
- ¹³ Klein *et al.* (1978), Ouchi (1980), Eccles (1981), Cheung (1983), Rubin (1978), Williamson (1975), Palay (1984), Masten (1984), Joskow (1985).
- ¹⁴ This was so for the 1991 paper by Williamson. For a pioneering survey of these studies, see Grandori and Soda (1995).
- ¹⁵ Some significant references are: (1) on subcontracting: Eccles, 1981; Aoki, 1988, chap. 6; and Bajari and Tadelis, 2001; (2) on networks: Thorelli, 1986; Powell, 1990; Podolny and Page, 1998; (3) on alliances: Oxley, 1999; Baker *et al.*, 2003; (4) on franchising: Rubin, 1978; Williamson, 1985; Lafontaine and Slade, 1997; (5) on collective trademarks: Dwyer and Oh, 1988; Menard, 1996; Sauvée, 2002; (6) on partnership: Farrell and Scotchmer, 1988; Powell, 1996; and (7) on cooperatives: Cook, 1995; Cook and Iliopoulos, 2000.
- ¹⁶ For example, studies on franchising show that contrarily to what agency theory predicts, contracts are not tailored to suit characteristics of transactors or transactions (Lafontaine and Slade, 1997).
- ¹⁷ A difficult tradeoff concerns the choice, when possible, between bilateral or multilateral agreements. The former is easier to monitor but involves higher dependency; the latter makes monitoring more complex but allows comparisons and benchmarking, a powerful tool for constraining opportunism. Most hybrid arrangements are of the second type. One suspects it is because it better captures positive properties of markets.
- ¹⁸ Studies on contracts, particularly econometric tests, ignore annexes, in which the essence often lies.

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