

The Economics of Hybrid Organizations

by

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This paper analyzes the recent progress in the understanding of a class of organizations known as *hybrid forms*. The growing literature on these forms, standing between markets and hierarchies, raises important questions about their nature and role in a market economy. Adopting a transaction-cost perspective, the paper first confronts the conceptual problem posed by this apparently heterogeneous set of arrangements. It then proceeds to explore the attributes characterizing their mode of coordination. The last section examines the complex forms of “government” adopted by these arrangements and proposes a model for encapsulating these properties. The conclusion emphasizes several remaining issues. (JEL: D 2, L 2)

1 Introduction

New Institutional Economics has developed rapidly in two directions over the last decade. Analyses in the direction proposed by Douglass NORTH ([1981], [1990], [2004]) provides us with a much better understanding of the nature of institutions involved in economic growth as well as of their interaction with agents’ behavior. The other direction in which significant progress has been made is micro-analytical. Following Ronald Coase, who extended his analysis of the nature of the firm to all modes of organization with his concept of “institutional structures of production” (COASE [1991]), Oliver Williamson has elaborated tools for exploring *The Mechanisms of Governance* (WILLIAMSON [1996]). Based on these contributions, a significant amount of knowledge has accumulated about the different structures that can support and secure transactions.

The emphasis within the micro analytical stream was initially on the now well-known trade-off between markets and hierarchies. In the 1990s, attention progres-

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sively shifted to what Williamson identified as *hybrid forms* in his seminal paper in 1991. Significant elements of the analysis of hybrids were present in previous publications by Williamson (e.g., WILLIAMSON [1985, p. 83], *The Economic Institutions of Capitalism*, in which he summarized his views as follows: “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.”). But it is the 1991 paper that systematized and modeled the concept of hybrids.

The growing literature on this mode of organization provides a clear indication of the increasing interest for the issues it raises. Indeed, until the mid-eighties very little was published on these forms, with the exception of a few exploratory papers on interfirm contracts (KLEIN, CRAWFORD, AND ALCHIAN [1978]; OUCHI [1980]; ECCLES [1981]; CHEUNG [1983]), on franchising (RUBIN [1978]), or on “nonstandard contracting” more generally (WILLIAMSON [1975]). A turning point is the transformation in the mid-1980s of transaction-cost economics into an empirical research program (e.g., WILLIAMSON [1985], MASTEN [1984], PALAY [1984], JOSKOW [1985]) that rapidly became influential in managerial sciences (THORELLI [1986]) and sociology (GRANOVETTER [1985]).¹ However, the real take-off regarding hybrid organizations dates from the 1990s, with the majority of contributions in noneconomic journals. In a survey from 1995, Grandori and Soda reviewed 167 papers (but only 16 from economics journals) on “interfirm networks,” among which a very significant number were inspired by transaction-cost economics. In 1999, GHOSH AND JOHN [1999] began an influential paper by emphasizing the dominant role of transaction-cost economics in studies on interfirm relationships in management and marketing sciences. In their terms: “Transaction-cost economics has become the dominant paradigm for analyzing issues in several areas of marketing, including interfirm relationships, channel structure, foreign market entry, and so on” (p. 131).²

Although questions have been raised about the importance of studying hybrid organizations (MASTEN [1996], NICKERSON AND HEINAN [2002], HODGSON [2002]), the probability is high that the considerable role of these arrangements in shaping and monitoring economic activities will continue to generate a flow of theoretical models and empirical studies.³ In the following pages, I examine characteristics that qualify hybrid organizations as “institutional structures of production” and that deserve the attention of economists. I do not intend to review the impressive literature already available. I will rather focus on fundamental properties, with an emphasis on contributions coming from a transaction-cost perspective. My analysis considers

¹ Agency theory is also part of that story (see BRICKLEY AND DARK [1987]).

² This is confirmed by other sources (e.g., GULATI [1998], ANDERSON AND GATIGNON [2004]). See also the abundant literature on networks in sociology. I do not review this literature here.

³ The idea of this paper grew out of a comment from Ronald Coase on MÉNARD [1996]. Coase’s comment was about the expression “strange forms”: he pointed out that these modes of organization might represent the dominant form of doing business.

almost exclusively multilateral agreements, with very little on bilateral contracts. This is a methodological choice, based on the idea (and experience) that multilateral structures better reveal the key characteristics of hybrids.

The paper is organized as follows. Section 2 faces the conceptual problem of defining “hybrid organizations.” It describes the heterogeneity of arrangements included in this broad category, and it identifies regularities emerging from the extensive literature on the topic. Section 3 analyzes underlying characteristics of the transactions monitored by hybrids. Section 4 examines the mechanisms defining their mode of governance. Section 5 concludes with a view of some critical issues and challenges for future research on hybrids. My analysis is drawn from a diverse set of empirical studies, including several with which I have been associated over the last years.

2 *What are Hybrid Organizations?*

Although the institutional dimension of markets is much more important than what economic theory suggests, there is a sense of common knowledge about the concept of “market,” with the mechanics of supply and demand at the core, and the role of prices as the key to adaptation. Similarly, notwithstanding challenges regarding their main characteristics and their blurred boundaries, firms represent a familiar object, with the central role of hierarchy in making decisions and adjusting them.⁴ When it comes to intermediate arrangements, the terrain is a shifting one. The vocabulary itself is not stabilized. Besides hybrids, one can read papers about clusters, networks, symbiotic arrangements, supply-chain systems, administered channels, nonstandard contracts, and so forth. My entry to this apparently undefined set of organizations is pragmatic. I begin with a quick description of forms recurrently identified as distinct from markets and hierarchies (section 2.1). I then emphasize regularities in the traits exhibited by the abundant literature on these forms (section 2.2).

2.1 *A Collection of Weirdos?*

From loose clusters of firms to quasi-integrated partners, the set of arrangements that rely neither on markets nor on hierarchies for organizing transactions is broad and potentially confusing.⁵ It is so much so that in a book devoting one-third of its space to hybrids, MASTEN [1996, p. 12] suggested: “Given the variety of hybrid forms, the nature of hybrids, their advantages and disadvantages, and the rules that influence their form must be assessed on a case-by-case basis.” From a theoretical standpoint, this is not very satisfying. Either “hybrid” is a concept extending to

⁴ For a good discussion of the blurred boundaries between markets and firms, see ALSTON AND GILLISPIE [1989].

⁵ “[The] increase in the number of studies [on interorganizational relations and networks] has contributed to a rather messy situation marked by a cacophony of heterogeneous concepts, theories, and research results” (OLIVER AND EBERS [1998, p. 550]).

a family of forms in need of an explanatory theory, or it is an empty label and the “cases” it covers must find an explanation in the theory of markets and hierarchies.

However, it must be acknowledged that there is indeed a great diversity of agreements among legally autonomous entities doing business together, mutually adjusting with little help from the price system, and sharing or exchanging technologies, capital, products, and services, but without a unified ownership. These characteristics are likely the minimum required to encapsulate the variety of hybrids.⁶ I begin my analysis with a quick review of forms more extensively documented.

In a pioneering study, ECCLES [1981] showed how *subcontracting* coordinates through mechanisms distinct from markets and hierarchies. Using a sample of 38 homebuilders, he analyzed the relationships between general contractors and their subcontractors. Over 80% of subcontractors were selected through negotiations, the remaining ones being chosen through formal competitive bidding⁷ in order to maintain some market pressures. Moreover, although contracts were short-term, related to specific projects, the contractual relationships were durable, with general contractors doing business with essentially the same partners. In almost all cases, they had been working together for over five years; in one case the relationship had been going on for 37 years. Numerous studies followed, substantiating the idea that subcontracting strategies based on durable relationships often coordinate more efficiently than markets while avoiding integration and its bureaucratic burden.⁸

Another concept developed a bit later was that of *networks of firms* (THORELLI [1986], POWELL [1990], PODOLNY AND PAGE [1998]). “Networks” is a very general term, now widespread in sociology and management sciences, that covers about all arrangements involving a set of recurrent contractual ties among autonomous entities. Two subsets have been more extensively studied. One is the supply-chain system adopted in many industries, with the typical example of the agri-food sector.⁹ Coordinating quantity or quality, or both, seems to be the engine of these arrangements, with their stability as a key issue (FEARNE [1998]; RAYNAUD, SAUVÉE, AND VALCESCHINI [2002]). The other subset is distribution channels (BROWN [1984], JOHN AND WEITZ [1988], GHOSH AND JOHN [1999], ANDERSON AND GATIGNON [2004]). The emphasis here is on how partners coordinate in order to minimize costs and to create value by capturing or developing markets through signaling, services, etc.

One variety that deserves particular attention is *franchising*. Because of its rapid development in the provision of final goods and services to consumers in the 1960s and 1970s, it attracted interest quite early (RUBIN [1978]; KLEIN, CRAWFORD,

⁶ For a related view, see SCHANZE [1993].

⁷ The bidding almost systematically involved the same set of subcontractors.

⁸ The literature on subcontracting is particularly abundant for the automobile industry, e.g., AOKI [1988], HILL [1995], DYER [1997], SAKO AND HELPER [1998].

⁹ The literature on these arrangements is impressive. There are even specialized journals (e.g., *Supply Chain Management*, *Journal of Chain and Network Science*). A good overview is provided in the proceedings edited by TIENEKENS AND ZUURBIER [2000].

AND ALCHIAN [1978]; MATHEWSON AND WINTER [1985]; WILLIAMSON [1985]). Initially viewed as “brand-name leasing companies” (KLEIN, CRAWFORD, AND ALCHIAN [1978]), franchise systems display problems that are relevant for a large number of contractual arrangements. The right to use a brand name generates agreements that must guarantee quality, provide visibility of services and/or goods, and implement the capacity to monitor users who have strong incentives to free ride. Agency problems emerge, but also complex issues of governance going beyond incentives (DNES [1996], LAFONTAINE AND SLADE [1997], LAFONTAINE AND RAYNAUD [2002]). Formalized procedures, standardization of inputs and/or outputs, and centralization of functions (uniform accounting, training of personnel, information system) are part of the toolbox involved. An important issue is the puzzling presence within the same system, simultaneously and durably, of competing modes of governance, namely, company-owned and franchised stores.¹⁰

Collective trademarks and their supportive mode of organization share some characteristics with franchises (DWYER AND OH [1988]; MÉNARD [1996]; SAUVÉE [1997], [2002]). As with franchising, one major goal is to reduce customers’ search costs while benefiting from joint marketing. There are also important differences. Collective trademarks usually involve backward coordination and often originate from suppliers, although retailers may also take the initiative (e.g., wholesalers associations and dealers cooperatives in the hardware industry; see DWYER AND OH [1988]). Because of the large number of partners involved, the risk of opportunism is high, while monitoring and control are difficult. In franchising, the existence of a franchisor makes the arrangement particularly well fitted to a principal–agent approach. In collective trademarks, the arrangement is most of the time developed by a group of peers, making enforcement particularly challenging.

From a certain point of view, *partnership* presents similar problems. Loosely defined, it mixes characteristics of an integrated firm and characteristics of a network. Links among partners can be more or less formalized, as illustrated by teams of researchers organized in firms maintaining very permeable boundaries with other firms and with universities in the biotechnology sector (POWELL [1996]). Another form of partnership, closer to the firm, is the mode of governance adopted by professionals, initially mostly lawyers and mostly in the U.S. (FARRELL AND SCOTCHMER [1988]). Law partners are typically associated to take advantage of a “brand name” (often that of the founder) and to coordinate complex services in situations in which human assets play a crucial role and can hardly be monitored, so that some major decisions have to be decentralized. The resulting problems of incentives combine with problems of coordination. The standard mode of governance adopted is a complex mix of strict hierarchy and broad decentralization.

Cooperatives share some characteristics with both collective trademarks and partnerships. Like the former, they confront problems of control over quality in

¹⁰ The problem was noticed by RUBIN [1978] and developed by BRICKLEY AND DARK [1987]. There is now an important literature on this issue (see LAFONTAINE AND SHAW [1999]; PENARD, RAYNAUD, AND SAUSSIER [2003]).

order to avoid negative externalities. Like the latter, they rely on decentralized decisions because of the high cost of closely monitoring the numerous partners often involved in multiple tasks, of which only some tasks are developed under the umbrella of their cooperative (COOK [1995], PORTER AND SCULLY [1987]). One major issue with cooperatives relates to ill-defined property rights, so that sharing rents rapidly becomes a source of potential conflicts. As emphasized by several contributors, tensions become particularly acute when decisions must be made regarding specific, long-term investments (HANSMANN [1996], COOK AND ILIOPOULOS [2000]). If one considers the problems of coordination and incentives they raise and their importance in market economies, it is surprising how little attention cooperatives have attracted from transaction-cost economists so far.

Last, there are *alliances* among firms, particularly frequent when the development or transfer of technologies is at stake (STUART [1998]; BAKER, GIBBONS, AND MURPHY [2002]). Here, we are closer to standard contractual practices. A spectacular example is provided by airlines, which progressively coordinated their schedules (in order to facilitate connections), flights, maintenance, reservation, frequent-flyer programs, and, in many cases, tariffs (HOLMSTROM AND ROBERTS [1998]). An extensive study by GULATI AND SINGH [1998], who looked at 1570 alliances over 20 years (1970–1989) among U.S., Japanese, and European firms in the biopharmaceutical, new-materials, and automobile sectors, showed the importance of anticipated coordination costs and the role of contractual hazards in the choice of a governance structure. This is confirmed by other studies (e.g., HENNART [1988b], OXLEY [1999]) that also exhibited the role of the institutional environment, particularly the regime of property rights, in the choice between nonequity and equity (joint venture) forms of alliances.

This review of different modes adopted for networking autonomous entities is not extensive. I could have mentioned the development of “virtual firms” systematically built on networks, or the clusters of venture capitalists analyzed by AOKI [2001, chapter 14]. And I have referred only to a few of the many studies published on these modes of governance. I am not aware of any extensive survey of the literature on hybrid organizations in economics. But at least two quite extensive surveys of papers published in sociology and management journals are available. One, by GRANDORI AND SODA [1995], has already been mentioned. The other, by OLIVER AND EBERS [1998], systematically analyzed 158 papers published on networks in four major journals in management sciences and sociology, from 1980 to 1996.¹¹ Combined with my own knowledge of the economic literature on hybrids, these studies suggest an underlying pattern beyond the heterogeneity of cases.

2.2 Fundamental Regularities

Indeed, and notwithstanding the diversity of empirical cases, all papers quoted in the previous section refer to a very limited set of concepts and theories, which

¹¹ The journals reviewed are: *Administrative Science Quarterly*, *American Sociological Review*, *Academy of Management Journal*, and *Organization Studies*.

reflects the restricted set of traits characterizing their object. From a theoretical standpoint, a few *configurations*¹² define the field, bounded by a social-network perspective at one end and a governance perspective at the other. The entry to the analysis of hybrids proposed in this paper unambiguously relates to the latter. But before developing this theoretical framework, let me summarize empirical regularities that are recurrent and apparently independent of the interpretation chosen. Three headings encapsulate these regularities: pooling, contracting, and competing. What makes these regularities characteristic of hybrid arrangements is that, besides some specific properties to be explored further in the next section, they rely on partners who maintain distinct property rights and remain independent residual claimants.

Pooling Resource. Whatever the form hybrid arrangements take, they are systematically oriented towards organizing activities through interfirm coordination and cooperation, so that key investment decisions must be made jointly. Hybrids exist because markets are perceived as unable to adequately bundle the relevant resources and capabilities (TEECE AND PISANO [1994]), while integration in a hierarchy would reduce flexibility by creating irreversibility and weakening incentives. Indeed, incentives are a driving force in the decision to organize transactions under hybrid arrangements. On the positive side, the search for rents provides the engine for strategies that require pooling resources and coordinating decisions; on the negative side, sharing rents involves discretionary choices that can easily provoke conflicts and destabilize an agreement.

Several consequences follow. *First*, because pooling resources puts hybrids at risk of opportunistic behavior, choosing partners is a key issue. Hybrids are selective rather than open systems. The identity of partners matters, whether partnership provides complementary resources (thus creating dependencies) or generates a multiplier effect (as with collective trademarks). *Second*, as noted early (BROWN [1984]), hybrids involve forms of joint planning. The anticipated complexity of decomposing tasks among partners and of coordinating across organizational boundaries is a major factor in the choice of a specific mode of governance and in the design of mechanisms for monitoring the arrangement (GULATI AND SINGH [1998, p. 782 f.]). Planning may concern inputs, quality standards, and training of personnel, but also prices and quantities. *Third*, information among parties to an agreement is a crucial issue. Some authors have even qualified hybrids as “*a cooperative game with partner-specific communication*” (GRANDORI AND SODA [1995, p. 185], their emphasis). Developing an adequate information system among partners is central to the survival of hybrids, but informational asymmetries also represent a major challenge (MATHEWSON AND WINTER [1985]). This is particularly so when a leader dominates who can capture part of the information, thus threatening the continuity

¹² I use the term “configuration” rather than “theory” because not all these approaches develop a theoretical framework from which testable propositions can be derived. Moreover, there is no general agreement on the exact definition and delineation of these configurations, and I do not intend to survey them here.

of the relationship. The potential role of the new technologies of information and communication has not been much investigated in that context.

To summarize, pooling resources among legally distinct partners does not make sense without some continuity in their relationship. This continuity requires cooperation and coordination: partners must accept losing part of the autonomy they would have under a market relationship without the benefits of extended control that hierarchy could provide. Hence a *first problem* for hybrid organizations: how can they secure cooperation in order to achieve coordination at low cost without losing the advantages of decentralized decisions?

Contracting. This problem is partially dealt with through more or less formal contracts. Contracts provide ways of regulating relationships among transactors, creating “transactional reciprocity” (PARK [1996]). The importance of relational contracting has long been acknowledged when cooperation carries advantages but also risks (GOLDBERG [1980]; WILLIAMSON [1985]; GIBBONS et al. [1994]; BAKER, GIBBONS, AND MURPHY [2002]). Advantages can be expected from extended market shares, from transfer of competencies, and from sharing scarce resources (e.g., finance). But risks are also at stake. Contracts are incomplete and subject to unforeseeable revisions, since they are about transactions that involve specific assets and that are often plagued by uncertainties (e.g., alliances in R&D). Part of the difficulty comes from the autonomy of partners who remain legally (and actually) independent in making decisions. Ultimately we have a typical transaction-cost problem. Recent studies on franchising (LAFONTAINE AND SLADE [1997]) show that contracts are not tailored to suit characteristics of the transactor or transaction. Contrary to what agency theory predicts, the features of contracts are not continuously refined in order to obtain an “optimal contract” that could encapsulate all required adaptation. Plainly, this would be too costly and the source of too many rigidities. Contracts rather provide a relatively simple and uniform framework.¹³ Although franchising is a particular case of hybrids, the same pattern can be observed in other forms, e.g., collective trademarks or alliances (STUART [1998]). With contracts reduced to a framework, the choice of governance structure that can adequately complement contracts and contribute to their implementation becomes crucial. Mechanisms must be designed that are aligned with the characteristics of the transactions they support, filling blanks left in contracts, monitoring the arrangement, and solving problems without repeated renegotiation. I will come back to these issues in the next section. But we can already identify a *second problem* recurrent among hybrid organizations: how can such arrangements secure contracts while minimizing costly or even impossible negotiations or renegotiations?

Competing. Another regularity that emerges from the literature on hybrids is the importance of competitive pressures in the shaping of a particular arrangement. Of course, competition also exists among agents involved in a firm, e.g., job-promotion

¹³ “[It] appears that firms, in responding to risk, incentive and monitoring-cost issues, adjust by changing how much they use franchising more than by altering the terms of their uniform franchise contract” (LAFONTAINE AND SLADE [1997, p. 16]).

tournaments to get better rewards. But the fundamental difference in hybrids is that partners remain independent residual claimants with full capacity to make autonomous decisions as a last resort. Competitive pressures in hybrids operate in two directions. *First*, with the possible exception of bilateral contracts,¹⁴ partners to a hybrid agreement compete against each other. Rivalry can take many different forms. The agreement can be designed in a way that recurrently makes the partners compete, as in subcontracting (ECCLES [1981], DYER [1997]). Notwithstanding contractual restrictions (geographical, etc.), their activities may overlap so that they try to attract customers from the same subset (RAYNAUD [1997]). Another possibility is that they cooperate on some activities, such as joint R&D projects, and compete on others (GIBBONS et al. [1994]). *Second*, hybrids usually compete with other arrangements, including other hybrids. A significant part of the literature shows that the standard neoclassical explanation of hybrids as pure rent seekers looking primarily for market power does not explain much (MÉNARD [1996], GULATI [1998], GHOSH AND JOHN [1999]). Hybrids tend to develop in highly competitive markets in which pooling resources is viewed as a way to deal with significant uncertainties and to survive. Competition among hybrids may also produce another effect. If specific investments are moderate, partners may be tempted to switch arrangements, *migrating* from one arrangement to another, thus making them highly unstable. A consequence is that the implementation of an internal mode of regulation and control is a key issue for hybrid organizations. As pointed out by MADHOK AND TALLMAN [1998], partners tend not to recognize *ex ante* the nature and extent of transaction-specific investment that is required in the collaborative relationship. Mutual dependence is fully perceived only *ex post*, which can require significant adaptations and be a source of major conflicts.¹⁵ Hence a *third problem* for hybrids: what mechanisms should be designed for delineating joint decisions, disciplining partners, and solving conflicts while preventing free riding?

To summarize, important regularities emerge from the apparently heterogeneous set of hybrid arrangements. Aspects of these regularities are present in markets and hierarchies. But what distinguishes (and plagues) hybrid arrangements is that these regularities are rooted in a mix of competition and cooperation that subordinates the key role played by prices in markets and by command in hierarchies (JORDE AND TEECE [1989], GIBBONS et al. [1994], GRANDORI AND SODA [1995], MÉNARD [1997]). Thus the workability of this mix depends on specific mechanisms capable of reconciling legal autonomy and interdependence. This is consistent with the model developed by WILLIAMSON [1991], according to which hybrid organizations are neither markets nor hierarchies: they have characteristics that make them better

¹⁴ Even bilateral agreements with long-term contracts may be subject to some internal competition, since strategies of partners remain at least partially distinct (see COASE [2000]). This is why these arrangements often use specialized managers for monitoring the arrangement and/or rely on arbitrators to smooth competition.

¹⁵ This is very much in line with the analysis proposed by WILLIAMSON [1985, chapter 2, section 3]) of the “fundamental transformation” that accompanies the implementation of a contract.

fitted to the attributes of transactions they intend to organize. I now turn to the analysis of these attributes.

3 *Determinants of Hybrid Forms*

Although I may refer once in a while to elements borrowed from a resource-based approach, according to which asymmetries in resources and information provide the main incentive to pool assets, the fundamental framework underlying the following pages derives from transaction-cost economics. More precisely, my interpretation is based on the *discrete alignment principle* (WILLIAMSON [1991]): hybrid organizations and the specific forms they adopt are selected through efforts made by agents to reduce transaction costs by aligning governance structures with exchange attributes. GHOSH AND JOHN [1999] suggest interpreting transaction costs as the *ex ante* costs of contracting cumulated with the opportunity cost of forgone transactions, together with the *ex post* costs of enforcing the agreement added to the opportunity cost of not shifting to more profitable activities in the light of new information. Here, I do not intend to discuss the trade-off that governs the choice of hybrids rather than markets or hierarchies for organizing transactions. My goal is rather to take advantage of existing and ongoing studies for substantiating the specific properties of hybrid organizations as governance structures.

Thus, let us assume that a hybrid way of organizing transactions has been chosen. What determines the choice of a specific form among the various possibilities mentioned in section 2.1? And what determines the internal properties of these arrangements? My analysis focuses primarily on coordination issues. I begin with an examination of the main forms of interdependent investments that develop in hybrids (section 3.1). I then turn to the underestimated role of uncertainty, which, when specific assets are present, contributes to shape hybrids but can also challenge their existence (section 3.2). Both subsections emphasize properties of transactions organized by hybrids that require specific mechanisms to deal with. These mechanisms give hybrids their “personality.” They are examined in section 4.

3.1 *Investing in Mutual Dependence*

Following the seminal contributions by WILLIAMSON [1975], [1985], [1991], hundreds of empirical tests have shown the role of the specificity of assets as a key factor in the trade-off among modes of organizations, i.e., in the decision to organize transactions through markets, within firms, or by interfirm agreements.¹⁶ The goal of the analysis developed here is different. I want to examine how investment decisions purposely creating a significant degree of mutual dependence help to understand what governance will be chosen for monitoring the arrangement. The main proposition I intend to substantiate is that *the more specific mutual investments are,*

¹⁶ Partial surveys can be found in KLEIN AND SHELANSKI [1995], COEURDEROY AND QUELIN [1997], and BOERNER AND MACHER [2002].

the higher are the risks of opportunistic behavior, and the tighter are the forms of control implemented.

A fundamental issue for partners choosing to organize transactions in a hybrid form is their commitment to make investments that create significant and durable mutual dependence while property rights and decision-making remain distinct. Two strategies are available. Either each partner develops specific assets, the resulting network being based on their complementarities; or partners decide to pool resources and to create joint investments for part of their activities. The first strategy was analyzed early by transaction-cost economists, who substantiated the importance of durable contractual relationships when complementary investments are at stake. Most initial studies were based on bilateral contracts. Pioneering examples can be found in PALAY [1985], who examined the arrangements between rail carriers and automakers, and JOSKOW [1985], who scrutinized in a now classical reference the contractual relationship linking electricity plants and coal mines. MÉNARD [1996] extended the analysis to multilateral contracts in his study of a complex chain of mutually dependent firms with highly complementary assets in the French label system.¹⁷ The second strategy, requiring joint investments, is typical of agreements for the development and transfer of products among organizations with different minimum efficiency scales (e.g., HENNART [1988a] on the aluminum and tin industries), and of agreements involving technology transfers (TEECE [1992], GULATI [1998], OXLEY [1999]).

Problems arise with both strategies when weakly redeployable investments create mutual dependence, i.e., when durable investments made by the partners become customized to their mutual needs. However, there is one significant difference between the two strategies. The first one leaves relatively open the form that the hybrid arrangement will take, i.e., a contract-based approach or a form closer to integration, depending on the intensity and scope of complementarities (MÉNARD [1996], OXLEY [1999]). The second one immediately creates significant mutual dependence. As is now well known, this lock-in relationship represents a fertile ground for opportunistic behavior. Contracts are most of the time incomplete and do not provide sufficient safeguards.¹⁸ With increasing risk of opportunism, forms of private government develop for coordinating and policing the relationship, moving it away from a contract-based agreement and closer to quasi integration (MÉNARD [1996], RAYNAUD [1997], SAUVÉE [2002]).¹⁹

The examples above referred to investments in physical assets. Indeed, most econometric tests of the impact of specific investments on interfirm agreements have been inspired by the paradigmatic analysis of vertical integration, with an emphasis on the role of physical capital (site specificity, physical specificity, dedicated

¹⁷ The analysis is based on an extensive study of the French poultry industry.

¹⁸ The pairing of specific investments with uncertainty reduces even more the capacity for safeguard clauses to discipline partners (see section 3.2).

¹⁹ More on these forms is developed in section 4.

assets).²⁰ Although physical assets remain a nonnegligible factor in understanding how hybrids are arranged, a significant contribution of the literature on hybrids is that it exhibits the key role of specific human assets (LOASBY [1994]). This comes out quite naturally from the centrality of agents needed for coordinating legally autonomous decision-makers while checking their propensity to free-ride. In franchise systems some physical investments may be difficult to redeploy, but it is above all the problem for the franchisor of selecting and monitoring franchisees adequately to avoid free-riding that explains restrictive contractual provisions as well as the presence of authoritative devices in the guidance of the relationship (DNES [1996], RAYNAUD [1997], LAFONTAINE AND SHAW [1999]). The role of specific human assets has been explored even more extensively in studies on other hybrid forms, e.g., the mutually dependent investments in human resources among biotechnology firms (POWELL [1996]), the interdependence growing out of transfer of competencies in networks confronted with rapidly changing technologies (TEECE [1992]), or the complex arrangements implemented to monitor independent salespersons (ANDERSON AND SCHMITTLEIN [1984], JOHN AND WEITZ [1988]) or subcontractors (ECCLES [1981], DYER [1997]). Moreover, as already emphasized by PALAY [1985], the very existence of agreements in which firms develop a significant degree of mutual dependence in their physical assets also requires substantial investments in training managers who can monitor the arrangement.²¹ It takes time and effort for those personnel to acquire interfirm-specific knowledge, and these go-betweens are highly regarded by firms as problem-solvers contributing to the continuity of the relationship.

Another type of specific investments that play a key role in determining the form taken by hybrids relates to brand-name capital. This aspect has been particularly illustrated in two branches of the literature. The abundant managerial literature inspired by transaction-cost economics and focusing on distribution channels emphasizes the importance of implementing modes of control among partners to maintain reputation (BROWN [1984], DWYER AND OH [1988], JOHN AND WEITZ [1988], FEIN AND ANDERSON [1997], FEARNE [1998]). Similarly, the literature on collective trademarks shows the importance of devices focusing on quality control in order to prevent opportunistic behavior (MAZÉ [2002]). When the reputation of a collective brand is based on quality of products or services highly dependent on human assets, training and network-specific competences of partners represent a key factor in the capacity to establish and maintain the reputation of the network (MÉNARD [1996]; RAYNAUD [1997]; RAYNAUD, SAUVÉE, AND VALCESCHINI [2002]).

²⁰ However, several papers on contracting practice in the automobile industry have emphasized not only the high level of mutual specific investments (e.g., DYER [1997]), but also the significant investments in training and communication among parties to the agreements (e.g., AOKI [1984], [1988]; WILLIAMSON [1985]; HELPER AND LEVINE [1992]).

²¹ This may also explain why hybrids tend to rely more on specific personnel than on legal services: it lowers their transaction costs while avoiding a confrontational approach.

The message of the studies referenced above and of a number of others not mentioned here is straightforward. Hybrid organizations develop because of the advantages partners find in linking some of their investments. In doing so, they accept mutual dependence. Deciding the level of this dependence is conditioned by the capacity to design mechanisms for securing specific investments and for determining how to share expected rents (a point discussed in section 4). Securing the relationship and reducing the risk of opportunism involves at least three different dimensions. *First*, the mechanisms chosen for monitoring such agreements involve specific difficulties due to partners who remain legally autonomous and independent decision-makers even when the network is quasi-integrated (ECCLES [1981], MÉNARD [1996]). *Second*, mutual dependence is accepted because it generates gains. Hence hybrids lean towards mechanisms that can protect rents, preserving the stability of the arrangement. They do so *ex ante* through selection of partners²² (MÉNARD [1996], [1997]), and *ex post* through modes of governance that can partially shelter them from market forces (GOLDBERG [1980], GAUCHER [2002]). *Third*, designing adequate devices for solving disputes, particularly disputes arising from appropriability problems, is central to the stability of hybrids (PISANO, RUSSO, AND TEECE [1988]; OXLEY [1997]; GULATI AND SINGH [1998]). *The greater is the appropriation concern, which grows with the specificity of investments, the more centralized the coordination tends to be.*

In other terms, hybrid organizations exist because partners need to develop coordination, which requires interdependent investments. With ownership remaining separate, what matters most for understanding what form of hybrid is chosen is the intensity of this interdependence, i.e., the degree of centralization and of formalization in the mode of governance required for coordinating and checking partners that are legally independent. In order to do so, hybrid organizations tend to develop mechanisms of control that represent a challenge to competition policies (MÉNARD [1998], [2002]; JUNKER [2001]).

3.2 *Uncertainty*

The second characteristic shaping hybrid arrangements is the degree of uncertainty surrounding the transactions they intend to organize. Uncertainty is secondary to the existence of specific investments in that without at least a minimal degree of mutual dependence in assets, there would be no hybrid arrangement properly speaking. But once partners get linked through specific assets, the literature on hybrids is quite unanimous about the role played by uncertainty in decisions regarding the level at which partners will pool resource. Hybrids operate as a buffer, with risk sharing as a central motivation. This was a key element in Eccles's explanation of the contracting scheme adopted in the construction industry (ECCLES [1981]) or in Ouchi's

²² This selection process can be viewed as creating barriers to entry, a potential problem with respect to competition policies.

theory of clans (OUCHI [1980]²³). It remains a central determinant in recent studies on alliances (GULATI [1998], OXLEY [1999]). As such, it represents a major factor for predicting the type of internal coordination implemented: *the more consequential the uncertainty is, the higher is the risk of opportunism, and hence the more centralized the coordination tends to be* (MÉNARD [1996], [1997]; RAYNAUD [1997]; NOOTEBOOM [1999]). The economics of hybrid organizations thus provides insights on an attribute quite neglected in the classic studies on make-or-buy decisions.²⁴

Uncertainty can grow out of a hybrid relationship because of the inputs required, of the output expected, or of the transformation process itself. If we assume competitive markets, problems with *inputs* are often connected to issues of quality, quality control, and the risk of free-riding. They can result from nonobservabilities in resources or services traded among partners, as in supply-chain systems (FEARNE [1998]), or from difficulties inherent in the coordination of inputs, as in the construction industry (ECCLES [1981], BROUSSEAU AND RALLET [1995]). Detailed contracts represent a limited tool for circumventing these problems, since it is precisely to maintain more flexibility that partners choose a hybrid form. Uncertainty can also come from outside suppliers with no specific commitment to the arrangement, particularly if they provide inputs hardly traceable (e.g., the provision of food to cattle farmers, as illustrated by mad-cow disease; see MAZÉ [2001]). Uncertainties regarding *output* can be related to difficulties in assessing that deliverables meet standards defined by the arrangement, to maladjustments to consumers' preferences, or to lack of flexibility in adapting to a changing demand. Several proxies have been developed to measure these factors and to identify their effects on the mode of governance adopted by hybrids: market-share stability, industry volume, forecast accuracy, predictability based on demand variability, and so forth (ANDERSON AND SCHMITTEIN [1984], JOHN AND WEITZ [1988], LAFONTAINE AND SLADE [1997], GHOSH AND JOHN [1999]). Last, the *transformation* process itself might generate uncertainties. In hybrids, partners share only part of their resources. The resulting complementarities are partial and overlap with activities not included in the arrangement, which makes planning uncertain. Combined with the legal autonomy of partners, this weakens seriously the ability to verify the exact causes of failures in the transformation process and to identify responsibilities. Conflicts result, particularly when it comes to sharing the costly consequences of failures. These problems are amplified when complex technologies and specific human skills are involved, as illustrated by many R&D projects. Indeed, these conditions make it difficult to have well-defined rules for claiming rents or for supporting unexpected costs – problems that are particularly acute in arrangements oriented towards innovation (GHOSH AND JOHN [1999]²⁵).

²³ According to OUCHI [1980, p. 137], clans develop “when teamwork is common, technologies change often and therefore individual performance is highly ambiguous.”

²⁴ There are a few exceptions (e.g., ANDERSON [1985], SAUSSIER [2000]).

²⁵ As pointed out by these two authors, when comprehensive contracts are impossible or too costly to write, as is often the case when innovation is at stake, “organizing a satisfactory split of the gains becomes nontrivial” (GHOSH AND JOHN [1999, p. 131]).

Of course, uncertainty may also result from factors exogenous to the arrangement. The role of the institutional environment in generating uncertainties that influence the choice to prefer a hybrid mode of organization rather than markets or integration, as well as the choice of a specific form of hybrid, is often mentioned in the literature. However, very few specific analyses are available so far, not to speak of propositions and tests, of how this interaction proceeds. NORTH [1981], [1990], [1991] has repeatedly insisted on the importance of the rules of the game for understanding how actors play that game, choosing ways to organize transactions. WILLIAMSON [1991] went a step further, as far as the micro level is concerned, in introducing the possibility of shifts in parameters that could explain changes in the mode of governance. Pioneering studies on hybrid forms, particularly on alliances, have begun to explore this issue more systematically (e.g., PARKHE [1993], KHANNA [1998], OXLEY [1999]). For example, Oxley has developed an econometric test, based on Williamson's model of 1991, showing how the legal definition and the implementation of property rights significantly influence the choice between equity and market-based contracts in hybrid arrangements designed for transferring technologies.

However, what matters most for characterizing hybrid organizations is whether these uncertainties are consequential or not. For inconsequential uncertainties, efficient contractual clauses can be designed and planning can be implemented to coordinate partners at low cost. The likelihood of contract-based arrangements is even higher when weak uncertainty combines with investments that can be redeployed, even if doing so has a certain cost. For example, growers of fresh vegetables may be part of a hybrid arrangement for producing specific labeled products (e.g., tomatoes, beans) that require specific investments, and at the same time maintain other productions, not included in the agreements, to which they can switch. When they have this capacity to reduce uncertainties associated with the agreement, they adopt a mode of governance close to market arrangements (SAUVÉE [1997], [2002]). When uncertainty becomes more consequential, contractual hazards develop. That can be so even if the assets involved are standardized, as illustrated by the construction industry (ECCLES [1981]) or the high-quality segment in the poultry industry (MÉNARD [1996]). Much tighter coordination is then required, with more control and more dependence: the governance leans towards quasi integration, developing specific forms of authority.

This is so because, confronted with consequential uncertainty, governing a hybrid organization involves dealing with major coordination problems: *adaptation*, in order to maintain the flexibility to adjust, must combine with *control*, in order to reduce discrepancies among inputs, outputs, or quality in the process itself, while developing *safeguards*, in order to prevent opportunistic behavior that uncertainties make difficult to detect.²⁶ *The intensity of the needs for adaptation, control, and safeguards, partially mirrored in contractual clauses, provides a very good predictor*

²⁶ This is so whether opportunism results from false or empty threats and promises concerning future conducts or from selective or distorted disclosure of information.

of the degree of centralization of the mechanisms to be implemented for dealing efficiently with the transactions at stake.

To summarize, hybrid arrangements develop when specific investments can be dispatched among partners without losing the advantages of autonomous decisions, while uncertainties are consequential enough to make pooling an advantageous alternative to markets. Mutual dependence of investments is particularly significant for understanding the presence of contractual hazards, while uncertainty is particularly significant for explaining coordination problems. Thus the combination of specific assets and of consequential uncertainties generates opportunistic behavior and miscoordination, determining the mode of hybrid chosen. If one attribute only is present, the governance leans towards contract-based arrangements. With both attributes together, the governance becomes much more authoritarian. Therefore, *it is the combination of opportunism, or the risk of opportunism, and of miscoordination, or the risk of miscoordination, that determines the governance characterizing hybrid organizations.*²⁷

4 The Governance of Hybrid Organizations

When it comes to the choice of mechanisms for governing a hybrid arrangement, the fundamental question is the one expressed by GOLDBERG [1976a, p. 46]: “What imperfect institutions should govern particular sets of transactions?”²⁸ At least three dimensions are involved in this choice. One has to do with the contractual hazards resulting from interdependent investments and uncertainty and with the provisions to deal with them. The second concerns the protection and distribution over time of the gains generated by the arrangement chosen. A third dimension is related to enforcement issues. For each dimension, contracts are an important part of the story. But they are only a part of it.

4.1 Facing Contractual Hazards

“Contract” is often loosely defined so as to include all forms of agreement, whether they are explicit or not. I stick to a more restrictive concept, following MACNEIL [1974, p. 693], who characterized contracts as “legally binding promises.”

In market economies, legal contracts represent one of the most prominent safeguards to parties. Why are safeguards so important? Because of hazards generated by the combination of asset specificity and uncertainty, namely: (i) bi- or multilateral dependency; (ii) measurement problems; (iii) changing conditions over time; (iv) ill-defined property rights; and, more generally, (v) weaknesses in the insti-

²⁷ PALAY [1984], [1985] already emphasized the role of contractual safeguards, and also the role of managers specialized in monitoring partnerships and in coordinating actions “when the contract was not enforceable in court” (PALAY [1984, p. 273]).

²⁸ Goldberg refers to “institutional arrangements” (NORTH AND DAVIS [1971]), which I interpret as synonymous with “modes of governance.”

tutional environment (WILLIAMSON [1996, p. 14]; see also NORTH [1991]). With parties remaining legally autonomous although mutually dependent for significant decisions, these hazards are particularly challenging. Reducing them through contracts requires them to select partners and to design clauses that can efficiently constrain opportunism.²⁹

Most studies on hybrids substantiate the crucial importance of adequately selecting partners, a process rarely implemented through purely formal rules. Bidding, for example, is used sparsely, mostly to “test the market” once in a while (ECCLES [1981], MÉNARD [1996]) and to discipline partners (KNOEBER [1989], DYER [1997]). In most cases, selection is based on past experience in market relationships, on previous hybrid arrangements, and/or on reputation. As for provisions that can constrain opportunism, they are restricted to a narrow band, since comprehensive binding contracts tend to be far too complex and/or too costly to design and implement. This is well illustrated by BAI AND TAO [2000], who applied a multitask model (HOLMSTROM AND MILGROM [1991]) for analyzing incentives to sell and efforts to develop a brand name in franchise. The resulting contract implies a complexity not observed in the real world. More generally, two well-established observations in franchise systems show limits to contracts. First, the stable presence over time and across sectors of a mix of company-owned units and franchisees suggests that contracting with outsiders does not provide enough information and safeguards. Direct monitoring of some units is necessary to develop a benchmark and to control partners. Second, franchise contracts tend to be very standardized. For example, incentive features are not customized for meeting the various circumstances a franchisee has to deal with (location, overlapping territories, etc.).³⁰ Mechanisms complementary to contracts are therefore needed (see section 4.3).

Notwithstanding their limitation in managing hybrids,³¹ contracts play a crucial role in coordinating partners. Setting aside incentive issues for a moment, I would like to emphasize five ways of doing so (MÉNARD [1996], [1997], [2002]). *First*, there is the decision regarding the number of parties to be included in the arrangement, involving a difficult trade-off between bilateral and multilateral agreements (when the choice exists, of course). The former are easier to monitor but involve higher dependency; the latter make the management of the relationship more complex, but allow comparisons and benchmarking, a powerful tool for constraining opportunism. Most hybrid arrangements are of the second type. One suspects that is because it captures some positive properties of markets.

²⁹ GHOSH AND JOHN [1999] distinguish the opportunism of parties reducing their costs regardless of its effects on total gains for their partners (e.g., shirking) and the opportunism of parties imposing costs on their trading partners in the hope of forcing a more favorable arrangement (e.g., holdup).

³⁰ This contradicts what agency theory would predict. See LAFONTAINE AND SLADE [1997].

³¹ As early as 1963, Macaulay noticed this limited role of contracts in coordinating (MACAULAY [1963]).

Second, duration also represents an important tool. Contracts in hybrid arrangements are either long-term contracts, or short-term contracts automatically renewable. Moreover, there is a close relationship between duration and the intensity of coordination (DYER [1996], [1997]). A consequence of this observation is that contracts and contractual relationships are two different things, with the former embedded in the latter. ECCLES [1981] already noted this. In his sample of 38 home builders, each managing a wide array of contracts with subcontractors, each contract was short-term, related to a specific project, while the average contractual relationship usually exceeded five years, an extreme case being one that had been going on for 37 years. COASE [1988] in the automobile industry, and MÉNARD [1996] and SAUVÉE [2002] in the agri-food sector, provide other examples.

Third, contracts in hybrid arrangements specify requirements. Specifications usually concern quantities and, above all, quality standards. When a contract provides only a framework, specifications are included in detailed annexes [e.g., the “list of specifications” in the label system in France (MÉNARD [1996]), or the detailed requirements linking Carrefour, the world’s second largest distributor (after Wal-Mart), with cattle farmers (GAUCHER [2002]).³² Specifications carry three intertwined goals: they make commitments as observable as possible; they standardize steps in production and/or distribution, thus facilitating quality control; and they develop uniformity in order to reduce the costs of monitoring. These provisions are of particular importance because prices do not play the key role they play for constraining partners in markets, and because the autonomy of partners prevents the use of a hierarchical mode to coordinate.³³

Fourth, adaptation clauses are crucial. They range from clauses requiring the parties to remain in the neighborhood of the original terms of a contract (e.g., index clauses) when transactions involve weakly specified investments and/or low uncertainty, to clauses relying on flexible mechanisms to deal with highly specific transactions and/or consequential uncertainties (e.g., clauses delegating adjustment power to identifiable managers). The importance of adaptation clauses can also be explained by the weak role of prices. This does not mean that prices do not matter. Various methods of pricing can be implemented, from fixed prices to internalized pricing mechanisms. But contracts in hybrid organizations share one main characteristic: prices are usually disconnected from spot markets and determined through negotiation or, when automatic price adjustments are included, through procedures for regulating renegotiations. These adjustments must remain within a “tolerance zone” (WILLIAMSON [1985]). Hence the key role played by appointed negotiators or selected arbitrators endowed with discretionary power. Adjustment clauses also require procedures for revealing information *ex ante*, in order to select partners, and *ex post*, in order to legitimize adaptations.

³² Almost all studies on contracts, particularly econometric tests, ignore annexes to contracts. However, for those familiar with actual contractual relationships, annexes often determine the essence of the agreement.

³³ Although some hierarchical elements can often be found, as we will show in the next subsection.

Fifth, notwithstanding the richness of these clauses, contracts remain incomplete and subject to opportunism. Complementary safeguards are usually needed (HADFIELD [1990]). They can be formal – specified in the contract, as with financial hostages (KLEIN [1980]), or mutual commitments guaranteed by specialized investments (WILLIAMSON [1983]). But they are often informal – based on relation (BRADACH AND ECCLES [1989]; GIBBONS et al. [1994]; BAKER, GIBBONS, AND MURPHY [2002]) or reputation (KREPS AND WILSON [1982], HILL [1995]). This is where the issue of trust enters into the picture. Several authors see trust as a way to secure transactions when contracts are incomplete (ZUCKER [1986], BRADACH AND ECCLES [1989]). Trust would alleviate opportunism and would be made operational through recurrent transactions (which refer to reputation) and through social networks and social similarities among traders (OUCHI [1980] on clans, GREIF [1993] on Maghribi traders). In that respect, it can be argued that trust is a form of calculativeness (AXELROD [1984], WILLIAMSON [1993]), although this has been challenged (BRAITHWAITE AND LEVI [1998], LEVI [2000]).

In isolation, none of these characteristics is entirely specific to hybrids. It is their combination that gives hybrids a typical content, in that it defines a mode of governance oriented towards solving the fundamental problem of interfirm networks: how to economize on contracting costs necessary to insure nonopportunistic behavior among autonomous partners as opposed to the cost of administering a broader range of assets within one single firm (KLEIN, CRAWFORD, AND ALCHIAN [1978]). A striking feature of contracts in hybrid organizations is their standardization. Contracts are not tailored to the specific characteristics or situation of the partners involved. Uniformity prevails because it economizes on transaction costs, i.e., on what it would cost to customize and administer many different contracts, with the room this would make for opportunism. But if contracts provide only a framework, complementary mechanisms are needed for monitoring and managing hybrids.

4.2 *Sharing Quasi Rents*

So far I have set aside incentive issues. But of course firms engage in networks because they expect a quasi rent from their investments in complementary assets (MADHOK AND TALLMAN [1998]). While the resource-based view of hybrids emphasizes rents resulting from the possession of a unique and valuable resource, the transaction-cost theory focuses on the nonredeployability of interdependent investments made in anticipation of benefits that must be shared. A contractual dimension is involved: contracts usually specify rules for distributing the gains expected from joint actions. But the combination of specific assets and significant uncertainty generates potential *ex post* opportunism that most contracts can neither anticipate nor monitor.

This problem lies at the core of the arrangement characterizing hybrid organizations, i.e., the existence of autonomous property rights³⁴ and the difficulty in

³⁴ By which I mean the right to use assets, to change their form or substance, and to appropriate returns (ALCHIAN [1987]).

specifying *ex ante* how residual gains will be shared. This difficulty exists because pooled assets often produce results that are only partially observable, since partners remain independent and may develop other activities simultaneously, making measurement a nontrivial issue. Hence the question: how to avoid postcontractual opportunism when appropriable quasi rents are present? What enforceable rules can be adopted? As emphasized by GHOSH AND JOHN [1999], claiming quasi rents in hybrid organizations is an issue as important as creating them. Several studies suggest that the solution is based on a mix of observable components and discretionary decisions.

Observable components (e.g., increase in sales) allow enforceable contractual clauses. A classical example is franchising, with fixed payments combined with royalty rates, usually based on sales, paid to the franchisor (BRICKLEY [1999], LAFONTAINE AND RAYNAUD [2002]). However, determining the royalty rate is not trivial: too high rates can provide incentive for franchisees to develop sales to the point where it becomes detrimental to efforts required for improving the reputation of the brand name. This can be nicely formalized in a multitask model.³⁵ Another solution is the *equity principle* that prevails in many partnerships. The fishing industry provides examples, both with the allocation of rights to fish among partners (FARRELL AND SCOTCHMER [1988]) and with the distribution of revenues among the owner of the boat, the captain, and the crew (ARRUNADA, GONZALEZ, AND LOPEZ [1996]). An interesting result of this last study is the remarkable stability of sharing rules over centuries, as if a convention had prevailed in order to avoid conflicts. A third solution is that of a leading firm tightening the network through indirect redistribution of gains, e.g., favorable credit terms to followers that meet certain predetermined goals (BROWN [1984]).

However, nonobservable components are almost unavoidable and most of the time predominant, blurring the rights of residual claimants. Nonobservabilities exist even with simple criteria such as sales, e.g., when sales depend simultaneously on the quality of services provided by the franchisees and on the advertising efforts made by the franchisor. More generally, when there are measurement problems with regard to the size of the rent and the contributions of the parties, or when measures are not verifiable *ex post* or can be verified only at very high cost, the distributional issue is nontrivial (BARZEL [1989], GHOSH AND JOHN [1999]). Discretionary decisions must be made, requiring organizational solutions (e.g., a committee in charge of distributing part of the quasi rent, as in SAUVÉE [2002]). Unfortunately, we still know very little about these organizational procedures.

Three rent-regulating mechanisms have received some attention in the literature on hybrids, which I briefly review here, from the least to the most formal. One is *reputation*. Hybrids are characterized by repeated transactions among partners. Frequent transactions paired with renewable contracts provide the possibility of withdrawing from future business if “fair play” in sharing gains generated by

³⁵ The two-task model developed by BAI AND TAO [2000] can be interpreted as an exploration of this problem.

mutual efforts is not respected. Credible commitments and credible threats thus reinforce each other. A second possibility is *negotiation devices*, often embodied in well-identified arbitrators responsible for determining the distribution of residual gains (PALAY [1985]). In the label system implemented in the French poultry industry, large groups of producers delegate representatives to negotiate prices *ex ante* and the distribution of quasi rents *ex post* with transformers and/or retailers (MÉNARD [1996]). SAUVÉE [2000], [2002] has described a similar arrangement between producers and distributors of high-quality tomatoes. A third mechanism is the creation of a *formal authority*, a specific entity composed of *delegates* who determine how to share gains from cooperation, as in joint ventures (OXLEY [1997]). SOLER AND VALCESCHINI [1997] showed how a large group of producers contracting with a major company specializing in canned vegetables of high quality coordinate through a “joint committee” that meets periodically to adjust the distribution of quasi rents. Several studies suggest that the higher is the uncertainty on the output and/or on the process, the more formal is the mechanism adopted for monitoring the agreement (MÉNARD [1996], GHOSH AND JOHN [1999], OXLEY [1999], SAUVÉE [2002]).

Notwithstanding these difficulties in determining rules for sharing quasi rents, hybrid organizations exist, and many of them grow steadily. Why? Three main reasons should be emphasized. One is that even if the rules adopted are debatable or sources of conflicts, interdependence still benefits even the less favored partners. Second, quasi rents are continually challenged because of technological changes, of the diffusion of processes and methods adopted by successful hybrids, and of changes in the environment, so that there are powerful incentives to cooperate in order to temper uncertainty. Third, hybrids maintain coherence through noncontractual modes of coordination that include coercion. I now turn to this aspect.

4.3 A Well-Structured Private Order

A fundamental characteristic of hybrids is that mutual dependence requires continuity in the relationship. In a world of incomplete contracts, a way to attain this goal and make the arrangement stable is by creating specific mechanisms designed for coordinating activities, organizing transactions, and solving disputes. These mechanisms are internal to the arrangement, although they can find legitimacy and support in their institutional environment.

One well-known mechanism is the embedment of *restrictive provisions* in contracts. Restrictions delineate the domain of action of partners, limiting their autonomy and identifying areas in which collective decisions must prevail. There is an abundant literature on vertical restrictions (for a survey see REY [1994]; also REY AND TIROLE [1986]), much less on horizontal restrictions. The emphasis is usually on the consequences of restrictions on prices and how they can distort competition. The message is clearly intended to alert competition authorities. This interpretation misses what is often the main goal of these provisions: to facilitate coordination. Williamson made the point a long time ago, in his discussion of the Schwinn case (WILLIAMSON [1985, pp. 183–189]). It has been largely substantiated,

particularly when the quality of goods or services traded is a key issue. Franchising is a well-known case (LAFONTAINE [1993], BRICKLEY [1999]). Supportive are also numerous studies on supply-chain systems, particularly in the agri-food sector, in which traceability and quality control have become increasingly important issues (MÉNARD [1996]; FEARNE [1998]; MAZÉ [2001]; RAYNAUD, SAUVÉE, AND VALCESCHINI [2002]). Notwithstanding these contributions, the positive role of contractual restrictions as a coordinating device is underexplored. But what we know suggests that they remain a limited tool. First, they generate conflicts with competition authorities (JUNKER [2001], MÉNARD [2002]). Second, their allocation effects are difficult to evaluate, so that partners tend to rely on other mechanisms (Goldberg pointed this out as early as 1976).

In several papers, I have shown the presence of *private governments* (or “authorities” as distinct from “hierarchies”) as a core element in the architecture of hybrid organizations (MÉNARD [1994], [1996], [1997], [2002]). One major characteristic of these devices is that they pair the autonomy of partners with the transfer of subclasses of decisions to a distinct entity in charge of coordinating their action. The presence of hierarchical elements in contractual agreements has been noted before (STINCHCOMBE [1985], [1990]). But the emphasis here is on partners monitoring their network and controlling their actions and decisions through specific and identifiable organizational devices that they have intentionally designed. The authority in the hands of these private governments involves both *intentionality* and *mutuality*, maintaining some symmetry among participants. That is clearly so with joint ventures, but also holds when coordination relies on a mutually agreed staff or on delegates.

Converging empirical studies suggest that the degree of centralization of these private governments depends on the degree of mutual dependence among partners on one hand, and on the complexity and turbulence of the environment in which a hybrid operates on the other hand (DWYER AND OH [1988], MÉNARD [1996], PARK [1996]). For example, RAYNAUD [1997] studied a group of millers who developed a brand name for high-quality bread in France in the 1980s. The millers select wheat in order to produce high-quality flour, which they dispatch to bakers, who operate as franchisees. Some millers are competing against each other, e.g., they cover the same area and want to attract as many bakers as possible. But they all agree on identical quality standards. To prevent opportunistic behavior, complex internal governance has been established. The implementation of standards, quality control, and the monitoring of contracts are delegated to a specific entity created by the millers and that owns the brand name. In order to solve disputes, the millers have also created an internal court, with three delegates operating as private judges.

SAUVÉE [2002] has exhibited a somewhat similar pattern in a different type of hybrid. In this case, a private firm has created a brand name for canned vegetables of high quality. Farmers operating under contracts provide the inputs. So far, this is quite standard. The interesting point is that because of its success the firm rapidly faced high transaction costs related to the monitoring of thousands of contracts and farmers. A complex organization was developed to solve the problem. Producers are

now grouped in several organizations, with representatives appointed for negotiating contracts and adjustments with the firm. In order to solve conflicts and facilitate rapid adaptation to changing conditions, a joint committee has been created with four delegates from the producers' organizations and two from the firm. This committee plays an important role in deciding and implementing changes, thus filling in the blanks of the contracts, organizing transactions, and negotiating the distribution of quasi rents.

Several recent studies exhibit similar arrangements.³⁶ In certain respects, they are close to how merchant laws worked (MILGROM, NORTH, AND WEINGAST [1989]). They give substance to the idea that hybrid organizations have architecture of their own, distinct from markets and from hierarchies.

The entities in which these private governments are embedded are more or less formal and possess various amounts of power. At one end of the spectrum, the closest to market arrangements, are hybrid forms relying primarily on trust. In these hybrids, decisions are decentralized, and loose coordination is implemented through mutual influence and reciprocity. From a calculative perspective, trust can maintain cohesion and guarantee some coordination because it is rooted in the need to maintain continuity in the relationship. We are not talking about a purely informal relationship here. Trust can operate as a (weak) form of government because it is based on specific arrangements and performed by specific actors. A good illustration is provided by the specialized personnel in charge of monitoring agreements among partners in the rail freight sector (PALAY [1985]³⁷). At the other end of the spectrum, hybrid arrangements monitored by a formal government are pretty close to those of an integrated firm. Although partners remain independent and may even compete in segments of their activities, a significant subset of their decisions is coordinated through a quasi-autonomous entity, functioning as a private bureau with some attributes of a hierarchy. This is well illustrated by joint ventures or by the millers' case described above. Between these polar cases are forms of authority based on close relationships or leadership. *Relational networks* (OUCHI [1980]; BEN-PORATH [1980]; BAKER, GIBBONS, AND MURPHY [2002]) have been extensively analyzed by sociologists and in organization studies (POWELL [1990], HAKANSSON AND JOHANSON [1993], GRANDORI AND SODA [1995]). This type of hybrids accepts a tighter coordination than trust, with formal rules and conventions framing relationships among agents and restraining the risk of opportunism. In such arrangements, coordination functions very much as in a club, with control over partners based on the history of the arrangement, on acknowledged complementarities of competence, and on social "connivance" (POWELL, KOPUT, AND SMITH-DOERR [1996]). Last, hybrid arrangements coordinated by a leader differ from relational networks in that

³⁶ For a recent and extensive study in the agri-food sector in seven European countries, see RAYNAUD, SAUVÉE, AND VALCESCHINI [2002].

³⁷ In this case, the Interstate Commerce Act prohibited coordination through contracts, so that parties relied on a network of managers that PALAY [1985, p. 164] described as "high premium personnel with long memories, sound hearts, and a penchant for looking both ways before crossing the street."

partners are more tightly monitored. Subcontracting provides good illustrations, particularly when it involves long-term contractual relationships (ECCLES [1981]; DYER [1996], [1997]). Leadership emerges as a mode of coordination among partners transacting frequently when a firm establishes its authority over these partners, either because it holds specific competences or because it occupies a key position in the sequence of transactions. But this type of arrangements maintains some symmetry among holders of property rights and preserves, at least formally, some independence in their decision power. This type of arrangement has been identified and analyzed mostly in high-technology sectors (PISANO [1990], POWELL [1996]).

4.4 *The Diversity of Hybrid Organizations Revisited*

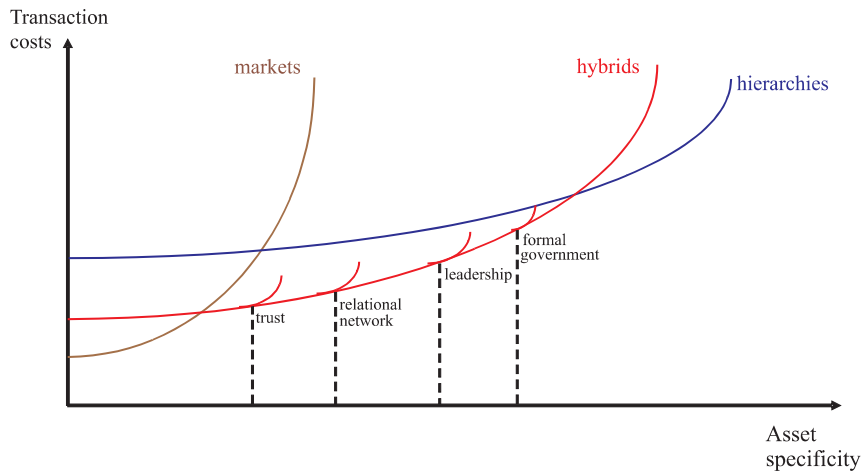
All the characteristics described above converge and support the central proposition of this paper, which is that hybrid organizations form a specific class of governance structures. I understand governance structures as “a shorthand expression for the institutional framework in which contracts are initiated, negotiated, monitored, adapted, enforced, and terminated” (PALAY [1984, p. 265]³⁸). Besides the role of markets and hierarchies, a growing body of literature substantiates the idea that specific arrangements combining contracts and administrative entities develop in order to better coordinate partners who can gain from mutual dependence but need to control the risks of opportunism.

The impressive set of studies on hybrids referenced so far helps to go a step further. It supports the idea that the diversity of hybrids and the decision by partners to adopt a specific form among this diversity are not random decisions. These decisions obey the logic of transaction costs: in a competitive environment, the 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 trade-off between markets and hierarchies and as illustrated by the less developed body of literature on hybrids, the leading property of 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. The framework proposed by WILLIAMSON [1991], correlating asset specificity and transaction costs to explain the trade-offs among markets, hybrids, and hierarchies, can then be extended, providing a useful tool for integrating and ordering the different forms of hybrids. Figure 1 relates the modes of government of hybrids described in this section to the characteristics of the transactions described in section 3.

This is a simplified picture that requires at least two important qualifications. One is that uncertainty should be introduced explicitly into the model. Here, it is tacitly subsumed under the effect it has in relation to the specificity of assets involved. But it is clearly a distinct variable that would deserve to be explored in

³⁸ The more recent definition, proposed by WILLIAMSON [1996, p. 378], of a governance structure as “the institutional matrix in which the integrity of the transaction is decided” is congruent.

Figure 1
A Typology of Hybrid Organizations



more detail and introduced more explicitly in order to better understand which form of hybrid organization is chosen. The second qualification has to do with a puzzling and challenging observation: in many cases, different forms of hybrid organizations with diverse levels of integration coexist (MÉNARD [1996],³⁹ BRADACH [1997]). Part of this puzzle can be explained by path dependence: history matters when it comes to explaining the modes of governance adopted. But this is only part of the story. More needs to be explored about this paradox, both on the theoretical side and in empirical studies.

5 Conclusion

In this paper, I have emphasized the significant progress made in our understanding of the nature and characteristics of hybrid organizations. On the theoretical side, the economics of hybrid organizations provides a unique opportunity to investigate a set of problems neglected in the standard literature on organizations, namely: the mechanisms of enforcement, the different forms and role of authority in coordinating autonomous partners, and the decision processes at work in these arrangements as well as the institutional structures within which these processes operate. On the

³⁹ In the study of the French label system, I exhibited three different arrangements: a loose network close to market arrangements, a tightly coordinated cooperative system, and a quasi-integrated group. The three arrangements have competed for over twenty years and have taken advantage of an expanding demand for high-quality products to generate quasi rents while maintaining their market shares.

empirical side, beyond the voluminous set of tests of the transaction-cost explanation to the trade-off among the basic governance structures (markets, hierarchies, and hybrids), there is a growing literature on how the attributes of transactions might also determine the type of hybrid arrangement adopted, the contractual provisions implemented, the incentives rules selected, and the mechanisms developed for solving disputes.

At the same time, the multiplication of studies in economics, managerial sciences, marketing, and sociology has expanded the set of issues to explore. One concerns the durable *coexistence of different arrangements* operating in the same sector and competing against each other, with homogeneous products, similar technologies, and very comparable assets. A second and partially related issue has to do with the *performance* of the different hybrid arrangements, particularly when several forms are competing. Third, the *typology* of hybrid forms is not well established yet. Typologies matter in science because they require criteria grounded in theory, thus helping to refine or revise the latter. A fourth important and difficult issue is the explanation of the *dynamics of hybrid forms*, i.e., their stability over time and the forces pushing towards change. Fifth, we need to know much better how the *institutional environment* influences the choice of a specific mode of hybrid and its characteristics. Last, hybrid organizations represent a challenge to *competition policies* built on the simplistic trade-off between firms and markets. How these policies should be transformed remains an open question. Steps in exploring these issues have been taken recently, some of which I have mentioned here. But a lot remains to be done.

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