Abstract. Economists have traditionally repudiated power from the theorization of the firm, shedding light on the amorphous and tautological character of this concept. On the contrary, this theoretical article argues that economists have to revisit the theory of the firm from a power perspective. First of all, an original theoretical framework of power relationships, which takes into account organization theory, is proposed in order to fill the conceptual vacuum left by the theorists of the firm. Then, it is argued that power represents the methodological key needed by economists to analyze the emergence of intra-firm cooperation and collective social identity. Lastly, the focus is on the analysis of inter-firm cooperation to put forward the cohesive role of power in the genesis of the network-firm.
INTRODUCTION

Even though it is a vehicle of freedom, power is often manifested by deceptive actions and is appreciated as the result of the worst vices of mankind. Ruse and trickery are traditionally used as a spring to get and keep power. These utilitarian considerations make clear the economists’ aversion to power, which is viewed as a poor, vague and unusable concept (e.g., Williamson 1996). Power is used to be treated by economists as an economically and socially polymorphous concept. This critical approach to power in economics is particularly based on its supposed intrinsically tautological character. In other words, it is because power can explain everything that it explains nothing. Power is devoid of conceptual rigor. However, much of economists share the opinion of Robertson (1923, p. 85) who considers that we find, in each economy, “islands of conscious power in this ocean of unconscious cooperation like lumps of butter coagulating in a pail of buttermilk”. Coase (1937) sees in these islands the genesis of firms to which he ascribes, from the institutionalization of power, a coordinating role of economic transactions. The legitimation of power results in the legal principle of employment contract that confers to the coordinator-entrepreneur a regulating authority.

Departing from the 1937 seminal article of Coase, incomplete contracts theories shed light on the role of authority – as a power institutionalized by law – to manage contract failures. Contractual incompleteness is the base of power. It is because contracts are contingent on uncertainty that power exists – more exactly that authority and negotiation power coexist. Furthermore, if these economic theories argue that the firm is an institution coordinated by a formal authority, another part of the contractual paradigm unseats power from the economic analysis and considers that the firm is simply an extension of market (e.g., Alchian and Demsetz 1972). Neo-institutionalist economists reduce power either to control on assets conferred by property rights (Grossman and Hart 1986) or to employment contract (Williamson 1975) and so to authority. But can power be reduced to authority? In what power differs from authority?

As a socio-economic fact, it does not matter if power is moral or immoral. Power can be resurrected in economics under the condition that theorists reconsider the positive relation between
power and efficiency, as Rajan and Zingales (1998, 2000, 2001) do. This does not mean denying power asymmetries, conflicts or abuses that punctuate the evolution of industrial capitalism but this means proposing an analytical definition of power regardless of contracts and property rights. In a whole system, power is defined as the ability of an entity A – individual or group – to structure and constrain the actions of another entity B, from formal as well as informal mechanisms. Henceforth, this article proposes to investigate, from a power perspective, one of the questions that constitute the theory of the firm: the emergence of intra and inter-firm cooperation. Cooperation is the social organization of the firm; it refers both to the ability to act for a common purpose and to the cohesion necessary to achieve this collective purpose. But is power a source of cohesion or of decohesion? From this question, the paper aims to revisit the theory of the firm. To do this, the article is organized in three theoretical sections.

The aim of the first section is to propose an original theoretical framework of power relationships. The position of the dominant economic theories of the firm on power is clarified to both understand the arguments used by economists to reject power from economic models and to answer the question of why power matters. This reveals that we should study the theoretical bases of power by taking into account organization theory. This one fills in the conceptual weaknesses of economists thanks to the inclusion of resource dependence and network effects in the structuration of power.

Barnard (1938) defines organizations as formal systems of economic actors who cooperate in order to achieve a collective purpose. For all that, can cooperation be perfectly formalized and instituted? The second section shows the role of power in the emergence of intra-firm cooperation. It is argued that formal authority, de jure power and de facto power – resulting respectively from employment contract, property rights of physical assets and resource dependence – coexist in each firm. Because

---

1 The paper focuses on contractual theories of the firm because they constitute the mainstream. There are some other alternative economic theories of the firm that give crucial insights for the organizational and productive dimension of the firm (see Langlois, Yu, and Robertson 2003), but they don’t really deal with the notion of power. That’s why these theories are only mentioned in passim.
power is plural, it is a strong factor of relational cohesion, which contributes to the construction of a collective social identity.

In a last section, the article deals with the emergence of inter-firm cooperation to discern the major differences compared to intra-firm cooperation. If the distribution of power is the main factor of cohesion between legally autonomous entities, no power is, however, institutionalized. Consequently, no authority coordinates inter-firm economic relationships. *A fortiori*, power is crucial in the formation and the sustainability of inter-firm networks (Sacchetti and Sugden 2003). Specific attention is then given to the impact of power on the coordination of the network-firm, which unifies some legally distinct firms into a single productive system. Briefly, a conclusion on the nature of the firm is offered.

**A THEORETICAL ANALYSIS OF POWER**

Economic science has the mission of allocating resources to maximize social welfare. Theorists of the firm have concomitantly used contracts and property rights to carry out this mission, leaving no place for power. Yet, everything cannot be the object of contracts or property rights in the firm. That’s why power seems to be a real methodological alternative. Power is, by essence, latent; it is always present in interpersonal relationships. If the theory of the firm casts doubt on the theoretical scope of power, organization theory has otherwise shown the utility of power concept. These two theories are indeed very complementary.

**Power in the dominant theories of the firm**

The dominant theories of the firm consider that contract is the more efficient mechanism for coordinating economic relationships. As a rule, the *ex ante* writing of a contract must result in the *ex post* elimination of any limiting power – of any contractual protest. For these theories, contract is the pertinent unit of analysis. But the ubiquity of contract is often the consequence of the omnipresence of power. More exactly, if power is rejected from the theorization of the firm, it is because an entity A can easily contract with an entity B thanks to a strong legal enforceability. Nevertheless, a distinction
must be made in the contractual paradigm between the theories of incomplete contracts and the theory of the nexus of explicit contracts.

The theory of the nexus of explicit contracts refers to the respective works of Alchian and Demsetz (1972), Jensen and Meckling (1976), Fama (1980) and Cheung (1983). They define the firm as a contractual structure that conceals the features of an efficient market. This theory denies the importance of power relationships that cannot exist in a market-coordinated society. Alchian and Demsetz (1972, p. 111) argue that the firm “has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting between any two people”. Authority is just an illusion. Contract supplants power even if this relation is not univocal. Indeed, contract does not only conceal coordinating properties but is also contingent on uncertainty and so incomplete. Everything is not predictable and contractible, and economists have to manage uncertainty. This is the object of incomplete contracts theories that are composed from two distinct approaches to the firm: the transaction cost theory (Coase 1937; Williamson 1975, 1985) and the modern theory of property rights (Grossman and Hart 1986; Hart and Moore 1990; Hart 1995).

If these two theories diverge as for the nature of contractual incompleteness – the *ex ante* bounded rationality of individuals for the transaction cost theory and the *ex post* difficulty to observe outcomes for the modern theory of property rights – they have the same view about the management of contractual incompleteness. In the presence of such contingencies, authority must take over from contract and play the role of an institution. Authority is the essence of firms. In a world of incomplete contracts subject to renegotiation later on, the firm as an institution takes on importance (Williamson 1985). Authority completes contracts when they cannot be enforceable by the law. But these two theories propose two complementary answers to the question of the nature of authority.

For Williamson – as for Arrow (1974) – hierarchy is a source of efficiency for all participants owing to its coordinating role of economic activities. It is the law that, through contract employment, confers authority by instituting the employer-employee subordination. This subordination is fully voluntary, accepted and legitimized by the subordinate. Authority is supposed to be consensual in
transaction cost economics. The modern theory of property rights does not link directly authority with contract employment but proposes a theory of formal power through the concept of residual rights of control. These ones are non-contractible rights provided by private property on physical assets that confer control on them and, consequently, the right to exclude individuals from access to the productive assets of the firm. Since human capital owners need non-human assets in order to be productive and to develop their specific know-how, “control over a physical asset in this line can lead indirectly to control over human assets” (Hart and Moore 1990, p. 1121). Property rights would confer the power to exert control – a certain authority. The firm is defined as a collection of owned assets that does not include employees. The main conclusion of this theory is hence that “it may be efficient to give ownership of assets (power) to agents who are indispensable (owners) even though they may not make important investment or effort decisions” (ibid., p. 1124).

Incomplete contracts theories share the idea that authority is the main ontological difference between market and firm. In this sense, they are opposed to the theory of the nexus of explicit contracts. But only the modern theory of property rights identifies a form of power through market power. Power is thus strictly limited to a role of market that takes root in contractual renegotiation. Bargaining power is exclusively dedicated to palliate contractual failures when contingencies occur (Hart 1995). If contracts were complete, power would not exist. From this point, transaction cost economics clearly casts doubt on the theoretical scope of power concept.

The position of Williamson concerning power is astonishing regarding the behavioral assumptions he advocates, namely the bounded rationality and the opportunism of economic agents. Arguably, these hypotheses can theoretically lead to potential conflicts and so to power relationships. Indeed, Williamson observes a positive relation between the degree of specificity of assets and the opportunism of individuals. For example, the specificity of human assets can be used by employees in the negotiation process. In other words, there is potentially a place for power in the Williamson’s theoretical framework. The efficiency of a firm is not secured in time insofar as the firm does not protect from employees’ opportunism. For all that, Williamson does not acknowledge the important role of power in the analysis of the firm. Although Williamson (1985) takes into account the informal
and relational elements of the firm, power has finally no place in his analysis. Indeed, Williamson and Ouchi (1983) assign power a role as soon as efficiency is sacrificed in support of personal interests – as soon as market fails. While authority serves efficiency, power is, according to these theories, the manifestation of inefficiency. Does this mean that just the institutionalization of power – that would become authority – is efficient and matters in economics?

**Why does power matter?**

To the question of the relation between power and efficiency, the answer of economists is not unanimous. Some of them do not consider power as the result of market failures but argue that power contributes to the productive efficiency of economic organizations (Rajan and Zingales 1998; Palermo 2000). Power is an economic variable insofar as it generates costs to create value. Power is essential for the rational intelligence of economic systems. Thus, according to Galbraith (1979), it is inaccurate to isolate economics from the real world by eluding power and by refusing to consider it as a political science. Power has a real value because it coordinates *ex ante* economic relationships both in the boundaries of the firm and in competitive markets devoid of authority (Bowles and Gintis 1994).

It is necessary to consider individuals as actors in economic relationships to give power a strong analytical scope. In this view, the corollary of power is the freedom of economic actors. In Foucauldian philosophy – where “a new economy of power relations” is claimed (Foucault 1982, p. 779) – “the relationship of power can be the result of a prior or permanent consent, but it is not by nature the manifestation of a consensus” (*ibid*, p. 788). It is precisely because power is never the manifestation of a consensus that power exists. But power always implies intentional action. More closely, power is the capacity of an actor A to produce intentional and predictable effects on another actor B. Therefore, power is not an attribute of the actor and has no existence in itself.

To introduce power in economics, it is suitable to endorse the definition proposed by Arendt (1969, p. 44) as “the human ability not just to act but to act in concert” because “power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps
together”. Power exists only dependently on action and is manifested only through socioeconomic relationships. Power is by definition relational. That’s why power can be used as “an autonomous interpretative dimension” in the theory of the firm (Dosi 1995, p. 6). Power matters in economics because it is a strong coordinating mechanism to regulate economic activities. Put it differently, power matters in economics because it enables to suitably allocate scarce resources. In this view, power is a source of efficiency. Orthodox economists reject the notion of power because they first consider the relationships between things (relationships among inputs and outputs), not the interpersonal relationships. Consequently, they cannot appreciate the role of power on the creation and the share of the cooperative rent. But there is an important question to be raised: how can power be implemented?

Power is rarely deemed irrelevant. Rather, the issue is whether power can be operationalized. In economics, power has often been considered as “non-operational”, which explains why it would not be interesting to include it in the firm’s analysis. This is notably the point of view of Williamson (1985, p. 237-238) who argues that “the main problem with power is that the concept is so poorly defined that power can be and is invoked to explain virtually anything”. Hence Williamson agrees with March (1966, p. 70) who thinks that “power is a disappointing concept”. But if it is true that power intrinsically has a large application scope, it can be at the same time suitably defined to be used in economics. Besides, is a largely explanatory concept necessarily a tautological one? What is sure is that power is imbued with subjectivity and perceptions, and so difficult to be apprehended. But this conceptual problem is not specific to power, even though power brings into focus this very issue. It does not seem trivial and shallow to propose to reconsider the place of power in economics because one of the crucial problems concerning power is indeed conceptualization.

Another important issue is how to measure power. It is evident that power cannot be measured in the same way that one measures production costs or proves a theorem. For Salancik and Pfeffer (1974, p. 457), “social power is a concept with more intuitive appeal than empirical precision”. Even though it can include quantitative and experimental research, power cannot be precisely quantifiable. But it can easily be qualitatively assessed and observed. Power can be assessed considering the dynamic of the whole system but cannot be individually measured. The observability and measurement of power
are also positively related to its degree of asymmetry. Capitalism is by essence a power system of
which manifestations are not necessarily observable. The more the relations of power are
asymmetrical, the more we can observe power. Inversely, the more distributed the power, the less
observable it becomes. Finally, the measurement problem is closely linked to a conceptual problem.
That’s why it is important to clarify the concept to introduce power in social research (see next
section). Power is not a tautological concept but can be “equated to causality” (Blais 1974, p. 46).
According to Simon (1967, p. 5), “for the assertion A has power over B we can substitute the assertion
A’s behavior causes B’s behavior”. It is precisely because power explains different organizational
behaviors that power matters and must be introduced in the economics of the firm. But it is needed to
find some organizational regularities to assess and implement the concept of power.

Three organizational regularities lead to power relations within an organization: (1) the sharing of
an identified common purpose, (2) the resource dependence and (3) the long-term commitments.
These regularities can be distinguished and observed in the firm but they do not directly result from
the formal and contractual organization of the firm. To argue that power is an important conceptual
key is to admit a salient part of the firm, namely its informal organization. Power is a constituent
property of the informal organization of the firm. Hence the farsighted vision of contract proposed by
Williamson (1985) is not sufficient to make extra-contractual power vanish. Power is capable of
explaining some important organizational phenomenon such as cooperation, cohesion, collective
identity or motivations for which contracts and property rights vanish. Moreover, these organizational
regularities have been largely explained by organization theory, notably from a power perspective.

Arguably, power gives some insights on the nature of the firm and can explain “a variety of real-
world institutional arrangement” (Rajan and Zingales 1998, p. 424). As a result, policy implications
are easily found regarding the governance and the law and economics of the modern firm notably in
terms of corporate social responsibility, legal liability, legal evasion, corporate torts or employees’
rights (see Chassagnon, 2008). Nevertheless, the dominant theories of the firm do not seem to have
conceptual tools necessary to appreciate the crucial role of power on the optimal allocation of intra and
inter-firm resources. Organization theory, which is the result of a scientific interdisciplinarity, is able to provide the theory of the firm some relevant research perspectives to introduce power with contract and ownership in the economic analysis of the firm.

**The contribution of organization theory to power concept**

Since no economic organization is strictly formal – i.e. regulated by instituted rules of law –, power is present in all economic organizations. It is impossible to study organizational behaviors without investigating the relationships of power that emerge in organizations (Clegg, Courpasson, and Phillips 2006). But power is often confused with other concepts as force (coercion), influence, domination, authority, control; which tends to present power as a shifty concept. This explains why it is easy to recognize but tricky to define power (Pfeffer 1981). Lawler (1992) concludes that the process of power is composed by distinct moments. However, each term can be discerned in order to give power concept its singularity (Bierstedt 1950). A conceptual clarification is needed for analyzing power in organizations. Power is a latent and potential capacity that must be understood in a narrow sense. Power is affirmed in close interpersonal relationships under the pretence of a more large scale called

---

2 Resource and competence-based-views of the firm (Penrose 1959; Nelson and Winter 1982; Wernerfelt 1984) shed light on the importance of specific competences and critical resources in defining the nature of the firm. But they do not explain how the firm’s resources structure power relationships within it.

3 In other words, the more formal the organization, the weaker the power.

4 Bierstedt (1950) proposes to distinguish power from six other concepts that are often affiliated to it: (1) power differs from force that is manifest power; (2) power differs from dominance that is not a sociological but a psychological concept – a personal trait; (3) power differs from rights and privileges that are only one of the perquisites of power but not power itself; (4) power differs from prestige that is a possible consequence of power rather than a determinant of it or a component of it; (5) power differs from influence that does not require it and power may dispense with influence; (6) power differs from authority that is an institutionalized power. Furthermore, power must be dissociated from control that is just a possible mode for authority to be manifested. And power is only a capacity to control others (Wrong 1968).
“puissance”, which bypasses the question of *quis custodiet ipsos custodies*. Power can so be used in the study of organizational behaviors.

Organization theory – that is at the intersection of economics, sociology and management of organizations – apprehends the firm as a political system (March 1962). The political dimension binds individuals to the group. It is an important contribution of behaviorist theories of organization whose position concerning power is more ambivalent. Indeed, behaviorist theorists focus on the conditions for integrating power – notably as regards with the analysis of decision-making process – but they concomitantly reduce power to either a single hierarchical decision authority (Simon 1951) or to multiple decisional authorities coming from the formation of multiple coalitions (Cyert and March 1963). Yet understanding power is understanding why and how an entity A has power over an entity B “to the extend that he can get B to do something that B would not otherwise do” (Dahl 1957, p. 290). The starting point of this argument is social exchange (Blau 1964). It is from social exchange that we can observe the intrinsic origin of power: resource dependence, because power is based on mutual interdependence.

Organization theory analyzes the relationships of power in a relational perspective from the dependence of an actor vis-à-vis another and shows, both theoretically and empirically, that the more the alternatives of an actor increase (the larger available resources), the weaker the dependence of this actor on another’s resources (Cook and Emerson 1978). The scarcity of resources and the position in an exchange network determine the relative power of an individual. The power differences between two actors are the consequence of their positional differences in a given social network (Markovsky, Willer, and Pratton 1988; Skvoretz and Willer 1993). In an organization, the distribution of power is based on the pattern of interdependencies amongst actors’ resources and activities. Thorelli (1986) concludes that power is the central concept in network analysis and the more typical phenomenon is interdependence.

In general terms, the knowledge of a social system is, in its own right, an internal base of power (Krackhardt 1990). Jacobs (1974) argues that the essentiality of resources is the main determinant of
power-dependence relations within and between organizations. For Pfeffer and Salancik (1978), the more critical the resources, the stronger the power. This theory of power based on resource dependence seems at a first sight to echo back to the hold-up theory (e.g., Klein, Crawford, and Alchian 1978)\(^5\) advocated by transaction cost economics. But this conclusion is hasty because relational cohesion and informal commitment take the place of opportunism and contractual arrangement. Organization theory considers indeed that trust and reputation, which emerge from power relationships, produce social commitments which are more efficient than contracts in the allocation of critical resources (Malhotra and Murnighan 2002). That’s why the theory of power based on resource dependence and network exchanges can be suitably used for analyzing complex organizational phenomena such as collective cohesion (Cook, Cheshire, and Gerbasi 2006). Emerson (1962) reveals a positive relation between mutual interdependence and organizational cohesion. Organization theory lays the foundations of a theory of power based on cohesion. Therefore, a strong difference between organization theory and transaction cost economics is lied in the theoretical scope they give to power. Efficiency considerations explain the poor attention Williamson gives to resource dependency theory. It appears evident in his 1990 article, when he affirms that “many dependency issues can be addressed in efficiency terms, whereupon power considerations largely vanish” (Williamson 1990, p. 182).

If power is a social process that promotes collective cohesion, it is because power cannot be reduced to a zero sum game. Indeed, contrary to domination – which is exercised by an entity A at the expense of an entity B –, power is a transformative and enabling one (see Scott 2001). It is not because the power of an actor increases that the power of another actor decreases. Actors can simultaneously

\(^5\) When some economic agents conclude a contract for specific investments, a situation of strong economic dependence emerges. Since economic agents are supposed to be rationally limited and opportunist, some of them can use selfishly lock-in to generate a quasi-rent. The risk of defection, which comes from opportunism, leads to a loss of efficiency because contractors, who are potentially inclined to hold-up, can choose to not invest in specific assets. Thus, they avoid to be locked into an economic relationship and to bear sunk costs that would result from the non-redeployability of specific assets.
win or lose. Indeed, even if power is by essence asymmetrical, it is never unilateral (Thompson 1967). Crozier (1973) defines power in an institutional perspective both as a non-transitive and reciprocal relation by nature imbalanced and as a power balance where one of the actors can win more than others, but also where nobody is powerless. More exactly, Crozier considers that, in the organization, power is defined as the ability of an entity A to get a favorable situation on an entity B during the negotiation process. Power results from the discretionary scope economic actors have on each other. Each actor has a power, and the more an actor controls the sources of uncertainty, the greater his power.

Power is a central mechanism in the management of human behavior; it is at the heart of all social relations. Consequently, it is no longer the market transaction but the relation – close to a Commonsian transaction (see Commons 1931) – that should be used as the pertinent unit of analysis. This relational approach to power grants an important role to affects in the coordination of economic activities (Lawler and Yoon 1996; Lawler 2001). As a consequence, the more balanced the power (the less manifested the power), the greater the cohesion. Otherwise, Cook and Gillmore (1984) show experimentally that the organization could be disintegrated in different coalitions and dissolved. The distribution of power in an identified social system creates a durable political order that is a source of cooperation (Parsons 1969). It is through the exploitation of power that the organization becomes a durable and legitimate entity (see Meyer and Rowan 1977). In organizations, power symbolizes the efficiency of collective action.

In conclusion, power gives some elements of answers to the questions of the internal organization (intra-firm cooperation) and the boundaries (inter-firm cooperation) of the firm; questions at which neither contract nor ownership have brought satisfactory answers. Hence, economists have to take into account the analysis of power based on resource dependence proposed by organization theory.

---

6 In his 1975 book, Williamson argues that the organizational atmosphere allows individuals to have a satisfying exchange relation. In this sense, Williamson is close to organization theory.
economic theory of the firm developed by Rajan and Zingales (1998, 2000, 2001), which is developed in the next section, is consistent with this view.

POWER AND INTRA-FIRM COOPERATION

Cooperation is the essence of economic organization. The question of the emergence of cooperation is more and more important in an economy where the main competitive resource is specific human capital. But too little attention was given to institutional arrangements that might be made to protect firm-specific human capital (Blair 1999). Indeed, the theorists of the firm often reduce this question to the \textit{ad hoc} principle of the voluntary acceptance of subordination codified in an employment contract. Authority is thus the main source of cooperation. But authority is not an exclusive factor of intra-firm cooperation. Authority coexists with power that is a crucial factor of collective cohesion and identification.

\textbf{From authority to power}

A firm exists and becomes durable if the individual entities who form it – the employees – cooperate together to achieve a common purpose. Since the abolition of slavery, human capital is inalienable. In other words, the ownership of a man by a man is unthinkable. Cooperation could not be forced or instituted. However, employment contract gives formally existence and force to the employer-employee subordination. Selznick (1948) defines organizations – in the spirit of Barnard – as cooperative systems composed of individuals who form a whole thanks to a formal system of coordination which generates an authority. Therefore, the root of employment contract is not power but authority. Arguably, authority is hallmarked by “unquestioning recognition by those who are asked to obey; neither coercion nor persuasion is needed” (Arendt 1969, p. 45). In a Weberian view, what distinguishes the power exercise in a primary society from the power exercise in a modern society is the passage of an authority based on a charismatic and patrimonial structure to an authority based on a rational administrative structure (McNeil 1978).
Law legitimizes, through employment contract, the power of an employer that becomes authority. The employer draws contractually his authority from the acceptance by subordinates of the legitimacy of his decisions. But does this mean that power *stricto sensu* is not present in the employment relationship? The answer is clearly no. If labor law creates obligations for employees, it does not create subordination. Law just recognizes it. The employment relationship as such is already an exchange between subordination and security. Besides, subordination is only decision latitude in the allocation of tasks. Within this contractual area of obedience, actors’ positions are formally frozen; there is authority. Authority refers to a mutual arrangement that stops when contract expires (Palermo 2000). Outside this instituted area of obedience, actors’ positions are not frozen; there is power. Power happens when authority vanishes. Power emerges in situations of confrontation which are the result of insubordination. Insubordination is by definition a mean of escape (Foucault 1982).

Power coexists with a unique authority and strengthens the employment relationship, regardless of legal considerations. Each organization creates an informal structure that implements formal commitments (Selznick 1943). Only the employer has an authority because he is formally and legally responsible for the control and the preservation of organizational efficiency (Lattin 1959). It is not the case of power that we observe in each relational node. The firm is made durable by formal as well as informal elements that interact and consequently create the exploitation conditions of power. If the law is, via contract and ownership, a formal source of authority and power and so the core resource of the employer, access to critical resources is the informal source of employees’ power. Thus, it is the employer who is at the base of intra-firm cooperation, because it is the employer who grants or does not grant employees access to a critical resource of the firm (secret of fabrication, innovation, project, idea, brand reputation, goodwill…). Hence, it is the employer who gives or does not give employees the opportunity to obtain a part of power.

Access to key resources is linked to long-term relationships and takes the place of more formalized control systems. Since employees do not have other resources than their human capital in capitalist firms, they must be indispensable – productive and effective – to get a part of power. It is hence economically more efficient to grant employees access to critical resources of the collective entity.
rather than to confer them property rights on these resources. Indeed, ownership seems to be less
efficient than access because ownership has adverse effects on the incentive to specialize and prevents
from exclusion. Rajan and Zingales (1998) conclude that ownership must be held by a third party.
Insofar as a large part of shareholders does not directly participate in production process, ownership
must be given to shareholders. If shareholders do not own the firm, they own the physical capital. This
is their main resource. In a knowledge economy, shareholders regain certain legitimacy because they
prevent from intra-firm conflicts (Zingales 2000). Hence, it is no longer the allocation of property
rights between the different productive entities but the appropriated allocation of powers that, through
selective access to key resources of the firm, leads to economic efficiency.

Financial capitalism is source of power but the traditional relation between ownership and power is
no longer exclusive. It is not ownership but the absence of ownership of productive assets that gives
employees power. Only the employer has indirectly a power conferred by property rights of assets. As
contract, ownership has limits. The existence of power reveals them. There are different and
complementary sources of power in each firm and consequently different latent powers which
confront each other and develop the cooperation between the individual members of the collective
entity (see figure 1). Formal authority that results from employment contract coexists with naturally
different powers. Hence, it seems interesting to propose a taxonomy of power that takes into account
the analyses of Rajan and Zingales (2000) who distinguish two sources of power:

1. The first, called de jure, comes from the legal system of private property that confers the right
to exclude (discharge). It is because an entity A can deprive an entity B of its work for which B has
valuable competences that A has de jure power over B. Ownership is thus a formal resource. Most of
time, only the employer or top managers have this resource and the right of exclusion delegated by
sovereign shareholders. However, two structural transformations have tempered the impact of this
argument. Firstly, the financial revolution that facilitates access to capital ownership, making this less
critical. Secondly, the valuation of specific human capital and social capital – whose rights of control
are not directly contractible and difficult to enforce (Mahoney, Asher, and Mahoney 2005) – that are
more and more important in the productive organization and the competitive advantage of the firm.
2. The second, called *de facto* power, does not strictly result from contractual and legal mechanisms but from an informal mechanism: access\(^7\) to critical resources. It is because B is involved in an employment contract and invests in his human capital that B has access to the key resources of the collective entity controlled by A and so that B has *de facto* power over A. The vehicle of power is hence the specialization of human capital that is at the heart of resource interdependence. Thus, the employee who is specialized gets control over a new critical resource: him. This new critical resource gives him a part of power. *De facto* power is in the hands of the employer and his corporate executives as well as in the hands of employees, because each of them participates in the intra-firm knowledge-creating process.

Figure 1: The different sources of cooperation within the firm

Resource dependence and actors’ position in the network of complementary specific investments (proximity to critical resources) determine the power of each individual entity. The main conclusion of Rajan and Zingales (2000) is that the more a firm is based on specific human capital, the stronger *de facto* power is compared to *de jure* power, and the more total power and rent are redistributed between the different individual entities. Consequently, the more an organization is based on specific human capital, the less the employer and his executive team have a great power over employees (Zald 1969); all the more so as relational resources are inalienable. This argument weakens the role of ownership in the definition of the firm. The development of knowledge economy is sustainable only if employees,

---

\(^7\) Access results from contracts but is *per se* not contractible.
who have intellectual resources, become identified with the firm and are loyal (Alvesson 2000). In this sense, access to critical resources is an efficient mechanism of resources allocation by creating strong incentives\(^8\). These incentives are both monetary (rent) and not directly monetary (power). Indeed, another possible interpretation of Rajan and Zingales’s model consists in positively linking power to group belonging and relational cohesion.

**The impact of power on the emergence of cohesion and collective social identity**

The production of collective action is the *raison d’être* of each economic organization. It implies that individual and collective interests coincide. In the classical economic theory of the firm, the organization is not distinguished from the entrepreneur and, thereby, the aim of the organization is the aim of the potential entrepreneur (Simon 1964). This approach is very reductionist; there is no place for power. The question of the personal accomplishment of employees is worthless; self-respect could not be an economic issue. Yet is it really specious to postulate a positive relation between personal accomplishment and the productive efficiency of an economic organization?

It is the tangle of extrinsic motivations (satisfaction resulting from the reward of an action) and intrinsic motivations (satisfaction resulting from an action as such) that guides individual intentionality, creates collective cohesion and conditions employees’ efficiency (see Deci and Ryan 1985). Therefore, the sharing of a common purpose is a necessary condition for the emergence and distribution of power. In the same way, the sharing of a common purpose is also the meeting point of the diverse motivations of an employee. The employment relationship allows employees to share the collective purposes of a firm. In this view, the employment relationship is split in two components: a formal component and an informal component. The former aims to enforce the employment contract

---

\(^8\) Rajan and Zingales (2000) make the distinction between an average effect and a marginal effect of power. The average effect means that when an agent has power, she is confidant that she will get a large part of the surplus. The average effect means that power can increase with the specific human investment the agent makes, and this will increase her incentive to invest. This marginal effect is collectively efficient.
objectives. The latter aims to create the relation between personal cohesion and collective cohesion – i.e. the legitimate acceptance of these same purposes.

The employer obtains power over inalienable human resources because he gives employees a part of power by integrating them in the collective knowledge-creating process. Employees accept to be engaged in a dependence relation – even if they know that they will be also engaged in a real economic inertia limiting their redeployability –, because they could get rent and power. Individual interest is blended in with collective interest. The commitments of individuals towards their firm – the specific human investments they make – bind them together. All individuals who have access to key resources create the collective entity “firm”. This entity creates a cooperative rent and its distribution could lead to intra-firm conflicts. But these conflicts are supposed to be reduced if power is distributed enough so that individuals are attached to the collective entity. Henceforth, the main resource of the employer is no longer the ownership of assets but his capacity to coordinate and maintain the integrity of the whole. The firm is the basis of cooperation in spite of interest divergence and the variety of personal purposes. Power distribution supports, on the one hand, the coincidence between individual and collective action and, on the other hand, specific human investments, by establishing trust and confidence.

The economic literature has been recently interested by the question of collective cohesion through the introduction of social identity in the analysis of individual utility functions (Akerlof and Kranton 2000). In sum, these theories try to answer to two dual questions (Davis 2006). First of all, how can a single individual have different social identities? Then, how can different individuals make up a single collective social identity? By answering the first question, we bring answer elements to the second question and vice versa. Though, power as vehicle of collective cohesion is a way for individuals to give a sense to their own identity. Brown (1969) shows empirically that the identification of individuals to a particular organization is linked to the power they get within it. Cohesion and collective commitment are the reflection of the emergence of a single social identity that is itself the symbolic reflection of cooperation. The firm gives both an image of itself as a collective entity and an image of the individual. These two images allow the individual to maintain his own cohesion. The
collective social identity creates a strong tie between individuals and the organization, and strengthens the individuals belonging to it. The image of each individual in an organization is related to his perception of power. Similarly, the individual’s feeling of existence in a firm is linked to power. As a consequence, the greater the mutual power, the stronger the identification of individuals to a firm. Power is unifying because relational cohesion is intimately dependent on the emergence of a collective social identity. This one represents the cognitive mechanism that unifies distinct individuals into a collective – into a whole (see Ashforth and Mael 1989).

The individual’s intentionality is the behavioral assumption that subtends this argument, because cohesion is chiefly an objective reality. Even if power is intentional, it is also the hidden part of social relations. Since each firm member has power, power is at the basis of cooperation. Firm members act intentionally in order to enforce the objectives of the collective entity and so strengthen their power, which comes up to their intentional desire of personal growth. There is a strong relation between personal cohesion and collective cohesion. Social actors can enforce their own objectives only through power relationships. However, in the same time, social actors can get power only through the pursuit of collective purposes. For Mintzberg (1983), it is essential to study the real power such as it is manifested in the productive activities of an organization to analyze the emergence of collective identity and organizational purposes. Power and identity are undoubtedly linked to each other. The collective social identity shared by a firm’s members gives some clear indications about the question of the boundaries of the firm. Where an economic organization’s members share a singular collective identity, we can suppose there is a firm.

The previous arguments show that the more distributed the power, the more cohesive the firm. The choice process encouraged by the distribution of power makes collective attachments stronger insofar as it creates “collective welfare metapreferences” (Lawler 1992, p. 336). Organizational commitment is closely related to the distribution of power. In other words, cooperation is nowhere as real as in an organization where power is never unilaterally exploited. Power has a systemic dimension that makes the firm a complex system unifying diverse members and parts. The threat of breaking-off power
relations is an immediate cause of personal decohesion (Molm 1991), which is detrimental for organizational purposes.

The representation of the firm by individuals depends on the collective entity that makes its members share a single social identity. The cohesion of a collective entity conditions the commitment of its individualities, that is to say the alignment between personal social traits and group purposes (Kanter 1968). These individualities are personally engaged and form a complex relational network that makes the formal and institutionalized structure durable. In this mind, Barnard (1938) argues that informal structures are able to sustain cohesion in organizations because they influence individual’s commitment and strengthen the durability of objective authority. Lawler and Yoon (1998) interpret organizational commitment as “incipient institutionalization”. This shows that power is a dynamic concept based on long term commitments.

The behavioral compliance of individuals with their belonging entity is directly associated with the perceived legitimacy of power structure that has to be such that each individual feels as an integrated part of the firm. A balanced intra-firm power is a vehicle of cohesion and durability. The informal elements of a firm are crucial. Bierstedt (1950, p. 735) concludes that “without power there is no organization and without power there is no order”. Finally, if the firm is not a strictly formal organization, is it possible for an informal organization – not recognized by law – to be a firm? To answer this question, it is accurate to analyze the place of power in inter-firm relationships.

POWER AND INTER-FIRM COOPERATION

Since the beginning of the 1980’s, the international industrial landscape has been changed on the impulse of a process called “vertical disintegration”. For our object of study, the main characteristic of the modularization of the economic production process is the inter-firm distribution of power between legally autonomous entities. De facto sources of power overcome de jure sources of power. In other words – and it is a crucial difference compared to intra-firm cooperation –, inter-firm cooperation does
not imply strictly institutionalized powers. This argument seems to be clearly stated in the network-firm.

**Power without authority**

The firm is a socio-political entity held in a web of powers and counter-powers. This argument is valid both within and between firms. If the exercise of power seems to be not really different within and between firms, its origins are by nature different. Intra-firm cooperation emerges from formal and informal mechanisms that are respectively related to authority and power. However, at the inter-firm level, there is no employment contract that regulates the subordination relation between order taker and order maker. The formal base does no longer exist. Power does no longer coexist with authority. That’s why inter-firm networks constitute a fertile research field to analyze the relations of power. Indeed, even though member firms of the network-organization are not integrated into the same lawful structure, the legal contractual autonomy does not imply that the different parties have equal economic power (Sacchetti and Sugden 2003).

In an employment relationship, the transfer of power is held in its legal definition, whereas in an inter-firm relationship, it is the economic dependence that is at the origin of power. Contrary to managerial sciences, the economic literature has been little interested in the theoretical bases of inter-firm relationships, choosing to focus on the formal elements that mark the evolution of governance structures. But inter-firm network actors are interrelated in the interdependent activities of a single social system, identifiable but not recognized by law (labor law, commercial law, corporate law). Informal elements are the key success factors of modern complex organizations. The main duty of corporate executives is to maintain and strengthen these elements (Baker, Gibbons, and Murphy 2002).

The relations of power within these inter-firm relations cannot be said to be totally free of legal principles. But these relations assume a legal particularity that differs from an employment relationship even though contractual clauses are susceptible to control the actions of partners. If both
transactors have right to sue, the real authority\(^9\) of the hub-firm has not the same base compared with obligations, sanctions or procedures (Masten 1988). A firm cannot legally aspire to a formal authority on the employees of its subcontractors. *De jure* power resulting from the ownership of assets is not a characteristic of inter-firm cooperation. Only *de facto* power resulting from resource dependence is here a source of cooperation.

Inter-firm relationships form dynamic and complex networks of resources (Dagnino 2004). Power is a crucial determinant of the nature of the relationships between network actors regardless of market, because inter-firm contracts (subcontracting, franchising, license, alliance…) differ substantially from simple buy-sell contracts. The main difference lies in the fact that trust – resulting from the distribution of power – makes inter-firm networks relational organizations (Powell 1990). The coordination of intra-network activities is not strictly contractual but depends on “relational contracts”\(^{10}\). According to Gulati and Gargiulo (1999, p. 1446), the “relational embeddedness” of the whole network “highlights the effects of cohesive ties between social actors on subsequent cooperation between those actors”. Relational interdependence promotes incentives for long-term cooperation and palliates the absence of formalized control systems – of an authority (Uzzi 1997). Power is the lacking element in economics to analyze the relationship system that links firms in a particular network. To understand the formation of these networks, it is necessary to understand what involves firms in a specific inter-organizational learning, creates a reciprocal trust essential for collective action and makes in fine the coincidence of individuals’ interests with the whole network’s interests. Håkansson and Johanson (1993) argue in this sense that the analysis of inter-firm relationships must be realized from actors as well as from resources and activities. Power emerges from these three elements.

---

\(^9\) See Aghion and Tirole (1997) for an economic distinction between real and formal authority.

\(^{10}\) Baker, Gibbons and Murphy (2002, p. 39) define relational contracts as “informal agreements sustained by the value of future relationships”.

23
If one of the more important properties of hierarchy is to complete employment contract by instituting a regulating authority, one of the more important properties of inter-firm relationships is to complete buy-sell contract – firstly manifested by a pre-existing specific need – by establishing a relational governance that grants the distribution of power. The integration of the whole inter-firm network is not based on formal contracts or on a specific allocation of property rights but on power relationships that emerge as soon as there is an economic dependence. The inter-firm diffusion of power casts doubt on property rights theory that reduces the firm to the ownership of non-human assets and plays an important role in the development of the outsourcing relationship (Caniëls and Roeleveld 2009).

Departing from this argument, Rajan and Zingales (2000) set a theory of the economic organization based on complementary resources, which allows them to analyze inter-firm networks. Is considered as an integrated part of the economic organization (inter-firm network) the legal entity that has access to its critical resources, that is to say the legal entity which has a valuable power within this economic organization. Thus, formal and informal elements are complementary and are at the heart of the question of the nature of the firm. Informal elements are crucial in inter-firm relationships. As proof of this, it is interesting to focus on the network-firm that, contrary to business groups for example, does not involve capital participation.

**Power as the basis of the network-firm**

The network-firm refers to a productive entity that unifies a set of legally independent firms, vertically integrated and coordinated by a main firm called the hub-firm, in order to produce a specific good or service. The distribution of power between actors is the main coordinating mechanism in a vertical network of production. The analysis of the relations of power in the network-firm reveals a salient fact: the absence of legal bases for professional subordination. There is no authority in the network-firm. There are only contractual obligations – regulating the enforcement of

---

11 The hub-firm is “the firm that, in fact, sets up the network and takes a proactive attitude in the care of it” (Jarillo 1988, p. 32).
commercial commitments – coming from subcontracting relationship. Consequently, the network-firm is directly based on powers but strictly devoid of authority.

The network-firm emerges from strong social ties between network actors who communicate closely with each other. The relational governance of the network-firm maintains the cohesion of the whole by maintaining the internal and external orders that are respectively related to the durability of collective social identity and the preservation of reputation, this latter being the key resource of the network. Indeed, reputation legitimizes the dominant position of the hub-firm compared to other peripheral partners by giving them access to a “conquered market”. The hub-firm conceals an ordering power on its subcontractors that is legitimated by its key strategic role in the coordination of the whole network. The degree of coordination of the network is high because of the large number of relational contracts. This coordinator role confers the hub-firm a durable specific resource and so a reproducible source of power.

If the network-firm is stable and durable, it is because, within it, different powers confront each other. Intra-network decision process is a political economy, making the network-firm an emergent political entity (see Benson 1975)\(^\text{12}\). Power is a constituent property of inter-organizational networks. Owing to the dependence between the members of a network, power is more widely dispersed and accrues to key actors having made specific investments around a critical resource of the network-firm. The complementarity of critical resources generates synergy that creates a systemic interdependence peculiar to the network-firm. Each legal entity of the network is in situation of economic dependence with each other, which requires compliance between actors. Hence, although the hub-firm has the “central power” in the network, the hub-firm is not tempt to abuse of its power, because, in the

\(^{12}\) In this sense, Benson argues that power derives from the central organization’s control over strategic contingencies confronted by the peripheral organizations. But, reciprocally, the more contingencies are controlled by a peripheral organization, the greater its power within the network (Hickson et al. 1971).
absence of employment contract, it is impossible for the hub-firm to restore cooperation – based on a relational and “reputational” trust – via a formal authority.

The theoretical analysis of the emergence of intra-firm cooperation can be transposed to the network-firm. The different legal entities (employees) dedicate their key resources to the hub-firm (employer) and thus participate to the knowledge-creating process of the network-firm (firm \textit{stricto sensu}). Network-firm-specific human investments are embodied in a valuable collective learning process that exists only given access to critical resources (Rajan and Zingales 1998), which is the exclusive base of power. The hub-firm grants network partners – initially selected – the possibility to put their own resources into the collective entity and also to develop the resources of the whole network. The hub-firm allows each individual entity to acquire a part of power. The exploitation of \textit{de facto} powers is hence at the origin of the emergence of the network-firm. In this latter, informal aspects form the “glue” that unifies some legally independent firms into a single production process.

The analysis of the network-firm is accurate to reject the broad use of the term “contract” in economic theories of the firm in order to not distort the legal nature of the firm. Legally autonomous entities are integrated and coordinated by the controlling and ordering power of the hub-firm that does not originate in contract but in organization itself. If economic relations take place between legally distinct firms, the firms of the network form together and draw the economic boundaries of a single entity. The economic perimeter of the network-firm transcends the legal boundaries of the firm \textit{stricto sensu} and can be circumscribed by the perimeter of power exploitation (see e.g., Diamontopoulos 1987). The exploitation of power draws a perimeter which can be treated as the one of the very network-firm. The emergence of the network-firm seems to be based on a real legal incompleteness insofar as this complex organization goes beyond the legal rights and duties resulting from legal liability (see Teubner 2002) and employment contract. Indeed, the employment relationship does not apply to the network-firm where some critical resources may extend beyond firm’s legal boundaries.

The employment contract is a single employer-employee relationship. But the development of complex economic organizations, where there are multiple employers, has strong implications for both
the legal and the socially constituted nature of the employment relationship (Rubery et al. 2002). Even though the network-firm forms a single production system, it places the employment relationship beyond the range of employment protection laws so that Collins (1990, p. 355) argues that “this raises the question whether the exclusion from employment protection rights is in fact an important reason for vertical disintegration rather than an unfortunate side-effect of other economic forces”. The analysis of the network-firm shows a strong separation between the “de jure employer” (peripheral firm) and the “de facto employer” (hub-firm) that makes the employment relationship ambiguous. The relation between employment and security has to be reassessed. This argument leads some lawyers to reconsider the relation of professional subordination in the network-firm with the intention to give subcontractors’ employees rights and to establish a joint responsibility for the employment relationship (Morin 2005). Ultimately, these arguments call labor and corporate laws, which institute the hierarchical subordination, into question; because the sustainability and the development of the network-firm show that the exercise of intra-network power does not need to be institutionalized.

CONCLUSION

Power is a crucial condition of cooperation both within and between firms. The theoretical analysis of intra-firm power shows that it is impossible to apprehend the nature of the firm as a formal entity without investigating the networks of informal relations (Blau and Scott 1962). Yet the theoretical analysis of inter-firm power does not fully confirm the reverse. In traditional capitalist firms, managerial power was unilateral because it derived from contractual origins. But the evolution of the large transnational firm is manifested by the non-exclusivity of de jure sources of power. The exploitation of de facto powers is a salient property of cognitive capitalism and sheds light on some important theoretical challenges. To echo back to the famous thought of Robertson (1923), it is rightly the exploitation of largely conscious powers that provides intra and inter-firm cooperation.

The use of powers within and between firms is unifying. The latent confrontation between different powers promotes the cohesion and makes the firm a collective and durable entity. The firm must be appreciated as a distinct entity to break with the nexus of contracts metaphor that cannot include the
emergent and cohesive properties of the firm (see Holland 1998). The ontological definition of the firm as a real entity proposed by some legal scholars (see Phillips 1994) seems to be very interesting for apprehending its real nature. According to this paradigm, the firm is a real entity insofar as it constitutes a singular, cohesive and durable whole that cannot be reduced to the aggregation of its parts or members. Arguably, power unifies, at both the intra and inter-firm levels, some individual entities into a real emergent entity.

The socio-economic power is an autonomous causal power that strengthens, through time, the integrity of the firm. Causal power is an existence condition of firms. Without power, the firm would be an abstraction. Power is real because it has a causal impact. As power is real, it has a singular scientific importance.

REFERENCES


