Corporate Governance Theories: From Micro Theories to National Systems Theories[*]

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Abstract: The objective of this article is to conduct a survey of the different corporate governance theories. In the first part, we present the micro theories by opposing the disciplinary view to the knowledge-based view. The second part deals with the macro or national systems theories. We separate the theories based on appropriation of the organizational rent from those attributing a dominant role to production. This survey highlights that the financial view of corporate governance is a very particular case and presents many limits.

Key words: national systems of governance ; micro theories of corporate governance ; macro theories of corporate governance ; disciplinary view ; knowledge-based view ; law and finance view ; political theory ; varieties of capitalism.

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Although the topic of corporate governance was mainly developed within financial literature, a bibliographic research would reveal that it has become of great interest to law researchers, economists, political scientists, sociologists and management sciences specialists. The wide range of literature reflects a strong diversity of theoretical grids.

Contrary to what the term "corporate governance", however ambiguous it may be, sometimes leads us to conclude, the objective of governance theories is not to study how managers govern – that would lead us to confuse the term governance with management – but rather how they are governed. To clarify the meaning we could use the analogy of the role of a governess. This role is mainly to supervise the children and define the rules of the game and their latitude. Therefore, the governess performs two interconnected functions: a "constraining" disciplinary function and an "enabling" educational function: while the definition of the play area and nature of the games makes supervision easier, it also encourages learning.

According to an early analysis by Berle and Means (1932), performed following the crisis of 1929, the problem of governance of managers arose from the separation of ownership[1], into a disciplinary function, supported by the incentive and supervision systems, – supposed to be performed by the shareholders –, and a decision-making function – supposed to be the managers' prerogative –, which came about at the beginning of the century during the emergence of the large public corporations with a broad shareholder base, the "managerial" firm, where the managers do not hold a significant share of the capital. This separation would have provoked a decline in the companies' performance and spoliation of shareholders due to the failure of the systems responsible for the discipline of the top managers.

Due to the separation of the functions usually combined under the responsibility of a single entrepreneur, Berle and Means concluded that the maximization of shareholder value should not be retained as the objective of the firm. The shareholders of the large public corporation, having renounced the performance of the "active" aspect of ownership and only performing the "passive" aspect (risk assumption), would lose their legitimity of being the only residual claimants, in other words, the exclusive right to appropriate the profit, this status should have been held only by actors who perform active entrepreneurial functions. They consequently recommended a stakeholder approach: the large public company having to account for the interests of all the Company's stakeholders. Their theory would however be at the origin of a strengthening of stock market regulations in the United States resulting in the creation of the Securities and Exchange Commission, responsible for protecting financial investors. As of the beginning, the question of governance came within the scope of the "regulation" perspective of the manager's behavior, defining the "rules of the game for managers".

Expressed as such, this matter was reflected only in the earliest literature dealing with the governance of political leaders[2]. Whether we are concerned with the relationship between government leaders and the people or between managers and shareholders, the problem

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[1] Berle and Means speak of separation between "ownership" and "control". This terminology is ambiguous. The "control" function corresponds to the power to make decisions (the decision-making function). The "ownership" function includes the assumption of risk (who supports losses and receives profits) and supervision. In modern terminology, the ownership function is comprised of three functions, decision, supervision (measure of performance) and assumption of risk (incentive function),— the latter two sometimes grouped into one "control" function (as opposed to the decision-making function). Jensen (1998) and Jensen and Meckling (1992) base their theories of organizational architecture and corporate governance on the connection between these three functions.

[2] This anteriority of the political analysis of governance is particularly evoked by Becht et al. (2002) who show that the political model was explicit at the time of the creation of the American Corporate Law.

remains one of governance. In this regard, constitutional lawyers and political scientists have had a longstanding preoccupation with governance and the traditional problem of separation of powers is typically a governance problem. In this last case, however, the rules of the game are not only directed at protecting financial wealth and revenues of constituents but other more fundamental rights as well. More recently, based particularly on the works of Roe (1994), political sciences have taken on greater importance in explaining the emergence of different national systems of governance (which we will refer to as NSG from now on), as well as legal analysis grids, even certain sociological approaches, with explanatory factors such as culture or religion. Furthermore, through the research regarding compared efficiency and the evolution of the NSG, a traditional topic has reemerged; that of comparing economic systems, to the point that certain authors speak freely of "New Comparative Economics" (Djankov et al., 2003a).

These developments and interdisciplinary reconciliations are hardly surprising. The very definition of governance as a system of managerial regulations leads directly to an institutionalist perspective, a natural result in sociology, law and political sciences, and strongly renewed in economics over the past three decades with the emergence of the neo-institutional approach. This perspective, applied to corporate governance, may be considered as a specific case related to North's (1990) approach. The latter (North, 1990, p. 3-4) defines institutions as "the rules of the game in a society" or more formally, "the humanly devised constraints that shape human interaction…". The governance system therefore represents a set of institutional mechanisms – an institutional "matrix" – designating the rules of the game for managers. In this spirit, Charreaux (1997) defines governance as the set of organizational and institutional mechanisms that define the powers and influence the managers' decisions, in other words, that "govern" their conduct and define their discretionary space.

A history of corporate governance research shows that it has been essentially devoted to Anglo-Saxon large public corporations. Thus, the study of corporate governance systems was conducted within a particular national institutional context of formal rules (in particular, law and legal organization, organization of financial markets…) and informal rules (religion, moral, national culture…). It therefore led to the promotion of mechanisms such as the board of directors, managers' markets and takeovers, disconnected from their national specificities. The development of research comparing the different national systems revealed that to understand both their diversity and their internal functioning logic, it was necessary to account for the national institutional architectures, for example, the nature of the legal or political systems.

In an extension of this evolution, we will present corporate governance theories, distinguishing between those that propose a general model on a micro level but do not account for the specificities of the national systems and those that focus on the specificities to explain the differences in NSG from a macro perspective. Consequently, the first part will be devoted to the theories based on the manager and the firm but will not account for the national institutional specificities. This does not necessarily mean that the developments in this section will totally disregard the macro approach to governance. However, if the latter arises on occasion, the elements presented will never be based on the identity of the NSG itself, characterized by its institutional architecture, but rather on the way it influences the processes of creation and appropriation of value with regard to the firm so as to facilitate future understanding of the connection between the micro and macro levels. In the second part, we will present the different macro theories, the objective of which is to identify and explain the main configurations of the NSG.

1 – MICRO THEORIES OF GOVERNANCE: THE GOVERNANCE OF THE FIRM AND ITS MANAGERS

Most micro theories of governance come under the perspective of efficiency. The function of a governance mechanism or, more generally, a governance system, is to contribute to the efficiency of the firm. Thus, mechanisms such as the board of directors or hostile takeover bids would, by ensuring a better discipline of the managers, contribute to the increase of efficiency of the firm that creates more value. However, if most of the theories retain this criterion, they attribute it differing contents.

The different micro theories also focus on a particular interpretation of economic Darwinism, leading to the creation of a relationship between selection through inter-firm competition and the efficiency of the governance systems. According to the principle of natural selection adapted to the field of governance, only efficient systems that ensure the regulation of firms leading to the creation of sustainable value, survive on the long term. Consequently, the systems observed would be considered efficient. This association between survival and efficiency, contested by certain modern biological works[3], produces a critique known as Panglossianism.

In the field of corporate governance, this critique aims for a conclusion, often associated with the functionalist perspective, according to which the governance systems observed would be the most efficient possible. In other words, the efficiency of first-degree would be guaranteed and the systems should systematically and automatically reach optimum performance. In the disciplinary perspectives of governance, most criticized in this regard, the existing governance systems are however not presumed efficient in the absolute, but only in a relative and precarious manner – particularly because of institutional and organizational innovations –, and after taking the costs of adaptation into account, according to the principle of remediability[4]. In particular, this principle is not opposed to path dependence and therefore, the contingent nature of efficiency according to the historical development of the institutional framework.

Other theories belonging to economics or more often to sociology or strategic management, propose an explanation other than efficiency in the sense that the reasons put forth are connected, for example, to research and appropriation of rents produced by firms by coercion, creation of dependency or influence. Mechanisms such as the board of directors, the directors' network or the hostile takeover bids are therefore viewed as means of acquiring power in order to collect wealth and not as a disciplinary lever to achieve greater efficiency. These theories are sometimes based on an integrative logic in which the managers or the firm are supposed to obey a collective rationality greater than themselves, for example, of a social class or a network[5]. In other cases, particularly in connection with the New Institutional Sociology approach, they provide justification of inter-organizational nature for certain governance mechanisms. For example, the board of directors and directors' network would serve only to fulfill a function of social legitimization, ensuring the distribution of cognitive or normative models between organizations – for example, shareholder value – without this function necessarily having an effect on the efficiency of the organizations. The latter theories, however rarely focusing on the firm, do not strictly speaking, constitute micro theories of governance systems, as do the theories of efficiency. Therefore, they will not be included in this presentation.

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[3] According to these works, the concepts of selection and adaptation are not necessarily connected, since selection does not depend only on adaptation but also on the ability of the species to procreate.

[4] According to the principle, an existing situation is considered efficient unless an achievable alternative for producing a net profit (after deduction of implementation costs) can be described and implemented.

[5] Numerous studies have dealt with directors' networks. For a summary of these studies, see Charreaux (2003).

Once we have introduced the two approaches comprising the paradigm of governance both based on efficiency, we will present them in a more detailed manner and then review the present attempts to unite them into a synthetic theory of governance. Lastly, we will conclude the first section of this article by providing a synoptic presentation of the different views that form the micro approach to governance.

1.1. – The two approaches of the paradigm of efficiency: the disciplinary approach and the knowledge-based approach.

The theories of governance relating to the paradigm of efficiency are all based, more or less explicitly, on a particular model of creation and allocation of value, associated with a theory of organization that is based on efficiency. The objective of every organization should be to produce a surplus, through cooperation, – the organizational rent – with regard to the resources used; the allocation should be done in such a manner so as to guarantee the perenniality of the organization by obtaining assistance from the different stakeholders. The view of governance as a set of rules of the game for managers can be adapted to the model for creation and/or allocation of value retained, which itself is associated to a particular conception of efficiency and the firm. We will distinguish between the disciplinary approach and the knowledge-based approach.

The first approach is based on the contractual view of the firm, in its standard version founded on disciplinary arguments. The firm is represented as being a “nexus of contracts”, in other words, a decision-making center responsible for centralized negotiations and management of all contracts required for its activities. Due to the asymmetry of information between the economic actors and the conflicts of interests, the spontaneous management of all the contracts by the market, – i.e. the only price mechanism – does not create maximum value, in other words, it does not make the best use of the investment opportunities considered as being given. For certain contracts, an authoritarian management run by the orders issued by the hierarchy was revealed to be more efficient.

This argument is at the origin of the “contractual theories” of the firm. However, it reflects a restrictive and negative view of the productive project. The source of efficiency is “disciplinary”; incentives and supervision are necessary to avoid dissipation of the profits resulting from cooperation. The firm exists because it is better able than the market to succeed in reducing loss of efficiency due to conflict of interests between the stakeholders, losses that should be measurable by the first rank Pareto optimum, sometimes referred to as “Nirvana economy” (Demsetz, 1969), which would be introduced if there were no flaws or conflicts of interests in market coordination.

The concept of efficiency that underlies this perspective may be presented as an adaptation of the allocative efficiency criteria of Pareto. According to Milgrom and Roberts (1992), an organization is inefficient if another exists that produces better average results in all possible states of environment for all the stakeholders involved. The stakeholders should be free to negotiate and to implement and enforce their decisions.

Efficiency, defined as such, depends on the value created but, because of its Paretian origin, it also depends on the allocation of this value, and except for very particular cases – corresponding to Coase’s theorem – in which allocation costs are negligible, the creation and allocation are no longer independent and separable. In other words, the method of allocation influences the level of value created. Due to the difficulties in applying this approach, it is often abandoned in favor of productive efficiency only (Rutherford, 1994), evaluated by reporting production in relation to resources consumed.

However, if the concept of information, confounded with that of knowledge, is a central part of contractual theories of the firm and the associated corporate governance theories, – the organizational problems originate in the asymmetry of information –, the

"knowledge-based" theories of the firm distinguish between the concepts of information and knowledge, favoring the latter. If, according to Fransman (1998), information refers to an objective closed set of data, – that all individuals can potentially acquire – related to the consequences of possible events, then knowledge, on the contrary, represents an open subjective set resulting from the individuals' interpretation of the information, according to their cognitive models. For Langlois (2001), knowledge is a complex structure, based on experience and consisting of a system of action rules that determine the meaning and the utility of the information.

If, through a contractual perspective, the creation of value results only from the resolution of conflicts of interests based on asymmetry of information, then knowledge-based theories would have other bases linked to knowledge acquisition and innovation: this enables the firm, a well identified entity, to acquire the faculty of learning and to create knowledge. The process of creating value does not always take the disciplinary path, but also a production path based on skills. The Pareto (allocative) efficiency or the simple productive efficiency in the static sense are abandoned in favor of a dynamic or adaptive approach, inspired by Schumpeter, who places great importance on innovation and flexibility and therefore the ability to creating sustainable value.

Let us specify that the two paradigms are separated mainly by an argument deemed crucial to the process of value creation – disciplinary vs knowledge-based – rather than the opposition between the "nexus of contracts" firm and the "productive entity" firm, which is possible to transcend by retaining a constitutionalist view (VanBerg, 1994) of the nexus of contracts. In the latter, the contracts network is interpreted as a constitution defining the common rules that allow the firm to act as an entity.

1.2. The disciplinary view of corporate governance

The disciplinary perspective has numerous variants based on the representation of the nexus of contracts and the analysis of the process of value creation. Traditionally, we distinguish the financial or shareholder view as dominating the stakeholder view.

1.2.1. The shareholder model of governance

Resulting from the debate opened by Berle and Means regarding the large public corporation, the financial model of governance is normally associated with the agency theory. Paradoxically – the initial analysis relating to the entrepreneurial firm opening its capital – this model originated in an analysis of Jensen and Meckling (1976) that focused on two main objectives. The first very ambitious objective was to propose a contractual theory of the firm seen as a team of productive inputs (Alchian and Demsetz, 1972), inspired by the theory of property rights and focusing on the agency relationship concept. The second more limited objective was to illustrate the explanatory power of this theory with regard to the problem of the capital structure of the firm.

If, in the beginning, Jensen and Meckling considered the firm as a nexus of contracts, associating the firm and the entire group of resource contributors (the team of productive inputs…), their limited objective of explaining the capital structure led them to construct a more simplified model taking into consideration only two agency relationships. The first linked the manager to the shareholders and the second linked the firm (represented by the managers and shareholders) to the financial creditors.

This initial modeling, that gave priority placement to the analysis of the relationship between the manager-entrepreneur opening his capital and the new shareholders – the shareholders playing the role of "principal" and the manager that of the "agent" –, was to lead

to the shareholder approach that still dominates normative research and reflections today. Traditionally associated with the legal approach to ownership, presumed[6] to recognize only the shareholders as the owners – or the only "residual"[7] claimants – it attributes the unique role of "securing" the financial investment (Shleifer et Vishny, 1997) to the governance system. According to this disciplinary perspective, the governance mechanisms constitute a means of forcing the managers to "maximize" the shareholder value. This perspective has particularly dominated the studies relating to the board of directors, the annual shareholder's meeting, the remuneration systems for managers, the legal and accounting regulations and takeovers as well.

However, the shareholder model is most often based on the normative branch of the agency theory – referred to as "principal-agent" – claiming through hypothesis, in its dominant model, that the shareholders are the only principals and the managers are the only agents. Moreover, it is possible to justify the shareholder objective in a different manner, to better conform to the positive branch of the agency theory resulting from the analysis of Jensen and Meckling. In accordance with the natural selection principle, we need only maintain (Jensen, 2001) that organizational practices have emerged in endogenous fashion, reinforcing the probability of survival of the firms that adopted them. However, the question is now to justify this argument by attempting to identify the sources of the advantage granted.

A first justification, developed by Williamson (1984, 1985), consists in assuming that if the stakeholders, other than the shareholders, are effectively protected by their contracts, the particular characteristics of the transaction that constitute the contribution of financial capital, render the shareholders particularly exposed to risks of opportunism and they would assume the major part of the residual risk. Consequently, the governance system would be constructed by entrusting the control to the shareholders in order to protect their interests and reduce the costs of this particular transaction. Hansmann (1996) completed this first argument by retaining the manager's control costs. A cost that is too high could do more than compensate for the economy of transaction costs realized by entrusting control only to the shareholders. As such, the shareholder value is also required since the presumed homogeneity of the shareholders interests would lead to a low cost, collective decision. The shareholder objective is therefore based on two hypotheses: (1) the shareholder investment is the least protected against the opportunism of managers; (2) there is homogeneity of interests between the different categories of shareholders. The latter hypothesis becomes invalid if conflicts exist between the dominating shareholders, holders of controlling interest and minority stockholders.

In the perspective opened by Jensen and Meckling, completed mainly by the analysis of Fama (1980), devoted to the large public corporation, the system of governance is comprised of "internal" mechanisms, implemented intentionally by the stakeholders or by the legislator, and "external" mechanisms resulting from the spontaneous functioning of the markets. The "internal" mechanisms, such as the voting rights attributed to the shareholders, the board of directors, the remuneration systems, the audits decided by the managers… or "external" mechanisms, such as the market of managers and takeovers, are all mechanisms

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[6] This interpretation of the legal view is contested, including in the United States. See, in particular, Blair and Stout (1999).

[7] The "residual", similar to profit, is what remains after remuneration of the various production factors. The resource contributors, other than the shareholders, should be remunerated at their opportunity cost corresponding to a price fixed on the presumed competitive markets. The shareholders are the only stakeholders that have the status of residual creditor and who are attributed a rent. Their interests therefore converge with those of all the other parties to the nexus of contracts. This hypothesis assumes that the remunerations paid to stakeholders other than the shareholders, take into account all the consequences of the decisions made by the firm, therefore no externality exists.

that appeared and persisted due to their ability to reduce agency costs resulting from conflicts between managers and shareholders. Other mechanisms such as contractual guarantees, rules of bankruptcy procedure, the financial information market, even an informal mechanism such as reputation, are justified by the resolution of conflicts of interests existing between the firm and the financial creditors.

These different mechanisms do not necessarily have the same significance. A hierarchy exists that varies according to the type of company. As such, according to Fama, for large public corporations, the dominating mechanism is the market of managers – the managers attempt to maximize the shareholder value to improve their reputation and value on the market – that is based on the evaluation of the performance by the financial market. This first mechanism is completed by internal mechanisms such as hierarchy, mutual monitoring between members of the management team and, most of all, the board of directors. The latter has only one disciplinary function, based either on incentive by linking the remuneration of the managers to the shareholder value (bonus, stock-options,…), sanction through the eviction of the manager or the monitoring performed, for example, by the audit committee. To be efficient, the board must simultaneously include inside directors (members of management) for informational purposes and outside directors whose independence should be guaranteed by the existence of a competitive market of directors. The takeover market, a brutal and costly disciplinary mechanism, intervenes only as a last resort.

The loss of value, depending on the nature of the conflicts (managers/shareholders or shareholders/creditors), has various origins (underinvestment, "private benefits" resulting from the appropriation of part of the organizational rent in the form of perquisites or additional compensation…). Certain models (Shleifer and Vishny, 1989) integrate entrenchment strategies implemented by the manager. The latter, to avoid being dismissed – he would therefore avoid the loss of human capital and could continue appropriating rents – may make his replacement more costly for the shareholders by preferring to invest in "idiosyncratic" investment projects or projects with reduced visibility. In the first case, the profitability is dependent on the presence of the manager as leader of the company; his dismissal would result in a loss of part of the organizational rent for the shareholders. In the second case, it would be more difficult for the shareholders to value the opportunity of a replacement and there is less pressure from the managers' market. This process of taking the managers' defensive behavior into account as well as their strategies for seeking rents is not inconsistent with the paradigm of efficiency. Since entrenchment increases agency costs, the governance systems are supposed to adapt in order to reduce a priori the negative effects of this type of strategy.

This first governance approach focuses on financial investors. The creation of shareholder value involves the discipline of the managers. The financial model constitutes the principal foundation for debates regarding the remunerations of managers and directors, the role, the composition (whether outside directors – or not), the form – single or two-tier – of the board of directors, the disciplinary role of takeovers, the measure of performance assured by the financial market, freedom of expression and the protection of small investors. This predominant model, inspired directly by the Anglo-Saxon large public corporation, has however greatly evolved, influenced by the concentration of equity capital in the non Anglo-Saxon countries and by the considerable spoliation of small investors by the dominating shareholders, in particular, during privatizations in the former Eastern bloc countries. Originally focused on the manager, the attention was moved to the dominating shareholders who would take advantage of their position to appropriate the major part of the rent. In a sense, the financial model is more concerned today with the dominating conflict between

dominating shareholders/small investors rather than the conflicts between managers/shareholders[8].

Since the shareholders are the only residual claimants, the efficiency of the different mechanisms is measured only according to shareholder value, which resulted in numerous empirical studies thanks to the availability of financial data banks. These often ambiguous results (Becht et al., 2002), in all probability due to the effects of complementarity and substitution arising between the various mechanisms, conclude that the explanatory ability of the shareholder model is limited. The limitations of this model, in particular for explaining the structure and functioning of non Anglo-Saxon systems and the small degree of realism in view of the minor role the shareholders play in the financing of companies or the ambiguous relationship connecting the disciplinary systems to shareholder performance, contribute to an extension in order to take other stakeholders into account, such as employees.

1.2.2. The disciplinary stakeholder model

The disciplinary stakeholder model also finds its origin in the representation of the firm as a team of productive inputs of which the synergies are the basis for the organizational rent. Modifications to the model for value creation, as compared to the shareholder model, are related to distribution by calling into question the shareholders' status of exclusive residual claimants. The abandonment of this hypothesis led to a questioning of the sharing of the rent that, due to the fact that the investment/financing are not separable, also has an influence on value creation. The contributors of production factors, other than the shareholders, would be encouraged to contribute to value creation only if they were to receive a share of the rent, therefore attaining status of residual claimant. In other words, as specified by Zingales (1998), governance only has an impact on the creation of the rent through distribution: "the governance system is simply a set of constraints governing the negotiations ex post for the sharing of the rent between the different stakeholders".

This view is a result of the renewal of the analysis of property rights within the incomplete contract theory (Grossman and Hart, 1986; Hart and Moore, 1990)[9]. Ownership is defined as much by the residual control rights[10] as by the allocation of residual gains. The ownership status can be extended to all the parties to the nexus of contracts. A salaried employee, who is assigned the power of decision in order to better utilize his knowledge, becomes part owner. He therefore has a greater incentive to contribute more effort when he would collect a share of the organizational rent, in the form of over-remuneration, regardless of its form (monetary or not), in comparison to his reservation salary. This extension of the analysis puts special emphasis on human resources (Blair 1995, 1999).

The attention given to managers, of great importance with regard to the question of governance, led Castanias and Helfat (1991) to question their role in the production of the organizational rent, that is to say, the importance of the managerial rent due to their specific skills. Even if the model does not provide direct reference to the concept of extended ownership, it supposes that the more rent the managers are able to appropriate the more incentive they will have to produce the rent. Then the problem of sharing the rent with the shareholders arises, which can be explained by the respective contributions of the

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[8] This evolution led La Porta et al. (2000a, p. 4) to define "corporate governance is, to a large extent, a set of mechanisms through which outside investors protect themselves against expropriation by the insiders".

[9] For Grossman and Hart (1986, p. 692) the firm is defined in terms of ownership of assets and the authority associated with holding residual control rights resulting in an ex post allocation of a substantial share of the rent. It will consequently influence ex ante investment decisions. Hart and Moore (1990, p. 1121) specify that the only right held by an asset owner is his ability to prevent others from using it. This authority over the use of physical assets results in retaining that of the employees.

[10] That is to say the decision rights that are not explicitly provided for by the contracts or the law.

shareholders and the managers and the shortage of skills offered. If the shareholder function is limited to the contribution of equity capital – "passive" ownership – and the financial market is competitive, shareholders hold less power; consequently, they must be remunerated at their opportunity cost that is presumed to be equal to the market equilibrium rate, to keep them in the nexus of contracts. However, it is best for the managers to share the rent with them in order to avoid dismissal; therefore their interests converge to a certain extent with those of the shareholders. This situation changes the view of the governance system – the intensity of conflicts considered as being less significant than within the financial model –, and results in different interpretations of certain mechanisms.

Thus, contrary to the traditional analysis, the managers' entrenchment strategies do not necessarily lead to a destruction of value (Garvey and Swan, 1994; Charreaux, 1996). Entrenchment, by securing the profitability of the human capital investment specific to the firm, encourages further investments on the part of the manager, which can produce a higher organizational rent. This reasoning can be transposed to the managerial latitude: excessive discipline by reducing latitude can produce a drop in efforts and initiatives of the managers further provoking a drop in efficiency (Burkart et al., 1997).

The issue of the origin of the rent put emphasis on the specific skills of the employees in addition to the managerial capital. As emphasized by Rajan and Zingales (1998a), it plays a determining role, particularly in the New Economy. However, the specificity of human capital, if it is the basis for the rent, renders it vulnerable to attempts at expropriation. The governance system is therefore justified by its ability to protect this capital. The firm becomes a nexus of specific investments: a combination of co-specific assets and persons[11] (Zingales, 1998; Rajan and Zingales, 1998a, 2000; Zingales, 2000). The organizational rent depends on the process of accumulation of specific assets associated with the critical resources brought by the manager. The sustainability is ensured if the growth of the rent is sufficient to encourage the different stakeholders to develop their specific investments, in particular, the employees to invest in their human capital. Furthermore, as specified by Rajan and Zingales (2000), due to the increasing inalienability of the critical assets, allocation rather than managerial shirking would become the major problem with regard to governance.

Finally, the logical conclusion to the stakeholder approach is its generalization to all the parties to the nexus of contracts, contributing to the formation of an organizational rent. The latter also depends on the particular skills offered, notably in long-term cooperation relationships, by certain suppliers, sub-contractors or customers. Such an approach assumes that the relationships between the firm and the different stakeholders are not reduced to simple market exchanges governed by prices, but are rather frequently co-constructed. As proposed by Charreaux (1995) and Charreaux and Desbrières (1998), this approach studies and evaluates the governance system in accordance with its ability to create stakeholder value[12] – for all stakeholders – by reducing the loss of value due to conflicts relating to the redistribution of the rent among the different stakeholders.

Modelling of the formation of value in the stakeholder model is summarized, essentially, by the resolution of conflicts of interests by influencing distribution, even if certain knowledge-based aspects superficially appear (Charreaux, 2002a). Then, according to Alchian and Demsetz, the manager acquires a particular skill relating to the other production factors and stricto sensu plays a much greater role in management that simply monitoring or "metering". However, the process of value creation itself remains unexplored. Also, Fama and

[11] Co-specificity signifies that profitability depends on the cooperation of the combination of different factors. There is a reciprocal dependence.

[12] The stakeholder value is defined by the organizational rent generated, which is equal to the difference between the sum of the revenues evaluated at opportunity price and the total of the opportunity costs.

Jensen (1983 a and b), Jensen and Meckling (1992) or Jensen (1998) are satisfied with their restricted view that organizational architecture, the forms of ownership and governance systems are organized in such a way so as to optimize the use of knowledge, the latter not being truly differentiated from information.

The models of Rajan and Zingales (1998a) and Blair and Stout (1999) offer little more. If the first model considers that the organizational rent is due to specific investments made by the different stakeholders and the second model insists on the importance of both vertical and horizontal cooperation to produce this rent, we may not really view this analysis of the process of value creation in terms of comparative advantages linked to production. The theory of the firm of Rajan and Zingales, in particular, remains traditional in its view of value creation and investment. Consistent with the theory of the firm of Hart and Moore (1990) but proposing a more extensive and complete model, its view of governance remains exclusively disciplinary. The objective is to reduce the loss of efficiency resulting from the conflicts associated with the sharing of the rent and, most particularly, those linked to underinvestment resulting from the specificity of assets and the hold-up phenomenon in the tradition of Williamson. This conclusion also applies to the more general analyses (Pagano, 1993; Pagano and Rossi, 2002; Nicita and Pagano, 2002), which emphasize the two types of causality existing between the structure of ownership rights and the development of skills. If, according to Grossman and Hart's theory of property rights, it is the characteristics of the assets, including human assets, which determine the structure of the ownership, the reverse may also be true.

The definitions of stakeholder governance confirm this interpretation. Zingales and Blair[13] mention only the decision and appropriation rights of the rent. Berglöf and Von Thadden's (1999) definition, considering governance as a set of mechanisms that translates the signals emitted by the goods market and the production factors in the behaviour of the firms, is seemingly different, but its justification based on two arguments: (1) the importance of recognizing the existence of categories of actors other than only the financial investors and managers; (2) the necessity of considering a larger context involving the competition on the goods market and inter-firm connections, apart from the fact that it is introduced in a purely normative manner, is based only on disciplinary aspects.

However, the role of organizational knowledge appears to be more important in the theory of the specialized firm (Demsetz, 1988, 1991), resulting in a transition, maybe even a primary synthesis, of the disciplinary and knowledge-based theories of the firm. The latter is represented as "a bundle of commitments to technology, personnel, and methods, all contained and constrained by an insulating layer of information that is specific to the firm, and this bundle cannot be altered or imitated easily or quickly". While remaining consistent with the contractual perspective, this definition presumes that there are only three conditions under which a nexus of contracts is a firm: (1) specialization : the firm must be a specialized production unit for others; (2) continuity of association : the nexus of contracts must be durable and (3) reliance on direction : the coordination must be governed by corporate management. Demsetz adds that, in addition to market coordination costs and monitoring, the third factor determining the productivity of the firm relates to the acquisition and use of knowledge. Finally, firms are defined as "repositories of specialized knowledge and of the specialized inputs required to put this knowledge to work" (Demsetz, 1990, p. 171-172), their boundaries determined, in particular, by "the economics of conservation of expenditures on

[13] Zingales (1998), in a spirit similar to that of Williamson, defines the corporate governance system as being "… the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by a firm". For Blair (1995), "Governance systems, broadly defined, set the ground rules that determine who has what control rights under what circumstances, who receives what shares of the wealth created, and who bears what associated risks."

knowledge" (Demsetz, 1990, p. 173).

1.3. The knowledge-based approach of governance

The disciplinary view of governance remains captive to the limits of the theories of the firm on which it is founded and either ignores the productive dynamic or offers a restricted view limited to the impact of incentive systems on production choices. If the link between skills and organizational rent is recognized, if the stakeholder value apparently has better explanatory potential than that of shareholder value, the view remains based on static and reactive conceptions of efficiency. The value is maximized at a given moment with the managers presumably aware of all investment opportunities, the choice of investment made according to an analogy of the "menu". The main aspect, in conformance with the disciplinary perspective, remains the organization of rent distribution sufficiently incentive to maximize value. The process of value creation through the emergence of the investment opportunity set, in particular, is still neglected.

To comprehend this process, we must call on the knowledge-based theories of the firm. Contrary to the disciplinary theories that can be interpreted lato sensu as extensions of the neoclassical economic model, these theories break away from this model. They particularly reject the hypothesis of calculative rationality, limited or not, in favor of procedural rationality. Rationality is assessed not according to the consequences of decisions but rather their governing processes. In these theories, value creation depends mainly on the identity and the skills of the firm, viewed as a coherent entity (Teece et al, 1994). Its specificity is linked to its capacity to create knowledge and therefore long-term profitability. A dynamic concept of efficiency is retained.

Much the same as the disciplinary theories, the knowledge-based theories include numerous perspectives that favor knowledge-based arguments. By caricaturing these aspects, due to their frequent imbrications, we can identify three main perspectives:

– The behavioral perspective introduced by Simon (1947), March and Simon (1958) and Cyert and March (1963) : the firm is a political coalition and a cognitive institution that adapts itself through organizational learning[14].

– The neo-Schumpeterian evolutionary economic theory developed mainly by Nelson and Winter (1982), that led to a very important line of research[15]. The firm is defined as an entity coherently uniting activities, a repository of productive knowledge (Eliasson, 1990 ; Winter, 1991), an interpretive system (Loasby, 2001a), that favors the concept that competition is based on innovation. This theory substitutes, in particular, the representation of investment choices as a pre-existing menu with a conception in which the menu is constructed from knowledge acquired by learning and stored in the organizational routines.

– The strategy theories based on resources and capabilities (the Resource Based View – RBV) that results mainly from the growth theory of the firm proposed by Penrose (1959). The firm appears to be a set of resources and an entity for accumulation of knowledge guided by the vision of the managers and depending on the experience they have acquired. The origin of sustainable growth is found in the ability to learn and in the specificity of the stock of accumulated knowledge. This theory is at the origin of an extensive[16] current of research that considers the knowledge-based theory of the firm stricto sensu (the Knowledge-Based View

[14] Organizational learning presumes there is interdependence between the individuals to build knowledge within the firm. This knowledge is of a collective nature and learning is an institutionalized social process of interpretation, trials, feedback and evaluation. This is a process of formulation and resolution of problems rather than acquisition and accumulation of information (Hodgson, 1998b).

[15] For a recent synthesis of the evolutionary approach to economics, see Nelson and Winter (2002)

[16] Foss (1997) constitutes an excellent introductory book on this current of research.

of the Firm[17] - KBV) as one of its components.

The framework of creation and allocation of value that underlies the knowledge-based theories differs profoundly from the one underlying the contractual-disciplinary theories, in which the productive aspect is either ignored or reduced to the incentive perspective (Langlois et Foss, 1999). It results in an approach that is different from the reasons for the firm's existence that not only distinguish it from the market but also from its competitors, in other words, that defines its identity. For example, according to Foss (1996a), firms exist because they can more efficiently coordinate the process of collective learning. According to Dosi (1994), firms represent a set of core competencies and complementary assets associated with these competencies and the boundaries of the firm must be understood not only in terms of transaction costs but also in terms of learning, path dependence, technological opportunities, selection and complementarity of assets.

The main element is the importance attributed to the productive aspect as much from the viewpoint of innovation as coordination. Therefore, according to Loasby (2001b), the problem of coordination cannot be relevantly expressed by defining the firm as a simple informational system in which coordination is performed only through incentive methods. It must be reformulated in relation to an objective of growth based not on the use of information but on the use of knowledge, which is not only the collection of information but the processing and interpretation as well. This reformulation also implies a more complex conception of the firm seen as an open system and the rejection of the equilibrium concept in favor of the process concept. In a similar perspective, Hodgson (1989) defines production as a social process that involves people with their own personal aspirations and as constraining their interactions. Efficiency depends not only on technology but also on the motivation and abilities of the manpower, organization and managerial supervision, the latter two based on the institutional structures and routines as well as the cultural norms inherited in the past.

The perceptive aspect of the entrepreneurial function linked to the management's ability for imagination, perception and construction of new opportunities (Prahalad, 1994), also plays an important role, more important than the restructuring or reconfiguration of the firm's business portfolio in response to the evolution of the environment. Let us recall that the objective is to ensure sustainable value creation, in particular, through the creation of growth opportunities.

In summary, the firm when viewed as a processor or repository of knowledge is based on the following applications of the knowledge-based argument[18]: (1) orientation of the activity in accordance with the managers' view; (2) the creation of knowledge as a basis for innovation and all investment opportunities, this knowledge possesses a tacit and social character that makes if difficult to imitate; (3) protection of the knowledge database; (4) coordination of the productive activity that involves aspects such as construction, exploitation and transfer of knowledge that go above and beyond the simple transfer of information (Hodgson, 1998)[19]; (5) resolution of conflicts, that goes above the conflicts of interests to take on a knowledge-based aspect.

This last point deserves a special comment. A significant difference between the nature of conflicts of interests and cognitive conflicts is although it is advantageous to reduce conflicts of interests to a minimum; this objective seems less than optimal for cognitive

[17] For a critical synthesis of the KBV, see Kaplan et al. (2001).

[18] In Kaplan et al. (2001), we find a more developed analysis of the courses through which knowledge can influence value creation.

[19] This cognitive aspect concerns intra-firm and inter-firm transactions, which presumes that the latter cannot be reduced to simple exchanges governed by prices but also involve relational modes of governance. The argument according to which cognitive expansion (of rationality) allowed by the firms renders contracts less incomplete and brings greater flexibility can be included in this aspect.

conflicts. Innovation, even simple adaptation, seems favored by the coexistence of conflicting cognitive frameworks (Foss, 1996b). In other words, the increases in efficiency resulting from the reduction of cognitive conflicts may be more than compensated for by the reduction of the potential for innovation or adaptation. We find here the traditional opposition between "exploitation" and "exploration" (March, 1991) or between "static efficiency" and "dynamic" efficiency (Dosi, 1990).

The knowledge-based approach to the firm leads to a reconsideration of the role of governance. It must support the identification and implementation of profitable investments within a dynamic efficiency perspective. According to Demsetz (1969), to comprehend the influence of the institutional framework – and hence of the governance system –, on dynamic efficiency, we "must strive to balance three objectives: (1)a wide variety of experimentation should be encouraged; (2) investment should be channeled into promising varieties of experimentation and away from unpromising varieties; (3) the new knowledge that is acquired should be employed extensively". The critique addressed by Prahalad (1994) regarding the financial view of governance supports this approach: this view must be expanded to consider the quality of the relationship between managers and investors and its potential for increasing the efficiency of the firm, to identify and create growth opportunities. In a broader perspective, the knowledge-based approach results in studying governance systems according to their influence on the different cognitive aspects of the value creation process.

The knowledge-based approach also involves a reconsideration of the traditional financial approach to governance, in which the relationship between the firm and the financial investors is limited to the contribution of capital and where the only objective is to secure the financial investment by disciplining the managers as best as possible. Therefore, as suggested by various authors, finance also includes a cognitive aspect. Accordingly, Aoki (2001) believes that, in the governance model associated with venture capital, it is not the ability of the venture capital investor to contribute funds that is the most important factor, but his ability, based on his knowledge and experience, to select the most promising projects and refuse the financing (or refinancing) of the less interesting projects, without delay. Similarly, Charreaux (2002a, 2002b) proposes an interpretation of the financing policy based on cognitive arguments that explicitly involve the contribution of expertise from the shareholders, in particular, industrial shareholders. Such developments plead in favor of a reconstruction of the financial view of governance extended to include cognitive aspects.

1.4. Attempting a synthesis

Of course, following the example of Winter (1991), Foss (1996b) Foss and Foss (2000), we may wonder if the knowledge-based theories are incompatible with the disciplinary theories[20]. As their analyses show and as the constitutionalist approach to the nexus of contracts suggests, a certain number of intersections are possible. The fundamental considerations of the disciplinary theories, in particular in terms of conflicts of interests, can be useful to better understand the performance of the firm viewed as a collection of competencies. For example, the sharing of common cognitive frameworks can lead to a reduction in conflicts of interests, the concept of specificity can be applied to organizational abilities, the protection of knowledge and the appropriability of rents can explain corporate acquisition policies… However, the cognitive aspects directly linked to the productive function, possessing a tacit and social character associated with organizational learning, cannot be comprehended through disciplinary arguments only.

The concept of access to a "network of specific investments" introduced by Zingales,

[20] We also find numerous developments regarding this confrontation in Foss and Mahnke (2000), see in particular, Dosi and Marengo (2000).

which he compares to that of organizational capital, can indeed be directly transposed in terms of access to the knowledge database. However, this analysis, that promotes the disciplinary aspects (of control and incentive), is unable to integrate the cognitive aspect of the creation of organizational capital. In contrast, the works of Lazonick and O'Sullivan (Lazonick, 2000; O'Sullivan, 2000, 2001; Lazonik and O'Sullivan, 1998, 2000) focusing on the governance of innovative firms and the more ambitious works of Aoki may be considered, to a certain extent, as attempts at a study for constructing a theory of corporate governance where disciplinary and cognitive aspects are simultaneously at work[21].

The presentation of these works would be an occasion to illustrate the structure of the links that exist between the micro and macro levels of governance. This approach does not mean that we begin the second part devoted to the presentation of the theories of the National Systems of Governance (NSG), but we must correctly show the imbrications of the different levels of analysis – in particular organizational and institutional – in the different theories of corporate governance. If considerations on the macro level are introduced, particularly in the presentation of the Aokian theory, they are only to better understand the architecture of all the governance systems governing the firm and its managers, while the specificities of the different National Systems of Governance (NSG) are not presented.

1.4.1. Lazonick and O'Sullivan: governance of the innovative firm

The works of Lazonik and O'Sullivan resulted in the formulation of a theory of the innovative firm. While based mainly on knowledge-based theories, they represent one of the best illustrations of recent attempts at considering the disciplinary and knowledge-based aspects jointly to model value creation. The concept of innovation retained is very broad; it is not based only on the technological aspect but also includes administrative and marketing aspects.

These works have succeeded in defining synthetic governance, attributing a central position to investment. According to O'Sullivan (2000), "a system of corporate governance shapes who makes the investment decisions in corporations, what types of investments they make, and how returns from investments are distributed". The focus on the innovative firm leads to the proposition of a governance theory centered on organizational control – as opposed to control by the market – to obtain a framework that can analyze the institutional conditions that support the innovation process. To be efficient, this process must comply with three conditions: (1) it must facilitate development: the resources must be committed long term because of the irreversible and uncertain character of the investments that support organizational learning; (2) it must possess an organizational aspect (organization of work): organizational learning can only be executed through the interactions inside the firm; (3) it must have a strategic character because it results from decisions that not only depend on the subjective interpretation of the environment but that evolve in accordance with the experience, which determines learning and modifies the very context of the decision. To sum up, the allocation process must be "developmental, organizational and strategic".

The characteristics of the innovation process lead to a complementary conception and analysis of the governance system also based on three conditions: (1) financial commitment to support the development of expertise, but also to obtain sufficient time for the innovation investments to be profitable; (2) organizational integration that offer incentive for the insiders to invest their expertise and efforts in accordance with the objectives of the firm and (3) insider control over the allocation of corporate resources and returns, to ensure that those who exercise control have the abilities and incentives to make innovative investments.

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[21] Analyses, such as those of Grandori (2001) may also contribute to the construction of a theory of the firm that can act as a basis to the development of a synthetic governance theory.

This micro analysis leads to a macro analysis of the National Systems of Governance based on the concept of a "skill base"" (Lazonick, 1998), deemed to be a determining factor in understanding the motivations of individuals to commit to a collective and cumulative learning process. The example of the Japanese domination in certain sectors leads to the conclusion that only the "broad and deep" skill bases can procure a sustainable competitive advantage. Inversely, the American situation, characterized by organizational methods that are based on three types of segmentation – hierarchical, functional and strategic – would not be the most conducive to producing efficient organizational learning. It would result in a type of innovation based on "narrow and concentrated" skill bases, unsuitable for sustainable growth.

Based on this view, three categories of conditions resulting in the emergence of the innovative firm were defined: (1) industrial (technological, market and competitive); (2) organizational (cognitive, behavioral and strategic) and (3) institutional (financial, employment, regulatory). The analysis otherwise focuses on the dynamic interactions between organizational and institutional conditions emphasizing four main types of institutions: (1) the "executive" institutions in charge of setting out the responsibilities and qualifications of the decision-makers with regard to allocation of resources and returns within the companies; (2) the "supervisory" institutions whose role it is to determine which stakeholders the decision-makers will be accountable to; (3) the "consultative" institutions whose function is to specify the stakeholders to be consulted (unions, shareholders, company groups…) as well as the consultation procedures; (4) the "regulatory" institutions that define the laws and rules for company decisions relating to the allocation of resources and returns.

This governance theory, based on the innovation process, recommends methods of redistribution of rents other than those normally retained in shareholder or stakeholder models, for example, favoring entrepreneurs responsible for launching new projects. It also contributes to the analysis of certain mechanisms such as the board of directors, in relation to their ability to encourage organizational learning and to conclude, for example, that this body should include representatives from every entity (organizations of employees, companies, financial institutions, training institutions, public bodies…) in agreement with this objective. Finally, more generally, the State is attributed the important role of structuring the institutions in a manner so as to facilitate the organizational learning process.

This resolutely prescriptive approach is critical with regard to the financial view of governance as well as the stakeholder approach; they are criticized for ignoring the dynamics of innovation. Beyond its normative aspect, it recommends an analysis of governance systems, based on their ability to facilitate innovation.

1.4.2. – Aoki and the comparative institutional analysis

Initially, Aoki's research regarded the theory of the "cooperative" firm (Aoki, 1980, 1984) based on the cooperation between shareholders and employees, attributing as much importance to the horizontal and participative dimension of coordination as the vertical dimension, and on the complementarity of mechanisms within the Japanese firm (Aoki, 1988, 1990). More recently, extending his research on the firm, Aoki (2000a and b, 2001) proposed a "comparative institutional analysis" that very likely at the present time constitutes the most advanced and ambitious study on governance systems, simultaneously taking into consideration the disciplinary and productive aspects. Although the latter analysis is conducted at the macro level, the central role of the firm in the model justifies that it be included in the first section.

In a framework of analysis based on the subjective evolutionary game theory – in which the different players are supposed to possess individual and incomplete cognitive views

of the game – Aoki defines the institutions of governance as self-enforcing mechanisms that govern the strategic interactions between the players[22]. These mechanisms (formal or informal) regulate the choice of actions of the stakeholders (investors, employees and managers) in the organizational field.

The analysis of governance systems is consistent with a very general issue that primarily tries to understand the complexity and diversity of the different NSG from a static perspective as corresponding to the multiple Pareto equilibria solutions for the same game. Secondly, the objective is to analyze the dynamic mechanism of change within these systems in accordance with the view that institutions are equilibria solutions for an evolutionary game, while taking innovation into consideration.

This analysis strays from the normative analyses of governance, such as those that most often dominate the financial approach or that underlie discussions regarding the governance of the innovative firm. Aoki's objective is to understand the bases of the diversity of governance systems, while admitting that the least efficient systems and mechanisms can be eliminated on the long term due to the competition between firms, in conformance to the natural selection principle.

An economy is a game characterized by a set of domains (the domains of common resources – "commons", trade – economic exchange, organizational, political economy – "polity" and social exchange) connected by a group of institutions that comprise a "overall institutional arrangement", or in other words, a system.

The developments in organizational architecture, based on the theory of the cooperative firm, represent a particularly important aspect of the analysis. This architecture is defined in relation to the division (vertical and horizontal) of the cognitive labor, in other words, information and knowledge processing activities between the different components of the organization. Aoki's objective was to identify the main types of architecture in relation to building blocks based on the different methods of informational connection and to study their ability for adapting to the evolution of the environment as much in the commercial aspect as the technological one.

Based on the distinction between vertical and horizontal relationships as well as the opposition between systematic information and idiosyncratic information (specific to a task), Aoki defines a certain number of organizational types (functional hierarchies, networks-integrated functional hierarchies, hierarchical-controlled teams, horizontal hierarchies, participatory hierarchies, suppliers keiretsu, Italian industrial districts, third-party information mediation – Silicon Valley clustering…). He shows that their efficiency depends on the nature of human assets and skills and, more generally, that there must be a concerted evolution – a co-evolution – between organizational structures and the nature of human capital expressed in terms of competence. He also shares certain conclusions with Zingales (2000), but within a larger framework, attributing a central place to the cognitive aspects, particularly to mental models able to interpret the environment. In this analysis, the State is considered a full player with its own objectives but also as a constraint through its interactions with the other players. This integration of public power introduces the political aspect within the governance systems and studies its influence as it interacts with the rest of the system.

This very general framework contributes to the method of analysis of governance that is based on a structure that involving three types of players: the financial investors, the employees – the investors in human capital – and the managers who decide on the use of the resources and assume a central role. In order to discuss the self-enforcing character of governance mechanisms, Aoki puts a special emphasis on the institutionalized links that exist between the organizational domain – in relation to the different types of organizational

[22] This definition, contrary to that of North, presumes that organizations are a sub-group of institutions.

structure – and the domains of financial transactions, work relations and polity, in particular evaluating their interactions.

This analysis identified numerous models of institutional arrangements, classified into three groups. The first group includes two referential and theoretical models: the Walrasian model and the model of the firm associated with the theory of Grossman, Hart and Moore. The second unites different national models based on stylized observations of the main developed countries such as the United-States, Germany and Japan, before the transformations resulting from new information technology. Aoki specifies that other models representing, for example, France, Italy or the Scandinavian countries may have been added, but an analysis remains to be performed. Finally, the third group is comprised of two emerging models, the globalization model and that of venture capital associated with the Silicon Valley. The analysis continues with an examination of outcome of national models in comparison to the emerging models. Will the latter dominate them or replace them altogether? Or will the national models evolve in order to efficiently meet the challenges set out by these new models?

The work of Aoki seems to best express the micro and macro aspects of governance, even if it is debatable in many regards. Among other things, we may regret that the framework of the game theory as well as the way of considering information/knowledge prompts a sometime superficial integration of the cognitive aspects, in particular the production of knowledge through organizational learning. We can also regret the often arbitrary character of the typologies used and contest them by re-examining the critique expressed by Coriat and Weinstein (1995) addressing the Aokian theory of the firm, the advanced causality model, based on the generic modes of information connectedness, that may seem inadequately adapted for taking organizational innovations into account. The magnitude of the reflection undertaken concerning the links between the types of organizational architecture and the institutional systems as well as the effects of complementarity between the different types of institutions, resulted however, in all probability, in the most elaborate governance theory as of yet.

1.5. The microeconomic theories of corporate governance: a synthesis

Table 1 provides a summary of the principal characteristics of the different micro theories of corporate governance of the firm.

Table 1: Micro theories of corporate governance

Governance theories	Disciplinary		Knowledge-based	Synthetic
	Shareholder	Stakeholder		
Theories of the support firm	Mainly Agency theory (normative and positive)	Mainly Agency theory (normative and positive) extended to numerous stakeholders	Behavioral theory Evolutionary theory Resources and competence theory	Attempts for a synthesis between disciplinary and knowledge-based theories
Aspects favored in the creation of value	Discipline and distribution Reduce the loss of efficiency connected to the conflicts of interests between managers and financial investors. Only the shareholders are residual claimants.	Discipline and distribution Reduce the loss of efficiency connected to the conflicts of interests between stakeholders (employees, in particular). Numerous categories of residual claimants.	Productive-cognitive aspects. Create and seize new opportunities	Disciplinary and cognitive aspects

Type of efficiency	Constrained static efficiency Shareholder view of efficiency and ownership	Constrained static efficiency Stakeholder view of efficiency and ownership	Constrained dynamic efficiency Cognitive aspects of production	Constrained dynamic efficiency Cognitive and disciplinary aspects of production
Efficiency criteria	Shareholder value	Stakeholder value	Ability to create a sustainable organizational rent through innovation in particular	Ability to create a sustainable organizational rent through innovation and resolution of conflicts.
Definition of corporate governance systems	All mechanisms that secure financial investments	All mechanisms that maintain the nexus of contracts and optimize the managerial latitude	All mechanisms possessing the best potential for value creation through learning and innovation	All mechanisms that have a simultaneous effect on the disciplinary and cognitive aspects of the value creation/distribution process

2. ANALYSIS OF NATIONAL SYSTEMS OF CORPORATE GOVERNANCE

The opposition between the disciplinary and cognitive functions of governance that support the presentation of the different micro theories, could also, in the continuum, identify the analyses of the NSG. This dichotomy would result, firstly, in the presentation of disciplinary analyses of the NSG that presume that the essential influencing factor of efficiency – often measured according to the productive perspective by the growth of the national economy – is based on the protection of the interest of the different contributors of production factors, with precedence given, under the influence of the shareholder view, to financial investors. This presentation would be followed, secondly, by the analyses attributing primacy to the cognitive aspect. Like the firms, the nations are supposed to have comparative advantages (Porter, 1990) resulting from their abilities and justifying an international specialization, reinforced by globalization.

To present a clearer and more balanced presentation of the different theories of the NSG, this logic will however not be followed. Instead of making the distinction between the disciplinary theories and knowledge-based theories, we prefer to use the one, although quite similar, that opposes the theories that overlook the productive aspect of value creation and those that support it. The productive aspect would therefore be considered globally; whether it is based on disciplinary or cognitive aspects.

The literature assembled comes from relatively separate fields. In the first approach, we find mainly law and finance literature, neoclassical economics and political theories based on rent-seeking. In the second approach, researches come under a larger perspective of the NSG, than the one effectively illustrated in the comparative institutional analysis of Aoki, presented in the first section. They regard, in particular, the national systems of innovation and production, and more generally, the explanation of the different forms of capitalism and their evolution.

2.1. The disciplinary theories of the NSG based on rent appropriation

The analyses supporting the disciplinary perspective based on the appropriation of organizational rents and the protection of the financial investor's rights are of financial origin. They begin with the hypothesis that the financial system plays a central role in explaining economic growth and prosperity. Levine (1997) presents literature that explains and tests the role of this system in relation to information and transaction costs. Its influence is exercised through five functions: (1) risk management : the facilitation of the trading, hedging, diversification, and pooling of risk; (2) allocation of resources; (3) the monitoring of managers and control of corporations; (4) the mobilization of savings and (5) the facilitation of the exchange of goods and services. The financial system would then promote accumulation of capital and innovation (Beck et al., 2000).

This positive effect appears to be confirmed by numerous empirical studies (Levine, 1997). Different indicators representing the liquidity of the financial system, the role of the central bank in relation to the commercial banks, the importance of credit attributed to companies, are positively correlated to growth and productivity[23]. The initial level of financial development is also a good predictor of future growth, once the effects linked to income, education, political stability and the monetary, trade and fiscal policies have been considered.

The question of the respective significance of different influencing factors for growth remains open however. Barro (1996) illustrates that growth is all the more greater because the superior level of education, life expectancy, quality of the law, control of inflation and improvement in terms of exchange are great and inversely, the birth rate and State taxation are low. A high performance financial system, whether it is the reason for growth or accompanies it, is supposed to play a significant role. And then it is a matter of knowing which institutional factors support the development of such a system through a corporate governance perspective.

The dominant explanation belongs to La Porta et al. (1998) that is based on the corporate legal institutions, which certain authors (Roe, 2003) call the quality of corporate law argument. Since this approach is of great significance, it will be presented first. Then we will continue by presenting the critiques that were addressed to the approach before examining the explanatory theories – political, endowment-based and socio-cultural – that are either competitors or provide completion.

2.1.1. The law and finance view of the NSG: the quality of corporate law argument

Within a financial perspective, efficiency depends on the protection of the financial investor's rights against attempts at expropriation by the managers or dominating shareholders. La Porta et al. (1998) concluded that the capacity of the law to ensure this protection – the quality of law – constitutes an influential explanatory factor of the financial policy and the ownership structure of firms. The different NSG must therefore be analyzed according to the protective ability that appears to fundamentally depend on the origin of the legal tradition seen through the opposition between the Anglo-Saxon Common law tradition and that of Civil law[24], inspired from Roman law and including many branches (French, German and Scandinavian). To summarize, the two legal systems function according to different principles. The civil systems are based on professional judges, legal codes and written procedures; inversely, in the Common law system, jurors are not professionals, the laws are not codified and the procedures are oral (Glaeser and Shleifer, 2002).

According to the dominant interpretation (La Porta et al., 1997b, 1998, 1999a and b, 2000a), these differences between legal traditions have a political origin based on the power relationship between the monarchy and the landlords. Hence, British Common law appeared and evolved so as to ensure the protection of the owner's interests against the monarchy. This protection especially ensures the confidentiality of the transactions therefore facilitating financial development. Inversely, the creation of the French and German civil codes in the 19th century, by reinforcing the domination of the State over the courts, led the governmental power to prevail over individual's rights and to a greater regulation of the economic activity. These different legal traditions were subsequently circulated through conquests, colonization or simply imitation. Civil law would therefore be associated to a greater governmental intervention, a weaker protection of private interests, corrupt and less efficient governments, even less political freedom (La Porta et al., 1999b; Djankov et al., 2003a).

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[23] These results are confirmed and extended in particular by the studies of Rajan and Zingales (1998b), Demirgüç-Kunt and Maksimovic (1998), Levine (1999), Levine and Zervos (1998), Beck and Levine (2003) and Carlin and Mayer (2003).

[24] For a brief history of the different traditions, in addition to La Porta et al. (1998), see also Beck et al. (2001b, 2003b).

Another explanation, also of political nature, given by Glaeser and Shleifer (2003) contrarily puts emphasis on the protective role of the State. In order to avoid that the local judges be totally beholden to feudal lords, it was necessary in France, where their powers were particularly strong, to appoint judges who would answer to the central authority. According to this logic that follows the path of efficiency – regulation leads to obtaining a superior level of development – it is the countries that originally had the least efficient system of protection of rights that opted for the civil system. We remark that this second argument supporting the State does not necessarily oppose the preceding claim: protection ensured by the State can be considered as compensation for its own power of predation.

We may also go above the political explanation – either Civil law is imposed because it facilitates governmental intervention or the Civil law structure itself requires governmental intervention (Glaeser and Shleifer, 2002) –, by claiming that Common law acquires its superiority from its inherent advantages[25]. Therefore, for Beck et al. (2002), the most important element is the adaptability conferred by Common law, which provides for a better adaptation to the needs of economic development. From an evolutionary perspective, the non-adapted, inefficient laws would be eliminated. Beck et al. (2001b) therefore contrast a "dynamic" law and finance view to the political perspective supported by La Porta et al. (2000a). Evidently, however the two paths – political and adaptability – of influence of Law regarding finance are not independent of each other: jurisprudence has as much of a chance of developing as the legal system is independent of the State (Glaeser and Shleifer, 2002).

LLSV[26] analyze the systems of protection of financial investor's rights (shareholders and financial creditors) based on legal traditions. They conclude that, independently of the level of national prosperity, the systems based on Civil law – most particularly those of the French branch – offer less protection than those based on Common law. This conclusion should however be weighted in accordance with its ability to execute legal decisions. Hierarchy is modified on these criteria: the German and Scandinavian countries with a Civil law tradition appear to be most performing followed by the countries of Common law and finally, the countries that follow French law. Of the two criteria considered: quality of the protection and ability to execute the law, the French tradition appears to be the less protective.

However, the authors often differentiate between the countries where legal tradition originated and those where it has been transplanted (Djankov et al., 2003b). If, in the first case, the hypothesis that the Civil law tradition constitutes an efficient solution (in particular to guarantee the independence and impartiality of the legal procedure) is sometimes accepted, this hypothesis is rejected in the case of transplantation. In this second scenario, the legal regime appears exogenously, either because it has been imposed or because it has been adopted for linguistic reasons or a reason of political philosophy (La Porta et al., 1998). Consequently, it does not necessarily ensure efficient protection of investors. According to the argument for "transplantation" (Berkowitz et al., 1999), countries that were able to adapt the law to their local conditions or that had a population already accustomed to the law, had more of a chance of building efficient legal institutions.

La Porta et al. (1998) conclude from the imperfection of the Civil law systems that governance mechanisms must appear to remedy the insufficiencies. They justify, in this

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[25] For an analysis of the supposed benefits alleged to Common law, see Coffee (1999). Its superiority is based on the role of the judge who has more latitude than within a civil system to fill the void due to the incompleteness of contracts. In particular, the judge of the civil system is restricted to a role of interpretation of the code. However, this interpretation is contested by Coffee (p. 29), certain researchers in law believe that the French and German judges display more activism than their English colleagues. This greater flexibility of Common law is also presumed by Johnson et al. (2000b).

[26] We will use the initials LLSV, in accordance with tradition, to designate the generic position of La Porta, Lopez-de-Silanes, Shleifer and Vishny.

manner, the persistence of concentrated ownership and the predominance of dominating shareholders in countries of Civil law. Their theory, according to which the legal tradition is the main explanatory factor for the ownership structure, appears to be confirmed due to the negative correlation existing between the concentration of ownership and the protection of investors. The same argument also explains the development of financial markets. The capital markets appear less developed in countries of Civil law tradition, in France in particular, since they are less protective of investors.

The law and finance theory led to an abundance of research attempting to confirm the relevance of the distinction between Common law and Civil law. The research led in three directions.

The first direction consists in studying precisely the functioning and the cost of legal mechanisms in the different systems. Hence, Djankov et al. (2003b), based on indicators measuring the formalism of contentious procedures, show that the latter is systematically higher in countries of Civil law tradition. The procedures are longer, less coherent, less honest, less fair and more subject to corruption. They conclude that ownership rights are much less protected in these countries.

The second direction, and the main one, concerns the impact of legal institutions on finance. Various studies, apart from exceptions, which confirm the relevance of the legal variable, addressed the issues of corporate valuation (La Porta et al., 2002b), the maturity structure of debt, access to external financing or growth (Demirgüc-Kunt and Maksimovic, 1998, 1999 and 2002), the dividend policy (La Porta et al., 2000b), the allocation of capital between firms or industries (Wurgler, 2000; Beck and Levine, 2002; Claessens and Laeven, 2003), the informational efficiency of stock prices (Morck et al., 2000), financial fragility (Johnson et al., 2000a), possession of excessive liquid assets (Dittmar et al., 2003), the operating and bankruptcy risks of companies (Claessens et al., 2000), the effect of diversification on value (Fauver et al., 2003), the legal procedures that an entrepreneur needs to carry out to begin operating a firm (Djankov et al., 2002), the value of voting rights and private benefit associated with control (Nenova, 2003) or finally, the State’s share of bank capital (La Porta et al., 2000c).

The third direction evaluates the influence of the legal tradition on non financial aspects of governance, for example, employment and social security legislation. Hence, Botero et al. (2003) stress that the most prosperous countries, while ensuring better social protection, display less interventionism. If socialist countries or French Civil law countries of legal tradition are greater interventionists than those of Common law, the influencing factor seems to be the legal tradition and not the political factor evaluated using the ideology of the government party.

The law and finance view has evident normative implications. This view considers the market-oriented governance systems, based on Common law and a limited intervention of the State, to be more efficient. The causality model resulting in efficiency and measured by growth is very simple, maybe even over-simplified. By ensuring effective protection of financial investors and limiting the role of the State, the Anglo-Saxon NSG should achieve a better performance. An intervention from the State is justified only when the level of conflict – linked to the risk of spoliation of private interests through other private interests – is too great to be resolved by private means or by the courts (Djankov et al., 2003a). This concept is based on numerous empirical studies that, apart from exceptions, seem to confirm the relevance of the legal factor, if not to explain the superior performance of Anglo-Saxon NSG – a certain number of studies show, that on the long term, this result is not a foregone conclusion (Boyer, 2001; De Jong, 1997; Hall and Soskice, 2001) –, at least with regard to the protection of financial investors and the financial policies followed.

2.1.2. Critiques of the law and finance theory

The law and finance theory is based on a simple argument. The Common law systems, recognized as being more flexible, would ensure a better protection of financial investors, in particular minority shareholders, and would result in a better development of the financial market. This argument was subject to numerous critiques contesting in particular: (1) the presumed advantages of Common law and the interest in the distinction between legal categories regarding the importance of governmental regulations; (2) the presumed connection with the development of financial markets; (3) the homogeneity and the relevance of the legal categories.

2.1.2.1. Is the Common law system superior to the Civil law system?

The first critique is regarding the presumed superiority of Common law: the Anglo-Saxon law would lead to a better adaptation to the variations of the economic environment. Lamoreaux and Rosenthal (2000) studied the possible choices of legal forms available to companies in the 19th century in France and the United States and arrived at a different conclusion. Firstly, the French commercial code offers more flexibility. Secondly, this flexibility was used effectively by French entrepreneurs while their American counterparts were only able to imperfectly recreate it by contractual methods due to the difficulty of executing the contracts. Thirdly, with regard to the rights of creditors as much as those of minority shareholders, the two systems ensured similar protection with the French form seemingly presenting a slight advantage. Globally, it seems that the rigidity of the French form had been over-evaluated and was inferior to that of the American form.

Furthermore, the evolution of the legal framework since the 19th century seems to show that it is the American corporate law that took the example of French law rather than the opposite. The present lag of France, regarding the protection of minorities, would be due to the fact that, contrary to the United States, the management of retirement benefits does not go through the financial market. Such protection is therefore not as important in the United States where it only appeared later due to the scandals that arose in the 1929 crisis. Unable to explain the superiority of the Anglo-Saxon system in view of the characteristics of the French legal framework, the authors put forth the hypothesis that the latter, more complex, could only be applied effectively if the higher legal skills required were present in sufficient quantity. The French form, despite its higher quality, is less efficient in developing countries due to the shortage of competent legal officers.

To a certain extent, this conclusion resembles that of Beck et al. (2001b), who consider that in the French case, there was a deviation from the spirit of the Civil law tradition. If the original objective of codification performed under Napoleon the 1st was to expel the jurisprudence, the necessity of adapting the law to economic requirements and the prior legal tradition would have required the preservation of the important role of jurisprudence leading to the adaptation of the system. However, this relaxation resulting from the jurisprudence in France would not have come about in countries that adopted the French legal framework[27].

The eventual superiority of Common law constitutes an acceptable argument only if the traditional legal systems play a decisive role. But, according to Pistor and Xu (2003), during the last century, as regulatory intervention greatly developed, they would play only a secondary role. The rapid socio-cultural and technological evolutions would increase the incomplete character of the laws. The inability of the legal framework to adapt quick enough would motivate a growing regulatory intervention by public authorities, regardless of the

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[27] According to Pistor et al. (2003a and b), legal systems have a greater ability for adaptation and innovation in their countries of origin.

country's legal tradition. This more flexible intervention was less subjected to the procedural constraints resulting in a better adaptation but at the cost of aggravating the problem of control by the regulator. The main question would no longer be the origin of the legal tradition but that of the structure of State governance.

2.1.2.2. Is the nature of the legal system a primary factor in the development of financial markets?

If we admit to the superiority of the Common law system, then must we establish that it is at the origin of the superior development of the financial markets. This link is strongly contested by Franks et al. (2003) in the British case where the concern for the protection of minorities appeared only recently. According to the law and finance theory, a concentrated ownership structure should have resulted. However, since the British legislation has evolved over the 20th century, from an almost total absence of protection to a very strong protection, a parallel increase in the dispersion of ownership should have resulted. On the contrary, the study of the structures of ownership of English corporations assessed in 1900 and in 1960, shows that ownership was not concentrated in the beginning of the 20th century and there was little difference in the rates of dispersion between these two dates, invalidating the law and finance theory. The authors assume that in the absence of legal protection, the security of the investors is ensured through implicit contracts based on informal trust relationships facilitated by the geographic location of the investors, often in proximity to the companies in question. The external growth by means of takeovers would have resulted in the severance of these trust relationships and the implementation of substitute mechanisms ensuring a formal legal protection[28].

However, if the rates of dispersion are similar in 1900 and 1960, the structures of ownership appear more unstable during the second half of the century. The strengthening of the formal protection of investors seems to be a factor for the growth of market liquidity and the rotation of investors. Finally, the dispersion of ownership in Great Britain did not result in the separation of ownership and control as noted in the United States. The boards of directors remained firmly controlled by the founding families even if they no longer held a substantial share of the capital.

Coffee (2000, 2001a) achieved a similar analysis for the United States. For the greater part of the 19th century, the interests of the minorities were not well protected; the situation was comparable to the recent one in the Eastern Block countries. Also, for the financing of infrastructures by foreign investors, two protection mechanisms appeared, first, investment bankers have a seat on the board of directors and second, regulation mechanisms have been implemented with regard to the stock market. The American and English experiences led Coffee to reject the law and finance theory: the law is not a preliminary condition to the development of financial markets. Causality would be the opposite. In the beginning, these markets could develop based on the substitute mechanisms applied, of private origin, but in the end the legislator had to intervene upon the request of investors, to reinforce their protection.[29]

The study of Rajan and Zingales (2003), regarding the development of financial markets throughout the 20th century, also invalidated the law and finance theory. This study

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[28] Cheffins (2001) also notes that minorities receive limited protection in Great Britain and this situation has barely evolved in the second half of the 20th century. The evolution of ownership structures towards more large public firms is based on a certain number of substitute mechanisms, such as the concern for the reputation of finance professionals and the regulatory role played by the London Stock Exchange.

[29] Similarly, according to Roe (2003b), in the United States, Common law was completed by the creation of the SEC that led many authors to believe that the SEC was the first mechanism for the protection of minorities and that the main function of Common law was not that of ensuring this protection.

predicted that either financial development would be guaranteed indefinitely or it would be perpetually blocked or restrained if the protection of financial investors was insufficient. On the contrary, on the basis of the usual financial indicators, most of the nations appeared more developed in 1913 than in 1980, the level of 1913 was surpassed only recently. Also, in total contradiction to the predictions of the theory, in 1913, the French financial market presented a market capitalization/GNP ratio almost equal to twice that of the United States, while the French legal system, presumably hostile towards investors, should have produced opposite results. More generally, in the beginning of the century, the Common law countries were not more developed on the financial plan than those of Civil law tradition.

2.1.2.3. Are the legal categories homogenous and relevant?

The validity of the law and finance theory is also dependent on the homogeneity of the legal categories that is strongly contested. Coffee (1999a) is not convinced that the American and English systems can be put in the same category. The quality of the protection of investors seems to him to depend mainly on the ability to apply the law; he shows that the minorities are much less protected in Great Britain than in the United States and that this difference is in all probability of the same nature as that existing between the United States and France. In addition, the role of judges is quite different. Hence, if American judges seem very active in the creation of new legal regulations in the absence of a specific law, their British colleagues seem contrarily passive. Then what is the difference with countries of Civil law tradition? What seems to matter most to Coffee, is not so much the quite contestable proximity between the American and the British corporate laws but rather the real proximity between the financial market regulations, which would explain the similarities in the development of the financial markets.

Coffee (2001a), starting with the analysis of the development of German, English, American and French financial markets, also proposes an interpretation of the role played by the State, as opposed to that of LLSV, according to whom the financial markets cannot develop in the absence of a legal system to protect financial investors. The English and American experiences support an opposite model: substitute mechanisms of private nature appeared to offer this protection. The legal system is important not to offer a technique for the protection of investors' rights but as a framework supporting the decentralized development of methods for private regulation and facilitating the development of financial markets. This conclusion is backed up, a contrario, by the French case. The governmental control over the stock market, ensuring a monopoly status, was an incentive for the latter to not engage in innovations. Due to the governmental regulation, private initiatives that ensured protection of the investors in Anglo-Saxon countries were discouraged.

To a certain extent, this theory is similar to the very radical critique of the law and finance theory expressed by Pistor et al. (2003a). The indicators used by LLSV to evaluate the protection of minority shareholders is often associated with the legal practices that, in Common law countries, have either been abandoned early on or they have only been recently adopted for reasons of European harmonization. The argument according to which these practices would proceed from more favorable attitude with regard to the protection of ownership rights therefore does not seem well founded. Consequently, the presumed link between legal traditions and the development of financial markets must be found in aspects other than those covered by these practices. For Pistor et al., the most important element is the ability of the legal system to adapt to the requirements of economic, political and social situations. The essential criteria would not be the protection of minorities but rather the flexibility of the legal framework.

2.1.3. The political view

The numerous flaws in the law and finance theory make us turn to the earlier political theory of the NSG. The first version was proposed by Roe[30] (1990, 1994 and 1997) to explain the configuration of the American financial system. It is sometimes called the politics and finance view (Beck et al., 2001b) due to the role attributed to politics in the construction of financial institutions. While the theory of LLSV dominates the law and finance perspective, that of Roe occupies an equal position within the political perspective. For this reason, it will be presented first.

2.1.3.1. The political theory of Roe

Roe's analysis is centered on the organization of the American financial system, in particular on the emergence of large public corporations and the dispersion of stock ownership. The configuration of this system cannot be explained exclusively by the search for efficiency (ability to realize economies of scale resulting from the possibility of financing large entities; superior portfolio diversification linked to the better liquidity and the greater size of financial markets; greater competence of professional managers…) but also and maybe more so by the political constraints that were exercised in the past and have influenced its path of development[31]. In support of this theory, Roe devotes himself to a historical analysis of the American system explaining its inability to finance the expansion of the economy because of insufficient concentration. This would be mainly due to political factors with either an ideological foundation – the American populism would have prevented the creation of organizations sufficiently powerful to jeopardize the interest of the citizens –, or interest-based, certain interest groups profiting from the fragmentation of the financial system. These obstacles to the emergence of a banking power, will have also affected other forms of financial power such as insurance companies and to a lesser extent, investment funds. The argument is therefore based on the excessive regulations, the political constraints rendering a NSG a priori less than optimal (Coffee, 1999b).

The absence of powerful financial organizations would have had significant consequences on the discipline exercised by the investors over the managers. In accordance with agency theory, the fragmentation of ownership results in an increase in agency costs that could lead to higher capital costs, even if the concentrated ownership retains its own costs. The American system however endured, since it was able to invent substitute disciplinary mechanisms to control the managers (competitive markets for goods and services, an active takeover market, incentive remuneration systems…), and take advantage of dispersed ownership that facilitated financing and the creation of managerial capital (and a managers' market). The recent evolution towards institutional ownership of capital (via investment funds) and a more active and direct control of managers may however be interpreted as a recognition of advantages associated with concentrated control. In the end, Roe concluded that neither of the two main systems – dispersed ownership against concentrated ownership – seems to be systematically superior and we must make place for competition between the systems.

In his initial studies, Roe gave precedence to the analysis of the American system, but then he tried to understand why the dispersion of ownership did not occur in non Anglo-Saxon nations therefore preventing the emergence of large public corporations. The explanation is also political (Roe, 2000). In social democracies that support the interest of

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[30] We may also mention Pound (1993) as one of the founders of this approach.

[31] Path dependence in the corporate governance systems is analyzed in depth by Roe (1996) and Bebchuk and Roe (1999). For Williamson (1988a), in accordance with the criterion of remediability, efficiency must be evaluated relatively and taking into consideration the costs for exiting the path, in other words the adaptation costs for the system.

employees, the managers have less incentive to perform their managerial duties in the best interest of the shareholders; the political constraint opposes an alignment of interests between shareholders and managers and reduction in agency costs. Codetermination, which results in a highly rigid labor market, is one of the main obstacles for this reduction. The dominating forms of ownership in social democracies would consequently be family-owned firms or concentrated-ownership firms. A contrario, the emergence of the large public corporation in the United States appeared only because of the absence of a dominant social democracy. Roe finds corroboration for his theory in the significant statistical correlation that exists as much between the dispersion of ownership and the political positioning of nations as between the importance of the financial market and income inequality.

The latter argument completes those expressed previously, supporting the fact that political factors were obstacles in the emergence of a strong financial power. Regarding efficiency, the arguments are however different, since the existence of a financial power was supposed to reduce agency costs between shareholders and managers while the presence of a social democracy ideology caused an adverse effect. Roe decided to abstain from evaluating the combined effects of financial power and social democracy, therefore the result remains undetermined.

Roe (2001) extends his theory by considering the competitive character of markets that is supposed to determine the level of appropriable rents. Therefore, social democracy would be more frequent in smaller nations with lower competitive character. This weakness would result in the existence of higher rents that, on the one hand, would procure greater latitude for managers, and on the other hand, would become a stake for different interest groups. In both cases, there would be an increase in agency costs, managers would be less constrained and employees would have a higher incentive to seek rents. Due to the electoral importance of employees as compared to the shareholders, this situation would most often result, on the national level, in a domination of the social democratic parties. In this scenario, the protection of the shareholders interests that is not ensured through the political or legislative paths would be carried out privately by the concentration of ownership. This causality model differs from the previous one, since it uses the industrial structure to determine political positioning and corporate governance systems. The strong correlation that exists in developed nations, between the protection of workers and the concentration of ownership on the one hand and the market power on the other hand, supports this model.

Roe's theory, affirming the primacy of political factors over the influential legal factors, also contributes to the criticism of the law and finance theory. To justify this primacy, Roe (2002, 2003a) shows that the explanatory power of the law can only be limited. To do so, he decomposes the managerial agency costs into two categories: (1) the first is associated with "private benefits" that the managers try to appropriate in accordance with their opportunism; (2) the second is linked to managerial errors, based on the ability of the managers to exploit investment opportunities in the best interests of the shareholders, these "errors", of course, could be considered as relevant decisions from the managers or employees point of view. If the law is able to efficiently reduce the first category of costs, then it is revealed as incapable of eliminating the other costs. This duality would explain that the concentration of ownership is maintained in most European nations while the legal protection of the financial investors is of comparable quality to what it is in the United States. This concentration would therefore not be because of insufficient legal protection but rather the necessity for reducing the costs related to managerial errors.

Another limit of the law and finance theory is therefore emphasized. If the concentration of ownership endures in a nation, we do not know whether it is because of insufficient protection of financial investors against appropriation manoeuvres from managers (or dominant shareholders), or of managerial errors presumed to be more frequent in the

absence of dominant shareholders. The results of a test confirm the superior explanatory power of the political theory in developed countries. Roe does not conclude however that the law and finance theory should be totally discarded: the argument of legal protection remains relevant in particular in developing nations or nations in transition, but it is far from being exclusive or even an influencing factor in developed nations. Let us also recall that in the law and finance theory, the role of politics is not denied but is limited to explaining the emergence of the legal tradition.

As shown by Gourevitch (2003), the political view of Roe contains in fact three critiques of the law and finance theory. The first one relates to the importance of the legal protection of financial investors: effective protection does not suffice to guarantee diffuse ownership because other reasons exist for the existence of control blocks. The second presumes that it is not the law that determines the request for legal protection, but rather the competitive character of the markets. If the markets function well, the rents are limited and the conflicts between the stakeholders hoping to appropriate the rents are minor. Finally, if competition determines corporate governance, it is in itself caused by political factors that are therefore the main explanatory variable.

2.1.3.2. Other political models and the critique of the political view

Roe's political theory was also subject to many critiques, propositions for development or expansions. As specified by Gourevitch (2003), since Roe opened the door for political interpretations of governance, other models may equally be proposed. In particular, Roe's analysis, based on the ideological opposition between right and left and the conflict between employees and financial investors, seems incomplete. Other scenarios, based on different relationships between the three main interest groups – the financial investors, managers and employees –, may be designed.

The models proposed by Rajan and Zingales (2003) and by Pagano and Volpin (2001 a and b) illustrate some of these scenarios. According to Rajan and Zingales, the main explanatory factor of financial development resides in the relative power of the beneficial political forces. Their scenario reveals that this development constitutes a threat for the dominating interest groups whether they are industrial or financial. The established (and mature) industrial interests are presumed not to be beneficial for the following reasons: (1) since their opportunities for growth are limited, there are few advantages; (2) they can easily be financed, either by a bank for they can use the collateral from existing projects and their prior reputation to borrow, or on a financial market that is modestly developed with limited transparency, because of their past history and position; (3) their relative strength efficiently protects their investments. Regarding the financial interests, development compromises their comparative advantage, based on the relational aspect of financing. Financial development therefore threatens the interests in place by increasing competition and by obstructing the progression of existing relationships. The vigor of the opposition depends on their respective powers and the profitability of this strategy.

In the past, how have dominating interest groups been able to slow financial development in order to protect their rents? The main explanatory factor of development seems to have been the international openness of the economy through its influence on the competitive character of markets. The political analysis is therefore expressed in terms of opposition to this openness. In a crisis situation popular pressure is exercised requiring reinforced protection from the State. The barriers that result do not only reduce international competition but also national competition and supports maintaining the rents appropriated by the dominating interests. In contrast to the analysis of Roe, which places workers and financial investors in opposition – the cause of higher agency costs in social democracies and the preservation of the concentration of capital –, that of Rajan and Zingales, which attempts

to explain the re-concentration of capital in European nations, is more balanced and dynamic. The result depends on the alliances between the interest groups. On occasion, it is possible for workers to make a pact with the industrial and financial interests so as to oblige the government to slow down the international extension.

Pagano and Volpin (2001a) propose another model. If politics play an influential role in the construction of the legal framework in response to the request of various interest groups, the structure of political institutions also intervenes by influencing the possible alliances. Since the entrepreneurs-managers are presumed to have little influence, the political debate mainly opposes the financial investors and workers. In order for the entrepreneurs to appropriate private benefits at the expense of the financial investors, they can conclude an agreement with the workers guaranteeing them better protection where their job is concerned. The possibility of such an agreement depends on the structure of the political institutions. The "consensus" systems, based on coalitions, are in opposition to the "majoritarian" systems. In the first systems, Pagano and Volpin obtain a solution characterized by a poor protection of financial investors and a strong protection of workers. In majoritarian systems, the solution is reversed. The results of the model are sensitive to the diffusion of ownership: the greater the diffusion, the higher the chance that protection of the capital will be essential. The "corporatist" nations offer greater protection for workers and a poorer protection for financial investors and most often have a "consensual" political system favoring coalitions, as confirmed by the results of a test.

Gourevitch (2003) tries to generalize the political theory with its previous models constituting special cases. Firstly, his theory is based on a representation of political preferences and interest groups, different from the traditional right/left or capital/labor opposition, hardly relevant when accounting for different types of conflicts. As revealed by Rajan and Zingales, in certain circumstances, industry-based logics may prevail over the capital/labour opposition; alliances may be formed between workers, shareholders and managers in order to protect the specific industry-based investments against the effects of globalization. Gourevitch and Shinn (2004) conducted a systematic study of coalitions that can be formed between these three groups.

Secondly, according to Pagano and Volpin, an important role is attributed to political institutions for the aggregation of preferences, such as electoral laws, the degree of federalism and the relationships between the legislative, executive and party systems. A fundamental opposition is also present between the majoritarian and the consensus systems. It does not reflect the right-left distinction, a left wing regime may result as much from a majoritarian logic as a consensual one. If majoritarian systems are conflicting and facilitate sudden modifications and extreme solutions, it is entirely different for the consensus systems based on negotiation and compromise. A system of corporate governance beneficial for shareholders (or, inversely, only for the workers) is only possible in a political majoritarian context. The credibility of long term commitments that influence specific investments, in particular those made by workers is only as strong as the system is consensual.

Such an analysis is therefore based more on the protection of specific investments made by the different stakeholders than the reduction of opportunism with regard to only financial investors. This analysis resembles that of Blair and Zingales that focuses on the protection of specific investments made by workers; arguments of cognitive nature are not present.

The political theories were also criticized. Roe's theory, regarding the political origin of the dispersion of ownership in the United States, is particularly contested by Coffee (2001a). If this theory is valid, how can we explain that in Great Britain, in a political context that is much less constrained, the financial investors are organized in similar fashion? Coffee is not convinced by the political explanation for the concentration of ownership – and lack of

transparency – in Europe, for which the function would be to offer protection to the private investors against attempts at expropriation from the social-democratic States. He finds this explanation to be fallacious because it implies that these States would have a special interest in favoring transparency to increase the dispersion of ownership and weaken the financial investors in order to obtain better control over the private sector. On the contrary, in the past, these States were rather opposed to the development of these financial markets. He finds the theory of Rajan and Zingales to be more plausible: the poor development of the financial markets could be explained by the comparative advantage of banks to constitute a lever of governmental interventionism. Once the banks had established their power, it was in their best interest to oppose the emergence of markets.

Coffee, however, does not deny the importance of politics (Gourevitch, 2003) that intervene on two different levels in the alternative theory, based on the institutional investors' demand for liquidity, that he proposes (Coffee, 1999b): (1) once the diffusion of ownership is accomplished, the shareholders put pressure on political leaders in order to obtain a legal regulation to protect their interests – the law can be adapted but is not foregoing; (2) politics play a central role in relation to the key variable of the theory, in other words, the intervention of the State in economic life that influences the emergence of private mechanisms of governance.

The decisive influence of politics on the constitution of NSG however appears difficult to deny but it does not take only one direction. Coffee's critique presumes that, for Roe, only the causality model underlying the American system would lead to the dispersion of ownership. As such, this type of interpretation is based on naïve determinism, foreign to Roe's approach (Roe, 1996; Bebchuk and Roe 1999), which does not exclude the fact that other earlier paths may have resulted in the same effects (the equifinality principle[32]). Gourevitch (2003) and Gourevitch and Shinn (2004) have emphasized the complex character of the paths which have led politics to influence the forms of ownership.

Of course, the State is an essential link for political analysis. For Beck et al. (2001b), the political view leads to the conclusion that a centralized, strong government is not compatible with financial development due to the threat of governmental predation and the risks of interventionism that could hinder the proper functioning of the financial markets. Similarly, the existence of powerful interest groups or majoritarian electoral systems would constitute as much of a threat for the development of financial markets. Such a conclusion is far from being totally accepted. Furthermore, Rajan and Zingales show that certain configurations of a balance between the interest groups can be beneficial to the development of financial markets. There are early examples of how a centralized State can try to develop the financial markets, such as the case in France under the socialist government two decades ago or even earlier under the French Second Empire[33].

2.1.4. The endowment theory and the socio-cultural theory

Two other theories propose different or complementary explanations of the legal-financial and political theories. The first, the "endowment" view or theory (Beck et al., 2001b, 2003b), is a study of the emergence of financial institutions in ancient colonized countries, in connection with their endowments in natural resources and their health status. This theory

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[32] The principle of equifinality states that there are a number of different paths to any given outcome.

[33] As specified by Roe (2003a, p. 69, note 19), Coffee's explanation based on the role of the State is contradicted by two factual elements. Financial markets were developed in France and Germany under the two conservative governmental regimes, the French Second Empire and the Imperial regime of Bismarck. Furthermore, the United States (through the SEC budget) spent much more – after controlling for the effects of size – to regulate their financial market than the European nations and therefore based on this point, governmental intervention in the United States appears more intense.

helps us to better understand the failure or success of transplanted institutions and to qualify the law and finance theory that presumes structural inferiority of the countries that adopted the French law without considering the context. The second theory comprises all the works that retain socio-cultural variables (religion, trust, norms in general…) as explanatory factors for the risks incurred by financial investors and for the level of agency costs.

2.1.4.1. The endowment theory

An important line of research (see for example Sachs, 2001) claims that the geographic differences (climate, endowments in natural resources…) and health related differences (in particular, mortality factors) have played an influential role in development. The countries that are not well endowed should have experienced more difficulty in creating efficient institutions, particularly financial. Acemoglu et al. (2001) put particular emphasis on the health situation that was present during colonization.

The argument underlying this theory is as follows (Beck et al., 2001a and b). Firstly, according to historians, the types of institutions created depend on the policies for colonization. Implantation strategies, contrary to the resource extraction strategies, led to the creation of institutions to protect ownership rights and facilitate development. Secondly, if the health status is unfavorable, the extraction strategies had a greater chance of being established. Thirdly, the initial state of the institutions has been extended until today. Therefore, institutions that turned to extraction of resources, generally centralized and authoritative, were upheld by the subsequent governments inasmuch as they were beneficial.

Acemoglu et al. (2001) reveal that the level of development depends greatly on the institutional variable that represents protection against expropriation, itself depending on the mortality of the colonists. The presumed superiority (La Porta et al., 1999b) of the British legal tradition would in fact be due to a lower mortality in British colonies. However, the French legal origin remains associated with the institutional framework that is least performing, even after controlling for the mortality rates. In addition, the religious, climatic, ethno-linguistic, endowment and natural resource variables have little effect on the results.

The institutional theory proposed by Acemoglu et al. supports the role of institutions in development and is opposed, at least in part, to the "geographic" determinism theory. In support of their theory, Acemoglu et al. (2002) show that, among the countries colonized by the European powers, there has been a regression: the richest countries of the beginning of the 16th century have become the poorest ones today. The Europeans would have created institutions beneficial to investment – protecting private interests –, in the regions historically less developed where implantation was easier. In the 19th century, the nations using the institutional framework would have better success at industrialization. Such a scenario does not exclude the influence of the geographic factor, but this influence was accomplished through institutions.

The institutional theory is also reinforced by Easterly and Levine (2003). They compare, among other things, the "geographic" and "institutional" theories with the "policy view" theory, which implicitly inspire the actions taken by multilateral development institutions. In the latter, the historical heritage plays only a minor role; to guarantee the extension of international trade and the freedom of capital flows. The results reveal that the endowments have a significant influence on the level of development, with mortality explaining more than half of the variance. The influence of endowments, however, passes through the institutional path. Mortality and geographical latitude explain almost half of the institutional variation, with control variables – legal, ethno-linguistic and religious – that are often significant[34].

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[34] These results are similar to those of Beck et al. (2003a), whose study based on the influencing factors for

Of course, it is important to know whether endowments explain development beyond their influence on institutions. A procedure of simultaneous equations shows that this is not the case; it is the institutional framework that is the decisive factor. The development policies theory is also rejected, which would imply that a political action that is not accompanied by an institutional reform is not very efficient. The variables associated with the legal origin lose all their significance which also invalidates the law and finance theory. The same is true for the variables that represent the ethno-linguistic diversity but not the religious variables.

The imbrication of the different variables obviously impedes a clear perception of the causality relationships. Endowments however seem to play a key role only through an institutional framework, therefore confirming the institutional theory.

2.1.4.2. The socio-cultural theory

Tests of the endowments theory often reveal a significant effect of the religious and ethno-linguistic variables. For example, Beck et al. (2003b) find that the ethno-linguistic dispersion is negatively correlated to the degree of financial intermediation, or that the financial development of ancient colonies depends on religious practices: it seems weaker in populations that are mostly Catholic or Muslim. In certain studies, the inclusion of these variables renders the legal-financial and political variables insignificant. These results are hardly surprising. The disciplinary theories attribute a central role to opportunism; we intuitively expect that these variables, associated with religion, trust, civil and social capital play an important role.

La Porta et al. (1997a) study the role of trust and social capital consistent with the works of Coleman (1990), Putnam (1993) and Fukuyama (1995) who consider that these variables represent the propensity of individuals to cooperate socially in order to increase productive efficiency. Trust seems greatly and positively correlated to the efficiency of the legal system, the absence of corruption, the quality of the bureaucracy, the acceptance of taxes and civil participation. The hypothesis according to which the highly hierarchical religious organizations (Catholic, Orthodox and Muslim religions), supporting vertical links of authority, would have impeded the construction of trust, is also tested. The hierarchical character appears to have a strong negative correlation with trust and seems to have a detrimental influence on the quality of institutions and the level of development.

Stulz and Williamson (2003) also try to evaluate the influence of religion on financial development, by distinguishing between the rights of the shareholders and those of the creditors. It is only religion that has a decisive influence on the rights of creditors; its explanatory power appears superior to that of language, openness of international trade, individual income level and the legal origin. Countries that are predominantly Catholic offer less protection of creditor’s rights and turn less often to financing through medium or long term debts. The openness of international trade reduces the influence of religion. In turn, with regard to the shareholder’s rights, religion loses its explanatory power if the legal origin is taken into account. Globally, the study confirms the role of religion and language.

Beyond the financial development, Barro and McCleary (2003) attempted to better define the influence of religion on economic growth by separating church attendance and beliefs (hell, paradise…). Economic growth seems to be positively correlated to the importance of beliefs, but negatively to attendance. Since beliefs reinforce morals they reduce opportunism, they constitute the output of religious systems. Most particularly, it would seem that the fear of hell has a greater effect on growth than the perspective of paradise. As for

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development of financial institutions confirms the role of endowments and the legal systems, with endowments offering the better explanatory power. The French legal origin looses its significance when the religious variable is introduced. The political variables would only have a secondary role.

attendance, it would represent the resources consumed in the religious activity. At a given level of belief, greater attendance would result in less productive efficiency. The authors also study the influencing factors of religiosity through an analysis of the supply and demand of religion. Religiosity is positively correlated to the presence of State religion and negatively to the intervention of the State in the appointment of religious leaders. These results open the door to reintroduce the political analysis with regard to religious values. Finally, the religious diversity has a positive influence on church attendance and beliefs.

In these different studies, the legal and religious variables are supposed to be independent. Certain results however lead us to presume that they interact. In particular, the hypothesis according to which a greater level of morality substitutes for strict legal control seems plausible. The complementarity hypothesis is however also valid: greater moral standards facilitate the application of the law. In this perspective, Coffee (2001b) questions the interaction between moral norms and legal systems. His approach is based on an apparent anomaly: private benefits acquired by control, traditionally used to evaluate the quality of legal protection, are the lowest in the Scandinavian nations of Civil law tradition while this result should have been obtained in countries of Common law. According to Coffee, this anomaly originated in the social norms that were substituted for law to ensure efficient discipline in the Scandinavian countries. This hypothesis, if it seems to be corroborated by Russia, Mexico and Brazil, is less valid in numerous Common law countries, such as the United States.

Licht (2001), considering that the national culture is the principal determinant of efficiency, proposes the use of concepts and methods of intercultural psychology in order to evaluate the cultural differences between nations and their effects on the NSG. To characterize the national cultures, he uses the works of Hofstede (1980, 1991) and Schwartz (1999) as a basis. The explanatory power of national cultural profiles relating to the protection of minority shareholders and creditors is tested by Licht et al. (2002), based on national scores established from three aspects identified by Schwartz (the oppositions of embedness (of the individual in a group)/autonomy; hierarchy/egalitarianism; master (control of the natural and social environment)/harmony), and four aspects from Hofstede (uncertainty avoidance; individualism/collectivism; power distance (attitude towards power and inequality); masculinity/femininity). The protection of shareholders is negatively correlated to the values of harmony and avoidance of uncertainty that would lead financial investors to avoid confrontations and hence renounce the respect of their rights. Similar results relating to harmony are obtained for the protection of creditors. The inclusion of a legal-financial variable shows that the cultural factor prevails over the law. Finally, the cultural classification of the nations does not reflect the legal typology of La Porta et al. (1998, 2000a). The countries that offer better protection to shareholders and creditors simultaneously are the Common law countries in the Far East. The Anglo-Saxon countries ensure excellent protection of shareholders but a poor protection of creditors.

The disciplinary perspective, dominated by the law and finance theory, views the main source of prosperity in the financial development supported by the protection of the investors. The law and finance theory, which leads to opposing the NSG based on legal origin, is strongly contested because it attributes a decisive role to legal variables only. Other studies show that the political and social variables as well as those representing endowments have an explanatory power preceding or exceeding that of legal variables. These studies, however, do not question the disciplinary origin of performance; they only contest the hierarchy of influential factors and the links to causality. To go beyond, we must account for the productive aspect of value creation.

2.2. Productive analyses of NSG

Productive analyses simultaneously involve incentive (protection of human and financial capital) and cognitive aspects. This leads us to consider like Hodgson (1988, 1989, 1993), Nelson (2002) or Nelson and Sampat (2000) that institutions display not only an incentive matrix but also a cognitive one that plays a central role in the construction and transmission of knowledge through the learning process. Charreaux (2002a and 2002b) even presumes that the financial aspects are not exclusively incentive but also cognitive.

If the role of institutions simultaneously takes an incentive and cognitive path, then theoretical reflection therefore takes a systemic form going much beyond the legal-financial aspects, eventually completed by the politico-cultural aspects, to integrate educational, technical and work relationship aspects into the social systems of production (Streeck, 1992; Hollingsworth and Boyer, 1997), the varieties of capitalism theory (Hall and Soskice, 2001, 2002), the comparative institutional analysis (Aoki, 2001) or finally, social systems of innovation and production (Amable et al., 1997), within which the interdependencies play a central role. The field of corporate governance theories is then included in literature regarding the economic systems using a much larger framework than that considered by Djankov et al. (2002). Let us specify that the productive analyses of NSG are not confounded with the technological theory – in its neoclassical or evolutionary form (Nelson, 1998) – that retains technology as the main influencing factor for growth[35].

A presentation based on the incentive/cognitive distinction is hardly relevant due to the imbrications of the incentive and cognitive aspects. Another distinction enables a classification of productive analyses into two categories: (1) one originates with an analysis of NSG supported by a micro analysis of corporate governance based on the firm; (2) the other originates in direct position with the macro level.

These different analyses identify numerous types of NSG that, apart from exceptions, do not reflect the opposition based on legal categories as emphasized by the law and finance theory. If, on occasion, the theories that attribute a dominant role to the productive aspects, distinctly oppose two types of systems, most often, they result in more complex typologies.

2.2.1. Productive analyses of the NSG connected to the micro theory of governance

The main studies that integrate the productive aspect and are based on the firm may be grouped into the "Varieties of Capitalism" (VOC) theory. The theories of Aoki and Lazonick and O'Sullivan presented[36] in the first section, developed on a macro level, can be considered as particular cases. However, the presentation will be centered on the VOC version deemed to be dominant[37] by Hall and Soskice (2001, 2002), which opposes two leading types of economies and NSG inside capitalism: "liberal market" economies and "coordinated market" economies.

2.2.1.1. The dominant vision of the VOC: the opposition between liberal market economies and coordinated economies

An objective of the dominant VOC view, consistent with the continuing research realized regarding the different forms of capitalism (Hall, 1999; Hall and Soskice, 2001,

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[35] According to Nelson (2002), institutions influence the creation of technology and its adoption as illustrated in literature regarding the "national innovation systems" (Lundvall, 1992 ; Nelson, 1993 ; Mowery and Nelson, 1999) and its extensions that, in certain regards, can be considered as being based on the innovative firm theories.

[36] We could also include the analyses of the complementarities inside the different systems of capitalism, proposed by Pagano (2002) and Nicita and Pagano (2002), in a perspective based on the protection of assets.

[37] This reference to Hall and Soskice may be criticized since it is far from representing all the VOC literature. For a synthetic presentation of the main studies in this objective see Boyer (2002).

2002; Boyer, 2002), is to explain the coexistence of the different economic systems based on the strategic behavior of economic actors, particularly firms. According to Hall and Soskice, the VOC reflects a "relational" perspective of the firm that integrates the contractual and cognitive conceptions of the firm and attributes an important place to the productive aspect. However, despite firms may be viewed at first as actors attempting to build and then exploit competencies within the RBV perspective, Hall and Soskice refer mainly to the contractual perspective.

Coordination is broadly considered with regard to the development of competencies and involves both disciplinary and cognitive aspects. Five institutional domains have been recognized as significant: (1) industrial relations institutions (remuneration, working conditions…); (2) education and training systems; (3) "corporate governance" interpreted restrictively such as the financial system; (4) inter-firm relationships that include exchange and joint-venture cooperative relationships; (5) internal firm relationships with employees in order to pursue the objectives assigned to them.

Hall and Soskice (2001, 2002) oppose two main types of NSG based on dominant coordination systems: "liberal" and "coordinated" market economies. Since this vocabulary is ambiguous, we will therefore describe these two types of economies as "arm's length" and "relational". In the first type, coordination is based mainly on market mechanisms. It is an "impersonal" spontaneous coordination, based on prices and attributing a central role to formal contracts. In the second type, coordination exists mainly through non-market relationships, strategic interactions of the actors as described by game theory. These relationships particularly involve reputation and information exchange mechanisms within the networks. As specified by Hall and Gingerich (2001), the choice between the two methods of coordination depends on the institutional framework. If markets are deemed imperfect and there is strong institutional support allowing the creation of credible commitments, the relational method will dominate. Contrarily, market coordination would be favored.

Taking professional training and education as well as inter-firm cooperation relationships into consideration implies the integration of the cognitive component of value creation but, for Hall and Soskice, the role of institutions however passes mainly through the disciplinary channel. The primary factors are the ability of institutions to facilitate the exchange of information, the surveillance and the sanctioning of non-cooperative behavior, the objective being to guarantee the enforcement of the commitments by reducing uncertainty.

Hall and Soskice put a particular emphasis on the role of deliberation institutions that provide for the exchange of information regarding the interests and beliefs of the actors in order to increase trust. The function of expanding the cognitive abilities, which would translate into an increase in the actor's ability for strategic action when faced with new situations, appears secondary with regard to the fight against opportunism. This cognitive aspect is attributed more to the informal institutions such as cultural. The informal rules, the shared mental models, are supposed to facilitate coordination by guiding it towards certain equilibria focal points. This aspect also appears in inter-firm relationships that distribute technology or in common technological standards established by industrial associations. In both cases, the objective is to create a common base of skills to facilitate coordination.

This institutional framework within which companies evolve is, at least in part, presumed to be exogenous and to play a dual "enabling" and "constraining" role. In particular, one of the fundamental hypotheses is that the specificities of each NSG lead to systematic differences in strategies between companies. However, this influence does not reflect total determinism; the national framework only sets the space within which managers have great latitude while their actions and skills are viewed as central variables.

If arm's length economies have institutions encouraging flexibility and redeployment of resources, inversely, relational economies constitute a framework suitable for strategic

interactions and (co)specific investments (industry-specific professional training; collaboration in relation to research and development), by better protecting this type of investment against risks of opportunism.

The opposition between the two types of economies, based on the dominant type of coordination, does not exclude the existence of hybrids. However, and this is the main thesis of the dominating version of the VOC, only the "coherent" systems in terms of institutional complementarities, favoring either mechanisms for market coordination or inversely, non-market mechanisms, could dominate due to a greater productive efficiency. For example, significant development of the financial markets would be accompanied by a poor protection of employees, fluid and slightly regulated job markets, training systems based on general skills and impersonal inter-firm relationships based on formal contracts.

Certain complementarities are deemed central (Hall and Gingerich, 2001). The first connects work relationships and financial governance. The financial systems that do not forbid cross-shareholdings by facilitating the concentration of power into the hands of the managers would limit hostile takeovers and would support financing granted on reputation rather than financial results. These systems would increase the efficiency of institutions that govern work relationships, by offering a better guarantee of employment security and to encourage long term contracts as well as the negotiation processes between labor unions and employers unions. The second complementarity associates the systems of labor relationships and training. In market coordination systems, characterized by a substantial mobility of manpower and salary negotiations decentralized at the level of the firm, the training systems oriented towards general skills would be more efficient than those based on industry-specific human capital that requires training supported by close collaboration with the companies. Finally, the third complementarity is between financial governance and inter-firm relationships. If the pressure exercised by financial markets over managers, to ensure they pursue an objective of maximization of shareholder value, is not as great, it would be easier for them to establish credible commitments for inter-firm cooperation with regard to research, development of products or transfer of technology.

These three forms of complementarity are far from being the only ones. Accordingly, Estevez et al. (2001) emphasize a complementarity between social policies beneficial to employees and production strategies based on (co)specific assets. As for Casper (2001) and Teubner (2001), they illustrate how the legal systems are connected with the forms of inter-firm cooperation. Finally, according to Hall and Soskice (2001), by limiting the intensity of inter-firm competition, the regulation of the goods market may be complementary to the relational-based financial disciplinary systems (banks as opposed to financial markets), to the wage systems based on negotiation and to the systems of inter-firm relationships that are aimed at developing cooperation with regard to research and development.

This analysis of institutional complementarities resembles the view of Aoki to which authors make frequent reference. However, Hall and Soskice seem to stray from this view when they conclude that hybrid NSG are less performing because they are less coherent in terms of coordination. If we limit ourselves to the two main types of NSG – the most coherent – and their traditionally associated nations, neither of these two systems dominate the other over an extended period (from 1960 to 1998), regarding criteria for the growth rate of the GDP, the GDP per head and the rate of unemployment.

The VOC analysis emphasizes the concept of institutional comparative advantage: the institutional structure of a NSG provides the companies of this system a competitive advantage in certain types of activities. Opposing radical innovation, characterized by important changes, with incremental innovation, Hall and Soskice show that arm's length economies favor the first type of innovation, which would attribute them an advantage in the industries of rapid technological evolution. Inversely, in the more traditional industries where

quality is the main competitive dimension, the systems favoring incremental innovation would, on the contrary, be more performing. This analysis is similar in certain respects to the studies of Lazonick and O'Sullivan. It differs however in that the cognitive aspects of the innovation process appear secondary in comparison to the disciplinary aspects, the function of protection of (co)specific assets deemed dominant.

2.2.1.2. The political aspect of the VOC

The VOC view attributes great importance to the political aspect. As political action must be defined so as to encourage cooperation, the political organization must be compatible with the dominant coordination method, either impersonal or relational. Consequently, Hall and Soskice emphasize the complementarities between the political and the other institutions, which ensure the coherence in the two main types of NSG. The relational economies should be based on a political system within which the employer and union organizations are sufficiently strong in order for the State to respect the commitments made by these organizations. A strong executive power, based on a majoritarian political system, even possibly a threat to these commitments, would oppose an efficient relational coordination. Inversely, the consensual regimes, since they are more stable and avoid sudden political reorientations, would make such coordination easier. An effective protection with regard to risks created by the interventionism of the State would encourage the investment in (co)specific assets. In relational economics, the social policies are more beneficial for employees, not only for electoral competition or ideological reasons, but because they ensure a better protection of (co)specific investments.

Gourevitch and Hawes (2002) consider however that such an analysis is incomplete and sometimes confuses the different levels of politics. Political influence is supposed to be exercised mainly by the institutions seen only from a formal angle (existence of governmental coalitions or parties able to enforce the respect of the interests of the groups representing the productive forces; multiple possibilities of veto). Then, if the complementarity between the majoritarian systems and arm's length economies and between the consensual systems and relational economies, appears strongly corroborated, then certain formal variables retained, such as the number of "veto points" and the regime (presidential/parliamentary), have a slight correlation to the type of NSG.

Furthermore, Hall and Soskice bring up another aspect beyond the opposition between majoritarian and consensual systems, by introducing a variable associated with the political representation of the interest groups, which raises the question of taking "corporatism" into account to model political institutions. Iversen and Soskice (2001) therefore propose a theory predicting that nations where employees have a human capital that is highly specific should be dominated by parties or governments that would protect this capital through social measures, so as to attract the votes of employees. Gourevitch and Hawes criticize this causality model that, by making corporatism one of the determinants of the political system, while it is more of a product of this system, results in confusion between the independent variable and the dependent variable in the test of the relationship between the type of NSG and the nature of the political system.

Moreover, according to Gourevitch and Hawes, such an analysis presumes that the preferences of the actors are identical regardless of the NSG. However, the preferences and interests seem to differ between types of economies, due to the protection objective of (co)specific investments. In a relational economy, interdependence between the actor's investments influence the composition of the alliances; for example, the financial investors may have common interests with the employees, which can encourage the two groups to join in the search for a protectionist policy. Inversely, in an impersonal economy, the traditional opposition of capital/labor would appear.

Finally, Gourevitch and Hawes also specify the importance of social networks in understanding the differences that exist between the NSG. These networks determine the options with regard to political action. Although the German State can rely on a condensed network to apply certain policies (training of employees, normalization, price and production control), the French State does not have equivalent structures available. On the whole, the influence of politics on the NSG would depend on the imbrications between the different factors presented: the form of institutions, preferences of interest groups and the structure and importance of the social networks.

2.2.1.3. Empirical tests of the VOC

Based on a synthetic indicator, taking into consideration the type of coordination present in the financial sectors, remunerations and work relationships, Hall and Gingerich (2001) reveal that the results obtained by the main developed nations confirm the relevance of typology opposing arm's length and relational economies. As such, the different types of complementarity presented appear to be confirmed within the two types of economies. At last, the hypothesis according to which greater systemic coherence results in a better economic performance is also corroborated.

The complementarity between this typology and the political characteristics is tested by Gourevitch and Hawes (2002). Significantly positive correlations exist between the type of system and the political variables representing the electoral system (majority/proportional representation), political cohesion (between the government parties) and the number of "effective" political parties that would have a chance of coming to power (bipartism/other systems).

However, a certain number of tests provide results that contradict the theory of Hall and Soskice by invalidating some of their key hypotheses regarding the two viewpoints. Firstly, the mobility of the production factors presumed to be less prominent in relational economies and secondly, the presumed inferior performance of hybrid economies.

Hiscox and Rickard (2002) contest the least mobility hypothesis because of the imperfect character of the measurements of specificity of labor normally retained (costs of dismissal and the importance of professional training). Considering it more relevant to study the mobility of employees using inter-sectoral mobility rates, they illustrate that, for the countries of the OECD over the period 1970-1992, the labor mobility rates are higher within relational economies. In addition, the intra-type variance of these rates appears as high as between the different types of NSG. Certain results however conform to the predictions of the VOC. Therefore, the differences between nations with regard to social protection are positively related to the specificity of human capital. But other factors such as programs for retraining and reconversion of employees as well as the nature of the technology also intervene, contributing to distend the presumed link between the specificity of human capital and the nature of the economy.

Kenworthy (2002) doubts the empirical results obtained by Hall and Gingerich, concerning the association between institutional coherence and economic performance: (1) only three of the five institutional domains proposed by Hall and Soskice are considered in the tests; (2) nearly half of the indicators retained are based only on the financial governance domain; (3) the results from certain nations appear barely plausible. The results obtained through a different measurement of coherence invalidate the hypothesis: performance is equivalent for the three groups constituted according to the degree of coherency and the intra-group variance appears quite superior to the inter-group variance. Kenworthy, however, does not reject the theory according to which institutions through their effects on cooperation (Hicks and Kenworthy, 1998) influence performance. He only doubts the ability of the statistical studies to take into consideration the presumed effects of causality, due mainly to

the imperfect character of the measurement of the variables. The theory, opposing two types of coordination, appears to him also to be over exaggerated due to the recent American developments that seem to have resulted, at least in part, from the relational mechanisms borrowed from the Japanese model. Such an example raises the question of relevance of the link between systemic coherence and performance and, more generally, of the evolution by hybridization of the corporate governance systems.

2.2.2. Productive analyses of NSG not connected to the micro theories of corporate governance

The approach of Hall and Soskice originates from a particular conception of the firm to define the NSG. It attempts to explain the coexistence of numerous NSG according to their ability to realize equal performance in conformance to the principle of equifinality. The two polar forms, the most coherent, would result in equivalent performances. In turn, the less performing hybrid forms would eventually be condemned for lack of evolution. This approach, however, is only one particular form of the VOC, based on the two modes of coordination retained. As shown by Boyer (2002), it is possible to define other modes of coordination that results in a typology opposing not two but four types of systems, also considered as coherent. As well, Aoki proposes a more complex typology. The position of Hall and Soskice is sometimes ambiguous regarding the relative efficiency of hybrid forms. The characteristic aspect of the VOC is therefore not connected to the opposition between arm's length and relational economies; rather it is more a matter of importance attributed to the complementarity between the different institutional domains. It explains the coexistence of numerous national systems, simultaneously accounting for the cognitive and disciplinary aspects, the latter occupying a more important place.

Another viewpoint, the regulation theory – "la théorie de la regulation" – , also gives a central role to the complementarity between institutions and hence, institutional coherence. This theory shares a certain number of common elements with the VOC (Boyer, 2002), in particular the refusal to consider that a unique optimal institutional architecture exists, but it diverges on numerous other points.

Initially, the objective of the regulation theory, which emerged in the middle of the 1970's, was not to explain the variety of capitalisms but rather to study the viability of the capitalist accumulation process focusing on crises. The holist and macroeconomic analyses emphasized the concept of the "regulation mode" that represents "all the procedures and individual and collective behaviors that reproduce the fundamental social relationships, guide the accumulation regime in force and ensure the compatibility of a myriad of decentralized decisions, without the actors necessarily being aware of the adjustment principles of the entire system" (Boyer and Saillard, 2002; our translation). The regulation mode is supposed to depend on five fundamental institutional forms: the wage labor nexus; forms of competition; the monetary regime; the place and role of the State and the relationship with the international economy.

This theory however led to an interest in the diversity of capitalisms because of two phenomena: (1) different modes of regulation can be a basis for the same type of growth regime; (2) the different regimes can be supported by different institutional architectures. To explain this diversity and distinguish it from the technological theories, the regulation theory puts emphasis on the political institutional factor that relays the social conflicts and determines the legal framework.

This causality model results a priori in as many forms of capitalism and NSG as States and political configurations, due to the national specificity of governmental interventions and institutional compromises. However, the regulation theory identifies a lower number of configurations – most often four – based on a dominant mode of regulation. The first, the

market-based system, associated with market regulation within a legal framework guaranteeing the enforcement of commitments, can be compared to arm's length economies or to the Common law system of the law and finance theory. The second, described as "social democratic", retains the tripartite negotiation between management, unions and the State as a foundation for the institutional forms. It corresponds to the relational economy model for which the Scandinavian countries constitute an archetype. In the third configuration, called "meso-corporatist", the adjustments are performed mainly at the intermediary, or "meso-economic", level of the large conglomerate companies considered less sensitive to fluctuations in the overall economic situation. The Japanese and Korean economies illustrate this form. Finally, the fourth configuration – the "public" system – attributes a central role to intervention by the State and involves the continental European countries active in European integration. Contrary to the interpretation provided by the VOC viewpoint, the two latter configurations do not constitute hybrids presumed to be less performing, between arm's length and relational economies, but rather fully performing types because of the originality of the mechanisms used to overcome crises.

There are three reasons that justify this reduced number of configurations (Boyer, 2001, 2002). First, if institutions are presumed to have a political origin, their viability depends on their ability to survive in a context of economic competition. Secondly, the existence of an isomorphism between institutional and organizational forms would reduce the number of possible configurations in accordance with the different regulation modes. Finally, for each important phase of capitalism, the existence of either a hierarchy or a specific complementarity between the different institutions would contribute to explaining this reduction.

If, within the VOC view, the NSG theory is constructed by changing from a micro to a macro dimension, inversely, in the regulation theory, the micro aspects were originally ignored. Various attempts have however been made to base the regulation theory on a theory of the "regulationnist" firm (Coriat and Weinstein, 1995; Boyer, 2002), with causality based more on a macro aspect than micro. Despite these attempts, the view remains fundamentally macro.

Finally, in accordance with its initial objective of explanation of the crises, the regulation theory considers time in a different manner. While the VOC supports a static analysis of complementarity and retains an exogenous explanation of crises, due to important shocks linked, for example, to globalization, inversely, the regulation theory proposes an explanation of endogenous nature.

Although the regulation theory stresses the political factor, it does not ignore the role of innovation, which seems to be influenced by the dominant mode of regulation. The theory of social systems of innovation and production (SSIP), which can be considered as being derived from the regulation theory, assigns it more importance. With the presence of six institutional sub-systems (science, technology, industry, labor markets, education and training, finance), it focuses on the interactions in terms of hierarchy and complementarity in order to evaluate coherence and the viability of the system over the long term, the objective being in particular to understand the phenomenon of endogenous growth. The SSIP retains the same typology of the NSG as the regulation theory with each of the four major configurations characterized in accordance to the six sub-systems. It leads to certain predictions regarding innovation, industrial specialization and evolution (Amable, 2000; Amable and Petit, 1999) that are particularly important when studying the question of convergence of the different NSG.

The main contribution of the regulation theory relates, first of all, to the extension of the analysis of institutional architectures using the concepts of "institutional hierarchy" and "institutional complementarity" and secondly, to the dynamic study of the systems, for

example the crises provoked by financial globalization. Compared to the VOC, it also puts greater emphasis on production and innovation through the cognitive aspects while the VOC favor the disciplinary considerations for the protection of (co)specific assets.

The macro analyses of the NSG that integrate the productive aspect place the greatest importance on the interactions between the different institutional domains; this importance is confirmed by different empirical studies. Hence, Nicoletti et al. (2000, 2001), using the nations of the OECD, outline the interactions between the policies for the regulation of the goods and services markets, the level of wages and employment, job protection, the degree of innovation, the distribution of the size of the firms and the degree of specialization of the different nations. The VOC and the regulation view both consider that there is a link between coherence and the performance of the systems even if the form of this link varies according to the complementarities considered or the number of typical forms retained.

The regulation theory deals particularly with the dynamic coherence of institutional architectures and the origin of the crises that are presumed endogenous. It is therefore consistent with the traditional debates on the possible conflict between static efficiency and dynamic efficiency, between static institutional coherence, a source of stability that could result in "ossification" (Olson, 1982; Hodgson, 1989), and the ability of the NSG to adapt. If Olson focuses on the ossification factors associated with the appropriation of rents – that correspond to the disciplinary aspects of governance – Hodgson, on the contrary, stresses the ability of the different architectures to facilitate the creation and transmission of knowledge. Inspired mainly by Polanyi and Schumpeter, he proposes (Hodgson, 2001) an analysis of the adaptation abilities of the different systems in relation to the "impurity principle" according to which an economic system must contain at least one "foreign" structural element in order to adapt. If the static coherence, connected to high institutional homogeneity, is too great it would impede the possibility of a proper adaptation. In this perspective, the hybrid systems would appear, not as systems hampered by a lesser degree of coherence but, rather, as offering a superior ability for adaptation.

The VOC and the regulatory perspective both attribute an important place to the productive/cognitive aspects while emphasizing the possibility of interactions with the legal and financial domains. They also extend, on a macro level, the synthetic attempts at studies that exist with regard to micro theories. This integration results in an analysis of the national structures of ownership as an alternative to the law and finance explanations of LLSV and the political explanations of Roe. As such, Charreaux (2002b) proposes a model involving cognitive aspects, in addition to the disciplinary variables, which explain the ownership structures, not only in terms of concentration of ownership, but also in accordance with the nature of the shareholders and the skills they contribute[38].

The complexity of the institutional interactions raises a question regarding the possibility of understanding the impact of institutional structure on the performance of NSG working only on the macro level. Aguilera and Jackson (2003) therefore propose a model for NSG, based on the actors and involving the three traditional categories of stakeholders, which particularly shows how institutions influence their conflicts and their strategic behavior. This influence is also considered by Thomas and Waring (1999) to explain the investment policies related to NSG and also by Kogut et al. (2002), for the diversification strategies.

2.3. A summary of the theories of the National Systems of Governance

Table 2 provides a summary of the principal characteristics of the different theories of the NSG.

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[38] The importance of the nature of the shareholders is confirmed by Pedersen and Thomsen (2003).

Table 2: Macro theories of the National Systems of governance

	Type of efficiency	Underlying Micro theory	Typology of national systems	Institutional interactions	Uniqueness of the optimal system or equifinality
The disciplinary theories of the National Systems of Governance based on appropriation of rents (excludes the productive aspect)					
Law and finance theory (LLSV)	Productive efficiency (growth rate of GNP or GNP by head). Disciplinary argument: quality of the law to protect the interests of financial investors.	Shareholder theory	Civil law systems (French system) against Common law systems (Anglo-Saxon systems). Possible nuances between Civil law traditions.	Politics are at the origin of the legal framework but once established it is the only one that determines the financial development.	Superiority of the Anglo-Saxon system offering more flexibility and better adaptability.
Evolutionary law and finance theory (Beck et al., 2001b ; Coffee, 2001a ; Pistor et al., 2003a)	Productive efficiency. Disciplinary argument (with evolutionary aspects). Flexibility and adaptation to economic and social conditions. Trade-off between agency costs and flexibility.	Mainly shareholder theory	Transplantation theory. Opposition between the countries of origin and countries of transplantation.	The law adapts in interaction with the other economic and social aspects (endogeneity). Usually preceded by politics.	The Civil law system is more rigid but the equifinality is not excluded, the main influencing factor is the origin. Maladjustment would result from transplantation.
Politico-financial theory (Roe)	Productive efficiency. Disciplinary argument with numerous aspects (opportunism, management errors). Protection of shareholders interests. Law allows for the reduction of costs of opportunism but not those of management errors.	Mainly shareholder	Opposition (1) of social democracy to liberal countries (2): (1) weak protection of investors + strong protection of employees + weak competitive character of the markets. (2) strong protection of investors + weak protection of employees + strong competitive character of the markets.	Politics influence the law and is the decisive factor in the separation of ownership/decision. Coherence between protection of investors, protection of employees and competitive character of the goods and services markets.	Possibility of equifinality. Trade-off between monitoring costs linked to dispersion and waste linked to the importance of rents due to the weak competitive character. Globalization threatens the coherence of the social-democratic system.
Extension and generalization of the political theory (Roe, 2000 ; Pagano and Volpin, 2001a and b ; Rajan and Zingales, 2003 ; Gourevitch, 2003 ; Gourevitch and Shinn, 2004)	Productive efficiency. Disciplinary argument. Protection of minorities or protection of specific investments of stakeholders. Three categories of stakeholders: managers, investors, employees.	Shareholder or stakeholder	Majoritarian vs consensus systems. - opposition of capital/labour is not the only possible model; other alliances may be established between the employees, investors and managers. - aggregation of preferences depends on political institutions (majoritarian systems vs consensus systems).	Politics construct the law according to the interests represented within the coalitions.	Possible equifinality; multiple equilibria within the games.
Endowment theory (Beck et al., 2001 ; Acemoglu et al., 2001)	Productive efficiency and disciplinary argument. The initial endowments (natural and human resources) influenced the creation of institutions by determining the type of colonization (extraction or implantation). The main variable is institutional.	Mainly shareholder	Applies to colonized countries. Opposition between countries of implantation and those of extraction. No overlapping with the opposition between the Civil law and Common law framework.	The endowments have an influence on institutional development. The role of institutions has priority over the only geographic determinism. The legal and religious factors also seem to intervene as explanatory factors of development.	Possible equifinality.
Socio-cultural theories (La Porta et al., 1997 ; Coffee, 2001 ; Licht, 2001 ; Stulz and Williamson, 2003)	Productive efficiency and disciplinary argument. Socio-cultural values, in particular religious, have an influence on agency costs, mainly by reducing opportunism.	Shareholder	Countries with strong social cohesion vs countries with weak social cohesion.	Imbrications of socio-cultural values and legal aspects. Effects of substitution or complementarity with regard to legal-financial variables. Predominance of the cultural variable.	Possibility of equifinality because of the imbrications of variables.

The disciplinary theories of the National Systems of Governance based on production (disciplinary and cognitive aspects)					
Varieties of capitalism theory (Hall and Soskice, 2001, 2002).	Productive efficiency with distribution aspects (unemployment and inequality). Productive with disciplinary predominance but with cognitive aspects. Efficiency depends mainly on the protection of (co)specific investments. 2 regulation modes: arm's length (market) vs relational.	Stakeholder and (in an accessory way) cognitive	Opposition between "arm's length" (market) and "relational" economies. The less coherent hybrids are less efficient.	Complementarity between 5 domains: industrial relationships; training and education; financial governance; inter-firm relationships; internal firm relationships. Complementarity and coherence are central concepts.	Equifinality of the two main forms. The most coherent forms dominate.
Regulation theory and the SSIP theory (Amable et al., 1997 ; Boyer, 2002 ; Boyer and Saillard, 2002)	Productive efficiency (static and dynamic) with considerations of inequality. Productive with disciplinary and cognitive considerations. Politics determines the emergence of forms, but the viable systematic configurations in terms of static coherence and dynamic ability are selected by the competition. The SSIP emphasizes the innovation and production systems.	A priori, no underlying micro theory. Try to propose a theory of the "regulationnist" firm and to link macro to micro theories.	4 viable types: market; social-democratic; meso-corporatist; public.	Regulation theory: complementarity between 5 institutional forms: wage-labor nexus; forms of competition; monetary regime; place and role of the State; relationship with the international economy. SSIP theory: 6 sub-systems: science, technology, industry, labor markets; education; finance.	Possible equifinality of viable forms. Questioning of the endogenous emergence of crises. Conflict between static institutional coherence and ability for adaptation.

GENERAL CONCLUSION

From the financial model based on the protection of shareholder's interests, the corporate governance theories have evolved towards more complex models involving all stakeholders and attributing greater importance to the productive/cognitive aspects of value creation. This evolution, influenced by that of the theories of the firm, leads to considering human capital as being more and more significant since the formation of the competitive advantage seems to be based mostly on skills.

This growing complexity, a priori costly in heuristic terms, however has, in return, a better explanatory power. The recent developments result in a better understanding of the functioning and the evolution of the corporate governance systems, as much on the micro level as the macro level, in particular outside the Anglo-Saxon world. The theoretical critiques and the results of empirical and historical studies that reveal a significant influence of political and cultural factors seriously question the dominant law and finance view. This crisis of the paradigm of financial governance, which is but an expression of the more general financial paradigm crisis (Zingales, 2000; Charreaux, 2002a), does not lead to a theoretical impasse. On the contrary, alternative theories are numerous and open up new horizons.

Due to the abundance and the extent of information in this research field, this presentation of corporate governance theories is far from complete. In particular, the epistemological and methodological aspects underlying the different perspectives have not been addressed and deserve an extended examination. From the only viewpoint of the methods used to test the theories, the practices are quite different. Within the law and finance view, the analyses are mainly functionalist and cross-sectional. Empirical investigations are, for the most part, based on econometrics, but they do not totally exclude the politico-historical method. Inversely, the longitudinal approaches, of historical and process-related nature, eventually based on case studies[39], are more favored by stakeholder and especially cognitive analyses that attempt to explain the evolution of corporate governance systems focusing on the processes for value creation– in particular by innovation –, and distribution.

The theories could have also been compared in relation to their consequences regarding diagnostics, prediction and recommendation. With no NSG appearing to obtain superior performance over an extended period, it seems more productive in terms of diagnostics, to concentrate on the influential aspects of the process of creation and appropriation of value to evaluate the different systems. If, in the disciplinary theories, the most significant aspect is that of the protection of the stakeholders rights – in particular shareholders – and therefore appropriation, the knowledge-based theories deal more with the value creation process itself.

Such an analysis, also taking the political aspect into account, shows in all probability that the different NSG offer advantages and disadvantages simultaneously, more or less sensitive according to the economic situations and the nature of the activities, which would explain the coexistence of systems producing equivalent performances (Charreaux, 1997; Gourevitch and Hawes, 2002). We can question, as did Charreaux (2000), the validity of the presumed link between the development of the New Economy and the Anglo-Saxon corporate governance system. It would appear that this system, under traditional representation, is neither a necessary condition, nor a sufficient one. According to Aoki (2000a, 2001) and Rajan and Zingales (1998b), the emergence of new forms of firms and the model for the development of the New Economy are based on a configuration that is very different from the model associated with financial governance.

On a predictive level, the various theories also result in variable responses to the question of convergence of the NSG. For Aoki (1995), in view of the effects of globalization,

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[39] For an illustration of this type of approach, see Wirtz (2002).

four scenarios are possible: (1) the convergence by reciprocal imitation; (2) the destabilization of a system due to the integration of elements harmful to coherence and resulting in a protectionist attitude; (3) the disappearance of dominated systems; (4) the emergence of a hybrid system with its own institutional architecture, of which the European integration is an incomplete example.

The supporters of the law and finance theory most often predict a type 3 scenario; the arm's length Anglo-Saxon system would ultimately prevail due to its greater efficiency while the other theoretical perspectives are far from sharing this conclusion. The regulation theory, for example, claims that the arm's length system may dominate, not because of its greater efficiency but rather its destabilizing effect provoked by the integration of certain of its elements into other NSG. Most analyses consider the hypothesis of evolution towards a single form – either by progressive convergence or by the disappearance of dominated forms – as hardly plausible, as much due to the cultural and political rigidities as the contingent character of the efficiency of the systems according to the stage of economic development. The complete hybridization hypothesis also seems barely probable as proven by the difficulty of implementation in the European Union.

The answers provided for the questions regarding the method of value creation according to the different NSG and their convergence have evident normative implications. If a system appears more efficient over a certain period, it is tempting to want to transpose some of the mechanisms into another NSG, by imposing, for example, the same rules for "good governance". Such a desire for normalization, often inspired by the law and finance theory, seems to tempt certain international institutions. However, the risk connected with normalization is significant since it could destabilize the NSG in which coherence involves aspects – mainly cognitive – ignored by the law and finance view. The NSG are complex systems that were formed over an extended period of evolution during which the influencing factors, not only have they not been inevitably well understood, but may be above human comprehension. Certain recent unfortunate transplantation examples, in particular in the former Eastern Block countries, could only contribute to instilling great caution with regard to normalization.

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