

THE BUDGET CONSTRAINT IN THE GOVERNANCE OF ORGANIZATIONS

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Abstract

The paper suggests a partial solution to the disjunction between the institutional environment and the institutions of governance by considering the budget constraint. This approach is put in the perspective of the comparative analysis of economic organizations as discrete structural alternatives. The budget constraint presents a whole range of alternative values that are distinct by different transaction costs that organizations meet. Following different values of budget constraint, bounded rationality and opportunism are allocated to alternative uses and asset specificity takes different forms. This approach requires that the discriminating alignment solution considers the prevailing value of the budget constraint, which opens the need for a comparative perspective on efficacious organizational governance. A second level of governance is corporate governance. The debate over corporate governance is centered around decision-making power and the existence of quasi-rents that organizations produce. Given different values of the budget constraint, the definition of what are efficacious systems of decision-making power and appropriation of quasi-rents are distinct in the shareholder value and the stakeholder interest paradigms.

Keywords: Governance, budget constraint, quasi-rents

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One of the problems with transaction cost economics is that "...the two stages of the new institutional economics research agenda – the institutional environment and the institutions of governance – have developed in disjunct ways." (Williamson 1991a) Transaction cost economics (TCE) has put particular attention on the latter, the institutions of governance, i.e. "...on the comparative efficacy with which alternative generic forms of governance – markets, hybrids, hierarchies – economize on transaction costs." (*ibid.*, p. 93. Cf. also 1991b) At the same time, TCE recognizes that "[i]t is elementary that we need to make provision for both the formal and informal features of the institutional environment in interpreting institutional change over time and in making comparisons between nation states in a point in time (...). Ordinarily these differences are taken as given. That, however, is unduly passive if, after discerning which conditions of embeddedness are especially productive, it is possible to prescribe 'optional rules of the game.'" (Williamson 1999, pp. 35-36)¹⁵

¹⁵ These points have much in common with the basic statement of comparative economics: "...[A]n optimal system for all types of environments and satisfying all possible goals does not exist. ... if the environment and

This paper suggests a partial solution to the disjunction problem by considering the budget constraint in the comparative analysis of economic organizations as discrete structural alternatives. This offers a meso-level of analysis, between the general level of institutional analysis and the micro-level of governance analysis.

In this paper I follow Kornai (1980a) in maintaining that the budget constraint of organizations can be usefully analyzed as regularity. The budget constraint intrudes into governance in a way that – following Williamson – is interdependent with other organizational attributes.¹⁶ This requires the allocation of individual attributes (bounded

government policies are held constant, the outcomes, for a given set of norms, will vary only due to the choice of the specific economic system." Neuberger and Duffy, 1976, p. 17. Transaction cost economics may offer a finer microeconomic analysis to complement and substantiate these general statements and the underlying analysis.

¹⁶ "[E]ach viable form of governance – market, hybrid, and hierarchy – is defined by a syndrome of attributes that bear a supporting relation to one another. Many hypothetical forms of organization never arise, or quickly die out, because they combine inconsistent features." Williamson 1991a (1996, p. 95)

rationality and opportunism) to different capabilities and specialization. The budget constraint influences the comparative (in)efficacy of organizations in two ways.¹⁷ First, the budget constraint presents a whole range of alternative values that are distinct by different transaction costs that organizations meet. Comparable organizations with different budget constraints have different varieties of choice and different costs for discovering valuable partners, profitable transactions, including the possibility of bargaining with the suppliers of external support, and have different costs for stipulating, implementing, monitoring and enforcing contracts.¹⁸ Second, different values of the budget constraint come with different organizational settings, that include distinct asset specificity and organizational competencies.

In the next section I describe briefly the salient features of the budget constraint and explain why it is important to consider it in the comparative analysis of economic organizations. In the following section 2. I distinguish two levels of governance: governance of the choice among different kinds of organizations (organizational governance) and governance of the interaction within each organization (corporate governance). Although they are complementary, both are needed to have viable organizations. Section 3. discusses organizational governance and its relation with the budget constraint. The following three sections discuss the two basic paradigms of corporate governance, respectively the shareholder value paradigm (section 4.), the TCE position (section 5), and the stakeholder interest paradigm (section 6.). TCE standing between these two perspectives is discussed in section 5. Section 7. goes further into the relation between these two paradigms and the budget constraint. Section 8. concludes.

1. The Budget Constraint

The budget constraint "...is not an *ex post*, but and *ex ante* category."¹⁹ It is not 'accounting identity,' but a *behavioural regularity*. More exactly, it is a summary expression of a whole series of partial rules that

jointly restrict the behaviour of the firm." (Kornai, 1980b) The budget constraint exhibits three features. First, it sprouts out of the general (formal and informal) institutional environment (the economic system). Second, it concerns directly organizations and the transaction costs they meet. In this way, it brings inside the organization the influence of the general environment. Third, it features variance of its value from perfectly hard to perfectly soft budget constraint. With different values of the budget constraint, opportunism and bounded rationality are allocated to alternative uses and asset specificity takes different forms.²⁰ At the same time, identical individual attributes can have different solutions in terms of specialization and governance, according to the value of the budget constraint. Consequently, the budget constraint broadens the spectrum of potential alternative generic forms of governance in the economy. The (system specific) transaction costs economizing approach applies within the limits set by the prevailing value of the budget constraint.

The concept of budget constraint summarizes the choice set of an organization. If the constraint is hard, the organization must act at real level (in the real sphere) by changing the combinations of inputs and output. If the constraint is soft, the organization can act also in the control sphere, by bargaining in order to obtain additional resources or decrease its costs at the expenses of other actors or the rest of the economy. The softening of the budget constraint can be either the consequence of various strategies of different organizations (Kornai et al. 2003) or the consequence of deliberate policies aimed at reaching social welfare augmenting results.²¹

The value of the budget constraint may be consistently different in distinct economies and in organizations of different kind for three reasons:²²

- a) Open: legal and official (e.g. due to budget subsidies, soft prices, soft taxes);
- b) Relational: informal and contractual (soft credit, the owners' external resources, inter-party agreements to modify the distribution of incomes particularly in default situations); and

¹⁷ "The discriminating alignment hypothesis to which transaction-cost economics owes much of its predictive content hold that transactions, which differ in their attributes, are aligned with governance structures, which differ in their costs and competencies, in a discriminating (mainly, transaction-cost-economizing) way. Williamson 1991a (1996, p. 101)

¹⁸ In an interesting comment to a previous version of this paper, Steven Rosefelde stresses that Kornai's conceptualisation excluded the possibility of systems that deliberately endogenized soft budget constraints to achieve specific objectives within either the shareholder of stakeholder model of corporate governance. This observation offers interesting research ideas that are worth pursuing to clarify the relation between the budget constraint and governance.

¹⁹ For a thorough review of the budget constraint in its soft version cf. Kornai et al. (2003).

²⁰ Baumol (1993) explains how institutions – even supposing identical individual attributes, e.g. in terms of entrepreneurial abilities or, as is the case here, opportunism and bounded rationality – determine the allocation of those attributes to different uses. Individual attributes that are required to adapt in a situation characterized by (quasi) hard budget constraint are distinct from the corresponding attributes necessary to individuals to adapt when the budget constraint is (quasi) soft. We can simplify the issue without much loss of analytical significance by considering that identical attributes are allocated to different uses following the value of the budget constraint.

²¹ I due this observation to Steven Rosefelde.

²² Kornai (1980a, 1980b) only considers legal origins and part of the informal ones. In my view, the opportunities for variance of the budget constraint are much wider than these in the real world.

c) Predatory: irregular and criminal (evasion and avoidance of taxes, breaking rules, use of irregular resources, corruption, embezzlement, threat, blackmail, criminal control, falsification of the organization accounts).

Adaptability is the central problem of economic organizations. Williamson (1991a) distinguishes two complementary types of adaptation. One is autonomous or market adaptation (adaptation *A à la Hayek*): “This is the neoclassical ideal in which consumers and producers respond independently to parametric price changes so as to maximize their utility and profits, respectively.” (Williamson, 1991a) The second type is cooperative or internal adaptation (adaptation *C à la Barnard*), which is important when disturbances have non-price character and require coordinated responses. This is particularly the case of long-term bilateral dependency of partners: when incomplete contracts require gapfilling and possibly get out of alignment, bargaining, maladaptation during the bargaining intervals, and also strategic behavior may follow. The solution may be coordinated investments and uncontested (or less contested) coordinated realignment, which are costly devices (Williamson 1991a). The inclusion of the budget constraint requires a third type of adaptation: adaptation to the prevailing budget constraint and adaptation to the variance of the budget constraint (adaptation *B à la Kornai*) which has a systemic character. Also this kind of adaptation is costly and builds the framework needed to the former types of adaptation.

The prevailing value of the budget constraint is a systemic feature and enters the actors’ probability calculations. With no variance among actors in a particular economy, TCE analysis would fully apply and explain organizational and governance features according to the principle of first-order economizing. To the extent that the normal value is different in distinct economies, the discriminating alignment approach should be extended in a comparative sense.

With variance of the budget constraint there are multiple efficacious organizational settings (equilibria) within each economy. Variance reflects the bargaining power of actors (e.g. due to size) and the priority of different sectors or branches. If this boils down to a regularity, predictable variance can somehow be modeled in probability calculations and can be featured within TCE organizational modeling. This would require a comparative approach to the discriminating alignment hypothesis within the same economy, according to the budget constraint value prevailing in different segments of the economy. However, variance also reflects chance factors (e.g. the actual ability of individual actors to bargain) in particular situations. Non-predictable (chance) variance causes uncertainty and no forecast of the efficacious governance is possible. In this case the organization will be redundant as an insurance against the unanticipated value of the budget constraint. This

redundancy is obviously costly and the organization is viable in an open and competitive environment only if this additional cost is somehow compensated (e.g. by the organization ability to actually obtain free external resources).

2. Two Levels of Governance

When using the market mechanism is costly and the market is unable to solve all the economic problems or fails to do so efficiently (because of bounded rationality, opportunism and bilateral relations), hierarchies may represent the solution. In other cases the solution is provided by the public hand (by means of “bureaus”) or by different kinds of organizations (hybrids). Since the market is abolished within hierarchies, alternative governance devices must be provided.

A double level of governance is required, one within the market and one within the organization. First, the comparatively most efficacious solution must be identified as to what kind of organization economizes most on transaction costs in a given situation (organizational governance or first level governance). This means finding the organizational form that controls best opportunism and also that reduces most (according to the remediable criterion)²³ the disrupting effects of bounded rationality by means of specialization. This organizational form should also give the strongest incentives to and protects in the most effective way investment in specific assets whenever bilateral dependence is involved. This is the issue of second level economizing where “the governance of contractual relations becomes the focus of analysis” (Williamson 2000: 599).²⁴

Second level governance (corporate governance) concerns the representation within the organization of different interests in the decision making process and consequently determines the crucial issue of who decides what and in whose interest within the organization. Clearly, this kind of governance builds upon organizational governance. While the former kind (organizational governance) represents essentially a technical problem, the latter one (corporate governance) is basically a micro-political issue.

To TCE we should ascribe the merit of having proved that there is an economic solution to organizational governance. Although TCE has been

²³ The remediable criterion “...holds that an extant form of organization for which no superior *feasible* form of organization can be described and *implemented* with expected net gains is *presumed* to be efficient. The relevant comparisons thus take place across feasible alternatives; costs of implementing change are taken into account; and efficiency is a rebuttable presumption.” Williamson 1999, p. 8

²⁴ Cf. also Aoki (2001), who shows that different organizational architectures require different governance structures.

paying less direct attention to corporate governance, it has largely dealt with different issues that are important for corporate governance. These are, for instance, finance, labor, and the boundaries of the organization.

While the issue of organizational governance is rather clear, since the solution derives from the attributes of individuals in terms of opportunism and bounded rationality, and from asset specificity, the issue of efficacious corporate governance is far from clear. A simple observation suggests that different countries have different corporate governance systems and that each corporate governance system pursues (partially) different goals in different ways, although with comparably efficacious results, at least in economically developed countries. Each governance system is rather consistent and – in spite of evolution needed to adapt to changes to the external environment – different systems do not clearly converge, even if economies are open in an international competitive environment.²⁵

According to the “law and finance” explanation, inter-country differences in corporate governance (Chew 1997, Hopt and Wymeersch 1997, La Porta *et al.* 1999) originate in differences among legal systems (cf. e.g. R. La Porta *et al.* 1999, A. Shleifer and Vishny 1997).²⁶ The legal origin explains differences in corporate law and the level of investor protection, hence differences in financial arrangements and ownership concentration. Differential access to finance and capital costs follow, that in turn determine corporate choice and consequently corporate performance. However, according to various critics (Pistor *et al.*, 2001, De Haas 2004) this explanation does not survive careful historical analysis.

Another explanation is complementary to this one: different regulatory environments – that are necessary to determine the rights and obligations of market participants, hence their opportunity costs and incentives - may result in dissimilar settings of capital markets. These generate different kinds of market inefficiencies and consequently distinct modes of organizing capital markets and different requirements for corporate governance (H.M. Dietl, 1998).

There are three reasons why the issue of corporate governance should receive particular attention. First, two main paradigms exist of corporate

governance.²⁷ These are the shareholder value paradigm and the stakeholders interest paradigm. The two paradigms view the organization in different ways and use different criteria to detect efficacious solutions to the issue of corporate governance. Therefore, given an efficacious organizational form identified through the organizational governance analysis, this particular form may work differently according to the corporate governance paradigm that is utilized.

Second, we have seen above that different values of the budget constraint generate distinct allocations of individual attributes to alternative uses. Consequently, the comparative efficacy of alternative generic forms of organizational governance varies according to the budget constraint value. One important question here is to understand whether the two paradigms require different values of the budget constraint to produce a convincing explanation of facts and prediction of behaviour.

Third, it is necessary to research the relation that exists between the two levels of governance. For instance, could second level governance provide remedy to failures of the first level governance? If, for whatever reason (e.g. path-dependence), the existing organizational forms do not economize on transaction costs, could corporate governance provide an adaptation device in line with the remedialness criterion, i.e. decrease transaction costs to a sustainable level without changing the organizational form?

It is implicit in TCE that organizations have a hard budget constraint. Only in this case does the nature of the basic elements (bounded rationality, opportunism, and asset specificity) determine uniquely the governance structure. But if the value of the budget constraint shows variance, multiple organizational governance settings exist and different corporate governance solutions are possible. This conclusion would complicate the existence of “discrete structural alternatives” (Williamson, 1991a). In reality, the situation is simpler and in line with the spirit of TCE prescription within each economy. In fact, the budget constraint has a characteristic value in each economic system (Kornai 1980a). Such discrete nature of budget constraint alternatives generates regularities of the allocation of individual attributes, from which discrete alternatives of governance structures and of corporate governance solutions follow within each economy. This adds a new, important comparative dimension to the governance issue, that is the analysis of inter-country comparative efficacy of alternative forms of governance in economizing on (country specific) transaction costs.

In the following I review briefly the basic features of first level governance.

²⁵ Dallago (1999). For a thorough comparative analysis of the issue in the case of transnational companies cf. Berger (2006).

²⁶ Oliver Williamson (1991a) accepts these explanations and terms them respectively first-order economizing or effective adaptation and the elimination of waste and discrete contract law differences. He adds a third explanation: firms are not merely extensions of markets (a contractual act), but employ different means (the firm is also a contractual instrument). Consequently, “...each viable form of governance - ... - is defined by a syndrome of attributes that bear a supporting relation to one another.” (O.E. Williamson, 1991a. Cf also Williamson 1999).

²⁷ I disregard here a third paradigm, that of the innovative firm, because it deals with different (typically dynamic) problems and adopts a different (post-Schumpeterian) approach. On this paradigm cf. Dallago, 2002.

3. First level Governance and the Budget Constraint

Cognitive limits and contractual hazards to which human actors are subject are relieved by specialization and governance, respectively (Williamson, 1999). Variance of these attributes explains the existence of different organizational forms.

The variance of the budget constraint introduces uncertainty and multiple equilibria:

a) different values of budget constraint change the economic consequences of cognitive limits, since they lead to allocate individual attributes to different uses. Opportunism and bounded rationality are allocated to alternative uses: e.g. adapt to a difficult situation by restructuring the firm, increasing prices, hunting for subsidies or pursuing tax evasion.

b) specialization is different under alternative budget constraints. Identical individual attributes can have different solutions in terms of specialization, control and protection: e.g. entrepreneurship or connections and bargaining abilities.

c) alternative budget constraints are characterized by different contractual practices and contractual hazards. Organizational governance is different under alternative budget constraints because transaction costs are different.

The consequence of the budget constraint value on organizational governance is important for corporate governance. In fact, alternative types of organizational governance require alternative types of corporate governance. In the following I review briefly the basic features of corporate governance paradigms and then concentrate on the consequences of alternative values of the budget constraint.

4. Second Level Governance: The Shareholders Value Paradigm

Although there are many and important differences among the supporters of this paradigm, there is general agreement that the paradigm should concentrate on two players in the firm: owners and managers. They supply the critical resources to the firm, equity capital and managerial abilities. The combination of the separately owned resources, capital and managerial abilities within the firm makes them specific to each other, so that their joint return exceeds the sum of what each owner could receive by using these resources separately. This differential return from “specializing interrelated investments” (Alchian 1987) form composite quasi-rents (Marshall 1920) or expropriable quasi-rents. Since recovering the anticipated value of equity capital and the return to it and of the investment in firm specific managerial

abilities can be neither precisely contracted *ex ante* nor guaranteed *ex post*, these actors must be actively motivated and linked to the firm by means of non-opportunistic (composite) quasi-rents appropriation. This avoids the hold-up problem. More precisely, the parties’ inability in agency relations to specify *ex ante* all the numerous and particular contingencies that characterize transactions would generate *ex ante* incompleteness and indeterminacy of relations among owners and managers. The ultimate outcome is general uncertainty that would prevent the existence of the firm. *Ex ante* contracting among shareholders and managers, then, concerns not the unknown features of unspecified contingencies, but the allocation of well specified and enforceable property rights in unspecified contingencies, thus keeping low the costs of (incomplete) contracting over transactions.

The problem is primarily rooted in the separation of ownership and control in a firm considered as a nexus of (incomplete) contracts (Alchian and Demsetz, 1972; Jensen and Meckling, 1976; Fama, 1980) and concerns incentives to the suppliers of equity capital. The reason for this particular concern with this type of investors is that capital is more specific or more liquid and therefore more difficult to control. More precisely, shareholders’ returns are regarded as incentives for risk-bearing and waiting (instead of consuming). As equity investors, shareholders are the only economic actors who make investments in the corporation without any contractual guarantee of a specific return. This particular feature is the motive for efficiency, since shareholders have an interest in allocating corporate resources to their best alternative uses to make the residual as large as possible and minimize risk (Fama and Jensen, 1983). The mobility of their investment requires that corporate governance guarantees the maximization of shareholder value. This in turn will result in superior economic performance for all the participants in the firm and also for the economy as a whole.

In firms with dispersed shareholders and liquid capital markets shareholders abstain from firm-specific investment, giving up any possibility to control directly the use of their investment. Their only option is exit, which is affordable only in liquid markets. Since managers are required to implement firm-specific investments (which give them a substantial informational and knowledge advantage) and this investment cannot be fully contracted, they need to keep discretion in unspecified contingencies to avoid the threat of shareholders’ opportunism. The failure of shareholders’ control over managers, that derives from the dispersed shareholders’ free-riding in control and opens the threat of opportunistic managerial initiative, is solved via the market for corporate control. The public nature of relevant information is obviously of crucial importance. Reputational effects strengthen this outcome (A. Gomes, 2000; Williamson, 1991b). Additional

mechanisms include the obligations that corporate law imposes on directors and managers (e.g. fiduciary duty of managers and directors vis-à-vis shareholders). Further devices include business ethics, commitment, consensus.

Corporate governance, then, includes the set of conditions that shape the ex post bargaining over the quasi-rents generated by a firm with incomplete contracts (Grossman and Hart, 1998). Although other players in the firm may supply important resources, their reward can be contracted and fully guaranteed. Therefore, they do not need any special residual incentive. Corporate governance includes the devices and mechanisms that guarantee dispersed shareholders against managerial opportunism and guarantees the managers' firm-specific investment.

In spite of its strength, the shareholder value paradigm presents various flaws. It generates choices that have been defined as "distasteful" (Tirole, 2001). Such features as manipulation of dispersed shareholders, herding effect, information distortion, and short-terminism are well known. The paradigm does not explain the origin of the firm and even less its evolution. It disregards the external and internal consequences of the firm adaptation to the changing environment and the change this generates in the capabilities and competence that individuals contribute to the firm. Indeed, this paradigm says nothing on production and innovation, nor does it consider the quality and intensity of the contribution of other parties in the firm activity, which depend on non-contractible incentives. Neither does it give proper and clear evidence to the fact that it requires particular (perfectly hard) budget constraint to work properly. Further unsolved issues are the conditions for the efficacy of ex post bargaining in reaching efficient results even without transparent and enforceable property rights (Li, 1996). Finally, solving the agency problem by making use of managerial incentives to align managerial effort is left in the background.

Another weakness of the shareholder value paradigm is that it disregards that the integration of transactions in the firm brings bargaining among managers, not owners, under the corporate umbrella. In fact, the integrated firm comprises two tiers of agency relationships: at the top between corporate headquarters and investors, and below that between corporate headquarters and division managers. To understand the effect of this integration, one must study the bargaining processes among the two latter kinds of agents (Bolton and Scharfstein, 1998).²⁸

One possible solution to these problems may be perhaps obtained by integrating this paradigm with an

explanation of organizational governance. However, this integration is offered neither by the paradigm nor by TCE (see the next section).

Pursuing shareholder value may lead to exploit the asymmetry among distinct actors typical of hierarchies. This is usually to the advantage of those who control critical functions, who may use softening strategies that distort the market picture and perception of the organization in a deceiving way to the disadvantage of dispersed shareholders and other stakeholders. The crucial instrument is the falsification of information on the variables that determine the firm value. Consequently, the firm market value is perceived as being higher or lower than what actually is, depending on the intended victim of the softening action (respectively dispersed shareholders, and tax authorities). The promoter of softening strategies are managers. In a liquid market, however, present shareholders who want to exit the firm and monetize their share value may find it convenient to ally with the managers and support the use of softening strategies to mutual advantage and disadvantage of prospective buyers.

When this paradigm dominates, the reliability and public nature of relevant firm information is of the utmost importance. Hard budget constraint is the norm and no or very rare use will be made of open forms of softening. These are those legal forms which distort firm information to the advantage of those firms which receive subsidies, use monopoly prices, pay lower taxes.

The disadvantages of hard budget constraint for the growth possibilities of firms with dispersed shareholders are compensated by liquid markets, including venture capital firms. At the same time, hard budget constraint compels the firm to put these resources to productive use in order to increase the firm value. Relational (informal and contractual) means of softening are stranger to this paradigm, since they contradict the contractual nature of transactions and the firm. A role may have instead predatory (irregular and criminal) means: firms may be eager to use these means, because these increase – if properly used – the perceived value of the firm. Discovering the use of these devices would require investment in specific assets (particularly information and knowledge and possibly inter-personal relations), that is possible and convenient only for stable shareholders.

Therefore, there is greater need for standardized, tough and precise public control (e.g. over accounts). Under this paradigm and compared to the stakeholder interest paradigm there will be an allocation of resources away from open support to softening and from relational support to the prevention and control of and fight against predatory means of softening. In turn, this is economically sound if the market is sufficiently liquid, so to disperse the overall control costs over a great number of transactions and a great

²⁸ The standard analysis also has problems in explaining two developments: a) the aging of population and the increasing role of institutional investors in a globalizing economy (M. Aglietta, 2000); and b) the firms increasing dependence on highly qualified and possibly scarce human capabilities and knowledge (see the sixth section).

amount of capital. Unitary costs can remain correspondingly low.²⁹

5. Second Level Governance: The TCE Perspective

Although Oliver Williamson (1991a) does not accept the definition of the firm as a nexus of contracts, he obviously supports the view that it is economically rational to give greater protection to the shareholders (Williamson, 1985). Corporate governance should be used to guarantee equity investors, since they miss alternative mechanisms to protect their investment – as other stakeholders do. In spite of this conclusion – apparently in line with the shareholder value paradigm – Williamson's analysis is substantially different compared to the latter in both its motivation and its implications.

According to Williamson (1985, 2002), the firm board should be primarily considered as a governance structure that guarantees the owners of capital and, secondarily, as a device for guaranteeing the contractual relation between the firm and management. Sometimes other components of the firm can be represented in the board of directors with the aim of allowing them to obtain timing and credible information. However, assigning the board other and broader goals would require compromises that would generate doubtful benefits. For most components of the firm, then, it is better to perfect the channels that are utilized to manage the fundamental relation with the firm.

To arrive at this conclusion, Williamson divides the stakeholders in a firm in three different positions, according to the combinations of asset specificity – which depends on the features of technology – and contractual hazards that characterize their position. If general purpose technology is used, no specific assets are involved, and the parties are essentially anonymous. In this node (node A) there is no dependency between the parties and governance is accomplished through competitive market prices and by means of court-awarded compensation, in case of disputes.

When special purpose technology is used, bilaterally dependent parties have incentives to promote continuity and to safeguard their specific investments. Safeguards include penalties, information disclosure and verification procedures, specialized dispute resolutions (such as arbitration) and, in the limit, integration in the two stages under unified ownership. Whenever specialized investment is not protected by any safeguard against contractual

hazard, farsighted agents will price out the implied risks (node B). The price that a supplier will bid to supply under node B conditions is higher than the price that will be bid at node A and C.

In case specialized investment is protected by safeguards, two situations may occur according to the nature of safeguards. Partners may craft credible contracting (interfirm contractual safeguards) to avoid costly contractual breakdowns (node C) or the transaction may be taken out of the market and organized under unified ownership (vertical integration). Since the latter solution suffers from greater bureaucratic costs, it is justified only when higher degrees of asset specificity and added uncertainty pose greater needs for co-operative adaptation (node D).

This representation of transactions and governance highlights the general rule of effective solutions: "...transaction, which differ in their attributes, are aligned with governance structures, which differ in their cost and competencies, in an economizing way. Implementing this entails working out of the logic of efficient alignment." (Williamson 2002, p. 191). This approach, then, offers a way to base the choice of corporate governance solutions on economizing considerations.

The role of the boards is also seen in the same light: "The board of directors thus "evolves" as a way by which to reduce the cost of capital for projects that involve limited redeployability." (Williamson 1988). At the same time, "[t]he TCE approach to corporate finance examines individual investment projects and distinguishes among them in terms of their asset-specificity characteristics. It also regards debt and equity principally as governance structures rather than as financial instruments." (*ibid.*, p. 183) In particular, "...whereas the governance structure associated with debt is of a very market-like kind, that associated with equity is much more intrusive and is akin to administration. ... whereas highly deployable assets will be financed with debts, equity is favored as assets become highly nonredeployable." (*ibid.*)

This disaggregation of the features of the different components of the firm allows to find an (TCE) efficacy-based solution to the issue of corporate governance (Williamson, 1985). Each different component of the firm should be guaranteed in the best possible way, although not necessarily by means of specific corporate governance structures.

Those who have polyvalent features and are located in node A – such as employees, managers, suppliers who do not implement specific investments – are protected by their ability to redeploy their resources to a better use through the market. Neither the actor nor the firm suffer consequently. They need no particular governance structure to protect them. Those whose specialized investment is not protected by any safeguard against contractual hazard (node B) are those who have the greatest need for a protecting governance structure. They will also be protected by a remuneration for the supply of their resources which

²⁹ Tirole (2001, p. 32) observes that "...one of the reasons why shareholder value is currently less controversial in Anglo-Saxon countries than in Continental Europe is that the externalities exerted by shareholders control on employees are smaller in the former." In fact, in the former countries it is much easier for laid-off workers to find a comparable-quality job.

is higher than in node A or C. This is particularly the case of shareholders.

Employees, managers and other stakeholders who implement specific investment should be located in node C by aligning incentives and creating governance structures that respond to the needs of the firm and of employees according to the features of this contractual relation. Participation of these employees in the board of directors is useful only insofar as it provides employees with important and correct information. In the case of managers, provided that this does not weaken the board function of control over the firm, their participation in the board has three further advantages. First, it allows the board to improve its knowledge of managerial abilities and better evaluate the decision making process. Second, managers in the board can supply the other members with more and better information on investment alternatives. This may allow a better choice. Third, managerial participation can guarantee the managers' employment relation with the firm better than formal devices. However important these functions may be, the fundamental function of the board of directors is to guarantee shareholders with a governance structure.

6. Second Level Governance: The Stakeholders Interest Perspective

A different solution to the agency problems is direct shareholders' control based on concentrated ownership, a situation that is not easily compatible with the shareholder value paradigm. Indeed, the comparison of this solution with that typical of the shareholder value paradigm stresses the existence of trade-offs in corporate governance between proximity and objectivity respectively (A.W. Boot and J.R. Macey, 1998). Direct shareholder control avoids the free rider problem, but may discourage initiatives on the part of managers or may address that initiative towards actions that do not maximize the value of the firm. It is particularly minority shareholders who suffer. Large shareholders – having invested an important amount of their resources in one particular firm – have the economic advantage to invest in control. Control requires firm-specific investment, in particular in information and in the knowledge necessary to run the board of directors. The cost of this investment is recovered only if there are appropriate private benefits to control. However, the existence of such benefits may distort decision-making. This situation is closer to, although not coinciding with, the stakeholder interest paradigm.

The stakeholder theory of the firm analyses corporate governance in a more complex way. As Tirole (2001, p. 4) puts it: "I will, perhaps unconventionally for an economist, define corporate governance as the design of institutions that induce or force managers to internalize the welfare of stakeholders." The outcome is better correspondence to the complexity of the firm and greater attention to

incentives, at the price of less focused firm objectives. It also takes into account that in a firm it is not possible to link individual contributions closely to a joint outcome because the innovation and also the production process have collective nature (Teece *et al.*, 1997).³⁰

Contrary to the conclusions of the shareholder value paradigm, Rajan and Zingales (2000) notice that the nature of the firm is changing following technological and economic developments. In particular, the increasing importance of human capital compared to inanimate assets is breaking-up the vertically integrated firm and legal, economic and technical boundaries do not coincide. There is a need for governance to support firm specific investment in human capital. Since control rights over human capital are residual, i.e. not allocable through contract, they need links that cause the person or unit to be better off when voluntarily following the firm's commands rather than going their own way. This is possible only if cooperation within the firm produces complementarities and spillovers that create greater value for both parties. A way to internalize complementarities and spillovers is to reward employees that acquire firm-specific specialization. This can be done by giving specialized employees higher income and other privileges (e.g. life employment) or by giving key employees or units privileged access (power) to the enterprise or its critical resources. This "democratization of rents" expands the job of governance beyond the control of managers. The firm need not be commonly owned and ownership and control can be more closely associated. Maximizing shareholders' value, then, is not necessarily the right objective.

The core idea is that when the firm, in particular in advanced industries, is better described as a coalition of different competences and capabilities and stakeholders must implement long-term firm-specific investment, stakeholders should be allocated residual rights of control to avoid the danger that shareholders and managers free ride on that investment (Pagano and Rowthorn, 1997). The main difference with the shareholders value paradigm, then and political and ideological issues apart, is in the conception of the firm – that here is considered as a coalition of different actors with different roles and capabilities – and the role of incentives. The effort, investment, loyalty of individual actors in the firm can be neither contracted nor guaranteed and, if this effort is important for the firm performance, proper incentives should be provided. Since individuals

³⁰ Innovation processes, and hence the features of corporate governance, vary greatly according to industry maturity and the characteristics of investment (H. M. Dietl, 1998) and according to the features of industries in terms of visibility, novelty and appropriability of innovation (Tylecote and Conesa, 1999). These distinct aspects of innovation in separate industries put different requirements upon governance and the financial system.

invest in human capital and to some extent their skills are specific to the firm for which they work, they afford costs (either directly or in the form of opportunity costs) and bear some of the risk associated with the enterprise. Because employees with firm-specific skills have a stake that is at risk in the firm, they should be accorded residual claimant status alongside shareholders (Blair, 1995, p. 238).

This paradigm, then, is primarily concerned with incentives to all suppliers of functions necessary to the firm and how this affects economic performance. As a consequence, the choice of residual claimants regards the claimants' incentives and ability to choose the specificity of their contribution to the firm. At the same time, the incentive effect for a variety of stakeholders should not trade off the control over managers. However important this recognition is, the features of a corporate governance process that allocates returns to firm-specific human assets are far from clear. The question of how to identify and properly rework individual investment and effort is still unsolved. No stakeholders interest theory of the process that generates higher quality and/or lower cost products still exists. In particular, it is unclear under what conditions (technological, organizational and competitive) investment in firm-specific assets can generate residuals and cause such increased returns.

Various economists of innovation have argued that firm-specificity is an outcome of organizational learning processes through which resources are developed and utilized in the economy (see, for example, Best, 1990; Lazonik, 1991; Penrose, 1995). Yet, the process of innovation is inherently dynamic: as learning within and outside the enterprise develops, the organizational requirements of innovative investment strategies evolve over time, as much as the firm-specific skills that result from continued innovation do. Consequently, firm-specific skills that enhanced at one time economic performance may fail to do so in another time. The mere defense of any such investment may jeopardize the position of the firm in the competitive market, and risks to become a *de facto* theory of corporate welfare. In fact, such defense likely encourages the entrenchment of the claims of economic actors, even when their skills are no longer sufficient to generate the returns to meet these claims (O'Sullivan, 2000).

Although this criticism has much substance, it is based on a rather restrictive conception of cognitive processes and supposes that an organizational learning process that was successful is bound to lose its full meaning and value once that particular innovation changes. Although the danger of encouraging the entrenchment of the economic actors claims is real, one has to admit that actors who invested in organizational learning process do not learn only one particular innovation. They also learn how to innovate, since they acquire a method (a procedure) to develop new innovations. It is incentives to this particular type of cognitive

processes (innovative cognitive processes) that is particularly apt to create wealth in the firm.

Jean Tirole (2001) adds further thoughts to the weakness of this paradigm. By broadening the number of stakeholders three dangers appear compared to the shareholder value paradigm: (a) residual income has to be divided among a great number of claimants: this may weaken incentives; b) managerial incentives become less focused and less sharp; and c) control may be divided and softened, thus encouraging foot-dragging and deadlock in decision-making. The solution may be found in designing governance structures based on the stakeholder interest paradigm "...in accordance with the lessons of the new economics of incentives and control."

The stakeholders interest paradigm relies comparatively more on open and on relational forms of budget constraint. The use of predatory forms may be relatively better curbed by community (stakeholders) control, who invest in the firm specific assets (information, knowledge, inter-personal relations). Here most predatory activities are of relatively minor importance, but may have diffuse character. They descend mostly from relational alliance of different kinds of economic actors to the disadvantage of the state. There may also be use of predatory means (e.g. in the form of corruption of public officials) to gain public procurement for the firm. But this is an alternative to open and relational means, which are more used because of their lower risk.

The stakeholder interest paradigm requires greater individual and group/community involvement in the firm. Therefore, its main feature is stability and specificity: stability of owners, of managers and employees, of creditors and suppliers, and bilateral and multilateral dependence of all such actors. Turnover in these roles is lower than in the previous paradigm and the number of stakeholders may also be lower (e.g. suppliers, creditors). The prevailing logic is consequently long-run involvement and returns, since much of investment is sunk and many assets are specific. Asset specificity does not necessarily generate vertical integration but – at least up to a certain point – relational involvement. Under these conditions, markets are hardly liquid, the main source of external capital is debt capital, investors are highly involved and much information is private in nature. The greater role of debt capital by stable suppliers grants effective quasi-internal control over the activity and decisions of managers and of majority shareholders. The main danger is the expropriation of minority shareholders, who do not have access to private information. Hence potential dispersed investors tend to abstain from direct investment (through stock exchange markets) and prefer to place their savings to productive uses through stable intermediaries (banks, investment funds).

In this paradigm, public information is of comparatively lower importance. More important is

the investment in and access to private information. In order for this system to be viable and private benefits of control not disruptive of economic efficiency, the potential unfairness must be compensated and curbed by a high level of sunk costs of investment. This is possible when control shareholders are stable owners of particular firms. Under these circumstances, private benefits of control are a way of compensating majority shareholders for the high costs of their specific investment in particular firms and the high costs for producing private information. Private information becomes then the basic means for controlling the managers of a particular firm. The overall consequence of this paradigm is that the prevailing budget constraint is softer than in the previous paradigm.³¹

Under this paradigm (compared to the shareholder value paradigm) there will be an allocation of resources away from market control by means of standardized public information and rule-keeping in favor of governance supporting open and relational softening. Public policy is likely to support stable owners/investors and to protect small savers (protection of savings, higher interests on savings) as a means to stimulate their supply of financial means to the stable participants in the capital market (banks, investment funds). Liquid capital markets are not a relevant issue, then. They may even be a threat to the stability of control shareholders and their long-term engagement. Other kinds of financial markets (e.g. credit markets), however, may be more liquid than in the previous paradigm. Most of the control and governance costs are dispersed on these liquid markets and the system can be efficacious.

7. The Budget constraint and Governance Paradigms

The following table summarizes the conclusions of the previous sections on the different features of governance paradigms. The definitions included in each cell refer to the features of the relevant variable in each line that are required for the proper working of each paradigm and for the generation of efficacious outcomes (cf. table 1).

The features of the budget constraint that are compatible with efficacious corporate governance and the firms prevailing strategies for changing the value of budget constraint are diverse in each paradigm. But why would firms use softening strategies and not resist softening as a danger? In any particular circumstance, the possibility to soften the budget

constraint gives the firm important additional means at a lower direct cost to reach its objectives. True, the firms operating in an economy with soft budget constraint have external costs and dangers. For example, these are due to political interference and the need to afford costly and risky bargaining with different organizations (tax offices, anti-trust agencies, credit agencies, etc.). Since in an environment where most firms have soft budget constraint these risks would exist anyway for any firms – even those that would pursue a hard budget constraint policy – the latter would be at disadvantage. They would have costs without having the corresponding benefits. They should adapt or fail.

The efficient working of each paradigm is influenced in different ways by the budget constraint and each paradigm requires a particular budget constraint to work efficiently. Firms pursue different softening strategies depending on the prevailing paradigm (cf. table 2).

The debate over corporate governance is centered around the existence of quasi-rents that organizations produce. Quasi-rents cannot be allocated *ex-ante* because of contract incompleteness. The definition of what is an efficacious and actual appropriation of quasi-rents (and their internal or external origin) is the main difference among different paradigms. Actual appropriation depends on the value of the budget constraint (cf. table 3).

8. Conclusions: Quasi-rents and the efficacy of organizations

According to the discrimination alignment hypothesis - TCE main operational device – “...transactions, which differ in their attributes, are aligned with governance structures, which differ in their costs and competencies, in a discriminating (mainly, transaction-cost-economizing) way.” (Williamson, 1991a – 1996, p. 101) Since the attributes of human actors and their combination feature variance, different types of organizations exist. Organizations have to adapt to the general environment and have to take decisions, including the allocation of organizational quasi-rents. This requires corporate governance. Governance of two levels is necessary to solve the problem of organizational operability.

Organizational complexity opens two sets of internal problems. First, decision-making processes are open to the failure of collective action since in a hierarchy the market mechanism does not work and hence provides no incentives. To solve the problem, decision-making power can be concentrated directly in the hands of one actor (of a group of actors) or it can be dispersed and solved indirectly through an interactive process.

³¹ A purely hard budget constraint would even be counterproductive, since it would make a system based on flexibility within the firm and in the relation between a particular firm and the market excessively rigid. In case of inefficiency of investment, reallocation of resources takes place mostly within individual firms (or firms belonging to the same group) and between individual firms and the market. Investors are patient.

Table 1. The efficiency features of governance paradigms

	Shareholders value	Stakeholders interest
Equity market liquidity	High	Low
Debt market liquidity	Low	High
Ownership	Dispersed	Concentrated
Investors involvement	Low	High/Co-operative
Protection of minority shareholders	Strong	Weak
Non-property interests representation	Weak	Strong
Main source of external capital	Equity (mainly for mergers and acquisitions)	Debt
Prevailing time horizon	Short-run	Long-run
Prevailing adaptation	Autonomous	Cooperative
Control over managers	External, ex-post (exit)	Internal, ex-ante (voice)
Information	Public	Private/Group
Public information reliability	Fundamental	Secondary
Private information reliability	Damaging	Fundamental
Goal of corporate governance	Guarantee non-contractable resource supply	Shaped on incentives to stakeholders
Main form of allocation of resources	External (Including mergers and acquisitions)	Internal (group)
Reaction to market signals	Fast	Slow
Consideration of social signals	Modest	Great

Table 2. Governance paradigms and the budget constraint

	Shareholders value	Stakeholders interest
Required budget constraint	Hard	Semi-hard or soft
Prevailing softening strategies	Predatory (irregular or criminal)	Open (legal or official) and relational (informal and contractual)

Table 3. Corporate governance paradigms, quasi-rents and budget constraint

Paradigm	Origin of internal quasi-rents	Efficacious appropriation of quasi-rents	Effect of softer budget constraint	Actual appropriation of soft (internal + external) quasi-rents
Shareholder value	Externalities due to market-type cooperation and technological complementarities	By dispersed shareholders	Change of appropriation of quasi-rents (primary) Increasing external quasi-rents to the expense of the state (secondary)	Winners: managers Losers: shareholders (primary), stakeholders (secondary)
Stakeholders interest	Relational externalities Market type cooperation and technological complementarities	By stakeholders (particularly majority shareholders)	Increasing external quasi-rents to the expense of the state (primary) Changing appropriation of quasi-rents (secondary)	Winners: majority shareholders (primary) and other stakeholders (secondary) Losers: minority shareholders

Second, cooperation in an organization among different actors creates quasi-rents, that descend from the net advantages of hierarchies over markets. The appropriation of quasi-rents may be seen as remuneration for lower protection or as incentive for better performance and loyalty. The appropriation of quasi-rents, then, is the true incentive for operating in the organization.

Quasi-rents can be allocated to the different actors in two extreme ways: either

- a) by concentrating them in the hands of the least guaranteed actors; or
- b) by dispersing them among all the actors who contribute to the organization activity, possibly according to the (marginal) contribution of each actor.

Each of these two extremes – and any of the many intermediate solutions – has advantages and disadvantages. To choose one particular way we need some principles, based on a better understanding of

the working of the organization. And we must consider the relation between the allocation of decision-making power and that of quasi-rents.

This problem can be solved along two different principles. First, quasi-rents should be appropriated by those whose general purpose investment is crucial but is not protected in any other way. Power should be allocated to those who make specific investment and who would keep discretion in unforeseen contingencies. Implicit in this is that without this contribution the organization would not be viable and that only by concentrating quasi-rents and power in few hands their amount and effect would be sufficiently powerful incentive. Other actors are considered to be content with their market remuneration and contractual (or else) protection and their role in the organization is basically passive, in the sense that no particular specific investment is needed on their part and that their effort and performance can be easily monitored and controlled. Clearly here the identification of these particular actors depend on a set of conditions: nature of contracts, contractual practices, existence of non-contractual mechanisms of protection, existence of alternative mechanism to influence the amount of quasi-rents, and the like.

Second, the appropriation of quasi-rents should serve the purpose of providing incentives to the actors within the organization and remunerating loyalty. Decision-making power should also be allocated to all those who, in a stable organization, invested in specific assets. Implicit in this position is that the organization is a collective body, that each actor invests in specific assets that are not (entirely) protected through contracts, that each actor contributes specific capabilities, that overall performance suffers disproportionately in case of lack of contribution by any actor, that nobody in the organization can fully monitor and control each actor. Under these conditions, the (re)production of quasi-rents requires the coordinated contribution by all actors and this contribution depends on equitable quasi-rents appropriation and decision-making power allocation.

Although quasi-rents are determined internally and can be consequently defined as internal quasi-rents, the activity of the organization or of some of its components can supplement those quasi-rents with others that are produced outside the organization. These can consequently be determined as external rents. The main way of obtaining these is by softening the budget constraint. Another way is to create fictitious value (fictitious quasi-rents), as in the ENRON and similar cases.

The possibility to supplement internal quasi-rents with external (including fictitious) rents may change the issue of their appropriation. This has important consequences for corporate governance. As explained by Williamson (1999), organization – in the form of both specialization and governance – is the chief device by which to relieve problems having

their origins in the attributes of human actors. Specifically, the cognitive limits and contractual hazards to which human actors are subject are relieved by specialization and governance, respectively. This explains a great amount of variety both at the level of individual choice and the theory of the firm.

To have such a clear determination of institutional variety following from the variance of two dimensions - cognitive limits and contractual hazards – requires two types of (implicit) simplifications. In fact, given the sign of those two dimensions, the efficacious organizational choice (efficacious first level governance) must be unique.

First, for this to be true – and avoid the possibility of having multiple equilibria – actors with given individual features (cognitive limits) must find an efficacious role with one type of specialization. Although cognitive limits of different individuals may have great variance, each individual can be precisely defined in terms of cognitive limits. Hence he can specialize in a role. Following from this, each organization is different, but behaves in the same (profit-maximising) way and its choices are determined by the particular sign of the real variables the organization is confronted with. But what happens if those cognitive limits can find solution (in the sense that the organization is viable) by softening the budget constraint? In this case the same cognitive limits can cause a different specialization of individuals and organisations, addressed to operate in the control sphere and not the real one. Or, better, different specialization mix can follow for the same organization. The specialization outcome, then, becomes undetermined and multiple specialization equilibria are possible.

Second, for the TCE solution to be unique, each type of contractual hazard must be met with one particular type of governance. Variance of contractual hazards generates different types of governance. Again, this is possible if organizations can only act in the real sphere. If they can act also in the control sphere –by softening their budget constraint – they have alternative governance solutions that are efficacious, depending on the variety of alternative choices for softening their budget constraint and the degree of softness. When this takes place, there is no unique correspondence between contractual hazards and governance. Multiple governance equilibria follow.

Two caveats are necessary at this point. First, one could suppose that the budget constraint alternative is already included in TCE analysis. In fact, different degrees of softness could be reflected in the variance of cognitive limits and contractual hazards. This is not so, because softness comes from the effects of the features of the outside context inside the organization: even if cognitive limits remain the same, the efficacious allocation of individual attributes generates efficient specialization that will differ depending on the degree of softness. As to

contractual hazards, the same hazard has different meaning with different degrees of softness and some hazards can be simply “insured” against utilizing the opportunities offered by softness. The same safeguard can have different consequences depending on the degree of softness and different contractual safeguards can be utilized. Consequently, identical contractual hazards can be solved with different governance mechanisms.

Second, regularities of budget constraint value simplify the issue. Indeed, it is difficult and costly to modify continuously the value. Other actors (who can be disadvantaged) may resist or react and changing value may require new capabilities, that is costly and difficult to acquire. This tends to create regularities, which limits the potential number of equilibria that are possible in a given context. Since these regularities tend to characterize each economy and in spite of some complication, the TCE solution is broadly valid within each economy and offers an important approach for inter-systemic comparison.

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