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Control Matters: Law and Economics of Private Benefits of Control

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Abstract

The standard approach to the legal foundations of corporate governance is that corporate law promotes separation of ownership and control by protecting minority shareholders from expropriation. This paper takes a broader perspective on the economic and legal determinants of corporate governance. It shows that legal entitlements to corporate control and their exchange on the market are as important as investor protection. This is based on a third category of 'idiosyncratic' private benefits of control, which supplements the more traditional specifications as inefficient consumption of control perquisites ('distortionary' private benefits) or outright expropriation of shareholder value ('diversionary' private benefits).

The framework departs from the standard principal-agent models by assuming that private benefits of control also account for a further value to be appropriated as reward of entrepreneurship in the corporate structure. The quasi-rent nature of this value makes appropriation by corporate controllers a necessary condition for efficiency ex-ante, which implies that control rights are allocated separately from ownership at the going public stage. Under certain assumptions (corresponding to legal restrictions on the behavior of controllers and non-controlling shareholders), a constrained-efficient outcome is derived ex-post as Coasian bargain between the incumbent and the insurgent at the takeover stage. To preserve interdisciplinarity of the discussion, these results are illustrated with a limited degree of formalization.

The above findings have important implications for corporate law. When legal institutions effectively constrain expropriation of non-controlling shareholders, they may still distort separation of ownership and control by making ownership structures either more concentrated or more dispersed than it would be efficient. This happens when corporate law fails to provide those who run the company with entitlements to control tenure independently of how much ownership they retain. Likewise, mandatory bid regulations undermine the takeover process by restricting side payments that ultimately support efficient bargaining over the value of corporate control.

Keywords: entrepreneurship, firm-specific investments, incomplete contracts, distribution of powers, private benefits of control, entrenchment, ownership structure, friendly takeovers, control premium, severance payments.

Classifications: G34, K22, K42, L26, O16

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Introduction

One major result of comparative corporate governance is that 'law matters' for explaining different patterns of separation of ownership and control across countries. Ownership concentration can persist inefficiently when corporate law fails to protect non-controlling shareholders from expropriation.[1] Since the publication of *Law and Finance* (La Porta *et al*. 1998), this has become the mainstream approach to the legal foundations of corporate governance. This perspective only focuses on investor protection, neglecting that other equally important aspects of corporate governance are affected by corporate law. Without denying that investor protection is a legal precondition for separation of ownership and control, this paper will argue that corporate law also 'matters' by supporting corporate control with appropriate entitlements and that it may have adverse effects on efficiency when it fails to do so.

Based on a principal-agent framework, the standard emphasis on investor protection overlooks that the decision to separate ownership from control is taken by *two* categories of players. One is the manager; the other is outside investors. Before going public, the manager is not an agent seeking employment by financiers. She is normally an entrepreneur. Eventually entrepreneurs need funds from outside financiers. This does not imply that they accept parting with firm control and downgrading their position to that of an employed agent.[2] It only implies a credible commitment that investors will not be expropriated of their money. Having identified in the law the source of this commitment is the fundamental strength of the 'law matters' strand of literature, but also its limit. The governance of publicly held companies also requires that somebody be in charge (Zingales 1998).

[1] When investor protection is poor – the argument runs – "ownership concentration becomes a substitute for legal protection, because only large shareholders can hope to receive return on their investment" (La Porta *et al.* 1998: 1145). This outcome obtains regardless of whether ownership concentration is efficient.

[2] Knight (1921:359) makes exactly this point in analyzing separation of ownership and control.

For sake of simplicity, I am considering only companies that have or do not have a controlling shareholder.[3] Accordingly, the one in charge of corporate decision-making will be either the controlling shareholder or – when there is none – the corporate management. I define these players in corporate governance as corporate controllers. In both situations, corporate control is hardly ever exposed to interference by outside investors (Hellwig 2000). Corporate controllers appear to be no less afraid of being ousted against their will than outside shareholders worry about being expropriated of their investment. This raises two questions. First, how can be control tenure reconciled with investor protection? Second, why do controlling shareholders prevail in some countries and management-controlled companies in others despite of equally strong protections of investors from expropriation?

In order to answer these questions one must understand why corporate controllers care so much about tenure and how this affects corporate governance both positively and normatively. One obvious reason why managers and controlling shareholders entrench themselves is taking advantage of outside investors once they have their money, by extracting private benefits of control (PBC). This is the most popular explanation of conflicts of interest in corporate governance, but it is not the only possible one. By departing from the standard principal-agent approach, it can be showed that PBC also play a virtuous role in corporate governance. To this purpose, I am going to present a richer taxonomy of PBC than that usually considered in the literature. They include not only control perquisites and siphoning-off of corporate assets, but also a separate reward for the controller's firm-specific investments that shareholders could not be committed to grant when they buy outside equity.

It is normally believed that this reward can only come at the expenses of outside shareholders, generating a tradeoff between protection of the controller's specific investments and maximization of shareholder value. Another way to look at this tradeoff is by introducing

[3] This simplification is becoming common in the literature on comparative corporate governance. See e.g. Bebchuk & Hamdani (2009).

a separate category of PBC, which do not enter the definition of shareholder value until they are realized in the form of a control premium. Similarly to the other PBC, these benefits affect incentives ex-ante via their expected distribution ex-post. However, differently from the PBC extracted by failing to maximize shareholder returns, originally they account for no existing market value. When the corporate controller acts as an entrepreneur, part of her motivation will be "the desire to excel, to win at a game, the biggest and most fascinating game yet invented" (Knight 1921:360). Until excellence is fully reflected in stock market performance, the satisfaction of playing this game comes as «profits on the entrepreneur's mind», which as such harm shareholders in no way. Only at one point the interest of outside shareholders will conflict with the entrepreneur's enjoying these private benefits. This is when a bidder is credibly committed to enhance shareholder value by taking over control from the entrepreneur. It is well understood that the incumbent's ability to resist takeover deprives shareholders of a more efficient management, whereas shareholders' ability to auction control to the best bidder makes it impossible for the management to secure a return on previous firm-specific investments (Shleifer & Summers 1988). However, it is often overlooked that the entrepreneur's private benefits of dealing (successfully) with uncertainty can be compensated without undermining the functioning of the market for corporate control.

In the wake of a takeover bid, control has price – the control premium (which, in management-controlled companies, takes the form of managerial severance payments). When corporate law entitles the entrepreneur to claim compensation of her PBC as a control premium, this should protect the investment of firm-specific talent without preventing efficient changes in control. The question, however, is whether the controlling entrepreneur would just claim too much when vested with such a power. Under a number of assumptions (corresponding to legal restrictions on the extraction of other kinds of PBC), this paper will argue that the answer is negative. When takeovers are friendly, and they can be operated via

side payments from the insurgent, all welfare-increasing takeovers succeed on condition that the efficiency gains are sufficient to compensate the incumbent's PBC. This constrained-efficient outcome is the optimal solution of the tradeoff between private benefits of control and maximization of shareholder value. Its difference from the first best (where there would be no PBC at all) does not exceed the size of PBC necessary to motivate the investment of entrepreneurial talent in the corporate enterprise. The welfare loss is illusory, though, for this difference accounts for a costly resource – entrepreneurship – that financial markets cannot price ex-ante in spite of its turning valuable ex-post.

This understanding of PBC has important implications for corporate governance and for corporate law. On the positive side, it shows that protecting investors is not all that matters for separation of ownership and control. Allowing corporate controllers to extract a reward for their firm-specific investments in the form of PBC is as important. This explains why, regardless of the ownership structure, control of the vast majority of publicly held companies around the world turns out to be entrenched. On the normative side, showing how PBC can be extracted efficiently sheds a new light on the legal underpinnings of separation of ownership and control and the efficiency of corporate law. Law can undermine efficient separation of ownership and control not only by failing to protect dispersed shareholders, but also by restricting the choice of ownership structure to those situations where corporate controllers can secure their PBC from ex-post appropriation by non-controlling shareholders.

The rest of the paper is structured as follows. Section 1 summarizes the current debate on PBC and highlights its shortcomings. Section 2 introduces a broader taxonomy of PBC, setting the stage for their welfare analysis. Section 3 discusses efficient protection of PBC with a limited degree of formalization, in order to preserve interdisciplinarity of the analysis. Section 4 elaborates on the economic and legal restrictions underlying this outcome, with special regard to the choice of ownership structure and the functioning of market for corporate

control. The main regulatory implications of this framework are discussed in Section 5. It will be shown that corporate law needs not only to support credible commitments against expropriation of outside shareholders. It also needs to provide managers with uncontestable control rights and with the opportunity to cash in the value of their specific investments when they accept to hand control over to a better manager. Section 6 concludes.

1. *Corporate Governance and Private Benefits of Control*

The notion of PBC is neutral as to the implications for shareholder wealth. By definition, the *private benefits* of a corporate controller include any utility derived from controlling a company that is not shared with non-controlling shareholders (Coates 2003). This definition applies equally to a controlling management (e.g., via the privilege of setting their own pay or simply enjoying control perquisites) and to a controlling shareholder (e.g., via perquisites of corporate offices or self-dealing transactions). Extraction of private benefits harms shareholder inasmuch as it reduces the actual or potential returns on their investment, which are called *security benefits*. This needs not necessarily be the case. A controlling management or shareholder may well extract utilities that are not available to non-controlling shareholders. The satisfaction of successfully pursuing synergies or innovations that are not yet fully appreciated by the market is a case in point. Nevertheless, mainstream economic theory only focuses on PBC that reduce the wealth of outside shareholders (Becht *et al*. 2007).

In this perspective, the impact of PBC on ownership structure has been investigated both theoretically (Bebchuk 1999) and empirically (Nenova 2003; Dyck & Zingales 2004). These studies show that little, if any, separation of ownership and control can be expected when private benefits are high enough. Few commentators have wondered why the prevailing ownership structure still differs across countries when PBC are relatively low. Within developed countries, Sweden is a case in point (Agnblad *et al*. 2001), but a similar argument

applies to the Netherlands (Högfeldt 2005). The average size of PBC is quite low in both countries, and this parallels the documented strength of investor protection. However, corporate ownership is significantly more concentrated than in Britain and in the US.

One explanation of this puzzle (Gilson 2006) is that empirical studies only measure *pecuniary* PBC directly extracted from shareholder wealth (e.g., through self-dealing), whereas ownership structure is also affected by *non-pecuniary* PBC extracted via consumption of utilities having a larger opportunity costs for shareholders as a whole (e.g., by pursuing a political agenda through control of a newspaper). Some businesses – typically, the media industry – endogenously involve higher levels of non-pecuniary benefits (Demsetz & Lehn 1985), and ownership concentration is just the way to have them consumed more efficiently. A problem with this approach is that it does not explain why the ownership structure varies systematically across countries. There is hardly a reason why non-pecuniary PBC should be more relevant outside the Anglo-Saxon world. It is also questionable that the empirical studies measure pecuniary PBC precisely. All estimates are based on the difference in market price between controlling and non-controlling stock as an indication of the control premium. This evidence tells us neither whether non-controlling stock is worth less because of PBC extraction nor whether other PBC are included in the reservation price for controlling stock. In addition, these data provide no information on PBC in management-controlled companies.[4]

This parallels a fundamental limitation of the theory. While sizeable PBC obviously involve ownership concentration for they must be self-financed (Mayer 1999), this result can only be inefficient when PBC are extracted at the expenses of non-controlling shareholders. Only in this situation further separation of ownership and control could be in the interest of both controlling and non-controlling shareholders, but gains from trade may be foregone due

[4] I thank one anonymous referee for emphasizing this point.

to inability of the former to take a credible commitment that the latter will not be expropriated (Bebchuk 1999). Conversely, when extraction of private benefits has no impact on security benefits, the ownership structure that supports their extraction has no efficiency consequence, but only distributional ones (Zingales 1995).

In the standard principal-agent model of corporate governance, PBC can hardly be so innocuous. The reason is that private benefits, whether pecuniary on non-pecuniary, can only be extracted by an agent failing to maximize the principal's profits (PBC are a source of agency costs). Still, PBC extraction may be efficient in this setting because the corporate contract is incomplete. When the agent's reward cannot be predetermined for every future state of the world, allowing her to extract private benefits ex-post may be the only way to induce investments that enhance prospective firm value ex-ante, but whose reward for the agent cannot be secured contractually. In principle, this can be done by allocating (residual) control rights to the agent.[5] There are two problems, however. First, the controlling agent may simply fail to produce security benefits when she can extract the entire firm surplus as private benefits. Second, given that in large public companies (as opposed to small entrepreneurial firms) management tasks are relatively routine (Hart 1995), protecting managerial investments may be not as important as safeguarding shareholder investments. Under the assumption that uncertainty affects the owners much more than the managers in this situation, only the former should have residual control rights. These are delegated to the controlling agent, and delegation can be withdrawn anytime by means of a hostile takeover.

Real-world corporate governance – featuring little, if any, hostility in takeovers – does not support this outcome. Given the success of public companies in raising outside equity around the world in spite of that, the opposite assumption (that managerial non-contractible investments matter) must be true. The question is how PBC extraction can be reconciled with

[5] Residual rights of control are the entitlement to decide in every contingency not previously specified in the contracts entered into by the firm. See Grossman & Hart (1986).

production and distribution of security benefits. One answer is that shareholders accept a moderate degree of PBC extraction to preserve the management's incentive to make non-contractible investments. However, shareholders retain residual rights of control, which allows them to prevent the management from getting a too large share of the pie after the surplus has been produced. This outcome obtains when control rights are still delegated from the owners to the managers, but shareholders are committed to withdraw delegation only in certain states of the world (Burkart *et al.* 1997). Moderate managerial entrenchment emerges as the optimal solution of the tradeoff between security benefits and private benefits of control. Entrenchment *tout court* and concentrated ownership can be explained based on a slightly different version of this tradeoff, where pecuniary and non-pecuniary PBC are alternative to one another (Bratton & McCahery 2001). Dispersed shareholders let the controlling management extract non-pecuniary PBC when it would be too costly for large shareholders to extract pecuniary PBC in exchange for a closer monitoring. The reverse (controlling shareholders extracting high pecuniary PBC, but low non-pecuniary PBC) is true for concentrated ownership structures. Neither outcome is superior to the other. Being somewhat opposite to Gilson (2006), this interpretation still does not explain why concentrated ownership should prevail in some countries and not in others.

The struggle of the theory with the notion of PBC acknowledges the existence of an appropriability issue between those who control the corporate enterprise and those who own it (Zingales 2000). The problem with existing analyses (which also explains why they differ in interpreting the ownership structure) is that they must set a limit to the kind or the amount of PBC that can be extracted, in order to avoid that outside shareholders receive no security benefits at all. As a result, part of the firm value is lost due to non-contractibility of investments on either side. This depends on the assumption that PBC can only be extracted at the expenses of security benefits. This assumption is unwarranted once we depart from the

principal-agent setting. In this vein, a few commentators (Mayer 1999; Coates 2003; Holderness 2003) have emphasized that corporate control may also generate private benefits enjoyed neither by diverting security benefits nor by failing to maximize their amount in the pursuit of other non-pecuniary utilities. These PBC are also non-pecuniary, but they have no opportunity costs to shareholders. As psychic satisfaction of bringing the company to success, they come *on top* of existing security benefits instead of reducing them as agency costs.

The advantage of allowing PBC to operate in this fashion is that the entire firm value can be jointly appropriated by the corporate controller and non-controlling shareholders when the proper distribution is chosen. If we assume for a moment that the above psychic satisfaction is the only kind of PBC that corporate controllers can enjoy, and that this is sufficient to motivate their non-contractible investments, there is no reason why outside shareholders should limit their extraction. To the contrary, at some point outside shareholders may be in the position to appropriate them by trading the controller's position for the higher security benefits offered by a takeover bidder. Anticipating this, corporate controllers will contribute to the firm value with their non-contractible investments only when redistribution of their PBC via hostile takeovers is ruled out. This approach connects quite well with a few positive analyses of corporate governance likewise departing from the traditional agency framework. They show that control can be entrenched regardless of the ownership structure (Hellwig 2000), that ownership concentration is the only possible outcome when corporate law fails to support managerial tenure (Cools 2005), and that firm-specific investments by the management require limited shareholder rights (Rock & Wachter 2001).

Yet this picture is incomplete from a normative perspective. Even protection of merely psychic PBC can harm shareholders by preventing efficient changes in control in the future. Another way to look at the problem is that corporate controllers may well extract further PBC (through on-the-job consumption, cronyism, or outright expropriation) once they are tenured.

These are the two sides of the same coin. An appropriate operation and regulation of the market for corporate control can guarantee both that control changes hands in the right situations (thereby disallowing inefficient extraction of PBC from security benefits) and that corporate controllers are compensated for their psychic benefits (thereby rewarding non-contractible investments via PBC that are *not* extracted from security benefits). In order to understand how this is possible, the different components of PBC need to be carefully disentangled. What is missing in the literature, but is necessary to appreciate the implications of PBC both positively and normatively, is a taxonomy of private benefits that allows for a welfare analysis of their interaction. This is the goal of the next section.

2. *A Broader Taxonomy of Private Benefits of Control*

The distinction between rents and quasi-rents (Marshall 1893) is particularly useful for welfare analysis of PBC. Quasi-rents are the prospective reward to inventiveness; rents are the ongoing reward to incumbency. Two important sides of contemporary economics (Ricketts 2002) rely on this distinction: one is the theory of entrepreneurship; the other is the theory of the firm. Since Coase (1937), these two theories have hardly communicated with each other.

Incomplete contract theories of the firm characterize quasi-rents as non-contractible rewards to investments in relationship-specific assets. Asset specificity gives rise to the hold-up problem (Klein *et al.* 1978). The party whose assets cannot be redeployed outside the relationship risks being expropriated of her investments, when their cost is sunk and unforeseen contingencies may result in ex-post redistribution of the quasi-rents generated. According to transaction costs economics, asset specificity determines a unique ('idiosyncratic') relationship between the investing party and the firm (Williamson 1979). The firm *organization* promotes idiosyncratic investments in both physical and human capital in that it protects them from hold-up. According to the property rights theory, however, only the

owners of the physical assets being specialized can appropriate rewards on idiosyncrasy (Grossman & Hart 1986). Both approaches try to explain why firms exist as a response to contractual incompleteness. Yet they do not entirely explain entrepreneurship, which involves the highly peculiar idiosyncrasy of inventiveness in management, but "for which ownership is never a condition" (Kirzner 1979:94).

Corporate governance can feature entrepreneurship in that framework. To this purpose, quasi-rents need be allocated as a reward of entrepreneurial talent, independently of the ownership of the underlying assets and of how they are combined within an organization. This promotes specialization of managerial talent to a combination of assets financed by separating ownership from control. I posit that this specialization accounts for the investment of pure entrepreneurship (i.e. investment under uncertainty), which is neither observable by outside shareholder nor verifiable by a third party.[6] As a result, its reward is not contractible and can only be appropriated through control rights. I define these quasi-rents as *idiosyncratic* PBC, for they depend on the identity of who controls the corporate enterprise.

What idiosyncratic PBC exactly are can be illustrated with an example. Suppose an entrepreneur who sets up a team of engineers to develop a new combination of wheels and tires allowing bikes to run 10% faster all else being equal. Our entrepreneur used to be a professional racer. By taking stock of his previous experience, and tailoring her skills to the new venture, she manages to develop the innovation, which eventually is patented and marketed by the company. The latter is floated to allow the project to be carried out on a larger scale. The new product sells well on the market generating good returns for the entrepreneur (the controlling shareholder) as well as for outside investors. Let us further

[6] The definition of classic entrepreneurs as uncertainty-bearers is based on Knight (1921). According to Knight, uncertainty differs from risk in that it cannot be assigned a probability. Differently from 'managers', 'superintendants', and other employees, entrepreneurs are willing to deal with uncertainty. The theory of entrepreneurship (e.g., Kirzner 1979) studies the conditions for rewarding this attitude. The best proxy for this approach in neoclassical economics is the theory of investments in the face of unforeseen contingencies, namely the incomplete contracts theory of the firm (Grossman & Hart 1986; Hart & Moore 1990). Differently from the assumption set out in the text, however, incomplete contract theory posits that investments are observable ex-post. The implications of this difference on the division of non-contractible surplus are discussed in Section 3.

assume that the profits are divided proportionally to share holding, and that the controlling entrepreneur keeps working hard in running the company (i.e., she is neither stealing nor shirking). Our entrepreneur reaps additional gains from this business. She has concluded an exclusive contract with a race team that, thanks to the special wheel-tire combination, systematically outperforms competitors in all kind of races. To the entrepreneur, this result is worth more than its spillovers on sales and profits. This personal satisfaction is her idiosyncratic PBC. The dream of becoming the key supplier of the leading race team ultimately motivated her to embark on this undertaking when its odds were inherently uncertain.

This understanding of idiosyncratic PBC parallels the emphasis by other commentators on the physic satisfaction of bringing a firm to success, which is enjoyed without harming and possibly benefiting non-controlling shareholders. Yet the story is incomplete. Let us assume that the monetary equivalent of idiosyncratic PBC for the entrepreneur is 50% of the market capitalization of the company. Our entrepreneur will most probably wonder why the market underestimates so much the importance of being the leader supplier in bike races. This profit potential could stay on the entrepreneur's mind forever, but at some point, a more concrete market alternative will emerge. Imagine that our entrepreneur has never travelled outside her home country (e.g., Italy, where people do not bike that much but still care about races) and that she is approached by the CEO of the largest producer of bikes in the Netherlands (having the highest ratio of bikes to population in the world) with a proposal for acquisition. The Dutch manager anticipates that, by redirecting the properties of the wheel-tire combination to cycling with lower effort instead of cycling faster, the value of the company would double. The acquisition is unambiguously wealth increasing, but it cannot be operated without the consent of the controlling shareholder. In order for the deal to close, she must be compensated for parting with control. When a prospective acquirer is willing to compensate the

entrepreneur's expectations about the profit potential under her management, idiosyncratic PBC suddenly have a market value. This is the control premium. Outside shareholder may dislike the payment of a control premium inasmuch as it affects their share of the takeover gains. However, there would have been no acquisition (and most probably, no successful company) in the absence of the entrepreneur's investments in developing the new product. Idiosyncratic PBC liquidated in the form of a control premium provide a *deferred compensation* (Schnitzer 1995) of non-contractible investments by entrepreneurs-managers.

As this story illustrates, idiosyncratic PBC are initially harmless to non-controlling shareholders. When the company goes public, these are prospective quasi-rents only visible to the entrepreneur who foresees profit opportunities that markets are unable to price. At this stage, the value of corporate control to the entrepreneur is higher than to anybody else. Her controlling position is allocatively efficient. Things change over time. Eventually, another entrepreneur may turn out to be a better manager. At this point, however, protection of idiosyncratic PBC could be a sufficient reason for the incumbent to stop the insurgent from taking over. This outcome is only apparently inefficient. Laffont and Tirole (1988) demonstrated that allowing any better manager to take over firm control undermines the incentives of previous management to make unobservable investments. The open question is whether insurgents can *induce* incumbents to part with control, by paying compensation for their idiosyncratic PBC, and still improve corporate performance on the stock market. In this perspective, protection of idiosyncratic control rents would be certainly efficient ex-ante, for it promotes the investment of unobservable talent. After this investment is made and corporate control has become valuable to potential acquirers, compensation of idiosyncratic PBC would be just a distributional issue. This provisional assessment depends on the assumption that the incumbent entrepreneur is not harming shareholders by stealing or shirking. For this

assumption to hold, we need specific restrictions on the extraction of additional private benefits. This calls for a closer look at the other categories of PBC.

Control benefits other than idiosyncratic PBC are extracted from security benefits, and therefore, they bear no relation with firm-specific investments having not yet generated a verifiable surplus. Under the previous classification, these PBC have no quasi-rent feature; they are just rents. Control rents are extracted from non-controlling shareholders in two different fashions. One is outright diversion of firm's assets and profits. The other is distortion of management decisions aimed at maximizing consumption of control perquisites rather than the firm's profits. Following Mayer (1999), I define the rents arising from the first kind of behavior as *diversionary* private benefits of control, and those arising from the second kind as *distortionary* private benefits of control.

Diversionary private benefits account for 'stealing' in its broadest characterization (Roe 2003). Welfare assessment of stealing is not a novel subject in Law and Economics. Being an ex-post redistribution of existing resources, stealing may seem neutral to overall social welfare. It is not. On the one hand, any effort taken to implement or to prevent stealing is a waste of resources (Cooter & Ulen 2008). On the other hand, the risk that stealing is operated ex-post reduces investors' willingness to pay for non-controlling stock ex-ante (Shleifer & Vishny 1997). A rational corporate controller would be willing to commit to a no-stealing policy at the outset in order to maximize the proceeds from the sale of non-controlling stock. However, to the extent that this commitment is not credibly supported by the legal system, diversion is always implemented ex-post and less separation of ownership and control than would be optimal occurs ex-ante (Bebchuk 1999). Diversionary PBC unambiguously generate efficiency in corporate governance, but apparently, they can be policed by appropriate legal rules and enforcement strategies (Djankov et al. 2008). This allows treating them separately from the other categories.

Distortionary PBC are more difficult to handle. They crudely account for inefficient management of the firm's resources. This is illustrated by a broad notion of 'shirking' (Roe 2003). A non-owner manager will always put a lower effort than she could in the management of the resources under control, and consume some of them in the form of perquisites. Under separation of ownership and control, on-the-job consumption will continue until it is worth less to the controller than its opportunity cost to the owners as a whole. Therefore, distortionary private benefits are always extracted in an inefficient amount. Unfortunately, there is not much one can do about it. Perhaps the most important result of the agency theory of corporate governance is that separation of ownership and control can only generate second best outcomes (Jensen & Meckling 1976).

A number of market and non-market institutions try to make sure that distortionary PBC are extracted in a limited amount, so that separation of ownership and control still allows capturing gains from trade. Traditional models of asymmetric information rely on monitoring, financial commitments, and incentive alignment. Incomplete contracts models do not share the same reliance on mechanism design (Zingales 1998). At the end of the day, minimization of distortionary PBC will be a matter of (re)allocation of corporate control (Hart 1995). No matter of how they were selected and used to perform in the past, managers are to be replaced as soon as they prove less competent, or just more prone to shirking, than the best management alternative available on the market. This is how takeovers provide the ultimate solution to the problem of agency costs.

This perspective overlaps with how idiosyncratic PBC enter the framework. The market for corporate control is not only the place where the management is replaced when it is no longer efficient, but also the final source of entrepreneurs' reward for their firm-specific investments. It could seem that the two goals cannot be pursued simultaneously. Whenever control tenure allows entrepreneurs to enjoy idiosyncratic PBC, there is apparently no guarantee that they

would not rather shirk (i.e., extract distortionary PBC) resisting takeover by any more efficient management. However, under certain assumptions about the functioning of the market for corporate control, idiosyncratic PBC is the most that the corporate controller can get on top of her share of the security benefits. When a takeover increases the latter by a larger amount than idiosyncratic PBC, the controller's parting with control dominates extraction of distortionary PBC on condition that idiosyncratic PBC are fully compensated. As the next section illustrates, this compensation provides the efficient solution to the tradeoff between idiosyncratic and distortionary PBC.

3. *Efficient Protection of Private Benefits of Control*

How can idiosyncratic PBC be protected efficiently is best illustrated under a few simplifying assumptions. First, I assume that outside stock is placed with a single, professional representative of the investing public, who takes care of contracting with incumbent and insurgent controllers on behalf of dispersed shareholders. A prominent implication of this assumption is that shareholders do not free ride (Grossman & Hart 1980). Second, I assume that corporate law enables controllers to take a credible commitment that non-controlling shareholders will not be expropriated. This rules out diversionary PBC, which undermine efficiency of both separation of ownership and control and of the takeover process. These effects will be highlighted in the next section, emphasizing that corporate law should have curbing diversionary PBC as a first priority, but not also as an exclusive goal. The third assumption is freedom of contract regarding the allocation of control rights. This implies a full range of control entitlements that can be variously combined with ownership, including the possibility that a corporate controller is in charge with no ownership at all. I shall start by analyzing how entrepreneurship can be combined with separation of ownership and control

under this assumption. How corporate law may effectively distort the outcome when this assumption is removed will be shown in section 5.

Let us consider an entrepreneur whose ideas can only be partly appreciated by the stock market. The value of the company at the going public stage includes two components: the expected security benefits (SB) and the expected returns on the controller's firm-specific investments (PBC).[7] Since these idiosyncratic PBC do not affect shareholders' returns, the controller's (unverifiable) private benefits must be added to the shareholders' (verifiable) security benefits. The following thus defines the firm value:

$$V = PBC + SB \quad (1)$$

The company value is not maximized when separation of ownership and control undermines production of either PBC or SB. Given that diversionary PBC are disallowed by assumption, separation affects SB only through the extraction of distortionary PBC. To avoid confusion, I define distortionary PBC as their opportunity costs to shareholders, namely the difference between potential and actual security benefits. Being SB^* the value of security benefits under the best imaginable management and SB_1 the returns actually expected by the investing public, the following are the expected costs of distortionary PBC:

$$D = SB^* - SB_1 \quad (2)$$

D affects outside shareholder's willingness to pay for outside stock. If D were high enough to wipe out SB^*, all verifiable firm value would be consumed by the controller in the form of perquisites. Conversely, $D = 0$ when the corporate controller retains all of the company's ownership.[8] In both extreme situations, no separation of ownership and control occurs. When we assume that our entrepreneur is wealth-constrained and cannot borrow enough funds to

[7] In order to keep discussion accessible to non-economists, I consider expected values equal to realized values. That implies that all probabilities and discount factors are set equal to one. This oversimplification does not affect the results of the analysis, which deals with uncertainty rather than with risk. See the previous note.

[8] $D = 0$ also holds when the company goes public with a perfectly contestable ownership structure (Grossman & Hart 1988). However, this solution does not allow for appropriation of PBC, and it is therefore inconsistent with the previous definition of firm value. See the discussion in the next section.

finance the implementation of her idea, any such outcome implies failure to produce V. Therefore, I focus only on those situations involving separation of ownership and control. This means that the controller retains a $0 < \alpha < 1$ interest in SB, which implies that D is always positive but never large enough to impair production of SB_1. For simplicity, I define α as the fraction k/n of outstanding shares retained by the controller. However, the condition $\alpha > 0$ (forcing the controller to share in the opportunity costs of distortionary PBC) does not require share ownership. It is also fulfilled by some pay-per-performance schemes in management-controlled companies (e.g., stock options vesting at the end of tenure).

That being said, I assume that α is chosen optimally given the size of PBC. I will elaborate on the mechanisms of this choice in the next section. For the moment, it is sufficient to note that this results in D* costs of distortionary PBC corresponding to the second best outcome of separation of ownership and control. This implies that (1) be rewritten as follows:

$$V = PBC + SB^* - D^* = PBC + SB_1 \quad (3)$$

When the company is floated, there is no management able to produce SB*. At that moment, the entrepreneur is the only option for controlling the company. She may be individually expecting the production of SB*, but the investing public is purchasing stock under the expectation that only $SB_1 < SB^*$ are produced. To the extent that the entrepreneur values controlling a company potentially worth SB*, she can still appropriate the difference $\alpha\ (SB^* - SB_1)$ as idiosyncratic PBC. This implies:

$$PBC = \alpha\ (SB^* - SB_1) = \alpha\ D^* \quad (4)$$

An important consequence of (4) is that private benefits that outside shareholders fear as on-the-job consumption can be extracted in a more productive fashion. While $\alpha > 0$ makes control perquisites worth less to the controller than their costs to outside shareholders, idiosyncratic PBC account for the additional value of the entrepreneur's firm specific investments. By substituting (4) into (3), we obtain:

$$V = PBC + SB_1 = SB^* - (1 - \alpha) D^* \quad (5)$$

where $(1 - \alpha) D^*$ measures the distance of the outcome from the first best.

Whether the entrepreneur is investing or shirking is unclear at the going public stage. Outside shareholders cannot observe the controller's behavior, and this is why $D > 0$. From the entrepreneur's perspective, the choice of investing rather than shirking depends on two circumstances. First, the controller's ability to appropriate idiosyncratic PBC in every state of the world in which this value is produced. Second, the chance that investing will enable her to claim a larger share of the surplus in the event of a takeover bid. This chance depends on unobservable entrepreneurial capabilities. However, only a capable entrepreneur who has effectively invested will be credibly committed to turn down the offer of a control premium high enough to compensate on-the-job consumption (viable for any prospective SB slightly higher than SB_1), but insufficient to make it up for idiosyncratic PBC (requiring that prospective SB be significantly higher than SB_1). Thus, as I am going to show, whether the controller has invested or just shirked only becomes clear in the face of a takeover bid.

Let us consider a takeover stage where a bidder is committed to generate $SB_2 > SB_1$. For simplicity, I assume that the bidder does not extract idiosyncratic PBC so that her commitment stands so long as she is willing to pay up to SB_2 for all outstanding stock.[9] The incumbent controller would not have invested when she could not secure her PBC from hold-up by shareholders. When the latter have control rights, they just auction control to the best bidder and the entrepreneur is replaced without getting any compensation for her PBC. This solution is inefficient inasmuch as entrepreneurial investments valued $PBC > 0$ are foregone. Takeover allows compensating PBC when the entrepreneur has control rights in the whole domain of $0 < \alpha < 1$ ownership stakes. In this situation, the entrepreneur will invest so long as PBC provide a sufficient return for her investment, and control will change hands if and only

[9] The results of the analysis are unchanged when the insurgent's PBC are accounted for, so long as they are lower than the incumbent's. However, justification of this condition requires a theory of PBC evolution over the firm lifecycle, which – for reasons of space – cannot be discussed here (see Pacces 2007).

if $SB_2 - SB_1 > PBC$. This condition guarantees not only that the incumbent is replaced when a significantly better management alternative is available. More importantly, it allows the incumbent to extract a control premium sufficient to reward her firm-specific investments (if there were any in the first place).[10] Under this condition, V is maximized ex-post subject to the constraint that PBC accounting for valuable investments ex-ante are appropriated. That is:

$$V = \max \{SB_2, SB_1 + PBC\} \quad \forall\, SB_2 > SB_1 \qquad (6)$$

A comparison of (5) and (6) shows that protecting idiosyncratic PBC allows for realization of a higher V ex-ante without compromising the improvement of V ex-post, so long as enhanced SB are sufficient to compensate previous firm-specific investments. This result obtains under the assumptions that the incumbent has control rights (which enables her to claim compensation for her PBC), that diversionary PBC are disallowed (which rules out takeovers resulting in expropriation of minority shareholders) and that outside shareholders cannot free ride (which enables the insurgent to finance takeover out of her prospective profits on outside stock). To this, we need to add that the insurgent must acquire α SB from the incumbent. This restriction – which parallels the widespread prohibition sale of office in corporate law (Easterbrook & Fischel 1991) – makes sure that the incumbent has an incentive to part with control without claiming the entire takeover surplus as compensation of her PBC.[11] This incentive depends on her being compelled to trade α SB in order to cash in PBC. Given the definition of idiosyncratic PBC, the incumbent cannot expect to earn more than $\alpha\, SB_1 + PBC$ under the status quo. Therefore, whenever $\alpha\, SB_2 > \alpha\, SB_1 + PBC$, the insurgent can offer for the controlling stake more than it is worth under the incumbent's best expectations. If the incumbent turned down that offer, she would lose up to $\alpha\, (SB_2 - SB_1)$. Prohibition of sale of office forces insurgents and incumbents to cooperate in order to

[10] Note that, if the controller has not invested, the condition becomes $SB_2 - SB_1 > \alpha\, (SB_2 - SB_1)$, which is true for any $\alpha > 0$, $SB_2 > SB_1$. See the discussion of this outcome below.

[11] This result differs from Zingales' (1995) analysis of a similar bargaining between the insurgent and the incumbent, because I am assuming that outside shareholders are unable to free ride. As we will see shortly, this implies that the insurgent is committed to pay no more than SB_1 (instead of SB_2) for outside stock.

appropriate the takeover surplus. Anything exceeding the current value of ownership ($\alpha\ SB_1$) and control (PBC) to the incumbent will have to be divided.[12] Thus, the following is a sufficient condition for control to change hands:

$$\alpha\ (SB_2 - SB_1) > PBC \qquad\qquad SB_2 - SB_1 > (1/\alpha)\ PBC \qquad (7)$$

(7) requires that $SB_2 > SB_1$, which disallows inefficient changes in control. This is a prominent consequence of the absence of diversionary PBC and of the prohibition of sale of office, forcing the insurgent to compensate the incumbent's PBC out of enhanced SB. However, as Bebchuk (1994) demonstrated, this pattern of negotiated transfers cannot guarantee that all efficiency-enhancing changes in control occur. The reason is that incumbent and insurgent only trade control when $\alpha\ (SB_2 - SB_1) > PBC$, but takeover is also efficient when $SB_2 - SB_1 > PBC > \alpha\ (SB_2 - SB_1)$. This generates the following welfare loss:

$$SB_2 - SB_1 - \alpha\ (SB_2 - SB_1) = (1 - \alpha)\ (SB_2 - SB_1) \qquad (8)$$

It is clear from (8) that the welfare loss is eliminated when, differently from Bebchuk (1994), outside shareholders are not allowed to free ride. In this case, the insurgent can subsidize the difference $\alpha\ (SB_2 - SB_1) - PBC < 0$ through the purchase of non-controlling stock and still have an incentive to take over. In the absence of diversionary PBC, outside shareholders always receive no less than $(1 - \alpha)\ SB_1$, which keeps disallowing inefficient takeovers. When we add $(1 - \alpha)\ (SB_2 - SB_1)$ to the insurgent's payoff, (7) becomes:

$$(1 - \alpha)\ (SB_2 - SB_1) + \alpha\ (SB2 - SB_1) > PBC \qquad\qquad SB_2 - SB_1 > PBC \qquad (9)$$

which proves the proposition in (6).

This result places sufficient constraints on the ability of the corporate controller to resist efficient takeovers, in spite of her control rights. (9) shows that controllers cannot extract from outside shareholders more than PBC. True, the controller may pretend that this value

[12] Here I am implicitly assuming that the incumbent receives a take-it-or-leave-it offer from the insurgent, and there is no actual or potential bidding competition. Bidding competition has important implications on the distribution of the takeover surplus, but under certain regulations of the incumbent's behavior pending a takeover bid it can be shown that incumbent and insurgent still have an incentive to split the gains. This is, however, beyond the scope of this paper. For more details, see Pacces (2007).

account for firm-specific investments (which are unobservable), while in fact this is just on-the-job consumption. However, the choice of shirking instead of investing cannot be concealed indefinitely. When the company is just being mismanaged, any SB_2 slightly higher than SB_1 will suffice for the insurgent to make the incumbent an offer she can't refuse. Having not invested, the incumbent is not committed to a tough bargain for PBC; she would rather leave for a compensation marginally higher than α ($SB_2 - SB_1$) (making it up for the value of control perquisites to her), while the insurgent will still be able to appropriate most of $(1 - \alpha)$ ($SB_2 - SB_1$). Conversely, when the incumbent has invested rather than shirked, she can credibly reject any offer by the insurgent so long as it does not suffice to compensate her idiosyncratic PBC (which she is enjoying *instead* of control perquisites).[13]

The technicalities of this mechanism, thoroughly illustrated by Almazan and Suarez (2003), are beyond the scope of this paper. Its intuition shows, however, that the fundamental virtue of takeovers (correcting mismanagement through coalescence of ownership) is not foregone when they are implemented as negotiated transfers. Under limited assumptions, forcing insurgents to come to terms with incumbents allows the latter to make firm-specific investments without giving them slack when they do not. In the same vein, Schnitzer (1995) demonstrated that allowing managers to resist takeover is efficient since it enables them to extract a compensation for their firm-specific investments as soon as they have become observable as an information rent. Based on the introduction of idiosyncratic PBC, the foregoing analysis shows that – somewhat more realistically – this outcome does not depend on ex-post observability of control rents, but only on $SB_2 - SB_1$ being sufficiently large to offset the controller's preference for enjoying returns on previous firm-specific investments as psychic satisfaction.

[13] The careful reader will notice that when α ($SB_2 - SB_1$) > PBC the incumbent is replaced regardless of whether she invested or shirked. However, the size of SB_2 that can trigger a change in control is different in the two scenarios. In the shirking case, SB_2 need just be slightly higher than SB_1. Under the investment hypothesis, instead, SB_2 need be significantly higher than SB_1, depending on the size of PBC.

This approach has important points of tangency with stakeholder theories of corporate governance, most famously represented in Law and Economics by the "Team Production Theory" (Blair & Stout 1999). As I do, stakeholder theories contend that shareholders are not the only firm constituency whose investments cannot be entirely protected contractually. Differently from stakeholder theories, however, I claim that the controlling entrepreneur is particularly exposed to hold-up by outside shareholders, and for this reason, she should be exclusively vested with control rights. The argument is essentially the following.

The economics of the team production theory is based on two papers by Rajan and Zingales (1998, 2001), where it is argued that stakeholders protect their firm-specific investments in human capital by controlling access to the critical resource they confer upon the firm organization. In order to exploit this critical resource, shareholders must be committed to reward these investments ex-post (which arguably, they can do by delegating control rights to a "mediating hierarchy" – Blair & Stout 1999). In principle, this applies equally to employees and entrepreneurs-managers. The problem is that no critical resource is bound to stay such forever. Rajan and Zingales (2001) account for this problem in describing a dynamics of progressive empowerment of key employees within the organization, supported by competition in generating critical resources. Shareholders are committed to reward employees who make firm-specific investments by trading access to critical resources for increasing responsibilities within the corporate hierarchy, which in turn provides employees with additional incentives to make themselves indispensable. Shareholders cannot take the same commitment with the entrepreneur for the simple reason that she is situated on top of the firm's hierarchy. When the company is auctioned to the best bidder, a valuable hierarchy may still protect stakeholders but not the entrepreneur who set it up. The entrepreneur should thus be able to protect her firm-specific investments through control rights.

Another problem with stakeholder theories is that division of the surplus between different stakeholders involves the risk that a substantial part of it is dissipated in rent-seeking. This problem is overcome when one maintains – as I maintained throughout this paper – that shareholders are the *only* residual claimants to the company's verifiable returns. The crucial point of the tripartite account of PBC being advocated here is that shareholders do not need control rights to protect their share of SB from distortionary and diversionary PBC, whereas the corporate controller needs those rights to secure an *additional* reward as idiosyncratic PBC. This result is achieved by placing legal and economic constraints on how controllers exercise their powers, which guarantees that they are not abused to outside shareholders' disadvantage. More than stakeholder theories, this framework parallels Bainbridge's (2009) approach to Corporate Law and Economics, which likewise posits that the controller's powers are unchallenged by shareholders, but they are exercised in their interest. Bainbridge's approach, however, mainly relies on an independent role of corporate directors, which is hard to reconcile with concentrated ownership and does not really explain why underperforming controllers ultimately yield to a more efficient management. Idiosyncratic PBC, and the mechanism of their compensation through the takeover process, explain both circumstances.

4. *Ownership Structure and the Market for Corporate Control: A Coasian View*

I have showed that idiosyncratic PBC matter in two stages temporally distant, but conceptually related. In both stages, there is a tension between extraction of returns on firm-specific investments and maximization of shareholder value, which can be, however, resolved efficiently. In this section, I shall elaborate on the conditions that make this happen. For the moment, I maintain that diversionary PBC are disallowed.

At the going public stage, investors are willing to buy non-controlling stock at a discount increasing in ownership dispersion: the lower the controller's stake, the higher the expected

extraction of distortionary PBC (Jensen & Meckling 1976). This discount could be eliminated efficiently if the controller was credibly committed to extract no distortionary PBC. As demonstrated by Grossman & Hart (1988), this result is achieved by choosing a perfectly contestable ownership structure where managers are replaced as soon as they shirk. The fact that such contestable structures are hardly ever chosen in real-world corporate governance shows that something else must be going on.[14] Absent diversionary PBC, only idiosyncratic PBC can explain control tenure. The framework developed in the previous section allows describing in very simple terms the efficient choice of ownership structure when both idiosyncratic and distortionary PBC are present.

Let $D = SB^* - SB_1 = D(\alpha)$ and k be the number of shares retained by the corporate controller out of n shares outstanding ($\alpha = k/n$). Given the controller's evaluation of her firm-specific investments, the optimal amount of n – k shares placed with the investing public must be such that:

$$PBC/k = D(\alpha)/n \qquad (10)$$

The reason is very intuitive. When $PBC/k > D(\alpha)/n$, the per-share control premium is higher than the average discount on outside stock, implying that the controller can cash in the difference by placing additional stock with the investing public. Conversely, if $PBC/k < D(\alpha)/n$ the controller would be better off repurchasing undervalued stock from the investing public. Equilibrium in the sale of non-controlling stock is reached when the expectations on the verifiable stream of profits converge for each unit of share capital, and the remainder of the firm potential is appropriated as idiosyncratic PBC.

Note that (10) is another way to write the expression (4) in the previous section, which yields the second best outcome described in (5). I am not making any particular assumption on the functional form of $D(\alpha)$, save that it is monotonically decreasing in α and, all else being

[14] Control of the vast majority of publicly held corporations around the world is not contestable (Morck *et al*. 2005). Also when the ownership structure is sufficiently dispersed to allow for contestability, takeovers originally initiated as hostile are concluded as a deal with the incumbent management (Schwert 2000).

equal, the marginal discount $|dD(\alpha)/d\alpha|$ is larger the higher the uncertainty on verifiable profits.[15] This uncertainty is the reason why the entrepreneur must earn an additional reward as idiosyncratic PBC. When we rewrite (10) as:

$$\alpha^* = k/n = PBC/D(\alpha^*) \quad (11)$$

this simple model shows how ownership concentration arises efficiently when uncertainty of profits is high. The effects of uncertainty on idiosyncratic and on (anticipated) distortionary PBC converge towards a higher α.[16]

As one would expect, raising outside equity under high uncertainty requires that the entrepreneur keep a high financial commitment in the venture. While this results in better incentive alignment, it also implies that significant returns on the controller's firm-specific investments must be enjoyed as psychic satisfaction until they can be cashed in as a control premium. These returns are undoubtedly lower, but they are not foregone under more dispersed ownership structures if idiosyncratic PBC are still necessary to motivate entrepreneurship.[17] Critics may disagree on this mechanism inasmuch as it disallows disciplinary takeovers at a later stage. Insistence on unobservable firm-specific investments by the controller – the argument runs – is an easy excuse for preventing hostile takeovers from policing managerial shirking or incompetence, especially in those situations where α is low (Becht *et al*. 2007).

The previous section demonstrates that takeovers need not be hostile to police distortionary PBC when the controlling stake (however little) is exchanged between the incumbent and the

[15] The marginal discount is the absolute value of the first derivative of $D(\alpha)$. It measures the speed with which the discount increases with separation of ownership and control.
[16] Uncertainty makes both PBC and $D(\alpha)$ higher, all else being equal. However, the higher the uncertainty the more rapidly $D(\alpha)$ increases in $(1 - \alpha)$ stock placed with the investing public. This implies that the equilibrium α^* that makes $PBC/k = D(\alpha)/n$ be higher.
[17] The simple model presented here is perfectly consistent with management-controlled companies where the controlling ownership α is low. With a few complications, which cannot be discussed here (see Pacces 2007), the same model can be adapted to situations where the management has no ownership at all, but retains an interest α in SB as pay-per-performance while being guaranteed idiosyncratic PBC in the form of a (renegotiable) severance payment. In this situation, the management faces the same incentive structure of the controlling shareholder described in the last section (see Almazan & Suarez 2003).

insurgent and outsiders are not allowed to free ride. The difference of that solution from hostile takeovers is that distortionary PBC can still be extracted by resisting takeover so long as their cost does not exceed the size of idiosyncratic PBC necessary to motivate firm-specific investments. As we have just seen, any outcome more favorable to non-controlling shareholders would be more than they bargained for at the going public stage. Efficient reallocation of corporate control needs not make any player worse off. If we look carefully at the gains from trading control, they include the insurgent's surplus from correcting managerial underperformance (i.e., the cost of distortionary PBC) but they exclude the value of the incumbent's firm-specific investments (idiosyncratic PBC). Gains from trade are positive only when the cost of distortionary PBC exceeds the value of idiosyncratic PBC; that is, when the insurgent attaches a higher value to corporate control than the incumbent does. Any different specification would violate the incumbent's preferences ex-post, which would be inconsistent with the assumption that these preferences matter ex-ante for the exercise of entrepreneurship in corporate governance.

This is essentially a Coasian perspective (Coase 1960) acknowledging that a specific allocation of entitlements to corporate control is necessary ex-ante for production of unobservable value through firm-specific investments. The implication is that corporate control has a value independently of ownership. While this is important for promoting entrepreneurship in corporate governance, the fact that control can only be traded in combination with ownership shields this mechanism from unnecessary inefficiency ex-post. Control is bound to change hands whenever coalescence of ownership brings gains from trade sufficient to compensate its value to the incumbent. This fundamental insight dates back to Manne (1965) who showed that purchase of (undervalued) ownership is only the instrument for the efficient operation of the market for corporate control. Control is the asset to be exchanged. This mechanism does not require takeovers to be hostile. It works as well when

reduced uncertainty and transaction costs allow compensating the private value of control. Only at this point corporate control can be safely reallocated to its most productive use through side payments. Takeover will succeed if and only if the insurgent can generate a higher value than the sum of private and security benefits under the incumbent's management.

This is how the market for corporate control is efficiently operated by friendly takeovers. More precisely, this arrangement guarantees a constrained-efficient outcome. The costs of an inferior management (distortionary PBC) are minimized by takeovers subject to the constraint of compensation of idiosyncratic PBC. In other words, the market for corporate control maximizes shareholder value subject to the constraint of rewarding entrepreneurship with a control premium. The welfare loss is illusory, though, for this constraint accounts for a costly resource – entrepreneurship – that financial markets could not price ex-ante in spite of its turning valuable ex-post.

Constrained efficiency depends on the assumptions of the simplified framework developed in this paper. These assumptions hold only under specific legal restrictions, two of which are worth mentioning briefly before focusing on the major implications of idiosyncratic PBC for corporate law. The efficient outcome obtains on condition that outside shareholders are not allowed to free ride on the takeover gains (Grossman & Hart 1980). Formally, this depends on collective action problems being ruled out.[18] This assumption is not particularly restrictive. Holdout by dispersed shareholders is unnecessary for efficiency when control transactions are bargained for between the bidder and the incumbent management. Friendly takeover bids cannot make outside shareholders worse off when sale of office and extraction of diversionary PBC are effectively prohibited – as I have assumed they are. Furthermore, there are a number of legal techniques to prevent outside shareholders from free riding. Of these, squeeze-out of non-tendering shareholders is "a simple and elegant solution" (Yarrow 1985:4). Discussion of

[18] Recall that I assumed that outside stock is placed with the investing public through a professional coordinating entity. Shareholders who are able to coordinate costlessly will let the bidder appropriate a sufficient share of the takeover gains, so that she can offer a side payment to the incumbent controllers and still be better off.

this solution and of its implications for takeover regulation is better left to a separate inquiry (Amihud *et al*. 2004; Pacces 2007).

The absence of diversionary PBC is also crucial for idiosyncratic PBC to be cashed in efficiently through the takeover process. Following Grossman & Hart (1980), it is often assumed that dilution of minority shareholders is necessary for changes in control to be operated efficiently. Since controllers can only extract PBC by consuming perquisites or diverting resources from outside shareholders, the basic tradeoff in the market for corporate control is between the incumbent's failure to maximize shareholder value and the insurgent's ability to subsidize takeovers by diverting the efficiency gains to her own pockets (Bolton & von Thadden 1998). This is how corporate governance is ultimately understood as a tradeoff between diversionary and distortionary PBC.[19] This paper shows that this tradeoff is unwarranted when the legal system can curb diversionary PBC without interfering with how the market allocates corporate control. When this is the case, the real tradeoff is between protection of idiosyncratic PBC ex-ante and minimization of distortionary PBC ex-post.

With this, I am not claiming that investor protection is unimportant. It is actually so important that the impact of idiosyncratic PBC on corporate governance only becomes visible in the absence of diversionary PBC. Outright diversion of shareholders' money dominates the extraction of any other kind of PBC, and thus it compromises the selection of ownership structure and its efficient evolution through the takeover process. When controllers cannot

[19] A related argument is based on controlling shareholders' ability to extract a reward for their firm-specific investments in the form of insider trading (IT). This should be efficient to the extent that large shareholding is less expensive than the takeover mechanism for monitoring the management (Becht et al 2007). This argument in favor of IT has a long-standing tradition (Demsetz 1986) and it has been recently revamped by Manne (2005). Although the matter is only tangentially related to the present discussion (save that IT can be regarded as a form of diversionary PBC), I see two reasons why IT is no better way to compensate controllers of their firm-specific investments than the one I am advocating. First, insiders will earn more from selling non-controlling stock when they are legally committed to let outsiders only trade on information advantages. This parallels the argument against any form of value diversion from outside shareholders (developed below in the text) and may explain why both IT and dilution of minority shareholders are generally against the law. Secondly, prohibition of IT does not mean that insiders are prevented from capturing information rents altogether. They can, indeed, to the extent that they manage to keep information about the firm potential secret and to share it only with bidders who know better how to turn this potential in stock returns. This allows for two separate bargains on control and ownership: the first, rewarding the incumbent via a control premium; the second, making sure that insurgents take over if and only if they can enhance stock returns more than the market already anticipates.

take a credible commitment that diversionary PBC will not be extracted if not in a limited amount, the cost of equity capital will be higher and gains from trading both controlling and non-controlling stock will be foregone.[20] Control will still be entrenched. However, short of promoting entrepreneurship, entrenchment will be aimed at protecting ongoing stealing or at preventing further looting from occurring by means of takeovers (Bebchuk 1999). Corporate law's ability to counter stealing remains thus a precondition for efficient corporate governance. The additional finding of this paper is that this is also a necessary condition for the market for corporate control to be operated efficiently by friendly takeovers. The conditions become sufficient when policing diversionary PBC does not also prevent controllers from extracting compensation for their idiosyncratic PBC. An appropriate fine-tuning of fiduciary duties imposed on the board members of management-controlled corporations, or directly on controlling shareholders, can realistically hit the target.[21].

5. *Implications for Corporate Law*

So far, I have maintained that corporate law supports allocation of control rights to the entrepreneur regardless of the ownership structure. Under this assumption, protection of idiosyncratic PBC provides an efficiency-based explanation of a number of real-world circumstances, namely: (i) entrenchment of corporate control regardless of ownership concentration; (ii) ownership concentration also in the absence of expropriation of minority shareholders; (iii) side payments in takeovers operated under both dispersed and concentrated ownership. In this setting, idiosyncratic PBC determine the efficient ownership structure, but do not tell why the latter should vary systematically across countries. Actually, it should not. Where the quality of investor protection is high (as it is in most of the developed world), these

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[20] Being unable to distinguish honest managers from looters, shareholders will just offer lower prices for non-controlling stock. Being unable to cash in idiosyncratic PBC in markets for corporate control that auction stealing instead of profit opportunities, most talented entrepreneurs will exit from the stock market or just refrain from entering it in the first place. These are the typical 'lemons' equilibria illustrated by Akerlof (1970).

[21] A thorough investigation of this problem is outside of the scope of the present inquiry. See Pacces (2008).

different patterns of separation of ownership and control must depend on corporate law's supporting protection of idiosyncratic PBC in certain ownership structures, but not in others. By removing the assumption of corporate law's neutrality in this respect, this section illustrates how regulation of control rights affects corporate governance via the extraction of idiosyncratic PBC.

Corporate law must make sure that entrepreneurs keep their entitlement to idiosyncratic PBC when they go public before having appropriated the returns on their firm-specific investments. The empirical evidence (e.g., Pagano *et al*. 1998; Daines & Klausner 2001) suggests that going public is actually a step towards appropriation of these returns, which will be eventually accomplished through cashing in of a control premium. Corporate laws anyway support this outcome by allowing control to be uncontested with 50% of ownership. This solution places a heavy financial burden on entrepreneurs who wish to grow relying on outside equity. Gains from trade are foregone when the marginal discount on non-controlling stock is lower than the per-share control premium accounting for idiosyncratic PBC. Still, the corporate controller can no longer protect this control premium when the ownership stake becomes insufficient to grant uncontested control rights. Under these circumstances, entrepreneurs must refrain from profitably placing further stock with the investing public. This is how the shortage of legal entitlements to corporate control can determine suboptimal separation of ownership and control.

Corporate law needs not be so rigid. With few exceptions (e.g., Cools 2005), Corporate Law and Economics tends to overlook one key feature of corporate law, which is *distribution of powers*. Because of the majority principle governing the corporate structure, a shareholder needs a half of the voting rights to be safely in control. This does not imply that a controlling shareholder owns 50% of the company. Corporate law can provide further entitlements to corporate control by allowing derogations from the one share–one vote principle. These

derogations are often viewed with skepticism by both economists and legal commentators. However, they ease the constraint of protection of idiosyncratic PBC on separation of ownership and control. This is efficient to the extent that further separation occur via voluntary exchange of non-controlling stock (Ferrarini 2006).

Disproportionality between ownership and voting rights is quite popular in continental Europe, in spite of the significant variety with which derogations from one share–one vote are allowed. Deviations from one share–one vote do not seem to undermine stock market performance. Quite to the contrary, two countries where these deviations are the most frequent – Sweden and the Netherlands – have both a very high stock market capitalization to GDP and extensive separation of ownership and control (ISS, ECGI, Shearman & Sterling 2007). There is hardly any evidence that shareholders of Dutch or Swedish companies are being expropriated by this arrangement. Both disproportionality of voting rights and separation of ownership and control are significantly lower in Italy, where shareholder expropriation is perceived as a more serious problem (Bianchi & Bianco 2007). Therefore, derogations from the one share–one vote principle do not increase extraction of diversionary PBC, but allow protection of idiosyncratic PBC when expropriation of minority shareholders is not an issue.

This is but one aspect of legal distribution of corporate powers. Besides providing controlling shareholders with voting rights in excess of ownership, corporate law can provide entitlements to control independent of voting. This is necessary for management to be in charge of corporate decision-making without significant supporting ownership. Management-controlled companies are economically efficient when idiosyncratic PBC are low enough to allow ownership to be largely placed with non-controlling shareholders. They are legally feasible under two major conditions (Cools 2005). On the one hand, management needs to be in control of how dispersed shareholders appoint board members and, more in general, of how

they cast their votes. On the other hand, management must be in the position to prevent an unwanted takeover.

In continental Europe, these conditions are fulfilled in the Netherlands, but not in Sweden. As a result, the former exhibits a significant proportion of management-controlled listed companies (de Jong *et al*. 2001), whereas there is virtually none of them in the latter (Agnblad *et al*. 2001). Dutch corporate law provides a broader range of entitlements to control rights (Schuit *et al*. 2002). The 'structured regime' of appointment of two-tier board members tends to empower the management. This is supplemented by other 'oligarchic' devices (e.g., shareholder voting trusts or priority shares), which are equally suitable for managerial and shareholder control. Availability of takeover defenses under both statutory and case law makes sure that incumbent managers cannot be ousted against their will, at least not without compensation. On the contrary, Swedish corporate law falls short of entitlements that empower corporate management (Skog & Fäger 2007). It only allows controlling shareholders to be in charge, thereby forcing separation of voting rights from ownership beyond what would be efficient (Holmén & Högfeldt 2005).

Asymmetry between entitlements for managerial and shareholder control explains other apparently puzzling circumstances. American law is no more demanding on the one share–one vote principle than Swedish law. Only pyramidal group structures are legally disfavored in the US (Morck & Yeung 2005). This does not explain why also dual class security-voting structures are far less popular on American stock exchanges. Differently from Swedish law, corporate law in the US also allows the management to be in charge. It does so by placing in the board of directors, instead of in the shareholder meeting, the center of authority over corporate decision-making. This gives corporate controllers two options. Either they retain sufficient voting rights to act as controlling shareholders or they simply control the board. Management-controlled boards can disenfranchise non-controlling shareholders by

determining when and how votes are cast through the proxy machinery, and whether an insurgent shareholder is allowed to take over. Delaware law supports 'director primacy' (Bainbridge 2002) both in ongoing management and in changes in control.

Authoritative commentators (e.g., Bebchuk 2005) have questioned the merits of this outcome, especially by contrasting it with the British model that promotes dispersion of ownership without supporting any of these features. This paper contends, instead, that managerial empowerment in the corporation is a necessary legal condition for highly dispersed ownership structures whenever idiosyncratic PBC matter. Unavailability of entitlements to managerial control is at least one reason why these structures have not emerged in most countries of continental Europe. The UK is no exception to this argument.

In uncontested elections, British managers have no difficulty in gaining control of the board without support by a controlling shareholder. However, one important difference from the US is that, in principle, British managers can be ousted very easily from the board (Davies 2008). Directors of UK companies can be removed from office anytime by a shareholder vote. Even more importantly, they are prohibited from frustrating takeover bids by implementing defensive measures. In spite of that, hostile takeovers are rare in the UK (Weir & Laing 2003), their incidence on corporate acquisitions adjusted for the size of the economy is lower than in the US (Armour & Skeel 2007), and apparently, they do not have any disciplinary effect on management (Franks & Mayer 1996). The interesting question is why.

A few circumstances suggest that British managers have stronger control rights despite of their formal allocation to shareholders. First, it is hard for controlling shareholders to exercise their powers against directors, for they would have to escape the provisions of the Combined Code recommending effective independence of the majority of the board from the controlling shareholder (Arcot & Bruno 2006). Second, becoming a controlling shareholder can also be burdensome, due to the mandatory bid obligations triggered when the 30% threshold is

passed. Finally, by making the board mainly accountable to non-controlling shareholders, UK regulation of listed companies essentially empowers institutional investors that have no ambition to be in charge. As a result, those who have the powers to discipline managers do not have the incentives to engineer a takeover to that purpose (Stapledon 2006). Conversely, a raider who has the incentive to take over faces costly legal hurdles to building a controlling stake, unless she comes to terms with the incumbent board (Franks *et al*., 2001). When a takeover is agreed upon with the board, the bidder can make sure she gets sufficient support to take the company private, thereby avoiding being stuck in the inconvenient position of a controlling shareholder.[22]

This is how corporate management is indirectly empowered in the UK, which – coupled with effective investor protection – explains the prevalence of dispersed ownership structures. This situation, however, depends on controlling shareholdings being disfavored by regulation. The implication is that ownership might be more dispersed than it would be efficient and only businesses that feature relatively low levels of idiosyncratic PBC can be financed on the stock market. Highly innovative firms, and their entrepreneurs, should better stay private. This parallels the conclusion of a British commentator that the regulatory stance against PBC in the UK may undermine the financing of "activities that markets are unable to sustain" (Mayer 1999:19).

The British example illustrates the dangers of confusing protection of outside shareholders with their empowerment. More in general, powerful non-controlling shareholders threaten the exercise of entrepreneurial discretion in corporate governance. Not differently from the clients of lawyers or doctors, investors only challenge discretionary decision-making in hindsight, when they turn out badly. The difference with a standard principal-agent setting is that this may result in opportunistic behavior undermining the protection of firm-specific investments.

[22] The only ways for the insurgent to take the target company private is reaching the 90% threshold required for squeezing-out minority shareholders (which can turn out to be difficult without the support of the incumbent board) or implementing takeover as a scheme of arrangement, which requires the board's consent (Davies 2008).

This is why, differently from any other profession subject to fiduciary duties, courts abstain from second-guessing business judgment. They only impose liability on corporate controllers when non-controlling shareholders are expropriated of their investment because of a conflict of interest, not also when the value of that investment is not being maximized. This principle, known in the US as Business Judgment Rule, is functionally upheld by other corporate jurisdictions (Kraakman *et al*. 2004). Empowering outside shareholders in corporate governance is clearly at odds with this reasoning.

The rationale of the Business Judgment Rule is that failure to maximize shareholder value cannot be 'regulated' (Roe 2003). Inefficient extraction of distortionary PBC is ultimately policed by the market for corporate control, and this is where regulation matters. The Coasian approach to takeovers advocated in this paper has important implications in this respect. An efficient market for corporate control requires that idiosyncratic PBC be cashed in through side payments. Those payments exist in the real world. They take the form of control premiums or 'golden parachutes' depending on whether control is transferred from controlling shareholders or from the management. Conventional wisdom looks at them with suspicion. Lawyers often consider them as 'bribes,' while economists tend to regard them as evidence of shareholder expropriation.

The prevailing approach to takeover regulation parallels this skepticism (Kraakman *et al*. 2004). On the one hand, regulators try to protect shareholders from extraction of distortionary PBC by promoting contestability also when companies have chosen to have none. On the other hand, regulation tends to allocate to minority shareholders the lion's share of the takeover gains for fear that diversionary PBC are extracted via control transactions. Economic theory has demonstrated that these two goals are jointly unattainable (Burkart & Panunzi 2006). As a result, takeover regulation should optimize a tradeoff between diversionary and distortionary PBC. I have shown that this tradeoff is unwarranted when idiosyncratic PBC

enter the picture. On this basis, empowerment of minority shareholders by takeover regulation turns out to be most unfortunate. When this approach seeks to promote contestability, by exposing idiosyncratic PBC to ex-post expropriation, its effects ex-ante are higher ownership concentration or just fewer entrepreneurs going public. When it prevents takeover gains from being divided between the incumbent and the insurgent management, by disallowing side payments, it forces corporate controllers to extract higher distortionary PBC instead of profitably 'selling' control to a better manager.

The EC Takeover Directive is an exemplary illustration of both regulatory strategies.[23] The principle of board neutrality and the so-called breakthrough rule (art. 9 and 11) attempt to restrict the ability of managers and controlling shareholders to entrench themselves. These rules only managed to be passed as an option for firms and member states. The regulatory stance against control premiums was more successful. A very severe mandatory bid rule (art. 5), requesting equal treatment of controlling and non-controlling shareholders, is now compulsory all over Europe. Both aspects of the European takeover regulation are misguided. Entrenchment, as I showed, obtains anyway in corporate governance whenever entrepreneurship needs be rewarded. Denying that corporate control has a value, which is legitimately appropriated by who has invested in its production, does not make minority shareholders better off. It only undermines production and finance in a market economy.

6. *Conclusions*

This paper shows that investor protection is neither all that matters in corporate governance nor the only dimension in which corporate law affects separation of ownership and control. Control matters too, and so do the legal institutions that support it. When investments by non-controlling shareholders are effectively shielded from expropriation,

[23] Directive 2004/25/EC of the European Parliament and of the Council of 21 April 2004 on takeover bids (OJ L 142, 30/04/2004, 12-23).

entrepreneurs are still reluctant to rely on outside equity so long as they cannot secure a reward for their firm-specific investments. In this perspective, corporate law sets the conditions of separation of ownership and control also by allowing efficient extraction of private benefits of control. When it fails to do so, corporate law may adversely affect the choice of ownership structure and the functioning of the market for corporate control. This result is derived by introducing a third category of private benefits of control (idiosyncratic PBC), which supplements the more traditional specifications as inefficient consumption of control perquisites (distortionary PBC) or outright expropriation of shareholder value (diversionary PBC).

The analysis departs from the standard principal-agent framework by assuming that idiosyncratic PBC account for a further value to be appropriated as a return on unobservable investments in entrepreneurship. The quasi-rent nature of this value makes appropriation by the corporate controller a necessary condition for efficiency ex-ante, which implies that residual control rights be allocated separately from ownership. This allows overcoming a non-contractibility problem with respect to the takeover stage, when quasi-rents of control would be otherwise subject to expropriation by the owners. Under the assumption that the non-controlling shareholders are unable to free ride on the takeover gains, this solution does not undermine efficiency ex-post. A constrained-efficient outcome – where the size of the constraint is equal to the value of previous firm-specific investments – is derived as Coasian bargain between the incumbent and the insurgent over the value of corporate control. The bidder is allowed to reap the gains of a superior management subject to the constraint that the incumbent is compensated for parting with control. Outside shareholders are at least as well off when the bidder can only gain from enhancing security benefits (reducing distortionary PBC) more than she has to pay as a control premium (idiosyncratic PBC). Prohibition of sale

of office and efficient policing of diversionary PBC by corporate law are sufficient conditions for this result to hold.

This theoretical framework explains real-world corporate governance better than an exclusive emphasis on investor protection. There is compelling evidence that control is entrenched also in situations where expropriation of non-controlling shareholders is not an issue. While this strategy must be aimed at protecting some private value of control, it does not prevent efficient changes in control from taking place so long as this value is compensated by a control premium. This paper does not only show why this makes economic sense. It also shows how corporate law may interfere with this strategy when it fails to provide those who run the company with entitlements to uncontested control independently of how much ownership they retain. Depending on the conditions for securing idiosyncratic PBC, this can make ownership structures either more concentrated or more dispersed than it would be efficient. Likewise, regulation undermines the efficiency of the takeover process when it restricts side payments that ultimately support bargaining upon the value of corporate control.

The bottom line is that protection of non-controlling shareholders is a necessary legal condition for efficient corporate governance, but it is not sufficient. Failure of corporate law to protect investors from extraction of diversionary PBC impairs, indeed, both separation of ownership and control and the functioning of the market for corporate control. However, further empowerment of non-controlling shareholders would be more than they bargained for. When shareholder empowerment makes the corporate controller unable to secure idiosyncratic PBC, this restricts the choice of ownership structure and makes it potentially suboptimal. Similarly, seeking shareholder protection by disallowing the payment of a control premium makes efficient changes in control more unlikely to succeed, thereby exposing investors to higher extraction of distortionary PBC.

These conclusions are merely suggestive of a more comprehensive revision of Corporate Law and Economics, which I have just started embarking on (Pacces 2007, 2008). The broader taxonomy of PBC introduced in this paper has a number of potentially interesting implications for corporate governance and corporate law. They deserve further research.

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