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**Corporate Social Responsibility and
Managerial Entrenchment**

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Abstract

When stakeholder protection is left to the voluntary initiative of managers, relations with social activists may become an effective entrenchment strategy for inefficient CEOs. We thus argue that managerial turnover and firm value are increased by the institutionalization of stakeholder protection depriving incumbent CEOs of activists' support. This finding provides a rationale for the emergence of specialized institutions (social auditors and ethic indexes) that help firms commit to stakeholder protection even in case of managerial replacement. Our theory also explains a recent trend whereby social activist organizations and institutional shareholders are showing a growing support for each others' agenda.

Keywords: Corporate Governance, Corporate Social Responsibility, Managerial Entrenchment, Social Activism, Stakeholders

JEL Codes: G34, G38

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1 Introduction

When stakeholder protection is left to the voluntary initiative of managers, relations with stakeholders and social activists may turn into a powerful entrenchment strategy for incumbent CEOs. This is particularly true in countries and periods where social activism, political lobbying and media campaigns have the power to promote or disgrace top executives of large corporations.¹ Inefficient managers have then a special motive for committing themselves to a socially responsible behavior that gains stakeholders' support. Explicit stakeholder protection - whether enforced by courts and regulators, or by monitoring institutions specialized in corporate social responsibility issues - can break this alliance, thus favoring control contestability and managerial turnover.

We propose a simple model where stakeholders other than shareholders² can affect the likelihood of CEO replacement, and incumbent CEOs can commit themselves (and *not* their firms) to a stakeholder-friendly behavior. This subtle entrenchment strategy becomes more appealing to CEOs when corporate law and the firm's charter promote independent boards, proxy fights and hostile takeovers. When deciding whether to support the incumbent CEO against a takeover or a proxy fight, stakeholder activists trade off the cost of a less talented manager against the benefit of managerial concessions. The latter are less valuable if stakeholders expect to receive a fair treatment *independently* of who runs the firm. Within this framework, we show the following facts. First, when private benefits of control are large and stakeholder activism is effective, corporate governance reforms aimed at enhancing managerial turnover should be accompanied by an increase in *explicit* stakeholder protection, otherwise they may simply spur more managerial concessions to stakeholders. Second, under the same conditions shareholder value is enhanced when explicit stakeholder protection is introduced, so as to undermine corporate officers' entrenchment strategies. Our theory thus suggests that firms increasingly submit their ethical behavior to the monitoring of ethic indexes and "social auditors" in an attempt to make incumbent managers less central to

¹It is widely recognized that stakeholders enjoy substantial *effective* control on firms by the threat of costly boycotts and media campaigns (see Baron 2001, Feddersen and Gilligan 2001, John and Klein 2001, and Dyck and Zingales 2002). In particular, local communities and unions often act as "white squires" to block hostile takeovers (see the Krupp-Thyssen case reported by Hellwig (2000)). In recent years, intense media campaigns against corporate takeovers have also been led by social and environmental activists. See for instance DeAngelo and DeAngelo (1998) for a report on the environmentalist campaign against the 1986 hostile takeover of Maxxam over Pacific Lumber Company.

²Namely, workers, consumers, local communities and potential pollutees. Although most of the literature has focussed on the relationship between firms and *workers* (see Blair 1995, Blair and Roe 1999, and Hansmann 1996), the recent debate on the stakeholder society concept has unveiled the importance of other constituencies.

relations with stakeholders. Third, we show that although stakeholders may support an inefficient CEO committed to a socially responsible behavior against an alternative manager, stakeholder welfare is always increasing in the degree of control contestability. This is because CEOs who can rely on anti-takeover defenses and dominated boards do not need stakeholders' support to buttress their positions. In light of these findings, stakeholders and shareholders have more interests in common than one would expect. Finally, we show that inefficient CEOs are always opposed to any institutionalization of stakeholder protection which would deprive them of their grip on stakeholders.

Our work is motivated by a recent trend whereby social activists and shareholders are growing increasingly supportive of each others' agendas, as corroborated by the following stylized facts:

Shareholders' support for explicit stakeholder protection.

Mainstream shareholder activists and institutional investors are asking firms to institutionalize stakeholder protection, rather than leave it in the hands of CEOs. Firms then resort to specialized institutions whose role is to monitor their environmental and social performance and report it to the public. This phenomenon is becoming so common that consulting firms are increasingly specializing in corporate social responsibility issues, while stock market ethic indexes are being created to respond to shareholders' demand for certified "ethic stocks". In the US, The Corporate Sunshine Working Group, an alliance between institutional investors, environmental organizations and unions, is asking the SEC to expand corporate social and environmental disclosure requirements. As reported by the Investor Responsibility Research Center (IRRC), resolutions filed by socially responsible shareholders are often endorsed by institutional shareholders that have long been associated with shareholder-value enhancing activism, like CalPERS.³

Social activists' interest for corporate governance issues.

Social and environmental activists are increasingly involved in the corporate governance debate. Many activists have in fact joined forces with shareholders' lobbies to campaign against anti-takeover legislation, CEO-dominated boards and lenient auditors, issues that used to be well beyond the traditional social activism program. *Business Ethics*, a publication on socially responsible business, ranks first the need for independent auditors within its

³Activists are increasingly exploiting standard corporate governance tools (e.g., shareholder resolutions and proxy contests) to commit firms to a socially responsible behavior. As recently reported by *The Economist* (May the 10th, 2001) "Shareholder activism is not new. But the issues being put to the vote [at firms' annual meetings] are moving beyond corporate governance towards questions of social, environmental and ethical behavior." For interesting evidence on shareholder activism on social issues, see IRRC (2000).

list of guidelines to reform US corporations; in a note dedicated to the use of shareholder resolutions by NGOs as a tool of pressure on corporations, Friends of the Earth reports that “socially-oriented shareholders often link social issues to corporate governance issues.” The Rose Foundation for the Communities and the Environment has recently used its shareholdings in corporations to pressure in favor of social responsibility, but also for more independent boards.⁴ Finally, we are aware of cases where social activists and minority shareholders have shared the costs of resolutions and proxy fights to improve the firms’ corporate governance *and* its commitment to stakeholders.⁵

General contempt for corporate malpractices.

Recent corporate scandals have raised awareness among all constituencies that ill-managed corporations harm both their shareholders and other stakeholders at large. It is widely believed that Enron chief officers did not only breach their fiduciary duty towards shareholders by misreporting earnings; they also deceived communities and workers by manipulating energy prices in California and getting rid of their shares right before the company collapsed. These considerations suggest that shareholders’ and stakeholders’ interests may be more congruent than received wisdom holds, to the extent that both have a common interest in favoring better management of corporations.

This paper contributes to the current debate on the stakeholder society (see Hellwig 2000, and Tirole 2001), trying to assess *who* has an interest in endorsing a stakeholder society concept, whereby managers are intended to have a multiple mission of aiming at both shareholder value and stakeholder welfare. We wonder whether both stakeholders and shareholders may not be better off when managers are bound to maximize shareholder value, while clear covenants restricting the firms’ set of actions are established either by firm charters or by the law to rule out actions that may impose large negative externalities on stakeholders. Tirole (2001) argues that putting in place managerial incentives and control structures that implement the stakeholder society concept may be very costly. Our paper shows that the decision *not* to institutionalize stakeholder protection may prove even costlier, leaving managers with the monopoly of relationships with stakeholders. In other words, the

⁴See respectively <http://www.business-ethics.com>, <http://www.foe.org>, <http://www.rosefdn.org>

⁵A case in point is represented by the unusual proxy fight set up in 1999 against Charles Hurwitz, the C.E.O. of Maxxam Corporation, accused of breach of fiduciary duty by shareholders, and held responsible for Maxxam’s 128 violations of environmental regulation and costly labor disputes. The fight was aimed at imposing an independent board of directors at Maxxam (with one director being a leading consumer rights advocate), and it was simultaneously supported by mainstream shareholder activists like CalPERS, by the Rose Foundation for the Communities and the Environment, and the United Steelworkers of America, all holding minority shares in the firm.

lack of rules on corporate behavior is not always a synonymous for firm profitability and shareholder value; often, it is only an excuse for managerial discretion.

Our work is related to Pagano and Volpin (2004a), who analyze the behavior of incumbent managers and workers in a firm faced with a hostile takeover threat, and argue that incumbents are *natural allies* of workers: the former have an interest in offering long-term contracts to workers so as to discourage the takeover, while the latter are likely to support a lazy manager prone to low monitoring against a more efficient raider. Contrary to our theory, in their model incumbent managers can only gain, and shareholders lose, by any institutionalization of stakeholder protection. The paper is also related to the recent literature on the political economy of corporate governance (see Pagano and Volpin 2001 and 2004b, and Perotti and von Thadden 2003 for the relevant references), to the extent that our results may be applied to a political economy framework in order to study how corporate governance and stakeholder protection laws and regulations are simultaneously determined (Cespa and Cestone 2004). Our results also relate to the well-known Porter hypothesis (see Porter and van der Linde 1995) that environmental regulation enhances innovation.⁶

The paper proceeds as follows. In section 2 we set up the basic model. We rule out potential collusion between incumbent managers and stakeholders, and study how shareholder value and stakeholder welfare are affected by stakeholder protection and corporate governance. In section 3, we assume that incumbent managers can commit to a stakeholder-friendly behavior, in order to obtain stakeholders' support against a replacement attempt. We study under which conditions an implicit agreement between managers and stakeholders arises. In section 4, we analyze shareholders', stakeholders' and incumbent managers' preferences over corporate governance and explicit stakeholder protection. In section 5 we briefly discuss two applications of our result.

2 The model

Consider a firm run by a manager (I) enjoying a large private benefit of control γ from running the firm. A fraction of shares α is held by the manager, while $(1 - \alpha)$ shares are dispersed among small shareholders (SH). Dispersed shareholders have no control over the firm's course of action. The firm generates both a monetary profit, which accrues to its

⁶This conjecture has been recently formalized in a mechanism design model by Ambec and Barla (2002), who argue that environmental regulation reduces agency costs. Notice that while their work relies on the crucial assumption that more polluting technologies are also costlier, we argue that environmental regulation may benefit shareholders even in cases where polluting technologies are *more* profitable.

owners, and a non-monetary externality on its other stakeholders (ST). We think of natural stakeholders like potential pollutees and environmentalists, customers or local communities. Stakeholders derive no utility from money. All agents in the model are risk-neutral.

Projects

The firm’s manager can either run the status quo project, or try to improve on it by discovering a new project. The status quo project (project zero) is highly disliked by both shareholders and stakeholders; we normalize to zero the profits and private benefits associated with the status quo. There are also N a priori identical projects, $k \in \{1, 2, \dots, N\}$, which yield a verifiable monetary profit R with probability $p + \tau_k$ (and zero with probability $(1 - p - \tau_k)$), and a non-verifiable private benefit to stakeholders B_k . It is known that $(N - 2)$ projects are worse than project 0 for both SH and ST, and that at least one of them implies a payoff equal to $-\infty$ for both. The payoffs attached to new projects are unknown unless further investigation is carried out. The above assumptions ensure that an uninformed party always prefers the status quo to a random project. The only two “relevant projects” generate the following expected monetary payoffs to shareholders and externalities on stakeholders:

1	2	probability
$(p + \tau)R, B$	$pR, 0$	λ
$(p + \tau)R, 0$	pR, B	$1 - \lambda$

The shareholder’s preferred project yields R with probability $p + \tau$; the stakeholders’ preferred project exerts an externality $B > 0$ on stakeholders (B can be thought of as the foregone pollution with respect to the status quo project, the value of preserved employment for a local community, or the value of additional product safety for consumers). With probability λ the shareholders’ preferred project is also the stakeholders’ favorite one; with probability $(1 - \lambda)$, the shareholder’s preferred project yields no private benefit to stakeholders, while the stakeholder’s preferred project only succeeds with probability p . We assume that λ belongs to $(0, 1)$; in words, stakeholders’ and shareholders’ preferences *sometime* coincide. λ measures the congruence of interests between shareholders and stakeholders; alternatively, $(1 - \lambda)$ captures the trade off between profit maximization and social/environmental objectives.⁷

⁷This modelling choice follows Aghion and Tirole (1997)’s lines in capturing the idea that parties in a relationship may have a *partial* congruence of interests over the course of action to be taken.

Managerial talent

A manager i learns the new projects' payoffs with probability θ_i , in which case she selects the one she prefers most. With probability $(1 - \theta_i)$, the manager does not learn anything; hence, she optimally decides to run the status quo project. We define θ_i to be the managerial talent for innovation. The incumbent CEO has talent θ_I . A better alternative manager, with talent $\theta_R > \theta_I$ is known to exist. However, she still has to be identified in the managerial labor market. We define $\Delta\theta \equiv \theta_R - \theta_I$.

CEO replacement attempts

We assume that with probability $\pi \in [0, 1]$ the board of directors or a coalition of shareholders identifies the alternative manager (alternatively, the latter realizes that he can increase the firm's value and launches a hostile takeover on the firm). π thus represents the extent of effective competition in the managerial labor market, both at the firm level and at the economy-wide level. π is higher when corporate law and the firm's charter promote independent boards and proxy fights, and when anti-takeover defenses are not allowed.

Stakeholder activism

When a replacement attempt occurs, stakeholder representatives such as social and environmental activists or local communities may side with the incumbent CEO to make sure that she is not replaced. Activists dispose of powerful tools in this respect: they may start a media campaign and even threaten a boycott in case the replacement occurs; alternatively, by exerting pressure on political leaders to back their cause, they can create an adverse political climate to the proxy fight or the takeover (Hellwig 2000). If undertaken, a stakeholder campaign succeeds with probability a in deterring CEO replacement, where $a \in (0, 1)$, and fails with probability $(1 - a)$.⁸ We assume that a stakeholder campaign is costless; the cost of campaigning could be taken into account in the model without changing its qualitative results.

Formal stakeholder protection

The firm's choice of a course of action may be constrained by stakeholder protection rules. We model this by assuming that - once projects are discovered - with probability $x_r \in [0, 1)$ the manager is obliged to pick the project yielding B to stakeholders, independently of whether this maximizes profits. Thus, with probability $(1 - \lambda)x_r$ stakeholder protection is detrimental to shareholder interests. The variable x_r has two interpretations.

⁸For the sake of simplicity, we assume that stakeholders do not choose the intensity of the campaigning activity, but only whether to campaign or not, hence a is an exogenous parameter.

(a) *Legal Stakeholder Protection* – A regulatory agency with the unique objective of maximizing stakeholder welfare has the formal right to make binding recommendations over the choice of projects (for instance, it may rule out projects requiring a polluting production process or impose a minimal standard of safety for consumers and workers). However, it effectively exerts this right only if it is informed about the projects’ payoffs, which happens with probability $x_r \in [0, 1)$.⁹ We think of x_r as being inversely related to the authority’s degree of overload, and directly related to the quality of its staff and the resources on which it can draw to pursue its investigations and enforce its decisions.¹⁰ (b) *Contractual Stakeholder Protection* – A formal commitment of the firm towards its stakeholders rules out projects that yield very low outcomes to stakeholders (i.e., $B_k = 0$). To stick to its commitment the firm buys the services of a monitor specialized in social responsibility issues, such as an ethic index; the intensity of such monitoring determines the extent of the firm’s compliance (x_r) with stakeholder protection.

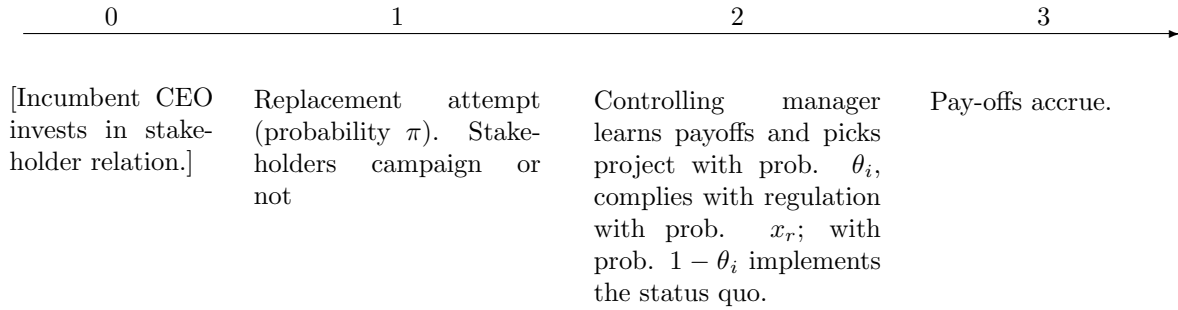
Timing

The timing of events is described in figure 1. At $t = 1$, with probability π an alternative manager challenges the incumbent CEO. If so, stakeholders may campaign and threaten a boycott against the potential new management. The campaign succeeds with probability a . At $t = 2$, the manager who is in control learns the payoffs and selects a new project with probability θ_i ($i = I, R$). If stakeholder protection rules are enforced, the manager has to comply with them; otherwise, she is free to choose her most favored project. At $t = 3$, monetary payoffs accrue to shareholders and the manager (who also enjoys the private benefit of control γ), while stakeholders enjoy the private benefits generated by the firm’s activity. In section 3, we will assume that at an initial date $t = 0$ the incumbent CEO can make a *personal* investment to credibly commit herself to a socially responsible behavior, so as to establish a privileged relationship with powerful stakeholder activists.

⁹This descends from the assumptions that some projects yield a negative payoff to stakeholders, and that projects all look alike ex-ante.

¹⁰This seems to be a reasonable description of what determines the extent of regulatory agencies’ interference in firms’ activity, at least in the perception of social activists. Environmental activists consider the Environmental Protection Agency’s budget as a crucial variable to be monitored. Friends of the Earth, a powerful US environmentalist organization, has recently argued that the Bush administration’s cuts to the EPA budget may damage EPA’s ability to make and enforce recommendations and environmental laws. Among all budget cuts, the most criticized are those to the Office of Science and Technology, which provides scientific backbone to EPA’s regulatory decisions and actions, and those to EPA’s enforcement office (see <http://www.foe.org>).

Figure 1: The timeline



2.1 The benchmark with no social activism

In this section we study the basic model where stakeholder activists cannot affect the managerial labor market, and hence incumbent CEOs *cannot* entrench themselves by building relationships with stakeholders. We look at the impact of control contestability (π) and formal stakeholder protection (x_r) on shareholder value, stakeholder welfare and the incumbent’s utility.

In this benchmark case, at $t = 2$, whenever free from regulatory interference, *any* manager chooses the project which maximizes equity value. As the incumbent manager’s preferences are *not* more congruent with stakeholders than the raider’s, stakeholders benefit when a more efficient manager takes over:

$$\theta_R [\lambda + (1 - \lambda)x_r] B > \theta_I [\lambda + (1 - \lambda)x_r] B.$$

A better manager discovers new projects more often ($\theta_R > \theta_I$); yet, both the incumbent CEO and the alternative manager pick the stakeholders’ favorite project only with probability $\lambda + (1 - \lambda)x_r$ (either the project maximizes firm profits as well, or it is imposed on the firm by the regulatory agency/corporate social responsibility monitor).

It is immediate that social activists have no interest in supporting the incumbent CEO at $t = 1$. Hence, if a raider appears the manager is always replaced. Given this, shareholder

value is:

$$\begin{aligned}
V_{SH}(\pi, x_r) &= & (1) \\
&= \pi\theta_R [x_r(p + \lambda\tau) + (1 - x_r)(p + \tau)] R + (1 - \pi)\theta_I [x_r(p + \lambda\tau) + (1 - x_r)(p + \tau)] R \\
&= (\theta_I + \pi\Delta\theta) [p + \tau - (1 - \lambda)\tau x_r] R,
\end{aligned}$$

where expected project returns under the relevant regulatory constraints are multiplied by the expected managerial quality $\theta_I + \pi\Delta\theta$. Stakeholder welfare also depends on project choice and expected managerial quality:

$$\begin{aligned}
W_{ST}(\pi, x_r) &= \pi\theta_R [x_r + (1 - x_r)\lambda] B + (1 - \pi)\theta_I [x_r + (1 - x_r)\lambda] B & (2) \\
&= (\theta_I + \pi\Delta\theta) [\lambda + (1 - \lambda)x_r] B.
\end{aligned}$$

Finally, the incumbent manager's utility is:

$$U_I(\pi, x_r) = (1 - \pi) [\gamma + \theta_I (p + \tau - (1 - \lambda)\tau x_r) \alpha R] + \pi\theta_R (p + \tau - (1 - \lambda)\tau x_r) \alpha R.$$

An incumbent CEO with a high enough stake might be better off in case she is replaced, to the extent that the additional value of her equity offsets the lost benefits of control. Here, however, we want to focus on CEOs whose private benefits of control are sufficiently large relative to their equity stake that they always want to stay on. Hence, we make the following assumption:

Assumption 1

$$\gamma > \Delta\theta (p + \tau) \alpha R.$$

In the following Lemma we describe the preferences of all agents (stakeholders, shareholders, and incumbent CEO) with respect to control contestability and formal stakeholder protection.

Lemma 1 *An increase in control contestability increases stakeholders' welfare and shareholder value, and decreases managerial utility. An increase in formal stakeholder protection increases stakeholders' welfare, and decreases both shareholder value and managerial utility.*

Notice that while shareholders and stakeholders have dissonant preferences over the extent of stakeholder protection, they are both better off under a tighter corporate governance regime. Indeed - although their views may differ on which is the best project to adopt - both

stakeholders and shareholders have *a common interest in enhancing managerial turnover*. The reason for this is that in our model new managers increase the corporate pie rather than redistribute it from shareholders to stakeholders. Indeed, shareholder value need not necessarily be created at the expense of stakeholder welfare; indeed, it is often the case that more efficient and innovative managers, by increasing the size of the corporate pie, benefit both shareholders *and* stakeholders.¹¹

Let us also stress that in this basic model, both shareholders and incumbent managers benefit from a weak stakeholder protection, whereas stakeholders and incumbent managers have no common interests. Moreover, shareholder value is maximized when π and x_r are respectively close to 1 and 0, that is, when the quality of corporate governance is high while stakeholder protection is minimized. In what follows, we allow stakeholder activists to campaign against the potential new manager, so that the incumbent CEO has an interest to commit to make concessions to stakeholders. As we will see, this changes dramatically shareholders' preferences over corporate governance and stakeholder protection.

3 Stakeholder activism and managerial entrenchment

We now assume that stakeholder activism can reduce the likelihood of CEO replacement, and show that at $t = 0$ the incumbent manager may try to entrench herself by building a privileged relationship with stakeholders. There are several ways to achieve such a commitment. The manager can make an early investment in human capital so as to gain expertise in implementing environmentally-friendly/socially responsible projects. She can spend long hours gathering the advice of, and building relationships with, NGO representatives, local communities and environmentalists. The CEO can also start a parallel career in a social activist organization, and enjoy personal gratification from being praised by other members.¹²

¹¹ Although many hint at a “natural alliance” between stakeholders and inefficient CEOs (see for instance Hellwig 2000), to us it is not obvious that stakeholders need benefit from managerial inefficiency. For instance, consumers may be better off when a more innovative manager takes over to improve the firm’s products. Potential pollutees may well be more aligned to shareholders concerned with future environmental liabilities, rather than to a myopic manager with poor incentives to invest in discovering green production processes. Against common wisdom, hostile takeovers enhancing efficiency in the oil industry have led to curtailment of excessive exploration. Probably, it is not managerial inefficiency *per se* that pleases stakeholders; managerial concessions do.

¹²Investment in “green expertise” is becoming a fashionable strategy for many corporate officers. In an interview with McKinsey consultants, the C.E.O. of Dow Chemical Company (a leader in the voluntary adoption of environmentally-friendly strategies) stated that he allocates about 25 percent of his time to handling environmental issues. He also reported on the firm’s dialogue with stakeholders: “[we created] a panel for the corporation on a worldwide basis. It includes academics, environmentalists, a former EPA director, (...) and it worked: we have learnt from the panel, and they have learnt from us.” (“What is

More generally, she can develop a reputation for being lenient to stakeholders' requests.

We model this idea in the following way. At $t = 0$, the CEO can make an observable investment in social responsibility expertise. If she invests x_c at cost Kx_c , with probability x_c she enjoys a private benefit b when implementing stakeholder-friendly projects in the firm she runs; in case of replacement, she enjoys private benefits b_0x_c anyways thanks to the human capital acquired through the investment Kx_c . We will assume for simplicity that $b = b_0$.¹³ Investing in the relationship with stakeholders and local communities requires time; hence, this investment is *not* feasible to outside managers. We assume that $K = b$, which implies that the investment is never profitable unless it is part of an entrenchment strategy. We also assume:

Assumption 2

$$b > \alpha\tau R.$$

This implies that when an investment x_c is undertaken, with probability x_c the manager picks the stakeholders' favorite project even at the expense of security benefits so as to enjoy the private benefit b . With probability $(1 - x_c)$, the manager gains no expertise and her preferences are congruent with shareholders'; in this case, she only picks the stakeholders' favorite project with probability λ . This directly implies the following lemma:

Lemma 2 *The degree of congruence between the incumbent manager's and the stakeholders' objectives is measured by $\lambda + (1 - \lambda)x_c$; it increases from λ to 1 as the CEO increases her stakeholder-specific investment x_c from 0 to 1.*

x_c thus measures the amount of managerial concessions to stakeholders. At $t = 1$, stakeholders are willing to support the incumbent CEO provided x_c satisfies the following constraint:

$$\theta_I [\lambda + (1 - \lambda)x_r + (1 - \lambda)(1 - x_r)x_c] B \geq \theta_R [\lambda + (1 - \lambda)x_r] B,$$

which can be written as:

$$\theta_I(1 - x_r)(1 - \lambda)Bx_c \geq \Delta\theta [\lambda + (1 - \lambda)x_r] B.$$

Environmental Strategy?", *The McKinsey Quarterly*, 1993, 4: 53-68)

¹³The case where no private benefits are enjoyed in case of replacement ($b_0 = 0$) yields the same qualitative results, though at the expense of more cumbersome algebra.

The value of concessions expected under the incumbent CEO outweigh the cost for stakeholders of bearing a less efficient manager. This constraint implies that managerial concessions must be sufficiently large, i.e.:

$$x_c \geq \underline{x}_c(x_r) \equiv \frac{\Delta\theta[\lambda + (1 - \lambda)x_r]}{\theta_I(1 - x_r)(1 - \lambda)}. \quad (3)$$

Notice that $\underline{x}_c(x_r)$ is increasing in x_r , i.e., the minimum investment in stakeholder relationships to gain activists' support increases with the level of explicit stakeholder protection. Indeed, when stakeholder protection is strong, activists have less reason to support an inefficient CEO.

On the other hand, the incumbent CEO is willing to invest in stakeholder relationships if and only if the following condition is satisfied:

$$\begin{aligned} (\pi a + 1 - \pi)\{\gamma + \alpha R\theta_I[(p + \tau) - (1 - \lambda)\tau x_r - (1 - x_r)(1 - \lambda)\tau x_c]\} \\ \geq \pi(1 - a)\alpha R\theta_R[(p + \tau) - (1 - \lambda)\tau x_r], \end{aligned}$$

or, equivalently, if:

$$x_c \leq \bar{x}_c(x_r) \equiv \frac{\pi a\{\gamma - \alpha\Delta\theta R[(p + \tau) - (1 - \lambda)x_r\tau]\}}{(1 - \pi + \pi a)[\theta_I\alpha R(1 - \lambda)(1 - x_r)\tau]}. \quad (4)$$

A first inspection of condition (4) allows us to state the following lemma:

Lemma 3 *The incumbent CEO's incentives to establish stakeholder relationships are stronger (namely, \bar{x}_c is larger) when the CEO is under a tougher replacement threat (i.e. π is higher), and when social activism is more effective (i.e. a is larger).*

When good corporate governance deprives managers of standard tools to protect their jobs (such as anti-takeover defenses and CEO-dominated boards) CEOs turn to subtler ways to stay in power. Moreover, as the effectiveness of social activists' campaigns increases, building a relationship with stakeholder representatives may become a powerful self-entrenchment tool.

We now define:

$$\Gamma \equiv \frac{\gamma}{\alpha R},$$

which measures the relative importance of private benefits of control versus monetary returns in the CEO's objective function. This variable is of crucial importance to our results; indeed, only when control benefits are large enough compared to the managerial equity stake, is the CEO willing to resist a replacement, even undergoing the cost of pro-stakeholder concessions.¹⁴

The following proposition establishes that, for any level of control contestability, an appropriate level of stakeholder protection can counter the CEO's entrenchment strategy:

Proposition 1 *For any $\Gamma > \Delta\theta(p + \tau + \lambda\tau)$, there exist $\pi_0(\Gamma)$, $\pi_1(\Gamma)$, with $0 < \pi_0 < \pi_1 < 1$, such that, for any $\pi \in [\pi_0, \pi_1)$, $\hat{x}_r(\pi) \in [0, 1)$ is the threshold level of stakeholder protection above which the incumbent CEO's entrenchment strategy becomes unfeasible. The threshold \hat{x}_r is increasing in π and Γ , and decreasing in $\Delta\theta$ and λ .*

Proof. See the appendix. ■

Figure 2 depicts the function $\hat{x}_r(\pi)$ in the space (π, x_r) . Above the $\hat{x}_r(\pi)$ locus, the incumbent CEO never invests in stakeholder relationships. This is either because poor corporate governance (low π) makes it easy for the CEO to preserve her job, or because explicit stakeholder protection (x_r high) makes stakeholders value less managerial concessions. Indeed, when faced with a potential alliance with the incumbent management, stakeholders trade off the benefit of managerial concessions against the cost of a less innovative management: if they expect to receive a good treatment independently of who runs the firm, they have no interest in the alliance with the incumbent CEO.

Remark 1 Notice that \hat{x}_r is increasing in π . This suggests that, when social activism can impair the market for corporate control, governance reforms aimed at enhancing managerial turnover should be accompanied by an increase in explicit stakeholder protection. If not, they may simply spur more managerial concessions and stakeholder activism.

The $\hat{x}_r(\pi)$ locus is shifted downwards by an increase in $\Delta\theta$: ceteris paribus, social activists are less likely to support more inefficient incumbents. \hat{x}_r also decreases as λ increases, as

¹⁴One may argue that increasing the CEO's equity stake α would eliminate the incumbent's incentive to resist a replacement. Hence, our results would depend on α being an exogenous variable in the model. Our answer is that even if α was endogenous, it could still be too costly to discourage managerial entrenchment by raising the CEO equity share. If large equity stakes were an effective, cheap instrument to deter managerial entrenchment, we would *not* observe top executives pressuring against corporate governance reforms that make control contestable, and engaging in creative self-entrenchment strategies, as we in fact do. See also Shleifer and Vishny (1988) for a discussion of reasons why many top executives own relatively little equity in the firms they run.

stakeholders are more supportive of a control change when their interests are more in line with an efficient project choice. Conversely, $\hat{x}_r(\pi)$ is shifted upwards by an increase in Γ , as larger private benefits of control make incumbent managers more prone to build an alliance with stakeholders, which in turn requires a stronger stakeholder protection to prevent the alliance. Notice that, by Proposition 1, $\pi_0 < 1$ if and only if $\Gamma > \Delta\theta(p + \tau + \lambda\tau)$. If $\Gamma \leq \Delta\theta(p + \tau + \lambda\tau)$, $\pi_0 \geq 1$, hence by Proposition 1 for any level of $\pi \in (0, 1)$, $\hat{x}_r(\pi) = 0$, and thus (even when $x_r = 0$) no alliance arises between the firm's CEO and its stakeholders. In words, unless control benefits are large enough, the incumbent CEO never finds it profitable to secure stakeholders' support through concessions. As we are interested in the potential alliance between managers and stakeholders, and the instruments to prevent it, we rule out the latter case by making the following assumption:

Assumption 3

$$\Gamma > \Delta\theta(p + \tau + \lambda\tau).$$

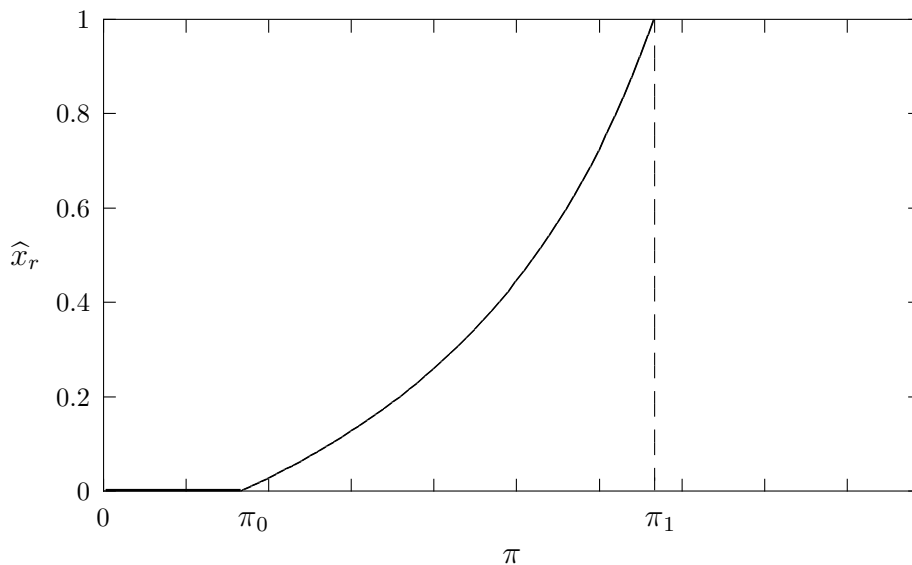


Figure 2: The function $\hat{x}_r(\pi)$.

Let us assume that π and x_r lie below the $\hat{x}_r(\pi)$ locus, hence the incumbent CEO commits to a protection of stakeholders' interests which goes *beyond* that to which the firm itself is committed. We also assume that incumbent managers have no bargaining power vis-à-vis

stakeholders, and thus CEOs' commitment to stakeholder concessions equals \bar{x}_c .¹⁵

$$x_c^* = \bar{x}_c(x_r) \equiv \frac{\pi a \{\Gamma - \Delta\theta [p + \tau - (1 - \lambda)\tau x_r]\}}{(1 - \pi + \pi a) [\theta_I(1 - \lambda)(1 - x_r)\tau]}.$$

Straightforward calculations show that $(\partial x_c^*/\partial \pi) > 0$, $(\partial x_c^*/\partial x_r) > 0$ and $(\partial x_c^*/\partial \lambda) > 0$. Intuitively, a tougher replacement threat (e.g., an independent board or a ban on anti-takeover defenses) makes the incumbent manager more willing to relinquish concessions to stakeholders in order to preserve control. The incumbent manager is also *forced* to larger concessions when stakeholders' welfare under the alternative manager is increased due to a larger degree of stakeholder protection or a higher congruence of interests between stakeholders and profit-maximizing raiders.

4 Who benefits from good corporate governance and explicit stakeholder protection

We now build on the previous section to study how corporate governance rules enhancing managerial turnover and explicit stakeholder protection affect shareholder value, stakeholder welfare, and CEOs' rents. We argue that stakeholders and shareholders may to some extent have congruent preferences over both issues.

4.1 Shareholder value, control contestability and stakeholder protection

In our model, small shareholders completely delegate control to managers, while an active market for corporate control ensures that inefficient managers are replaced. If social activism can impair the functioning of this market, incumbent CEOs have an incentive to secure stakeholders' support by committing to a less efficient project choice. This potential alliance changes dramatically shareholders' preferences over corporate governance and explicit stakeholder protection, as the results in this section show.

Proposition 2 *Suppose managerial entrenchment is to be countered. Then, shareholder value is concave in π , and is maximized when a minimal level of protection $\hat{x}_r(\pi^*) \in [0, 1)$ is provided to stakeholders and control contestability is set equal to $\pi^* < 1$, with π^* decreasing in Γ and a and increasing in λ .*

¹⁵Since there is bilateral monopoly between the stakeholders and the incumbent CEO, we could equally well allow the CEO to have all the bargaining power. The main insights of the model are robust to any distribution of bargaining power.

Proof. See the appendix. ■

In contrast with section 2.1, when managers can entrench themselves by committing to a socially responsible behavior, shareholder value is a *concave*, rather than increasing, function of π . This is so as the cost of countering managerial entrenchment by adopting explicit stakeholder protection measures increases with π , to the extent that incumbents have stronger incentives to seek stakeholders' support when faced with a tougher takeover threat. This in turn implies that shareholder value is maximized when competition in the managerial labor market is *not* too intense (i.e. π is *strictly* lower than 1).

Proposition 3 *Suppose managerial entrenchment is not to be countered. Then, shareholder value is maximized by $x_r = 0$ and a level of control contestability given by*

$$\pi^* = \begin{cases} 1 & \text{if } a\Gamma < \Delta\theta(p + \tau), \\ 0 & \text{if } a\Gamma \geq \Delta\theta(p + \tau). \end{cases}$$

Proof. See the appendix. ■

If managerial entrenchment need not be countered, it is clearly in the shareholders' interest to provide no stakeholder protection. Shareholder value is thus a monotonic function of π . If private benefits of control are small, and social activism is not very effective, a tougher replacement threat does not spur larger concessions to stakeholders, while leading more often to an efficient CEO replacement. Hence, shareholder value is maximized by $\pi = 1$.

Finally, the following result states that under some conditions, countering managerial entrenchment is indeed in the interest of shareholders.

Proposition 4 *If $a\Gamma \geq \min\{\Delta\theta(p + \tau), \tau\theta_R(1 - \lambda)\}$, shareholder value is maximized when a minimal level of explicit protection $\hat{x}_r(\pi^*) \in [0, 1)$ is secured to stakeholders.*

Proof. See the appendix. ■

When private benefits of control are large and social activists are powerful, shareholders are better off if some formal protection is guaranteed to stakeholders, so as to counter a very effective managerial entrenchment strategy. Though such explicit protection implies a less efficient project choice, shareholders anyways benefit from the higher CEO quality induced by managerial turnover. Notice that in this case, the corporate pie (inclusive of stakeholder welfare) is *increased* at the expense of incumbent managers, though some shareholder value is lost to stakeholders. Shareholders thus get a smaller share of a larger pie. Proposition

2 states that in this case, shareholder value is maximized by *not* putting CEOs under a very tough replacement threat, namely, when $\pi < 1$ (see example 1). The optimal levels of π and x_r decrease with Γ and a . Thus, as Γ and a get very large, insulating incumbent managers from competition becomes a less costly way to fight managerial entrenchment than institutionalizing stakeholder protection (see example 2).¹⁶

Example 1 In figure 3 panel (a) we set $\theta_I = .1$, $\theta_R = .5$, $\alpha = .5$, $p = .5$, $\tau = .5$, $\lambda = .1$, $a = .3$, $B = .1$ and $\Gamma = 2$. With these parameters $\pi^* = 0.18$ and $\hat{x}_r(\pi^*) = 0.49$.

Example 2 In figure 3 panel (b) we keep the same data of example 1 but assume that the stakeholder ability at affecting the replacement decision is higher (i.e. we set $a = .9$). In this case: $\pi^* = 0.017$ and $\hat{x}_r(\pi^*) = 0.03$.

Notice that in both examples shareholder value is indeed maximized by countering managerial entrenchment (i.e., it is not optimal to set π and x_r below the $\hat{x}_r(\pi)$ locus).

4.2 Stakeholder welfare and control contestability

Stakeholders' welfare function changes according to whether x_r and π lie below or above the locus $\hat{x}_r(\pi)$. By Proposition 1, whenever $x_r \geq \hat{x}_r(\pi)$, W_{ST} coincides with (2); hence, it is increasing in x_r as well as π : stakeholders can only benefit from the replacement of an inefficient manager. When instead $x_r < \hat{x}_r(\pi)$, stakeholders' welfare writes as:

$$W_{ST}(\pi, x_r) = [\theta_I + \pi(1 - a)\Delta\theta] [\lambda + (1 - \lambda)x_r] B + (1 - \pi(1 - a))\theta_I(1 - x_r)(1 - \lambda)x_c^*(\pi, x_r)B,$$

which is also increasing in π and x_r . Notice that the additional term with respect to (2) represents the benefit of managerial concessions: stakeholders now have an additional motive for endorsing good corporate governance, to the extent that the incumbent's concessions are an increasing function of π . Indeed, bad corporate governance rules allowing anti-takeover defenses and staggered boards make CEOs less eager to appeal to stakeholders, in that they do not need stakeholders' support to buttress their positions. This implies that even those stakeholders who would support incumbent CEOs in return for concessions prefer the firm's control to be contestable *ex ante*:

¹⁶The idea that boards may prevent inefficient entrenchment strategies simply by "granting the CEO some insulation from competition for his job" is often advanced in the corporate governance literature. See for instance Shleifer and Vishny (1989).

Corollary 1 *Although stakeholder activists may want to side with the incumbent CEO at $t=1$, their welfare is always increasing in the quality of corporate governance rules enhancing managerial turnover.*

Corollary 1 adds a further argument to a common view on the use of anti-takeover defenses: “...who benefits from such protection against outside bids? Not shareholders, who lose their chance to vote on a change of management; and not employees or other stakeholders, whose interests may be better served by a new and more dynamic ownership. The only beneficiaries from obstacles to a market in corporate control are managers.” (“Takeover Troubles,” *The Economist*, January 31st, 2002). Our result also rationalizes the recent, surprising interest of social and environmental activists for the corporate governance agenda. Many activists have in fact joined forces with small shareholders’ lobbies to campaign against anti-takeover legislation, CEO-dominated boards and lenient auditors.

4.3 CEO’s utility and stakeholder protection

Interestingly, inefficient CEOs have opposite preferences over corporate governance and stakeholder protection rules. Indeed, the results in section 3 imply the following result:

Corollary 2 *The incumbent manager always benefits from a reduction in the intensity of the replacement threat and from a reduction in explicit stakeholder protection.*

That CEOs may be opposed to tough competition in the managerial labor market is not surprising. Here we would rather stress that CEOs prone to make personal commitments to stakeholder representatives (which is the case whenever $x_r < \widehat{x}_r(\pi)$) are indeed opposed to welcome stakeholder-protection laws, or the introduction of explicit pro-stakeholder covenants in *the firm’s* charter. This finding is in line with casual evidence of managers who profess concerns for corporate social responsibility, but are then reluctant to endorse pro-stakeholder regulations and all “attempts to institutionalize considerations of stakeholder interests in corporate governance” (see Hellwig, 2000). It also supports Shleifer and Vishny (1989)’s informal argument that entrenchment objectives may explain why managers try to make the firm’s contracts implicit rather than explicit.

5 Concluding remarks

In this paper we have argued that shareholders’ interests are better served when the protection of stakeholders is not left to CEOs’ discretion. Incumbent managers under a tough

replacement threat may in fact use relationships with stakeholder activists as an effective entrenchment strategy. Our model hence predicts that in countries where good corporate governance promotes the market for corporate control, introducing some explicit stakeholder protection may increase firm value. This finding provides a rationale for a recent phenomenon whereby a growing number of firms are submitting their ethical behavior to the monitoring of ethic indexes and social auditors, in an attempt to commit to protect stakeholders' interests beyond current regulatory mandates.¹⁷ We further predict that when activists' power grows increasingly large, shareholders should forego the explicit protection of stakeholder rights and rather insulate CEOs from excessive competition in the labor market.

The paper is part of a recent literature that acknowledges the central role of social activism and media campaigns in shaping corporate policy and governance (see Baron 2001, Hellwig 2000, and Pagano and Volpin 2004a). Such role has been emphasized by Dyck and Zingales (2002), who document how social and shareholder activists affect companies' policies by influencing the public image of corporate officers, and advocate a new approach to corporate governance that should keep the media's role into account.

Our theory is closely related to Pagano and Volpin (2004a), who argue that in the face of a takeover threat incumbent managers are natural allies of workers: incumbents have an interest in offering long-term contracts to workers so as to discourage the takeover, while unions are prone to support a poorly-monitoring manager against a more efficient raider. In that paper, managerial effort is instrumental to reducing workers' wages, hence takeover gains occur via a reduction in stakeholder welfare.¹⁸ This has two natural implications. First, workers are always opposed to rules favoring control contestability. Second, incumbent managers can only gain (and shareholders lose) from an increase in employment protection, to the extent that long term labor contracts can be used as poison pills to deter takeovers. We derived opposite predictions in a model where raiders *increase* the corporate pie rather than simply redistribute it from stakeholders to shareholders.¹⁹ Indeed, it is this feature of our

¹⁷Our theory is indirectly supported by recent evidence that companies with a good social record are increasingly outperforming their peers on the stock market. Socially responsible (SRI) funds have done better than traditional investment funds: Morningstar, a reputed independent leader in financial information provision, reports that in the first half of 2000, 21% of the SRI funds in its database have obtained the top performance rating (i.e., five stars), whereas in the overall funds universe only ten percent of the funds have scored five stars (see Hall, 2000, "How do socially responsible funds stack up?", Morningstar News. Available at <http://www.morningstar.com>).

¹⁸Whether takeovers can only create value by reducing stakeholder welfare is largely an empirical question: while evidence on the effects on the wage bill is mixed (see Becker, 1995 and Bhagat, Shleifer and Vishny 1990, but also Jarrell, Brickley and Jeffrey 1988 and Rosett 1990) casual observations suggest that hostile takeovers may well benefit natural stakeholders like consumers and potential pollutees, as argued in footnote 11.

¹⁹This derives from our assumptions that the raider discovers a highly profitable project more often than

model that leaves room for a *congruence of interests* between shareholders and stakeholders. We showed in fact that stakeholders always benefit from good corporate governance, while non-controlling shareholders are better off when some explicit protection is granted to stakeholders.

To conclude, our results can be applied to a political economy framework where interest groups (shareholders, incumbent managers and stakeholders) contribute to determine financial regulation and institutional stakeholder protection (see Cespa and Cestone (2004)). We then predict that besides endorsing a better corporate governance regime, small shareholders may want to support the introduction of explicit stakeholder protection to prevent the implicit agreement between inefficient managers and stakeholders. Hence, when social activism is effective and private benefits of control are large, shareholders' preferences over corporate governance and stakeholder protection are partially congruent with those of other stakeholders.

the incumbent manager, and that such project coincides with stakeholders' favorite one with probability $\lambda \in (0,1)$. It is interesting to note that as λ gets close to zero (i.e., extra profits always come at the expense of stakeholder welfare), our model yields similar predictions to Pagano and Volpin (2004a): explicit stakeholder protection is no longer beneficial to shareholders.

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Appendix

Proof of proposition 1

Define $\hat{x}_r(\pi)$ as the level of explicit stakeholder protection such that $\bar{x}_c(x_r) = \underline{x}_c(x_r)$:

$$\hat{x}_r(\pi) = \frac{[\Gamma - \Delta\theta(p + \tau + \lambda\tau)]\pi a - \lambda\tau\Delta\theta(1 - \pi)}{(1 - \lambda)\tau\Delta\theta(1 - \pi)}. \quad (5)$$

When $x_r > \hat{x}_r(\pi)$, $\underline{x}_c > \bar{x}_c$, and thus the alliance between incumbent CEO and stakeholders is not feasible. By inspection of (5), $\hat{x}_r(\pi) < 1$ if and only if $\pi < \pi_1 \equiv \tau\Delta\theta/(\tau\Delta\theta + a(\Gamma - \Delta\theta(p + \tau + \lambda\tau)))$. Hence, if $\pi \geq \pi_1$ no feasible level of stakeholder protection can counter the CEO's entrenchment strategy. Also, $\hat{x}_r(\pi) > 0$ if and only if $\pi > \pi_0 \equiv \lambda\tau\Delta\theta/(\lambda\tau\Delta\theta + a(\Gamma - \Delta\theta(p + \tau + \lambda\tau)))$. When $\pi \leq \pi_0$, the alliance does not arise, even at $x_r = 0$. The assumption $\Gamma > \Delta\theta(p + \tau + \lambda\tau)$ guarantees that $\pi_0 \in (0, 1)$ and $\pi_1 \in (0, 1)$. Since $\lambda < 1$, $\pi_0 < \pi_1$. The sign of the first three derivatives is immediate. To see that $(\partial\hat{x}_r/\partial\lambda) < 0$, note that

$$\frac{\partial\hat{x}_r(\pi)}{\partial\lambda} = \frac{1}{(1 - \lambda)^2} \left(\frac{\pi a(\Gamma - \Delta\theta(p + \tau(1 + \lambda)) - \Delta\theta\tau(1 - \lambda))}{(1 - \pi)\tau\Delta\theta} - 1 \right),$$

and the latter expression is negative if and only if

$$\pi < \tilde{\pi} \equiv \frac{\tau\Delta\theta}{(1 - a)\tau\Delta\theta + a(\Gamma - (p + \tau)\Delta\theta)}.$$

As $\tilde{\pi} > \pi_1$, and for $\hat{x}_r(\pi) \in [0, 1)$ it must be that $\pi \in [\pi_0, \pi_1)$, the result follows. ■

Proof of proposition 2

Let $H_1 = \Delta\theta(p + \tau(1 + \lambda))$ and $H_2 = \Delta\theta(1 - a)(p + \tau(1 + \lambda)) + a\Gamma$ where $\Delta\theta = \theta_R - \theta_I$. If managerial entrenchment is to be countered, using (1) shareholder value writes as

$$\begin{aligned} V_{SH}(\hat{x}_r(\pi)) &= R(\theta_I + \pi\Delta\theta)(p + \tau - (1 - \lambda)\tau\hat{x}_r(\pi)) \\ &= R\left(\frac{\theta_I + \pi\Delta\theta}{\Delta\theta(1 - \pi)}\right)((p + \tau)(1 - \pi)\Delta\theta - (\Gamma - \Delta\theta(p + \tau))\pi a + \lambda\tau\Delta\theta(1 - \pi(1 - a))) \\ &= R\left(\frac{\theta_I + \pi\Delta\theta}{\Delta\theta(1 - \pi)}\right)(H_1 - \pi H_2). \end{aligned}$$

The first order condition for an interior solution to the shareholder value maximization problem is given by

$$\frac{R}{\Delta\theta(1 - \pi)^2} (\pi^2\Delta\theta H_2 - 2\pi\Delta\theta H_2 - (\theta_I H_2 - \theta_R H_1)) = 0.$$

Solving for π^* we obtain

$$\pi_{1,2} = 1 \pm \sqrt{\frac{\theta_R a (\Gamma - \Delta\theta(p + \tau(1 + \lambda)))}{\Delta\theta(a\Gamma + \Delta\theta(1 - a)(p + \tau(1 + \lambda)))}}.$$

By assumption 3, $\Gamma > \Delta\theta(p + \tau(1 + \lambda))$, and the optimal level of corporate governance quality is given by

$$\begin{aligned} \hat{\pi} &= 1 - \sqrt{\frac{\theta_R a (\Gamma - H_1)}{\Delta\theta H_2}} \\ &= 1 - \sqrt{\frac{\theta_R a (\Gamma - \Delta\theta(p + \tau(1 + \lambda)))}{\Delta\theta(a\Gamma + \Delta\theta(1 - a)(p + \tau(1 + \lambda)))}}. \end{aligned} \quad (6)$$

If $\hat{\pi} \leq \pi_0$ ($\hat{\pi} \geq \pi_1$) shareholders choose $\pi^* = \pi_0$ ($\pi^* = \pi_1$), otherwise $\pi^* = \hat{\pi}$. Notice that $\pi^* \in [\pi_0, \pi_1) \subset (0, 1)$ is decreasing both in a and Γ . To see that π^* increases in λ consider first the case of an internal solution. Then differentiating (6) yields

$$\frac{\partial \hat{\pi}}{\partial \lambda} = \left(\frac{\Delta\theta H_2}{\theta_R a (\Gamma - H_1)} \right)^{1/2} \frac{\theta_R a \tau \Gamma}{H_2^2},$$

which is always positive. When $\pi^* = \pi_0$, it is easy to see that

$$\frac{\partial \pi_0}{\partial \lambda} = \frac{\tau \Delta\theta a (\Gamma - (p + \tau)\Delta\theta)}{[\lambda \tau \Delta\theta + a(\Gamma - \Delta\theta(p + \tau(1 + \lambda)))]^2} > 0.$$

Therefore, for all $\pi^* \in [\pi_0, \pi_1)$, $(\partial \pi^* / \partial \lambda) > 0$. ■

Proof of proposition 3

When managerial entrenchment is not to be countered, shareholder value is given by

$$\begin{aligned} V_{SH}(\bar{x}_c(\pi)) &= (\pi a + 1 - \pi)(\theta_I R(p + \tau - (1 - \lambda)\bar{x}_c \tau)) + \pi(1 - a)\theta_R R(p + \tau) \\ &= ((p + \tau)\theta_I - \pi a(\Gamma - \Delta\theta(p + \tau)))R + (1 - a)\pi(p + \tau)R\Delta\theta, \end{aligned} \quad (7)$$

as by inspection of (4) \bar{x}_c is increasing in x_r and thus in this case shareholders optimally choose $x_r = 0$. Differentiating (7) with respect to π yields

$$V'_{SH}(\bar{x}_c(\pi)) = R(-a\Gamma + \Delta\theta(p + \tau)). \quad (8)$$

From (8) it is immediate that shareholders' value is maximized with *no* control contestability if and only if $a\Gamma > (p + \tau)\Delta\theta$. ■

Proof of proposition 4

If $a\Gamma > \Delta\theta(p + \tau)$, then $V_{SH}(\bar{x}_c(\pi))' < 0$ and $\pi = 0$ is optimal if managerial entrenchment is not to be countered. However, by inspection $V_{SH}(\bar{x}_c(0)) \equiv R\theta_I(p + \tau) = V_{SH}(\hat{x}_r(0)) \equiv R\theta_I(p + \tau) \leq V_{SH}(\hat{x}_r(\pi^*))$. When $a\Gamma = \Delta\theta(p + \tau)$, $V_{SH}(\bar{x}_c(0)) = R\theta_I(p + \tau)$ and the result follows.

Assume now that $a\Gamma < \Delta\theta(p + \tau)$, then $V_{SH}(\bar{x}_c(\pi))' > 0$. In this case if managerial entrenchment is not countered, then $\pi = 1$ is the shareholders' optimal choice. As

$$V_{SH}(\hat{x}_r(\pi_1)) = \frac{R(p + \lambda\tau)(a\theta_I(\Gamma - (p + \tau(1 + \lambda))\Delta\theta) + \Delta\theta\tau\theta_R)}{a(\Gamma - (p + \tau(1 + \lambda))\Delta\theta) + \tau\Delta\theta},$$

and $V_{SH}(\bar{x}_c(1)) = R(-a\Gamma + (p + \tau)\theta_R)$, $V_{SH}(\hat{x}_r(\pi_1)) > V_{SH}(\bar{x}_c(1))$ only if $a\Gamma > \tau\theta_R(1 - \lambda)$. A sufficient condition for $(p + \tau)\Delta\theta > \tau\theta_R(1 - \lambda)$ is that $0 < \tau < \min\{1 - p, p\Delta\theta/(\theta_I - \lambda\theta_R)\}$.

■

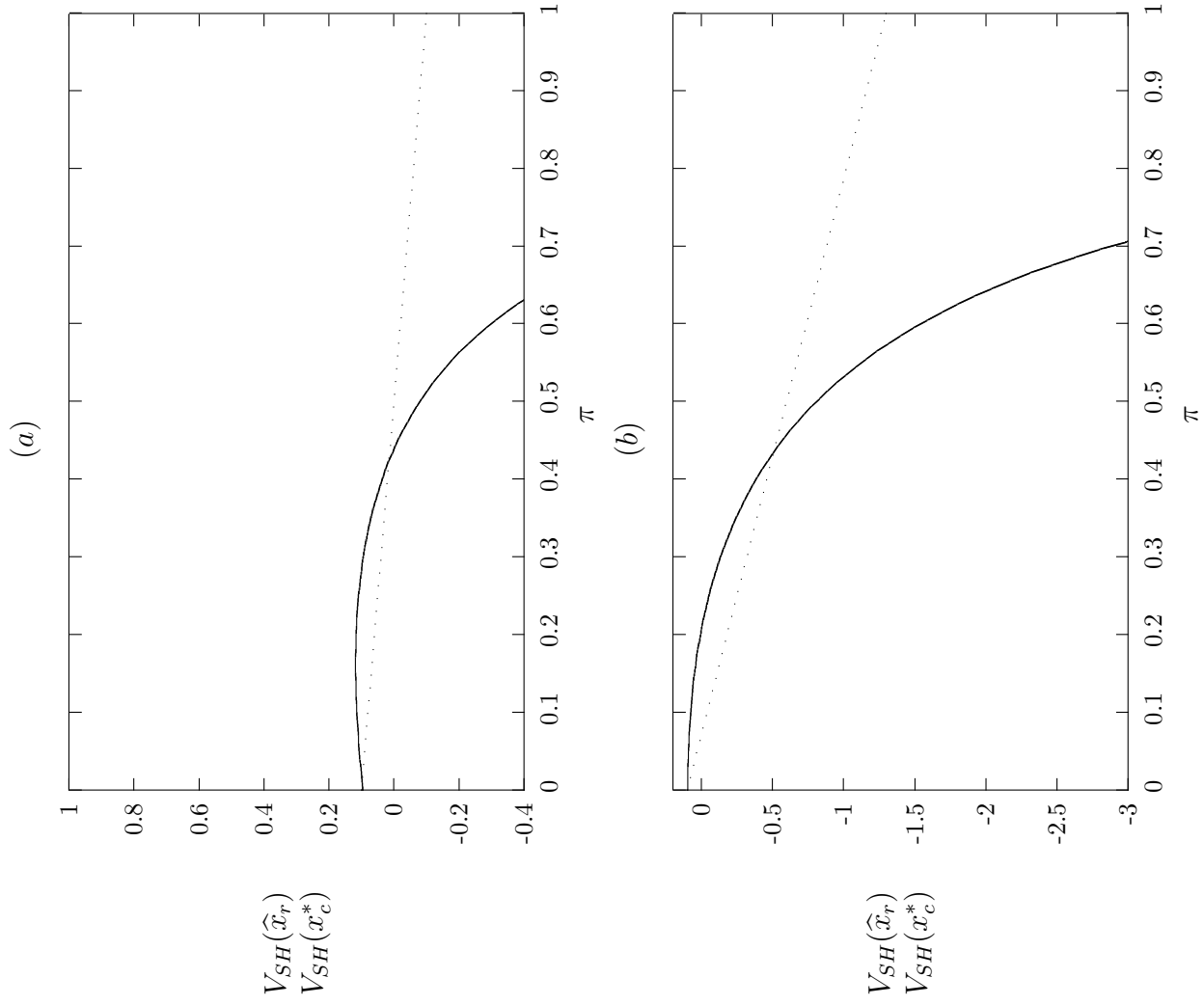


Figure 3: The continuous (dotted) curve represents shareholder value when entrenchment is (not) countered. In panel (a) shareholders preempt entrenchment: $\pi^* = 0.18$ and $\hat{x}_r(\pi^*) = 0.49$, while in panel (b) they set $\pi^* = 0.017$ and $\hat{x}_r(\pi^*) = 0.03$.