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A theory of optimal expropriation, mergers and industry competition

Neil Brisley [a,*], Arturo Bris [b,d,1], Christos Cabolis [c,d,2]

[a] School of Accounting & Finance, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada
[b] IMD, Chemin de Bellerive 23, P.O. Box 915, CH-1001 Lausanne, Switzerland
[c] ALBA, 2A Areos Street & Athinas Avenue, 166 71 Vouliagmeni, Athens, Greece
[d] Yale International Centre for Finance, USA

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ABSTRACT

We model a competitive industry where managers choose quantities and costs to maximize a combination of firm profits and benefits from expropriation. Expropriation is possible because of corporate governance 'slack' permitted by the government. We show that corporate governance slack induces managers to choose levels of output and costs that are higher than would otherwise be optimal. This, in turn, benefits consumers – the equilibrium price is lower – and other stakeholders such as suppliers and employees. Depending on the government's social welfare objective, less-than-perfect investor protection can be optimal. We show why some mechanisms suggested by the literature as improving investor protection – legal change, cross-listing, domestic mergers – may not be effective. We provide a theoretical argument showing the efficacy of cross-border mergers. The stronger corporate governance of a foreign acquirer, imposed on the domestic target firm, benefits merging shareholders and those of competing unmerged domestic firms.

1. Introduction

In this paper we argue that in some legal systems it may be socially optimal for firms to expropriate from shareholders. We present a model of imperfect industry competition in which firms strategically choose their optimal output and unit costs, taking into account the effect of their choice on prices. Firms compete à la Cournot, and care about profits, but also care about private benefits which reduce shareholder wealth. The level of expropriation depends on output decisions determined by the level of competition in the industrial sector and the degree of investor protection. The more corporate governance 'slack' allowed by the government, the greater the weight of expropriation in the firm's objective function. By expropriating, firm managers impose a cost on shareholders, and in equilibrium they produce more output than would otherwise be optimal. This decreases prices and benefits consumers to the detriment of shareholders and so a consumer-oriented government may regulate to a level that permits managers to expropriate, but to the advantage of consumers and other stakeholders in the economy. Depending how the government's social welfare function weights consumer surplus and other stakeholders relative to shareholders, less-than-perfect investor protection can be the regulator's optimal course of action. Even in an economy where the strongest levels of corporate governance would be optimal, the presence of corporate governance slack may not be quite as detrimental overall as is often assumed, thanks to some positive externalities on consumers and other stakeholders which we outline in this paper.

The term "expropriation" has a negative connotation in the literature that we acknowledge. However, in this paper expropriation is not unambiguously bad. Indeed, a dictionary definition of expropriation is "*Depriving an owner of property by taking it for public use*". Hence, for a society the question is whether the public benefit arising from expropriation is worth more than the private loss to shareholders. Mayer (1999) asserts that there are substantial social benefits, as well as costs, associated with private benefits, and argues that in some economic systems they are socially optimal. In this sense, our paper is a formalization of Mayer's (1999) claim, although for us expropriation leads to *public* benefits arising from positive externalities caused by overproduction which benefit other stakeholders. Potential public benefits of expropriation can derive in our model from policies of the firm which act in the interests of employees (by paying higher than their reservation wage and investing in workplace safety), suppliers (by supporting local

* Corresponding author. Tel.: +1 519 888 4567.
E-mail addresses: nbrisley@uwaterloo.ca (N. Brisley), arturo.bris@imd.ch (A. Bris), ccabolis@alba.edu.gr (C. Cabolis).
[1] Tel.: +41 21 6180111.
[2] Tel.: +30 210 89 64 531.

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suppliers rather than cheaper alternative sources), the broader community (by employing more workers than strictly necessary, not laying off employees during slack periods, contributing to charities and respecting high standards of corporate social responsibility), the environment (by reducing emissions of pollutants), and even firm managers (by granting excessive compensation packages). The extent of benefits accruing to such stakeholders are influenced by the legal, regulatory, social and cultural norms within which the industry operates (Roe, 2003; Pagano and Volpin, 2005). Further, when overproduction (relative to the profit-maximizing output of firms under imperfect competition) is a consequence of corporate governance slack, consumers benefit from increased output at lower prices.

Several recent papers implicitly find externalities on workers, suppliers and community, even if they are not explicitly identified as beneficial since the focus is on loss of shareholder wealth. Cronqvist et al. (2009) find that weak corporate governance, manifested as CEO entrenchment, leads to workers being paid more as a by-product of CEOs enjoying private benefits such as lower effort wage bargaining and improved social relations with employees (see, e.g., Jensen and Meckling, 1976). Giroud and Mueller (2010) find evidence in non-competitive industries that input costs and wages increase following the passage of business combination laws which weaken corporate governance. They interpret this as consistent with managers avoiding haggling with suppliers and labor unions. Landier et al. (2009) find that firms in the US are less likely to fire workers located geographically closer to corporate headquarters. Landier et al. identify 'social interaction' as a non-pecuniary private benefit to managers and conclude that *"Managers internalize how their decisions affect local employees and local community welfare. As a result, social considerations can lead to a conflict with shareholder wealth maximization."* While it is not easy to *quantify* the local community welfare benefit of such managerial actions, it does seem likely that the reluctance to fire local workers would lead to an increased unit cost of production for the firm, or increased output, or both – as in our model. Finally, Claessens and Ueda (2008) take a broad stakeholder view of corporate governance and find evidence that enhancing some stakeholders' rights, especially employment protection, can be justified on efficiency grounds.

In countries with corporate governance slack, we show why a formal improvement in investor protection is not necessarily implementable. We borrow the terminology of Gilson (2000), who identifies three ways in which corporate governance systems may evolve. *Formal convergence* occurs when a change in the law forces the adoption of best practices, and its effectiveness has been advocated in the "Law and Finance" view of corporate governance (La Porta et al., 1997). Our model shows that formal convergence might not be initiated if governments have concern for consumers and other beneficiaries of expropriation. Glaeser et al. (2001) and Coffee (1999a) analyze the experience of Poland and the Czech Republic and show that the better protection afforded by the Polish commercial code resulted in a more developed stock market. However, Pistor et al. (2003) conclude that, as in medicine, transplants are sometimes rejected and countries that have adopted US-style corporate laws do not necessarily experience the anticipated corporate development. Our model shows that rejection may originate from consumers and other stakeholders who can, paradoxically, be harmed by improved investor protection. Since there is no universally optimal corporate governance system, cross-sectional variation (e.g., La Porta et al., 1997) is to be expected. In turn, this can help explain why sometimes firms prefer a legal system that offers less investor protection (Allen and Gale, 2005)[3]; why some governments do not fight expropriation (Cheung et al., 2009); and why it is not always the case that better functioning economies are associated with more investor protection (Rajan and Zingales, 2003).

We study how shareholders can reduce expropriation by adapting within the existing law. This is what Gilson (2000) calls *functional convergence*, which consists of firms unilaterally adopting those best practices which can be accommodated within the existing system, in response to market participants' demands for better protection. We show that reform by any subset of firms in an industry helps all shareholders in that industry. It helps the reforming firms because with less corporate governance slack they can overproduce less, prices are higher and profits are higher; and it helps non-reforming firms because they overproduce even more at now higher selling prices. Only if all firms reform are maximum shareholder profits attainable for any and all firms. Put differently, relative to the competitive profit-maximizing equilibrium, slack corporate governance in *any* subset of firms reduces the profits even of those firms which have the strongest corporate governance. This is an important insight. Even if a firm's shareholders succeed in getting their own house in order, they are still vulnerable to the negative externality caused by the lack of investor protection in competitor firms. With these interactions in mind, we show that managers may not have an incentive to unilaterally and voluntarily initiate a corporate governance reform unless the level of corporate governance slack in the economy is already sufficiently low. This is due to a free-rider effect – if one firm unilaterally adopts stronger corporate governance and 'overproduces less,' this leaves room and incentive for unreformed competitors to overproduce even more. In equilibrium, no firm moves first, and functional convergence will not be initiated. Our analysis suggests that it may be precisely in those economies and industries where investor protection is *weakest* that the prospects for functional reform in corporate governance are most bleak.

The previous result also applies to what Gilson (2000) and Hansmann and Kraakman (2001) call *convergence by contract*. Convergence by contract is achieved when managers explicitly or implicitly commit to better governance, perhaps by embedding certain shareholder control rights within security design or, as Coffee (1999b) suggests, by cross-listing a firm's shares on a stock exchange with tougher corporate governance requirements. For example, because the improvement in corporate governance brought about by a cross-listing in the US is larger the worse the protection in the domestic, i.e. non-US, economy, our model predicts a larger valuation effect of the cross-listing for such firms.[4] Despite this, our more novel finding is that firms are more *likely* to cross-list in the US the *better* the shareholder protection in the domestic country. This is because the domestic governance regime needs to be already sufficiently protective so that the manager's costs of moving to a stronger system (less expropriation) are compensated by a large enough increase in firm profits. Our prediction would be that managers seek listings on exchanges with standards that represent marginal improvements to those available in the domestic market, rather than making the quantum leap to exchanges with standards that are orders of magnitude stronger than at home and may help explain why we see European firms listing in the US more often than firms from Latin America or East Asia. Consistent with this, Reese and Weisbach (2002) find that their hypothesized negative relation between the quantity of cross-listings (in the US) and shareholder protection in the home country is ambiguous, *"because managers will consider both expected private benefits and the public value of their shares"*.

[3] See also Bebchuk (2002), which explains how asymmetric information induces managers to choose sub-optimal levels of shareholder protection.

[4] Miller (1999) finds higher abnormal returns around the US cross-listing for firms from emerging markets relative to those of firms from developed countries.