

Incomplete Contracts Theories of the Firm and Comparative Corporate Governance

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This article draws on key models of monitoring and blockholding articulated in the incomplete contracts theory of the firm. Under incomplete contracts theory, different governance systems have incentive structures that entail different tradeoffs—tradeoffs between ownership concentration and liquidity, between monitoring and management initiative, and between private rent-seeking and activity benefiting shareholders as a group. The tradeoffs delimit opportunities for productive cross-reference. More specifically, blockholder systems, such as those in Europe, subsidize monitoring by permitting blockholders to reap private benefits of control through self-dealing and insider trading. Market systems, such as those in the United States and Britain, regulate such private rent-seeking toward the end of maintaining an institutional framework that supports diffuse share ownership and liquid trading markets. It follows that a legal framework conducive to blockholding may be ill-equipped to foster dispersed equity ownership and thick trading markets and that a legal framework conducive to liquid trading markets may have properties that discourage blockholding. This gives rise to questions for law reform agendas on both sides of the Atlantic. In the United States, proponents ask for deregulation of controls on institutional investors, looking to encourage blockholding and more effective monitoring. In Europe, proponents ask for stronger securities regulation, looking to encourage deeper trading markets. This article suggests that each reform program may lead to disappointing results because neither assures conforming adjustments to the pertinent actors' incentives. Alternatively, strict reforms that materially change

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prevailing incentive patterns could perversely destabilize workable (if imperfect) arrangements without assuring the appearance of more effective alternatives.

INTRODUCTION

Policy agendas worldwide reflect the findings of comparative corporate governance, the law and economics that describes national variations in corporate structure and securities law and then goes on to consider the implications for productivity. These findings strongly suggest that corporate and securities law reform could enhance the development of national financial systems and help spur economic growth.¹ As a consequence, actors in many countries diagnose weaknesses in their existing legal regimes and propose new arrangements said to foster higher firm productivity, more entrepreneurship, and the better-developed capital markets.² Recent finance-driven troubles in East Asia and elsewhere,³ along with scandals in Continental Europe concerning minority investors' exposure to unfair dealing and other abusive transactions, have spurred this drive toward policies and institutions that address defects in corporate performance.⁴

Which package of reforms holds out optimal results for a given national system? The comparative governance literature has yet to yield a determinative blueprint. Meanwhile, the theoretical approach commanding

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- 1 Ross Levine, *Law, Finance, and Economic Growth*, 8 J. Fin. Int'l 8, 15 (1999); Rafael La Porta et al., *Investor Protection and Corporate Valuation* (Harvard Univ., Working Paper, Oct. 1999); Bernard S. Black, *The Legal and Institutional Preconditions for Strong Stock Markets: The Non-Triviality of Securities Law*, at <http://papers.ssrn.com/paper.tafabstract?id=182169>.
 - 2 See Rafael La Porta et al., *Agency Problems and Dividend Policies Around the World*, 54 J. Fin. 471 (1999); Maria Maher & Thomas Andersson, *Corporate Governance: Effects on Firm Performance and Economic Growth*, in *Convergence and Diversity in Corporate Governance Regimes and Capital Markets* (Joseph A. McCahery et al. eds., forthcoming) [hereinafter *Convergence and Diversity*].
 - 3 Raghuram G. Rajan & Luigi Zingales, *Which Capitalism? Lessons from the East Asian Crisis*, 11 J. Fin. 40 (1999); Stijn Claessens et al., *Expropriation of Minority Shareholders: Evidence from East Asia* (World Bank Working Paper No. 2088, Mar. 1999).
 - 4 Yves Crama et al., *Corporate Governance Structures, Control and Performance in European Markets: A Tale of Two Systems* (Tilburg Ctr. for Econ. Research, Working Paper, May 2000); Erik Berglof, *Reforming Corporate Governance: Redirecting the European Agenda*, in *European Economy: A European Policy Forum* 93, 97-99 (1997).

widest acceptance⁵ suggests a process of selective cross-reference through which best practices are drawn from the two prevailing types of national systems: (a) "market" systems, found mainly in English-speaking countries and characterized by widely-dispersed shareholding and thick, liquid trading markets; and (b) "blockholder" systems, found in many variations in Europe, East Asia, and most other capitalist economies and characterized by control in insider coalitions or wealthy families and thin trading of non-controlling stakes.⁶ The assertion, which we term the "cross-reference hypothesis," is that each system can and should learn from the other—the failures of market systems can be ameliorated with devices from blockholder systems, and devices from market systems can ameliorate the failures of blockholder systems. Restated as a convergence projection, the cross-reference hypothesis implies that global competition will cause the emergence of a hybrid best practice. It also suggests that we should assume in the meantime that the market and blockholder systems possess equal competitive fitness.

This article draws on models of monitoring and blockholding articulated within the incomplete contracts theory of the firm to advance a case for a contrasting view. We address a basic assumption that underlies the cross-reference hypothesis. Under this assumption, corporate governance institutions are divisible—one system's components can be adapted for use in the other system, without significant frictions or perverse effects. In contrast, we argue that each national governance system, instead of being a loose collection of separable components, is a *system* to a significant extent, a system tied together by a complex incentive structure. Interdependencies between each national system's components and the incentives of its actors create significant barriers to cross-reference to and from other systems.

Incomplete contracts theory supports this picture by showing that the incentive structures of different governance systems entail tradeoffs

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- 5 The leading description sees sub-optimal performance caused by the operation of political forces over time. See, e.g., Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 Harv. L. Rev. 641, 643-62 (1996) (describing path-dependent evolutionary patterns in general and in respect of corporate governance in particular).
- 6 See Lucian Arye Bebchuk et al., *Stock Pyramids, Cross-Ownership, and Dual Class Equity: The Creation and Agency Costs of Separating Control from Cash Flow Rights* (Nat'l Bureau of Econ. Research, Working Paper No. 6951, 1999) (explaining how controlling shareholders with a small fraction of cash flow rights maintain control through the use of stock pyramids, dual-class stock, cross-holdings, and other such structures); Lucian Arye Bebchuk, *The Evolution of Ownership Structure in Publicly Traded Companies* (Harvard Law Sch., Working Paper, June 1999) (demonstrating why control structures are more common in countries with poor shareholder protection).

instead of unexploited complementarities—tradeoffs between ownership concentration and liquidity, between monitoring and management initiative, and between private rent-seeking and activity benefiting shareholders as a group. The tradeoffs delimit opportunities for productive cross-reference between systems. More particularly, blockholder systems subsidize monitoring by permitting blockholders to reap private benefits through self-dealing and insider trading. Market systems, in contrast, regulate such private rent seeking toward the end of maintaining an institutional framework that supports diffuse share ownership and liquid trading markets. It follows that a legal framework conducive to blockholding may be ill-equipped to foster dispersed equity ownership and thick trading markets and that a legal framework conducive to liquid trading markets may have properties that discourage blockholding.⁷ It also follows that one cannot casually project either global convergence that eliminates systemic differences or the emergence of a hybrid best practice.

Part I of the article sets out the results of the governance comparison, describing the interrelated strengths and weaknesses of the market and blockholder systems and reporting on empirical findings. Part II turns to breakthrough applications of incomplete contracts theory and highlights their pertinence for legal policy in the field of corporate governance. The models under review show that the market and blockholder systems' contrasting features follow from second-best choices in a world of tradeoffs. The models try to work through the tradeoffs. To the extent that their analyses identify stable, optimal (albeit second-best) tradeoff points, these models provide the beginnings of a blueprint for a superior, hybrid governance structure. Contrariwise, to the extent that these analyses show that structural factors or incidental frictions are likely to prevent the realization of optimal tradeoffs, they hold a negative implication for the cross-reference hypothesis.

Part II then goes on to look at a line of incomplete contracts inquiry that explores the properties of the tradeoff between concentration and liquidity. This analysis begins with the standard assumption that blockholder control brings stepped-up monitoring that makes the firm more valuable. It goes on to assert that liquidity also enhances firm value by lowering the cost of capital.⁸

7 We do not claim to be the first commentators to make this point. But we do claim our discussion to be the first sustained endeavor in the legal literature to describe and confront the economic theory supporting the point.

8 And, hence, raising the stock price, all other things being equal. Patrick Bolton & Ernst-Ludwig von Thadden, *Liquidity and Control: A Dynamic Theory of Corporate Ownership Structure*, 154 *J. Institutional & Theoretical Econ.* 167, 173 (1998). Empirical support for this proposition can be found in studies showing that the liquidity of a stock increases with the firm's market capitalization. *See, e.g.*, Franklin

The resulting tradeoff is because concentration sacrifices liquidity even as it enhances monitoring; at the same time, dispersed ownership enhances liquidity even as it sacrifices monitoring. Ultimately, the incentive problems bound up in the tradeoff prove destabilizing to hybrid structures. Absent private benefits and the incentives they import toward block formation, we can never be sure that blocks will appear when monitoring is needed. Such blocks as they appear will be unstable and will tend to be larger than necessary, sacrificing liquidity even as they solve monitoring problems. Allowance of private benefits solves these problems only to create new problems, for there is no way to assure provision of private benefits to an incentive compatible degree.

Part III takes up a second line of incomplete contracts economics. This line scrutinizes one of the basic assumptions of comparative corporate governance—that increased monitoring makes the firm more valuable. This literature adds an assertion—that delegation of authority to managers has a positive impact on productivity because it imports incentives to make productive investments. It follows that although some monitoring may be a good thing, there can be such a thing as too much monitoring. A tradeoff results between monitoring and delegation: stepped-up monitoring depresses management's incentives to make productive investments even as it imports productivity-enhancing discipline.

Part IV asserts that a system must go one way or the other, either controlling access to private benefits for the purpose of protecting its liquid trading markets or not doing so in order to support controlling blocks. The theory of the firm holds out no solid middle ground. For Europe, this means that the installation of thoroughgoing investor protection regimes could have the unintended effect of prompting dissolution of the blocks. The primary message for legal policy in the United States is the old point that systems depend on legal protections for outside investors. Blockholder systems lack these protections. Caution respecting their diminution is the indicated course.

Allen & Douglas Gale, *Limited Market Participation and Volatility of Asset Prices*, 102 *Am. Econ. Rev.* 933 (1994); Marco Pagano, *Endogenous Market Thinness and Stock Rise Volatility*, 56 *Rev. Econ. Stud.* 269 (1989).

I. THE EMERGING COMPARATIVE PICTURE

This Part recounts the results of the corporate governance comparison. It begins by describing the elements that distinguish market and blockholder systems and goes on to review leading empirical findings.

A. The Market and Blockholder Systems and Cross-Referenced Policy Initiatives

Market corporate governance systems are characterized by dispersed equity holding, a portfolio orientation among equity holders, and a broad delegation to management of discretion to operate the business. Two productivity disadvantages are said to result. The first disadvantage is the shareholder-management agency problem. Collective action problems prevent close monitoring of management performance by widely dispersed shareholder owners holding small stakes. Imperfect performance incentives result for managers, who may rationally sacrifice shareholder value to pursue their own agendas. Market systems address this management incentive problem with three corrective mechanisms: the hostile takeover, shareholder legal rights against management self-dealing, and the inclusion of outside monitors on boards of directors. The second productive disadvantage of the market system is a time-horizon cost that stems from the shareholders' tendency to rely on short-term performance numbers. This problem has been attributed to information asymmetries. Management has superior information respecting investment policy and the firm's prospects, but this information tends to be either soft or proprietary and therefore cannot credibly be communicated to actors in trading markets.⁹ At the same time, market systems fail to provide clear-cut protections to managers who make firm-specific investments of human capital, a failure due in part to these systems' reliance on takeovers, proxy fights, and boardroom coups to control agency costs.

Market systems have countervailing advantages. Their shareholders can cheaply reduce their risk through diversification. Relative to shareholders in blockholder systems, they receive high rates of return. Market systems' deep trading markets facilitate greater shareholder liquidity. These capital markets also facilitate corporate finance, providing management with greater flexibility as to the type and sources of new capital than do the markets in blockholder systems. More generally, they provide an environment relatively

⁹ Roe, *supra* note 5, at 649.

more conducive to management entrepreneurship, as reflected in increased investment in new technologies.

Blockholder systems are characterized by majority or near-majority holdings of stock held in the hands of one, two, or a small group of large investors.¹⁰ Blockholder systems, like market systems, leave management in charge of the business plan and operations. But large-block investments imply a closer level of shareholder monitoring. In addition, the coalescence of voting power in a small number of hands means earlier, cheaper intervention in the case of management failure. The other primary benefit of blockholder systems stems from the blockholders' ability to access information about operations. This decreased information asymmetry permits blockholders to invest more patiently. The longer shareholder time-horizon in turn frees management to invest for a long term and creates a more secure environment for firm-specific investments of human capital by the firm's managers.

There are corresponding costs and limitations. Where the blockholder is a firm, internal agency costs can constrain its effectiveness as monitor.¹¹ Indeed, whatever the identity of the blockholder, its heightened oversight incentive does not appear in practice to result in sharp oversight of management investment policy. Freedom to make long-term investments thus often means pursuit of growth in market share at the cost of a sub-optimal rate of return on equity investment. Trading markets in blockholder countries tend to be thinner and less transparent than in market system countries, and firms in search of financing encounter a more restricted range of alternatives. Meanwhile, the blockholders themselves forego the benefits of diversification and, given thin trading markets, liquidity and the possibility of easy exit through sale. Finally, there is a shortage of loyalty. Blockholders, having sacrificed diversification and liquidity, extract a return in the form of private benefits yielded through self-dealing or insider trading. Legal regimes in blockholder states facilitate this *quid pro quo* with lax protection of minority shareholder rights and lax securities market regulation. This in turn chills the development of robust trading markets.

The first round of discussions on comparative governance occurred in the United States in the early 1990s, prompted by a perception that shortcomings in domestic practice had contributed to the failure of American firms in several key sectors to compete successfully against foreign rivals.¹² It was said that the market system had operated in the United

10 Marco Becht & Colin Mayer, *The Control of Corporate Europe*, in *The Control of Corporate Europe* (Franco Barca & Marco Becht eds., forthcoming).

11 Roe, *supra* note 5, at 649.

12 Michael E. Porter, *Capital Choices: Changing the Way America Invests in Industry*, in

States in the 1980s to favor short-term increases in shareholder value and deter long-term investment in production processes. As a result, Japanese and German producers, who had invested more in search of growth, had a product market advantage. It was thought that America's short-term bias had arisen as a perverse result of widespread hostile takeover activity in the 1980s. Ironically, by the early 1990s, new legal controls constrained takeovers, constraints that also deprived the governance system of a principal disciplinary device. American firms therefore needed to look abroad for additional means of agency control in order to reestablish a competitive position. It made sense to make reference to the systems whose firms were seen to be out-performing American firms in product market—systems that had not evolved to rely on takeovers. Thus, European and Japanese practices of bank monitoring, cross-holding, and blockholding presented themselves as simultaneous correctives for both short-term investment bias and the takeover's decline.¹³

In more recent years, the center of gravity of comparative governance discussion has shifted to Europe and Japan, with a corresponding change of emphasis. This shift reflects the recent slowdown in productivity growth of the economies of Germany and Japan, along with contrasting corporate success stories unfolding in the United States. As a consequence, we see European and Asian policymakers looking to corporate governance institutions of the United States and the United Kingdom toward the end of improving the quality of domestic boardroom operations and enhancing the depth and liquidity of their trading markets. European governments are now promulgating a range of securities and corporate governance reforms that not only provide more legal protections for minority investors, but also create strong pressures for companies to adopt corporate capital structures that follow the pattern of those in the United States.¹⁴ For example, Italy has increased disclosure requirements and required a mandatory public bid by

Studies in International Corporate Finance and Governance Systems: A Comparison of the U.S., Japan, & Europe 5, 6-8 (Donald H. Chew ed., 1997).

- 13 Policy debates respecting participation of institutional investors in governance in the United States provided an independent impetus. See William W. Bratton & Joseph A. McCahery, *Regulatory Competition, Regulatory Capture and Corporate Self-Regulation*, 73 N.C. L. Rev. 1861, 1905-06 (1995); see also Bernard S. Black, *Shareholder Activism and Corporate Governance in the United States*, in 3 *The New Palgrave Dictionary of Economics and the Law* 459 (Peter Newman ed., 1998).
- 14 See Henry Hansmann & Reinier Kraakman, *The End of History for Corporate Law* (Yale Law & Econ., Working Paper No. 235, Jan. 2000).

any person or group acquiring 30% or more of the shares of a publicly held company.¹⁵

B. Empirical Results

Ultimately, any asserted causal connection between improved productivity and given corporate governance structures presents an empirical question.¹⁶ A number of recent studies assess the significance of differences among national legal regimes by using data from a number of countries to establish connections between given legal rules and given economic institutions.¹⁷ We now know, for example, that regulatory and institutional structures influence the development of stock markets.¹⁸ Studies find that mandatory disclosure of reliable information about firms is consistent with encouraging investor participation in the stock market.¹⁹ A complementary body of work shows a positive correlation between the level of shareholder protection, ownership concentration, and the financial system. These studies set out to test national systems against a multipart checklist designed to measure the level of investor protection. A study by Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny²⁰ finds a strong positive correlation between the level of legal investor protection, on the one hand, and the size and depth of the national securities market and the prevalence of dispersed investor shareholding, on the other. The study also notes that economic statistics, such as total capitalization of equity held by outside shareholders, tend to show that common law countries have better stock markets.²¹ Finally, this study confirms that the level of legal enforcement and the origin of legal rules are also correlated to valuation and depth of both equity and debt markets. The

15 John C. Coffee, Jr., *The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications*, 93 Nw. U. L. Rev. 641, 665-66 (1999).

16 See Erik Berglof & Ernst-Ludwig von Thadden, *The Changing Corporate Governance Paradigm: Implications for Transition and Developing Countries* (Stockholm Sch. of Econ., Working Paper, June 1999).

17 Raphael La Porta et al., *Legal Determinants of External Finance*, 52 J. Fin. 1131 (1997); Asli Demirgüç-Kunt & Vosislav Maksimovic, *Law, Finance, and Firm Growth*, 53 J. Fin. 2107, 2134 (1998).

18 See Marco Pagano, *The Flotation of Companies on the Stock Market: A Coordination Failure Model*, 37 Eur. Econ. Rev. 1101, 1124 (1993).

19 See Asli Demirgüç-Kunt & Ross Levine, *Stock Market Development and Financial Intermediaries: Stylized Facts*, 10 World Bank Econ. Rev. 291, 300 (1996).

20 Rafael La Porta et al., *Law and Finance*, 106 J. Pol. Econ. 1113, 1118-20 (1998).

21 Rafael La Porta et al., *Legal Determination of External Finance*, 52 J. Fin. 1131, 1137, 1146-48 (1998).

upshot is that firms in common law countries have better access to equity finance than do civil law countries. The differences between Britain and France are particularly significant and strongly suggest that poor investor protection entails lower liquidity and smaller markets. Other, complementary studies show that the level of shareholder protection is related inversely to the size of the premium over the market price per share paid for a majority voting block: higher premiums are commanded in countries with weak legal protections for investors.²²

A related body of work focuses on the relationship between the structure of financial systems, corporate ownership, and types of economic activity. Raghuram Rajan and Luigi Zingales, for example, find that industrial sectors relatively more in need of external finance develop more quickly in countries with well-developed financial markets as measured by accounting standards.²³ Similarly, Wendy Carlin and Colin Mayer find a significant relationship between market systems and legal protection of investors with growth of equity finance and skill-intensive industries.²⁴ It should be noted that these studies are consistent with the finding of a strong positive correlation between the presence of strong legal protections for investors and liquid equity markets and the prevalence of dispersed shareholding.²⁵

To sum up, the studies use comparative data to establish correlations between shareholder protection practices and other structural aspects of governance and finance. They thereby tend to confirm the accuracy of this Part's causal description of the advantages and shortcomings of the respective systems. However, they do not purport to address the matter of comparative advantage between market and blockholder systems. Most commentators decline to take up this question, preferring a working hypothesis of equal competitive fitness. Significantly, two studies that do attempt to assess comparative advantage among developed economies show no significant differences between the systems and imply support for the equal fitness hypothesis. One study finds no significant relationship between per capita

22 See Luigi Zingales, *The Value of the Voting Right: A Study of the Milan Stock Exchange Experience*, 7 *Rev. Fin. Stud.* 125 (1994).

23 Raghuram G. Rajan & Luigi Zingales, *Financial Dependence and Growth*, 88 *Am. Econ. Rev.* 559 (1998); see also Marco Becht & Ailsa Röell, *Is Stock Market Liquidity a Force of Convergence for Corporate Governance Systems*, in *Convergence and Diversity*, *supra* note 2.

24 Wendy Carlin & Colin Mayer, *How Do Financial Systems Affect Economic Performance?*, in *Corporate Governance: Theoretical and Empirical Perspectives* (Xavier Vives ed., 2000).

25 See La Porta et al., *supra* note 21, at 1146-48.

gross domestic product and the incidence of widely held firms based on a study of twenty developed countries.²⁶ The other study is a famous body of work by Kaplan, which looks at management replacement rates in the United States, Japan, and Germany. This study finds no significant differences between the three countries.²⁷

There is also considerable indirect support for the equal competitive fitness hypothesis. For instance, it can be argued that each system's weaknesses can be matched with strengths in the other system, and vice versa. Thus, stepped-up shareholder monitoring under the blockholder system comes at the expense of thick trading markets and associated benefits, and thick trading markets exact a monitoring cost. Somewhat contradictorily, each system's deficiency respecting investment is also its advantage, and its investment advantage is also its deficiency. The market system suffers from short-termism because it sacrifices long-term projects to the demand for present shareholder value, while the ability to deliver present shareholder value is its strength. In contrast, the blockholder system suffers from an excessive growth focus because it does not concern itself with shareholder value; meantime, these sub-optimal growth investments display a long-term horizon that is said to be their advantage. Blockholding tends to ameliorate information asymmetries, but the proximity that opens access implies susceptibility to capture by the management interest.²⁸ The market system suffers from information asymmetries, but shareholders at a distance from managers evaluate firm performance with a clearer eye.

II. THE INCOMPLETE CONTRACTS THEORY OF THE FIRM AND THE CASE FOR INDIVISIBILITY

Economists working within the incomplete contracts theory of the firm have taken up the questions raised by the juxtaposition of systemic features of market and blockholder systems. One line of incomplete contracts inquiry

26 See La Porta et al., *supra* note 2, at 510.

27 See Steven N. Kaplan, *Top Executives, Turnover, and Firm Performance in Germany*, 10 J.L. Econ. & Org. 142 (1994); Steven N. Kaplan, *Top Executive Rewards and Firm Performance: A Comparison of Japan and the U.S.*, 102 J. Pol. Econ. 510 (1994). See also Steven N. Kaplan & Bernadette Minton, *Appointments of Outsiders to Japanese Boards: Determinants and Implications for Managers*, 36 J. Fin. Econ. 225 (1994).

28 See Mike Burkhart et al., *Agency Conflicts in Public and Negotiated Transfers of Corporate Control*, 55 J. Fin. 647, 648 (2000).

poses a tradeoff between concentration and liquidity. This analysis begins with the standard assumption that blockholder control brings stepped-up monitoring that makes the firm more valuable. It goes on to assert that liquidity also enhances firm value by lowering the cost of capital.²⁹ The tradeoff results because concentration sacrifices liquidity even as it enhances monitoring; at the same time, dispersed ownership enhances liquidity even as it sacrifices monitoring. One of this tradeoff's activating assumptions—that increased monitoring makes the firm more valuable—is, in turn, scrutinized in a second line of inquiry. This inquiry asserts that delegation of authority to managers has a positive impact on productivity because it imports incentives to make productive investments. There results a tradeoff between monitoring and delegation: stepped-up monitoring depresses management's incentives to make productive investments even as it imports productivity enhancing discipline.

By hypothesis, to the extent that these analyses identify stable, optimal (albeit second-best) tradeoff points, they provide the beginnings of a blueprint for a superior, hybrid governance structure. Conversely, to the extent that these analyses show that structural factors or incidental frictions are likely to prevent the realization of optimal tradeoffs, they hold a negative implication for the cross-reference hypothesis.

The discussions in Parts II and III show that this economics' cumulative results lie on the negative side and support the case for indivisibility. Private benefits are the key. The models in this economics show that absent private benefits and the incentives they import toward block formation, we can never be sure of the appearance of optimally-sized blocks when monitoring is needed and that when blocks do appear, they will tend to be unstable and sub-optimally large. Once a system allows for private benefits, in contrast, there is no way to assure their provision to an incentive-compatible degree. It follows that a system either controls access to private benefits for the purpose of protecting its liquid trading markets or does not control private benefits, so as to nurture its blocks. The theory of the firm holds out no hospitable middle ground.

29 And, hence, raising the stock price, all other things being equal. *See supra* note 8.

A. Incomplete Contracts Theory

The various versions of the incomplete contracts model³⁰ remit us to a second-best world and there identify and explain barriers that prevent the evolution of first-best transaction structures.³¹ This economics holds, first, that transacting actors can create producing institutions that assuredly evolve toward the first-best only to the extent that they deal with contractible subject-matter. Second, it holds that contractibility cannot safely be assumed. Noncontractibility may obtain, because the requisite transactional technologies may not yet exist.³²

30 For overviews of the literature, see Bernard Salanie, *The Economics of Contracts: A Primer* 175-88 (1998); Bengt Holmstrom & John Roberts, *The Boundaries of the Firm Revisited*, 12 *J. Econ. Persp.* 73, 75-79 (1998). For precedent treatments in the legal literature, see, for example, Avery Katz, *When Should an Offer Stick? The Economics of Promissory Estoppel in Preliminary Negotiations*, 105 *Yale L.J.* 1249, 1278-79 (1996); William W. Bratton, *Dividends and Noncontractibility*, 19 *Cardozo L. Rev.* 409 (1997); William W. Bratton et al., *Repeated Games, Social Norms, and Incomplete Corporate Contracts*, in *Fairness and Contract* 163, 166-71 (Christopher Willet ed., 1996); Alan Schwartz, *Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies*, 21 *J. Legal Stud.* 271, 272-73 (1992); Oliver Hart, *An Economist's View of Fiduciary Duty*, 43 *U. Toronto L. Rev.* 299 (1993); Oliver Hart, *An Economist's Perspective on the Theory of the Firm*, 89 *Colum. L. Rev.* 1757 (1989).

31 Incomplete contracts theory should be distinguished from transaction costs theory. Both recognize that contracting actors cannot be expected to negotiate complete *ex ante* solutions to all problems. Transaction costs theory, however, turns on the notion that the institution of *ex ante* contracting, broadly conceived, self-sufficiently supports efficient transactional relationships. It makes three assertions toward this end. First, actors who put capital at risk can be expected to design *ex ante* governance structures that minimize the costs of future uncertainty. Second, even though legal decision-makers must assist the parties by filling in omitted terms *ex post*, those terms may be cast from an *ex ante* time perspective and, indeed, should be so cast in order to guard against disruption of the parties' allocation of financial risk and to minimize future transaction costs. Bratton et al., *supra* note 30, at 166-71. Third, and finally, comes a prediction: given proper containment of the agencies of state intervention, transacting actors can be expected to devise technologies that lower the transaction costs that cause incompleteness, thereby expanding the effective zone of contractual governance. Incomplete contracts theory places a greater stress on the *ex ante* impact of *ex post* problems of performance and enforcement than the transaction costs approach does. These three factors—computability, observability, and verifiability—intrinsically limit the operation of the institution of the *ex ante* contract. State intervention accordingly takes a place on its list of possible means to the end of improving sub-optimal governance conditions. See Phillippe Aghion & Benjamin Hermalin, *Legal Restrictions on Private Contracts Can Enhance Efficiency*, 6 *J.L. Econ. & Org.* 381 (1990).

32 Unlike most law and economics, which tends to include any voluntary economic

Alternatively, even where an *ex ante* contract term can be devised in theory, *ex ante* agreement on that contract term will not be feasible if in practice a party's future performance of the term will be either unobservable by the counterparty or unverifiable by the enforcing authority.³³

Corporate capital structures provide second-best solutions to noncontractible governance problems.³⁴ Corporate contracts are famously empty at their cores, omitting important future variables due to the difficulty

relation within its notion of the *ex ante* contract, incomplete contracts theory restricts the reach of the *ex ante* contract to cases where actors make explicit specifications about the future. That is to say, to have "contract" terms that govern future states, those contingent states must be specified and the future outcomes must be computable. Since many future states of nature clearly are not computable, transacting parties as a result lack the technology necessary to enable the negotiation and composition of a contract term *ex ante*. See Luca Anderlini & Leonardo Felli, *Incomplete Written Contracts: Undescribable States of Nature*, 109 Q.J. Econ. 1085 (1994); see also Oliver Hart & John Moore, *Foundations of Incomplete Contracts*, 66 Rev. Econ. Stud. 115, 134 (1999).

33 For contributions to the literature making this point, see Sanford Grossman & Oliver Hart, *The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration*, 94 J. Pol. Econ. 691 (1986); Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 Econometrica 755 (1988); Bengt Holmstrom & Paul R. Milgrom, *Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design*, 7 J.L. Econ. & Org. 24 (1992) (Special Issue) (showing that contracts that tie an agent's compensation to verifiable measures can divert effort and attention from other more important but less easily measured aspects of performance).

34 Oliver Hart, *Firms, Contracts, and Financial Structure* (1995), offers a formal expression of this point. He notes that given managers who derive no private benefits from control of assets, first-best results easily can be achieved (in a taxless world) with an all-equity capital structure and a simple incentive compensation system. In a two-period situation, he would simply make the managers' compensation depend entirely on the dividend. That is, assuming investment at $t=0$ and cash flows to be realized at $t=1$ and $t=2$, incentive compensation I should equal $\pi(dt=1+dt=2)$, where π is a small positive number. If the payment also covers liquidation proceeds L at $t=2$, then $I=\pi[dt=1+(dt=2, L)]$ and the manager can be expected to make an optimal decision respecting liquidation at $t=1$. If at $t=1$, the expected L is greater than the cash flow expected at $t=2$, the firm is liquidated at $t=1$ and no indebtedness is needed in order to align management incentives.

But managers do derive private benefits from asset management, and in Hart's conception, the bribe π required to align their incentives with those of the outside security holders is unfeasibly large. Accordingly, a complex capital structure that includes control mandates must be interpolated. And, in a dynamic environment, a range of possibly optimal contractual formulas for setting the terms of that control transfer can be suggested; uncertainty makes it impossible to deem any one *ex ante* optimal. Restating this point, it now is the understanding that a simple one-period

or impossibility of *ex ante* description or *ex post* observation and verification. Shareholders, for example, contribute capital in the absence of terms governing such fundamental matters as investment policy, dividend payout rate, and management remuneration and tenure. Absent specific directives, outcomes respecting these matters must of necessity be determined *ex post*, either by renegotiation or by the specification of an empowered party. More particularly, the contracts making up the firm's capital structure deal with noncontractible future contingencies by providing open-ended processes that facilitate the allocation and reallocation of control.³⁵ These control transfer mechanisms are particularly important in bad performance states. They determine whether the shareholders do (or do not) vote out the managers; whether a blockholder does (or does not) emerge to put the managers under effective control; whether a tender offer does (or does not) occur so as to effect needed change; and whether the bondholders do (or do not) take control of the assets in distress situations.³⁶

These *ex post* outcomes follow neither from the consummation of transactions facilitated by price mechanisms nor from the operation of *ex ante* contractual specifications. They instead follow from the exercise of contingent powers to control the firm's assets,³⁷ powers in some cases vested by the basic terms of corporate law and, in other cases, vested by contract. Incomplete contracts theory asserts that with the diminution of space in which contractual specification is feasible, such power allocations play a progressively larger role in determining the firm's productivity.³⁸ It further asserts that some power allocations work better than others and goes on to try to identify the properties of the better arrangements. Toward this end, it models the impact of particular provisions for control transfer on *ex ante* incentives to make firm-specific investments of human and financial capital.

incentive contract that sets the firm's capital structure based upon a particular projection of the appropriate direction for the agents' activities will not be optimal for all future scenarios.

35 See Philippe Aghion & Patrick Bolton, *An Incomplete Contracts Approach to Financial Contracting*, 59 Rev. Econ. Studies 473, 479 (1992).

36 There is disagreement within the incomplete contracts literature respecting the efficient location of control rights, in particular with respect to the debt/equity tradeoff. See Raughuram U. Rajan & Luigi Zingales, *Power in a Theory of the Firm*, 113 Q.J. Econ. 387 (1998) [hereinafter Rajan & Zingales, *Power in a Theory of the Firm*]; Raughuram U. Rajan & Luigi Zingales, *The Firm as a Dedicated Hierarchy: A Theory of the Origin and Growth of Firms* 32-34 (Nat'l Bureau of Econ., Research Working Paper No. 7546, 2000).

37 *Id.* at 387.

38 *Id.*

This approach is often referred to as the "property rights" theory of the firm because it isolates the collection of physical assets as the firm's defining characteristic and studies arrangements for the assets' ownership.³⁹ Notably, "owner" is here specially defined as the party that has the right to control all aspects of the assets that have not been given over to contractual specification *ex ante*. Since ownership is control under this definition, the two cannot be separated, although they can be shared.⁴⁰ This concept has a counter-intuitive aspect in a world still characterized by the Berle and Means separation of ownership and control. But the concept, as applied in exercises that articulate the characteristics of this "shared" ownership, easily accommodates the management-controlled firm as we know it in practice. Managers are seen to share control with the equity, retaining "effective" control in most situations subject to displacement by the shareholders in exceptional situations.⁴¹ As thus extended, incomplete contracts theory comes to bear on production-specific aspects of firm governance—for example, a manufacturer's decision to make or buy a component part⁴²—in addition to control transfer events like takeovers, proxy contests, and insolvency receiverships. The subject-matter for examination in these extensions is not "ownership" of assets *per se*, but the granting of access to assets owned by others. Here, again, the emphasis is on the identification of arrangements that encourage firm-specific investment.⁴³

B. The Tradeoff between Liquidity and Concentrated Ownership and the Minimal Block Capital Structure

Concentrated ownership sacrifices liquidity but enhances supervision, whereas dispersed ownership enhances liquidity but sacrifices supervision.⁴⁴ A theory of the optimal tradeoff between the two should not, according to

39 Eric Maskin & Jean Tirole, *Two Remarks on the Property-Rights Literature*, 66 *Rev. Econ. Stud.* 139 (1999).

40 Grossman & Hart, *supra* note 33, at 695.

41 Mike Burkhardt et al., *Large Shareholders, Monitoring, and the Value of the Firm*, 112 *Q.J. Econ.* 693, 696, 712 (1997).

42 Rajan & Zingales, *Power in a Theory of the Firm*, *supra* note 36, at 419-20.

43 *Id.* at 387-90.

44 See Andrei Shleifer & Robert Vishny, *A Survey of Corporate Governance*, 52 *J. Fin.* 751, 754-55 (1997) (asserting that concentrated ownership solves the problem of shareholder disincentive to invest in monitoring that comes with high levels of diversification, but that the benefits of concentrated ownership must be assessed in terms of the significant costs, including loss of liquidity and private benefits extraction).

economists Patrick Bolton and Ernst-Ludwig von Thadden, seek to determine whether concentrated or dispersed ownership is *per se* desirable. It instead should seek to determine how often and at what points in a firm's life cycle concentrated ownership leads to more productive results.⁴⁵ Bolton and von

45 Patrick Bolton & Ernst-Ludwig von Thadden, *Blocks, Liquidity, and Corporate Control*, 53 J. Fin. 1, 2 (1998). The model appears in two versions. See also Bolton & von Thadden, *supra* note 8.

The Bolton-von Thadden model has a long ancestry. We can trace its origins to the classic analysis of Armin Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization*, 62 Am. Econ. Rev. 777 (1972). The latter model looked into the incentive problems of team production and asked how the owners of the asset can induce the manager of the asset to cooperate. The model introduced two mechanisms to overcome the control problem—monetary incentives and a third-party monitor—and assumed that the monitor could measure the agents' performance. Eugene F. Fama & Michael C. Jensen, *Agency Problems and Residual Claims*, 26 J.L. & Econ. 327 (1983), later sharpened this story by centering on how the structure of ownership can be altered to limit externalities tied up with the incentive problems of joint production. More specifically, they argued that an ownership structure, such as a partnership, can be designed so as to produce an optimal outcome for the firm. The equilibrium result is asserted to follow from the role played by contractual constraints enforced by third parties. For a new interpretation of these foundational models directed at the place occupied by constituency interests in the theory of the firm, see Margaret Blair & Lynn Stout, *A Team Production Theory of Corporate Law*, 85 Va. L. Rev. 247 (1998).

The inquiry into the relationship between ownership structure, team production, and firm value took its next step forward when Bengt Holmstrom identified concentration of equity ownership as a critical factor. Bengt Holmstrom, *Moral Hazard in Teams*, 13 Bell J. Econ. 324 (1982). Holmstrom's model is concerned with techniques for disciplining production team members. It emphasizes that given problems in monitoring individual contributions to firm output, there is no sharing rule that can achieve an equilibrium outcome. This is because the team members will always have an incentive to collude so as to facilitate shirking and therefore cannot enforce a sharing agreement among themselves. Hence, there must always exist a principal to enforce penalties respecting shirking. More particularly, the moral hazard problem respecting the agents calls for an incentive scheme that "breaks the firm's budget constraint." In other words, given bad news about team performance, a budgeting authority must be in a position to cut off needed capital. Holmstrom suggests that shareholders with an ongoing contingent commitment to provide capital could perform this incentive function; with the occurrence of the contingency related to team performance, they are released from their funding commitment. The problem left open for solution in the Holmstrom model, which relies on equity intervention, is the incentive that some owners have to free-ride on other owners' efforts. From this monitoring perspective, then, it might be optimal to have a single owner. Thus do the costs of independently monitoring the firm and pledging capital for financing give rise to a question respecting the optimal level of concentration of ownership.

Thadden, thus directed, offer a model of the liquidity-concentration tradeoff that bears importantly on evaluation of the cross-reference hypothesis.

The Bolton-von Thadden model inquires into the conditions necessary for the formation of control blocks and into the concomitant costs in terms of reduced liquidity.⁴⁶ It assumes that blocks can coalesce in two ways: either (a) there is a large blockholder in place *ex ante* who stays

Holmstrom identifies at a theoretical level the problem on which today's comparative governance discussions devolve: the relationship between ownership concentration, liquidity, management agency costs, and investor incentives respecting governance. Holmstrom, having identified the problem, later goes on to confront the problems of the separation of ownership and control and blockholding. Andrei Shleifer & Robert Vishny, *Large Shareholders and Corporate Control*, 94 J. Pol. Econ. 461 (1986), offer a model of an equity-financed firm in which there is one large shareholder and a number of small shareholders who free-ride. In this model, firm value increases with the larger shareholders' presence. Consequently, in the model, the large shareholders are likely to have an incentive to retain their large shareholdings. The problem comes if the large shareholders ever get into a position to sell their shares anonymously in the trading market. Shleifer and Vishny find that they would have every incentive to do so, thereby sacrificing the benefit of their monitoring. See also Steven Huddart, *The Effect of a Large Shareholder on Corporate Value*, 39 Mgt. Sci. 1407, 1408 (1993) (modeling the instability problem in a world where the blockholder's risk profile differs from that of the wider shareholder population).

A different perspective on the liquidity-control tradeoff can be found in Bengt Holmstrom & Jean Tirole, *Market Liquidity and Performance Monitoring*, 101 J. Pol. Econ. 678 (1993). This paper assesses how a firm's ownership structure affects the value of managerial monitoring through the improved information content of the share price of the firm. Holmstrom and Tirole argue that the existing literature on managerial incentives poorly understands how the stock market acts as a monitor of management: "[T]he firm's ownership structure," they say, "influences the value of monitoring through its effect on market liquidity." *Id.* at 679. More particularly, they show that the informational benefits of listing and observing a quoted stock price are not well understood in terms of the costs and benefits of market monitoring.

In this highly stylized model, it is the presence of liquidity traders that produces the incentives for other traders to invest in information. The informed traders are able to profit since they choose the profit-maximizing route given the expected behavior of the other investors. Holmstrom and Tirole nonetheless argue that someone will have to pay the speculator for making investments in monitoring. The cost of such investments in monitoring is borne *ex ante* by insiders in the form of a lower initial share price. *Id.* at 696-97. Without the monitoring fee, liquidity would be hard to sustain. Market liquidity thus has its costs. Accordingly, say Holmstrom and Tirole, some degree of concentration of ownership is required.

The Bolton and von Thadden model picks up the problem at this point.

⁴⁶ This cost-benefit analysis covers not only the blockholder but also the shareholder population as a whole.

put and removes unsuccessful managers; or else (b) where ownership is dispersed *ex ante* and the managers later fail, an entrepreneur shows up to put a block together by purchasing shares in the market by tender offer.⁴⁷ The model further assumes a world where: (a) blockholders can add to their returns through insider trading but do not breach their fiduciary duties;⁴⁸ and (b) blockholders incur net private costs due to monitoring and other activities incident to the exercise of control. Taken together, these two assumptions imply that block shares sell at a discount from non-block shares on a per share basis, reflecting the monitoring cost.⁴⁹ This result traverses the real-world experience of block shares trading at a substantial premium over market price, of course.⁵⁰ But the dose of unreality nonetheless enhances the model's heuristic value for comparative governance. In the real world, control premiums follow from the fact that control makes private benefits available absent a strict and perfectly enforced regime of insider trading and fiduciary rules. The task for comparative governance, in contrast, is to test the proposition, put forward in American institutional investor literature, that public-regarding institutional monitoring is economically viable. If incentives for block monitoring can be shown to obtain in a world entailing a liquidity tradeoff but constraining private benefits, then the case for public-regarding monitoring emerges much enhanced. Such a result simultaneously would bolster the case for the coexistence of thick trading markets and effective blockholding in Europe.

47 Bolton & von Thadden, *supra* note 8, at 188.

48 Bolton & von Thadden, *supra* note 45, at 2. Here, they proceed in contrast to many other incomplete contracts models of blockholding. For recent models that use insider trading and other private benefits as a permitted incentive to be traded-off against gains from monitoring, see, for example, Ernst Maug, *Large Shareholders as Monitors: Is There a Trade-Off between Liquidity and Control?*, 53 J. Fin. 65 (1998); Charles Kahn & Andrew Winton, *Ownership Structure, Speculation, and Shareholder Intervention*, 53 J. Fin. 99 (1998).

49 The implications of possibilities for gain through insider trading are examined in the model. See *infra* text accompanying note 69.

50 An extensive empirical literature documents this. See, e.g., Michael Barclay & Clifford Holderness, *Private Benefits from Control of Public Corporations*, 25 J. Fin. Econ. 371 (1989). Bolton and von Thadden point out that the Barclay-Holderness study finds substantial premiums for blocks of greater than 25% and smaller premiums for blocks under 25%. In effect, they say, their model contemplates blocks of 10% to 20% that nevertheless exert control power. Bolton & von Thadden, *supra* note 45, at 8-9.

1. *The Optimal Block in a World of Tradeoffs*

For Bolton and von Thadden, the optimal tradeoff between concentration and liquidity depends on a complex of factors. These factors include: (a) the degree of liquidity demand due to shareholder impatience or desire to consume, with lower demand and patience favoring concentration; (b) the transaction costs of ownership and transfer, with high costs favoring concentration; (c) the level of monitoring costs, with high costs favoring dispersal; and (d) the expected variance of returns, with high variance favoring concentration because uncertainty implies a need to accord more discretion to managers and thus a corresponding need for monitoring.⁵¹ The location of the tradeoff point varies from situation to situation. But a clear set of alternatives emerges at the bottom line, despite the complexity at the tradeoff point. If the factors signal concentration, then an optimal capital structure: (a) contains no more than one block, since duplication of the block position reduces liquidity; (b) includes a block containing no more than the minimum number of shares necessary for the exercise of control, since a larger block reduces liquidity (the "Minimal Block" or "MB"); and (c) includes outside shareholders, each of whom holds only a minimal number of shares, since any shareholding larger than the minimum also reduces liquidity (the "Minimal Block Capital Structure" or "MBCS").⁵²

Under the above model's assumptions, the MB will sell at a discount per share from intrinsic value, because monitoring is costly and the cost cannot be passed on to the outside shareholders in the form of private benefits received by the blockholder. For the same reason, block formation through tender offer occurs only to the extent that the holder can buy the shares at a discount from intrinsic value. Under the model's set-up, such purchases can be made only from impatient liquidity sellers who are willing to sell at a discount.⁵³ Relative numbers of liquidity sellers and patient investors (who only sell for intrinsic value) thus can have a significant governance impact.

We note some points at which the MBCS fails to synchronize with main points on governance reform agendas. Since the MB must command control, it, of necessity, has to be comprised of a substantial percentage of shares, even recognizing that control can be maintained with considerably fewer

51 Bolton & von Thadden, *supra* note 8, at 173, 191-93.

52 *Id.* at 190. In the model, the minimum holding is one share. Substantial blocks smaller than the optimal size could carry the benefit of easing the cost of a tender offer, but Bolton and von Thadden speculate that dispersion still will dominate due to liquidity benefits. Bolton & von Thadden, *supra* note 45, at 18.

53 *Id.* at 13.

than 51% of the shares.⁵⁴ The insistence on a control block follows from a central assertion of incomplete contracts economics—that absent enforceable contract terms, productivity and related incentives depend on control transfer allocations.⁵⁵ The American case for delegated institutional monitoring, in contrast, looks toward the lesser goal of ongoing participation in control through institutional coordination. The model accordingly raises a question as to whether the pursuit of half a loaf is worth the cost. At the same time, however, it dovetails with a central point in the American case: monitoring requires much more concentration in institutional holdings than we presently see in the United States.

The MBCS model has the converse message for Continental European blockholding practices. For Europe, the problem is not undersized but oversized blocks, for the blocks in place there are larger and more numerous than the MBCS model predicts.⁵⁶ The model also shows that the European blocks carry a liquidity cost that diminishes the depth of national securities markets. A clear implication arises for European law reform: trading-market depth approaching that of Britain and the United States depends not merely on transparency but on the unwinding of some of the blocks.⁵⁷ This presumably could occur without a negative governance impact so long as each firm were to emerge with an MBCS.

2. Block Formation

The MBCS model allows for the coalescence of blocks for the purpose of effecting governance improvement in badly managed publicly held companies. But such block formation comes in the mode of the traditional tender offer rather than in the mode of delegated institutional monitoring. Block formation through tender offer depends, in turn, on the degree of

54 This result would be especially easy to effect where the firm goes public with a block in place.

55 See *supra* text accompanying note 35.

56 The implication is that private benefits figure prominently in blockholder-firm relationships. See *infra* note 78 and accompanying text.

57 In this regard, Germany's *Bundesrat* approved on July 14, 2000, with few changes, the German federal government's ambitious Tax Reduction Act (*Steuerersenkungsgesetz* or *StSenkG*), which phases out capital gains taxes on corporate sales of stock. See http://www.bundesfinanzministerium.de/verm/pmsteuerreform_2000.htm; <http://www.bundesrat.de/pr/107.html>. The legislation, which became effective for fiscal year 2001, is expected to facilitate the unwinding of some block positions. See Hubert E. Mattausch, *Draft Legislation on the Future Taxation of Business Enterprises in Germany*, in International Bureau of Fiscal Documentation 389 (Aug./Sept. 2000).

uncertainty about the block's appearance. If a block's appearance is certain, no holder will sell into a tender offer for less than the firm's intrinsic value with a block in place. This kills the offer. Since monitoring is costly, the tender offeror must get the shares at a discount from intrinsic value so as to be compensated for the cost of the monitoring. This means that block formation can never be a sure thing: the tender offer proceeds only if a sufficient number of impatient liquidity sellers are willing to sell at the requisite discount.⁵⁸ Liquidity, which is enhanced by impatient selling, thus promotes block formation for a public company,⁵⁹ even as the block's formation reduces liquidity. Contrariwise, if it were absolutely certain that no block ever would appear, all shares would be discounted to reflect that possibility. This, in turn, would create a perfect arbitrage opportunity for a potential tender offeror seeking to put together a block. The model thus posits an equilibrium characterized by uncertainty about prospects for block formation by tender offer.⁶⁰ The tender offeror only bids for shares on offer from impatient sellers because only these present an opportunity for an arbitrage profit. If all holders are impatient, the offeror will tender for as many of their shares as its level of wealth can sustain. The size of the emergent block

58 Bolton & von Thadden, *supra* note 8, at 188.

59 See also Maug, *supra* note 48, at 66 (noting that in this sense, there is no tradeoff between liquidity and control).

Liquidity also can make block monitoring difficult to sustain. Whenever a closely held firm goes public while retaining a blockholder, the free-rider problem arises. The holder, who reaps no private benefits, must spend to monitor, but must share the proceeds with the shareholders as a whole. At the same time, the presence of the block depresses liquidity in the outside trading market. Not only are there fewer shares trading than otherwise would be the case, but given anonymous trading, an information asymmetry arises between the blockholder and the outside shareholders: the blockholder could be secretly unwinding its position due to negative inside information and the outside shareholders do not realize it. Bolton & von Thadden, *supra* note 8, at 173. The possibility that the block will be unwound independently depresses the value of the firm because it implies a reduced level of monitoring. That threat always is present to the extent that the blockholder's wealth is constrained: limited wealth makes the holder vulnerable to liquidity shocks and the block unstable. Lower wealth levels thus favor concentration. *Id.* at 208.

Just as liquidity makes blocks unstable, so it facilitates takeovers. A deep market driven by impatient liquidity traders who do not hold out for the full, long-term value of their shares is a market with minimal free-riding on monitoring gains yielded by a blockholder. Thus block formation by tender offer is favored. Bolton & von Thadden, *supra* note 45, at 3-4.

60 Note also that uncertainty about block formation is the only equilibrium result absent legal restrictions. Bolton & von Thadden, *supra* note 8, at 194.

thus very well can exceed that of the MB. Patient holders, in contrast, will demand a premium in exchange for giving up their free ride. As a result, if the process rules governing tender offers require the highest price offered to be shared with the entire group of offerees, then the bid fails whenever the offeror has to buy shares from patient shareholders in order to accumulate the minimum number of shares necessary to take control.⁶¹

There arises a negative implication for transparency regulations, such as section 13(d) of the Williams Act,⁶² that tip off the holders as a group as to the presence of a party interested in gathering a control block.⁶³ Interestingly, however, this negative implication does not extend to all regulations appearing on the target list put forward by U.S. proponents of delegated monitoring.⁶⁴ Regulations constraining the size of institutional holdings and the nature of institutional shareholding appear in a positive light in this context because they by definition promote liquidity.⁶⁵ The model thus echoes a policy position of the Chicago School: emphasis on law reform to promote larger proportionate institutional holdings may be misplaced, and primary emphasis should be placed on reversing state-level constraints on tender offers. The underlying reasons are quite different, however. Here the point is not that the market system is intrinsically superior to the blockholding alternative. Nor is the point that market regulation is intrinsically costly.⁶⁶ Rather, the point is that the market system's underlying incentive structure favors control transfer by takeover.

61 Bolton & von Thadden, *supra* note 45, at 14-17.

62 15 U.S.C. § 78m(d) (1994).

63 Bolton & von Thadden, *supra* note 45, at 17.

64 The targets are: (1) disclosure requirements imposed on holders of more than 5% of a class of securities under section 13(d) of the Williams Act, 15 U.S.C. § 78m(d) (1994); (2) liability of controlling persons for securities law violations of controlled persons under section 15 of the Securities Act, 15 U.S.C. § 77o (1994), and section 20(a) of the Exchange Act, 15 U.S.C. § 78(a)(1994); (3) short-swing liability for trading profits of 10% holders under section 16(b) of the Exchange Act, *id.* § 78p(b); (4) restrictions on capital structures and incentive compensation for advisors of investment companies under sections 18(d) and 23 of the Investment Company Act, 15 U.S.C. §§ 80a-18(D), 23(a), 23(b) (1994); and (5) portfolio diversification requirements under ERISA. See Mark J. Roe, *A Political Theory of American Corporate Finance*, 91 Colum. L. Rev. 10, 26-27 (1991).

65 Bolton and von Thadden note this, Bolton & von Thadden, *supra* note 45, at 3-4.

66 Bolton and von Thadden's model implies a need for regulation at a crucial point. See *infra* text accompanying note 71.

3. *The Unwind Problem*

The same factors that make block formation problematic make the MBCS unstable once in place. Assume that a privately held firm goes public but simultaneously places a MB with a third-party holder who receives no private benefits. We have an optimal tradeoff between concentration and monitoring. But will the MB stay in place? If it is absolutely certain that the MB will remain in place, then the market price of the stock will be at a high level, reflecting the value of the MB holder's monitoring. But in this state of facts, the MB holder has an overpowering incentive to sell its shares piecemeal into the market—it is not, after all, being compensated for its monitoring expenses under the model's assumptions. If the MB holder can sell into the market anonymously, the other shareholders never will be in a position to know whether or not the MB holder is unwinding its position. Given anonymity, then, the MB holder can exit at the higher price, recover its expenditures for monitoring, and leave the firm unmonitored, thus selling at a lower value. Uncertainty results respecting the stability of the block, a factor that will tend to depress the stock price.⁶⁷ Ironically, the more stable market actors believe the block to be, the more the MB holder has an incentive to unwind it. Intrinsic instability thus is a problem for blockholder systems, given anonymity respecting trading and changes in block positions.⁶⁸

A very different result follows where the MB holder's ownership position

67 This problem can be viewed in different ways. Kahn and Winton, accepting that trading profits yielded by the inside position are an intrinsic part of a blockholder's incentives, work them in as a factor in a model directed to predicting types of firms in which a blockholder emerges in the first place. Trading profits, they find, are likely to loom larger where the firm is small, young, and not very well known. With mature, thickly traded firms, other motives will predominate when a shareholder becomes active. Kahn & Winton, *supra* note 48, at 101.

68 Bolton & von Thadden, *supra* note 8, at 194-99. The unwinding problem is discussed extensively in the literature. Others somewhat implausibly suggest that the firm lock-in the blockholder with supermajority provisions in the charter. The idea is that the blockholder has to acquire the supermajority in order to get control in the first place. The supermajority holder is more likely to intervene and suffers a larger liquidity sacrifice and thus has a heightened incentive to stay with the firm for the long term. See Maug, *supra* note 48, at 67. See also Kahn & Winton, *supra* note 48, at 102 (suggesting that firms place blocks of restricted shares); Anat R. Amati et al., *Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium*, 102 J. Pol. Econ. 1097, 1100-01 (1994) (obtaining a block equilibrium outcome with first-best, assuming a Walrasian trading mechanism, and blockholder commits to only one round of trading); Huddart, *supra* note 45, at 1408 (noting the commitment problem and suggesting that all purchases and sales by the blockholder be made on the basis of pro rata offers).

and trades are made transparent. Given transparency, other shareholders will read the MB holder sales to mean that the MB holder is unwinding either: (a) because it has become impatient and wants to cash out; or else (b) because it has adverse inside information about the prospects of the firm. Either way, the sales will depress the stock price, making it difficult for the MB holder to unwind in the first place. Transparency thus has a tendency to lock in the blockholder, making the block more stable and thus more effective as a governance tool.⁶⁹

Bolton and von Thadden draw a regulatory conclusion from all of this. Just as transparency respecting blockholder purchases (such as that mandated by regulations such as section 13(d) of the Securities Exchange Act of 1934) decreases the likelihood of block formation, so does mandated transparency respecting blockholder sales (such as that incident to section 16(b) of the 1934 Act⁷⁰) import stability to a block monitoring system by preventing the blockholder who has negative information about the firm's prospects from selling out on the sly.⁷¹ Significantly, the MB holder is not absolutely locked in given transparency. If it encounters a need for liquidity, it always can exit by selling its block as a whole. That sale will be at the MB holder's pro rata share of the value of the firm as block-monitored net of monitoring cost, compensating the holder for its governance input, if not depriving the other shareholders of their free ride.⁷²

4. A First-Best Second-Best Hybrid Capital Structure

Can the MBCS be endorsed as an all-purpose optimal capital structure? As we have seen, an MB by definition leaves the largest possible number of shares available for trading and thus best combines the monitoring advantages of blockholding with the thick trading of market systems.⁷³ Generalizing from this point, Bolton and von Thadden assert that

69 See also Marco Pagano & Ailsa Röell, *The Choice of Stock Ownership Structure: Agency Costs, Monitoring, and the Decision to Go Public*, 113 Q.J. Econ. 187, 213-14 (1998) (finding that blockholders will have an incentive to alter their stakes through trading absent complete transparency in the trading market and that transparency imports a stable ownership structure).

70 15 U.S.C. §§ 78m, 78p(b) (1988).

71 See also Pagano & Röell, *supra* note 69, at 208-09 (finding that mandatory disclosure that makes private benefit extraction easy to detect encourages public offerings to the extent that they lower the monitoring costs that otherwise would be incurred).

72 *Id.* at 179, 199, 207. The block is broken up in subsequent liquidity trading only if every holder becomes impatient. Bolton & von Thadden, *supra* note 45, at 11.

73 This result previously has been commended in Amar Bhidé, *The Hidden Costs of Stock Market Liquidity*, 34 J. Fin. Econ. 31 (1993).

given a number of non-block shares "tending to infinity," blockholding will always dominate over dispersion. Otherwise the choice between dispersion and concentration depends on the full range of tradeoff factors.⁷⁴

Does this finding provide us with a template for the optimal firm and a supporting hybrid governance system? The answer is no. Since the number of shares outside of the block always is finite, we remain stuck in a world of tradeoffs, at least as a technical proposition. But it can still plausibly be suggested that real world tradeoffs heavily favor the MBCS as a practical matter. If the optimal block were sufficiently small that a very large number of dispersed shares were left in circulation, then a satisfactory level of liquidity could be maintained even as the holders benefited from the blockholder's monitoring. Bolton and von Thadden take pains to note that control can be maintained with a block of 10% or 20% of the shares.⁷⁵ With a large capitalization firm, the remaining 80% or 90% available for trading should more than suffice to support a deep market.

There emerges, then, a picture of first-best second-best capital structure, characterized by a 10% to 20% block, with the remainder publicly traded. This MBCS seems better suited to conditions in Continental Europe than in Britain or the United States, however. Although 10% to 20% blockholders certainly have been known to exercise control in market systems, control does not inevitably attach to blocks of this size. The American experience has been that such a small blockholder is difficult to unseat if already in control of the board. But, at the same time, an outsider who newly acquires a 10% to 20% block has influence but will not necessarily possess unilateral control power.⁷⁶ The MBCS picture thus seems tailored for Europe, where blocks larger than 10% to 20% and not identical with the management interest already are in place.⁷⁷

74 Bolton & von Thadden, *supra* note 45, at 21-22.

75 *Id.* at 8-9.

76 This is the lesson of sale of control cases like *Essex Universal v. Yates*, 305 F.2d 572 (2d Cir. 1962), in which a 28.3% block implicates control.

77 Note that in the United States, where a corporation has a 10% to 50% blockholder or blockholders, there often is identity between the blockholder group and the firm's management group—as where a group of entrepreneurs builds a successful close corporation and later takes it public, continuing to run the business and retaining significant equity stakes. Such firms are not "blockholder" firms within the model, which contemplates separation in the identities of the blockholder and the manager. The importance of this distinction is dramatized in Pagano & Röell, *supra* note 69. This model shows that for an owner taking a firm public, completely dispersed shareholding maximizes returns even though entailing a sub-optimally high level of monitoring. The owner avoids a capital structure entailing a higher level of monitoring, because it chokes off her private benefits. *Id.* at 190.

Presumably, the block's size can be reduced without materially disturbing existing control relationships. In the United States, in contrast, such blocks are the exception rather than the rule. Entrepreneurs would have to put the 10% to 20% blocks together through open-market purchases. No control transfer would follow so long as management remains opposed, necessitating the further step of a proxy fight or a tender offer for a 51% block.

5. Implications of Indivisibility

Despite the problematics, the MBCS model suggests a hybrid, block-based solution to the problem of optimal capital structure. It thus supports the cross-reference hypothesis. But this support lies at an aspirational level. The model simultaneously offers incidental but significant support for a real-world description of indivisibility. It does this at three points. First, it is fundamental to the model that absent a number of shares tending to infinity and given substantial demand for liquidity, an MB may fail to emerge even though it is needed to maximize the value of the firm. Here the insight is that in a world where all investors are impatient, liquidity is valued above all, even at the sacrifice of gains from monitoring. We note a more than passing resemblance to investors and markets in the United States.⁷⁸ Secondly, as the model's discussion of the incentives of the tender offeror shows, when such a control block does emerge in a world where liquidity is highly valued, it likely does so in the form of a suboptimally large block. Finally, absent complete transparency in the trading market and private benefits, an MBCS will have a tendency to be unstable.

Given these results, the model can be read to predict not an ideal hybrid system, but a world in which we are likely to see: (a) given legal controls on private benefits, intervention respecting a poorly-performing widely-held firm in the form of a tender offer for a majority or greater than majority stake, as in market systems; (b) the emergence of smaller, long-term control blocks only with the provision of returns through private benefits, as in blockholder

Interestingly, the model also predicts that private benefit extraction will not tend to be very wasteful for firms that do go public—otherwise monitoring would be highly beneficial and a close corporate structure with a large outside investor-monitor would make more sense. Similarly, strict disclosure rules encourage dispersed ownership by making monitoring from an outside point of view more effective. *Id.* at 191. See also Burkhart et al., *supra* note 41 (predicting that concentrated ownership leads to high levels of monitoring and low management initiative).

78 No claim to originality accompanies the observation. See John C. Coffee, Jr., *Liquidity Versus Control: The Institutional Investor as Corporate Monitor*, 91 Colum. L. Rev. 1277 (1991).

systems; and (c) hostile takeovers for majority and supermajority stakes rather than optimal blockholding. The divergent results strikingly resemble the divergent characteristics of existing market and blockholder systems. The results are doubly noteworthy, because they are yielded by a model devoted to predicting the shape of a superior hybrid.

III. INSTITUTIONAL MONITORING AND THE FREE-RIDER PROBLEM

Bolton and von Thadden model a world in which blockholding without self-dealing is profitable, replicating a result basic to the American case for delegated monitoring.⁷⁹ Although they do not address in terms the subsidiary point respecting the formation of institutional coalitions, their model does not exclude the possibility.

A. Institutional Monitoring

Elsewhere in the literature, we learn that shareholder cooperation toward the end of stepped-up monitoring presupposes two conditions: (a) stable interactions over time within the monitoring coalition,⁸⁰ and (b) substantial

⁷⁹ See *supra* note 13.

⁸⁰ Pagano & Röell, *supra* note 69, at 210, suggest that such a cooperative pattern may make possible monitoring by institutional coalition, citing Jean Tirole, *Collusion and the Theory of Organizations*, in 2 *Advances in Economic Theory: Sixth World Congress* 151, 156 (Jean-Jacques Laffont ed., 1992). We are skeptical.

The problem facing all attempts of cooperative monitoring is how to enforce a noncontractible contract for monitoring. Pagano and Röell's solution is to suggest that even if there is no enforceable contract, the prospect of an equilibrium outcome is made possible by such mechanisms as reputation, which can facilitate long-run cooperative behavior. Following Tirole, *supra*, they propose relying on reputation as the foundation of enforceability of repeated interactions. The idea here is that given enough repeated interactions, trust will emerge and a party can invest without a contract. More specifically, the repeated game works as a self-enforcing arrangement so long as there is a high probability that each round will be followed by a succeeding round, which deters defection and induces cooperation in the current round. The reputation model presupposes a number of basic requisites. A player will invest in his reputation and cooperate so long as he values the returns from cooperation over time more highly than the short-term gains of opportunistic behavior. The player's self-interest serves as a mechanism for overcoming the collective action problem. We should note, however, that in many infinitely repeated games, there is a very large (possibly infinite) number of outcomes that are better than the non-cooperative outcome. See Bratton et al., *supra* note 30, at 177. These persistent multiple equilibria give rise to questions respecting the viability of the reputation

shareholdings, since incentives to free-ride diminish as stakes grow.⁸¹ But these conditions only return us to the incentive problems bound up in the liquidity-control tradeoff. Stable interactions and substantial positions will prevail only among investors who do not value liquidity highly. The shareholder free-rider problem also comes into play—the MBCS model never quite manages to make it go away. This could retard coalition formation among institutional investors even if coordination is otherwise desirable and investors have come to value liquidity less highly. Note also that given the free-rider problem, it is prospects for trading profits (as realized by a tender offeror in the MBCS model) that provide the incentive for bringing a block into existence. But since trading profits mean selling as well as buying, they turn out to provide an unstable incentive base for long-term monitoring, at least absent a regulatory device that prevents blockholder sales.

A model from Charles Kahn and Andrew Winton expands on this point. Kahn and Winton's set-up takes us a step closer to American practice. Here, control transfer is not the only meaningful form of intervention— influence stemming from significant stakes can lead to productive changes in certain circumstances. More particularly, institutional-ownership stakes below a critical level mean that information about the firm developed by an institutional investor is most profitably used only for the purpose of speculative trading. Above the critical level, intervention in the firm's affairs is the more attractive alternative, but only if special conditions obtain.⁸² A large capitalization conglomerate in need of unbundling presents the archetypical attractive situation: it is informationally accessible; its stock has been bid down; the intervening institution knows what to do; and the intervention is quickly completed. In contrast, a firm where problems and solutions presuppose special knowledge, like a high-tech firm, presents an unattractive case for intervention. Here, the situation is opaque, intervention

effects model of cooperation. Quite simply, the number of equilibria predicted vastly outnumber the number we would expect to observe in the real world. This creates the problem of predicting an outcome.

This approach is not without problems, even on a practical level. If there is to be cooperative monitoring by a subset of shareholders, the level of cooperation sustained over time surely depends on the incentives of the parties. Institutional investors present a succession of different parties, none of whom appears to be committed to maintaining a reputational interest in monitoring. Thus it appears that cooperation can be sustained only if it is possible to bind parties to the process by first persuading them that they have common interests. This is a heroic assumption no matter how large the stock of the companies that wish to invest in monitoring.

81 See Pagano & Röell, *supra* note 69, at 210.

82 Kahn & Winton, *supra* note 48, at 100-01.

is more expensive, and turn-around takes longer. Even an institution with a large stake resolves doubts in favor of selling in the event of bad news.⁸³ Given wealth limitations on institutions and the need to diversify, say Kahn and Winton, intervention will follow only in quick-fix situations where the critical level of ownership stakes is low.⁸⁴ On this analysis, the economically sustainable pattern of institutional intervention already has appeared in American practice. It takes the form of discrete (as opposed to relational) intervention against mature, large-capitalization firms that are manifestly ill-managed—actions like the "Just Say No" campaign, the shareholder proposal against the poison pill, and the one-time, behind-the-scenes meeting between company executives and select institutional representatives. Incentives for more sustained delegated monitoring appear to be lacking.⁸⁵

The MBCS model, as thus supplemented, challenges the cross-reference hypothesis as applied to the United States: economic fundamentals rather than historical-path dependencies may be the factor primarily responsible for the dearth of institutional monitoring. Persistent differences among national systems can be as plausibly accounted for as the results of free choice in a world of tradeoffs, as they can be accounted for as perverse effects of interest group legislation.

B. The Monitoring and Initiative Tradeoff

American analyses of blockholder systems have proceeded on the assumption, widespread in corporate law, that increases in a principal's effort to measure or verify an agent's performance necessarily induce better performance. The incomplete contracts literature reconsiders this proposition,⁸⁶ entering a *caveat* respecting monitoring. The *caveat* has powerful implications for both comparative governance and other exercises in incomplete contracts economics, including the MBCS. Even if it were safe to assume that control passes to a 10% to 20% blockholder, the MBCS model's signal of optimality cannot be taken as conclusive, because it reflects

83 *Id.* at 119-21. The model has a strong regulatory implication. To the extent that quick institutional intervention can assist in company turn-around, short-swing profit disgorgement under section 16(b) of the 1934 Act has an unproductive side effect.

84 *Id.* at 120.

85 For a description of the pattern seen in practice, see Bratton & McCahery, *supra* note 13, at 1906-18.

86 Philippe Aghion & Jean Tirole, *Formal and Real Authority in Organizations*, 105 J. Pol. Econ. 1, 10 (1997).

only two factors: concentration and liquidity. Firm value may be sensitive to a wider range of governance variables.

The variable now in question is a tradeoff incident to monitoring itself. The concession of decisional authority to an agent means a potentially costly loss of control over projects; but it also entails a benefit. The agent's initiative—its incentive to acquire and develop information—increases along with the scope of the delegation of authority. It follows that reductions in monitoring activity can encourage initiative in the agent, increasing the principal's expected return.⁸⁷ Contrariwise, the costs of monitoring can include a diminution in the value of firm-specific investments made by the firm's agents.⁸⁸ Just as stepped-up monitoring is a benefit of increased concentration in shareholdings, so is reduction in management initiative a cost of concentration.⁸⁹

The tradeoff implies a commitment problem. If management initiative is crucial for the firm's success, maximal shareholder value requires an *ex ante* commitment to leave control vested in the manager. Given concentrated shareholdings, that commitment may be difficult to make credibly. Matters such as investment and monitoring policy are non-contractible: the equity cannot credibly commit *ex ante* to refrain from using its control rights in situations where it deems the exercise to be optimal *ex post*.⁹⁰ The best available solution may be a reduction in concentration of shareholdings. The equity's incentive to monitor decreases as the level of holdings becomes dispersed. Cost and incentive barriers decrease the likelihood that dispersed shareholdings will coalesce into blocks *ex post*. Management's initiative to invest productively is enhanced as a result.⁹¹

87 *Id.* at 11. The incentives of the agent, thus empowered, to communicate information back to the principal depend, in turn, on the alignment of incentives between the principal and the agent. *Id.* at 17-18.

88 Burkhardt et al., *supra* note 28, at 694.

89 *Id.* at 701.

90 *Id.* at 700-01. At least according to the literature. A corporations teacher at this point might make reference to the device of a shareholders' agreement combined with an irrevocable proxy: assuming a small number of shareholders, complete delegation can be effected if either (a) the manager is given irrevocable control of the board or (b) the board is abolished and a shareholders agreement gives the manager the right to the presidency and an irrevocable proxy to determine the results of shareholders' meetings. These arrangements do not solve the problem, however, because of the absolute nature of the delegation they entail. The more desirable middle ground of a continuing, conditional, and controlled delegation proves problematic because of the contractibility problem.

91 *Id.* at 694, 701.

The point for comparative governance is not that monitoring always is a bad thing and dispersed shareholding always superior to blockholding. The literature takes pains to stress that the optimal tradeoff between initiative and concentration (and thus monitoring) may vary from firm to firm. For example, the tradeoff point may vary depending on the availability of reliable means to measure agent performance. With a long-established, mature business, reliable measures of management performance may be found in conventional, short-term quantifications such as the stock price, the earnings results, or the dividend payout pattern. Accordingly, strict incentive contracts may work well in tandem with limited monitoring and dispersed ownership. With a high-tech business engaged in a novel line of business, monetary incentives will be harder to design. Tighter control and concentrated ownership may be needed as a result.⁹²

A warning for comparative governance emerges from this analysis: there may be such a thing as suboptimal overmonitoring. The warning gives rise to a question: Does the intense blockholder engagement with management hypothesized in the comparative literature carry this risk of overmonitoring? The results of the informal governance comparison confirm the question's salience. American academics went abroad in search of vigorous institutional monitors—banks that scrutinize investment policy with a clear eye for shareholder value.⁹³ But, as noted above, comparative inquiries report that the benefits of European and Japanese institutional-investor monitoring lie on the downside of the intervention scenario.⁹⁴ These reports correspond directly with the basic assertion of the incomplete contracts models: investor-manager arrangements are more likely to look to the transfer of control to remedy manager failure than to ongoing active participation in management control as a prophylactic that prevents management failure from occurring in the first place.

92 Aghion & Tirole, *supra* note 86, at 22; Burkhart et al., *supra* note 28, at 718-19. We note an apparent tension between this line of inquiry and that of the Kahn-Winton model, discussed in the text accompanying *supra* note 82. Kahn and Winton intervene in the large capitalization firm and avoid intervention in the high-technology firm. Here we monitor the high-technology firm and rely on published data on the large capitalization firm. In fact, it is the same story. Kahn and Winton's intervention is a low-cost event, initiated by institutional holders who presumably are relying on published data and would never invest in the monitoring contemplated by Aghion and Tirole, whose monitor is a blockholder.

93 See *supra* text accompanying note 12.

94 The blockholders' inside access and lessened information asymmetries certainly create possibilities for constructive engagement on an ongoing basis. But comparative research has not yet yielded concrete evidence of such relationships.

In sum, we see an additional reason why control transfer trumps control sharing as a governance strategy for the equity interest: control sharing carries a risk of chilling management incentive.⁹⁵ We also must

95 The Aghion-Tirole model has prompted a series of inquiries into the problem of overmonitoring. The fact pattern posited depicts an owner considering taking her firm public, facing a choice between holding a control block and an otherwise dispersed shareholder group and holding a control block and admitting another large holder and an otherwise dispersed shareholder group. The former situation carries a risk of undermonitoring, whereas the latter carries a risk of overmonitoring. Pagano & Röell, *supra* note 69, explore the possibility of a cooperative solution to the latter problem: The controlling shareholder and the blockholder make a collusive contract in which they agree to an optimal level of monitoring activity. In the model, increasing returns to capital follow if the monitoring shareholders act together to set the level of monitoring activity. On the other hand, small shareholdings will be discouraged given the existence of the collusive contract between controlling and large shareholders. This means that small stakeholders are likely to meet heavy discounting of their share stakes in subsequent trading.

We have questions about this approach, based on insights developed in a new theoretical literature in industrial organization that tests the effects of enforceable side contracts within the firm. See generally Tirole, *supra* note 80; Jean Jacques Laffont & David Martimort, *Collusion and Delegation*, 29 *Rand J. Econ.* 280 (1998). Jean Jacques Laffont & David Martimort, *The Firm as a Multicontract Organization*, 6 *J. Econ. & Mgt. Stg.* 201, 223 (1997), point out that side contracting is possible but may be costly. A tractable model must explain how bargaining takes place, which party has more bargaining power, and whether the parties bargain under asymmetric information. It is suggested that in the context of the principal-agent models, the bargaining problems are further complicated by mechanism-design difficulties. More specifically, it is pointed out that there may be several problems with the implementation of the contract offered by the principal (here the controlling shareholder). They stress that in this regard, the modeller may have to make a choice between the assumption of a strongly collusion-proof allocation (which is robust to all equilibria in hidden games) versus a weakly collusion-proof allocation (which is responsive to just one equilibrium). But they acknowledge that this distinction makes little sense when the agents bargain under symmetric information since they will, assuming joint rationality, bargain to the set of Pareto-optimal outcomes. It follows that Pagano and Röell's collusive contract will emerge if the contracting parties are narrowly rational and symmetrically informed. As a practical matter, however, parties are more likely to be imperfectly informed agents who, due to less than ideal conditions, bargain to less than efficient outcomes.

The problem of asymmetric information is yet another serious barrier to the emergence of an equilibrium side contract. Laffont and Martimort, *id.* at 224, point out that the scope for a perfect Bayesian equilibrium in the game of coalition formation "depends on what happens in the status quo outcome when one agent refuses the coalitional agreement." In conventional Bayesian theory, it is the substitution of different beliefs from prior beliefs that ensures the emergence of an equilibrium side contract. As with the standard Bayesian dynamic games,

modify the vision of optimality bound up in the MBCS: block-capital structures are optimal only to the extent that the benefits of intense monitoring outweigh the costs of its negative effects on management initiative. More generally, the optimal capital structure may be asset-specific. The question for comparative governance is, accordingly, one to be addressed separately and specifically to each different system worldwide: Is there any aspect of your practice or regulation that unnecessarily prevents given firms, viewed as collections of assets and incentive problems, from maximizing their value? The answers could involve either deregulation or regulation, depending on the circumstances. Cross-reference and hybridization would or would not result, depending on the answers.

IV. PRIVATE BENEFITS AND IMPLICATIONS FOR EUROPE AND THE UNITED STATES

A. Private Benefits and Indivisibility

The informal comparison, as we have seen, tells us that blockholders look to yields from insider trading and self-dealing transactions⁹⁶ to recompense their investments in monitoring and sacrifices of liquidity. In contrast, leading models of the concentration-liquidity tradeoff and the monitoring-initiative tradeoff tend to assume a world with constraints on private benefits.⁹⁷ The assumption, while heroic, teaches an important lesson about the connection between private benefits and governance structures. The more closely we look at the dynamics of the MBCS model, the harder it is to imagine an MBCS in a world without private benefits. In the MBCS world, as posed by Bolton and von Thadden, blocks appear only occasionally. Even then, they are unstable so long as equity holders value liquidity highly and gains from monitoring are the only reason for block formation. Incentives for block formation diminish further once we interpolate the insight of the monitoring-initiative models: if

problems of multiplicity arise also in the game of coalition formation. One potential solution is to assume an uninformed and benevolent third party that suggests side contracts to the parties that jointly maximize their collusive activity. Obviously this model is more appropriate to regulated industries where delegation to third parties dominates. From the perspective of corporate law, it is unlikely that this second-best solution can be achieved.

⁹⁶ See *supra* text accompanying note 11.

⁹⁷ See *supra* note 8 and accompanying text (Bolton and von Thadden); Burkhardt et al., *supra* note 28, at 697 (monitoring-initiative model).

block formation carries a cognizable risk of unproductive overmonitoring, a clear-cut formation incentive emerges only in the case of control transfer due to poor management performance. Accordingly, we must make reference to private benefits if we are to account for the blocks that exist in practice (and dominate capital structures outside of English-speaking countries). Thus these incomplete contracts models effectively refute the case for block monitoring based on a pure financial incentive.

This point is made affirmatively in a new model from Lucian Bebchuk.⁹⁸ Bebchuk interpolates private benefits so as to cause a *volte face*. Under this model, it is dispersed ownership structures rather than blocks that are intrinsically unstable. The reason is straightforward. Absent effective anti-takeover devices and to the extent that private benefits are freely available to actors in control, a dispersed group of shares presents an intrinsically attractive opportunity for a takeover entrepreneur, because the private benefit yield assures a payoff. Given this, there is no incentive for an insider to sell-out by taking the firm public in the first place. Such a move sacrifices the value of the private benefits, detaching it from the insiders' control stake, only to leave it open for capture later by a tender offeror.⁹⁹

Let us suppose, as does the American governance literature, that Bolton and von Thadden's model of the concentration-liquidity tradeoff more closely approximates the problem for solution in the real world than do models of the tradeoff between concentration and initiative. Given this assumption, the problem for solution concerns the interface between the MBCS and private benefits provision. That is to say, we take the MBCS model and relax the assumption respecting self-dealing transactions. A number of problems identified by Bolton and von Thadden become solvable as a result. Given the right amount of private benefits, free-riders and gain-specification need not present a problem and a clear-cut incentive to

98 Lucian Arye Bebchuk, *A Rent-Protection Theory of Corporate Ownership and Control* (Harvard Univ. Law Sch., Ctr. for Law, Econ. & Bus., Discussion Paper No. 260, 1999).

99 For a recent model that also considers the role of private benefits, see Mike Burkhardt et al., *Block Premia in Transfers of Corporate Control* (London Sch. of Econ., Fin. Mkts. Group Discussion Paper No. 1868, June 1998). The assertion here is that tender offers are a preferable means of effecting control transfer to block transfers. Under this model, a controlling blockholder with a large stake internalizes more deadweight costs of extracting private benefits and thus gains less. To the extent that private benefits extraction decreases with the size of the block, tender offers are superior because they increase concentration and hence firm value.

form a block and monitor readily can be hypothesized. The block, once formed, remains stable.

By hypothesis, then, an optimal tradeoff between blockholding and ownership dispersal implies a subsidiary need to set an optimal level of self-dealing and insider trading. That optimum could be variously defined, as: (a) an amount costing the minority shareholders just less than their pro rata share of the gain to the firm as a whole from blockholder monitoring; (b) an amount just sufficient to cover the costs of blockholder monitoring but no greater; or (c) an amount falling between these two extremes, resulting from negotiations between the inside and the outside interests.¹⁰⁰

A question then arises as to why we do not see real-world governance systems directed at the achievement of this result. The answer must be that the subject-matter is noncontractible. Neither the per-period cost of monitoring nor the per-period gain to the firm from monitoring is suited to advance specification. Nor, given the information asymmetry that prevails between blockholders and outside shareholders, do we have conditions favorable to *ex post* observation and verification.¹⁰¹ It follows that a choice must be made between prohibition and liberality of private benefits at a systemic level.¹⁰² That choice can be seen in economic terms as turning on the relative value placed on monitoring and liquidity. It also legitimately can be described in political and historical terms. Either way, it appears to be fundamental and unavoidable.

100 Cf. Lucian Bebchuk, *Efficient and Inefficient Sales of Corporate Control*, 109 Q.J. Econ. 957 (1994) (discussing the costs and benefits of equal opportunity and free transfer rules respecting transfers of corporate control); Marcel Kahan, *Sales of Corporate Control*, 9 J.L. & Econ. 368 (1993) (same).

101 Once we confront the difficulty of setting the right amount, it would seem that we can re-characterize the monitoring incentive problem as a species of the economics of management compensation. But the re-characterization holds out no quick solutions to the basic agency problems under discussion. Oliver Hart has argued that the management and shareholder incentives can, in theory, be perfectly aligned in a world without private benefits by giving management a set cut of the dividend payout stream. The problem, says Hart, is that the amount that would have to be paid over is too large as a practical matter. See *supra* note 34 for the formal presentation of this point. The same would appear to be the case in respect of a blockholder in control. Moreover, given anything but a completely effective regime of private benefits prohibition (which, in turn, presupposes complete transparency), the control-monitor on an optimal salary easily can double dip. See also Burkhart et al., *supra* note 28, at 705-06 (arguing for an analytical distinction between employment contracts, which encourage productive behavior with monetary incentives, and monitoring, which discourages bad behavior).

102 Or, alternatively, contractually by individual firms within a given system.

B. Implications for Europe

This analysis holds out an important lesson for the European law reform movement. Clearly, private benefits must figure into the explanation of Europe's existing blockholding pattern. Market liquidity comparable to that in Britain and the United States will come only with fewer and smaller blocks. One means to the end of reducing the size and incidence of blocks is a legal regime that effectively deters blockholder-insider trading and self-dealing and brings transparency to internal corporate affairs. The question is whether a partial regulatory package will suffice. More particularly, if self-dealing is a mainstay of blockholder returns, then an effective insider-trading ban will not suffice to bring high liquidity, and present European reform initiatives could fail in their purpose. This appears to be a serious prospect: If substantial private benefits remain available, why should a blockholder give up its privileged position? But a tougher reform package that constrains self-dealing transactions gives rise to the converse question: Assuming (a) that a new regime that discourages blockholding by regulating both self-dealing and insider trading and (b) that blockholder monitoring does import benefits and an MBCS should be the objective, how can it be assured that a single, optimally-sized block will remain in place in each firm? Unless some private benefits are reserved for this remaining blockholder, it remains in the same posture as the selling blockholders. In other words, the free-rider problem shows up at exactly the same point where it presently determines results in market systems.

C. Implications for the United States

We return to the corporate law system of the United States to offer a new view as to the message held out by corporate governance comparison. Certainly, there emerges no template for public-regarding delegated monitoring, as observers once hoped to find. We reserve on the assertion of market system superiority, now sounded so widely. But we have a comment. We wonder whether triumphal cries of market superiority heard from American observers reacting to the distress in Asia could prove closely tied to transient stock market averages and turns of business cycles. We instead perceive a warning from comparative governance.

The comparative exercise teaches again the old lesson that markets are only as deep as their legal foundations. Market systems have been built on foundations that compel transparency, prohibit insider trading, and police self-dealing. Yet legal mandates that support these foundations have been questioned in the United States in recent years, with the questions

following from the idea that deregulation means freer markets.¹⁰³ The comparison can be seen as a reproach to this line of reasoning. From this point of view, markets and legal investor protections go together in the real world. Where protections are absent, one-sided deals flourish and outside equity capital either becomes more expensive or dries up altogether.¹⁰⁴ Of course, the comparison also shows us that self-dealing can have incidental productive benefits when leavened with relational engagement. It can even be built into a system that is equally competitively fit. But the system that results is materially different from ours.¹⁰⁵

Furthermore, a nominally mandatory, market-protective legal system such as ours can be captured by the special interests that operate within. It can be manipulated for their benefit without simultaneous provision of processes adequate to facilitate corrective self-help by the injured interests. This is precisely what has happened in American corporate law during the past two decades. Management capture of the state-based system has led to anti-takeover regulations and enervated fiduciary rules, without provision of processes adequate to facilitate contractual adjustment by shareholders. Politics do matter, and as the Chicago School likes to remind us, it is not safe to assume that invulnerability follows automatically from the system's evolutionary survival.

So whenever someone suggests that we unwind one of our system's legal supports, we need to ask whether we want to do so at the risk of pushing the system in the direction of a market-blockholder tipping point. Across that line, private benefit provision is so liberal as to make blockholding the only rational systemic alternative. The question, by virtue of its very existence, materially increases the burden on the deregulatory proponent.

103 See, e.g., Roberta Romano, *The Genius of American Corporate Law* 85-101 (1993) (arguing against the mandatory disclosure system).

104 See Simon Johnson et al., *Tunneling*, at <http://papers.ssrn.com/paper.tatabstract>.

105 A contrasting point of view also must be noted. Under this view, the comparison indirectly supports the case for removal of mandates and substitution of universal default rules. By highlighting the essential nature of legal supports, it shows that corporate actors in market systems, if left to their own devices, simply would recreate the mandatory system on a contractual basis. The proponent then alludes to enhanced possibilities for healthy innovation and concludes this to be the more productive approach. The problem with this story is that it assumes effective process rules respecting corporate decision-making. Such rules do not obtain in the real world.