

Economic Analysis of Corporate Law

David Gindis^a and Martin Petrin^b

^a University of Hertfordshire, UK

^b University College London, UK & Western University, Canada

DEFINITION

The economic analysis of corporate law applies the concepts and tools of microeconomics to the study of the legal rules, regulations and practices that govern the formation and operation of business corporations, most notably as regards the rights and duties of directors, officers, shareholders, and creditors. The literature has focused mostly on publicly-traded corporations, but the analytical framework extends to the simpler cases of close corporations and limited liability companies and the more complex case of corporate groups.

FOUNDATIONS

Virtually all significant, large-scale business enterprises around the world are organized as corporations. Given the existence of alternative legal forms business organizers might adopt, the dominance of the corporate form suggests that it offers them some comparative advantages. The basic legal characteristics of corporations – legal personality, limited liability, transferable shares, delegated

management under a board structure, and investor ownership (Armour et al. 2017) – must be uniquely effective in reducing the costs arising from the organization of productive and commercial activities.

One purpose of the economic analysis of corporate law is to assess the nature and origins of these relative benefits. Another is to weigh the costs and benefits of specific existing or proposed corporate law provisions. Still another is to explain the economic forces shaping the evolution of corporate law through time and across geographical space. When Henry Manne (1967) called for a research program into these questions, few tools were available for the task. Since the early 1970s, advances in the theory of the firm, financial economics, the economics of regulation and other areas of applied microeconomics have supplied the requisite tools. The view of the firm as a contractual nexus is particularly important for the economic analysis of corporate law.

The theory of the firm builds on the insight that firms emerge to economize on transaction costs (Coase 1937). These costs are reduced when the complex set of multilateral contracts between resource owners that would be required to organize production in markets is replaced by a much simpler set of bilateral contracts between each resource owner and a common central party or agent. The central agent is the entrepreneur in a sole proprietorship and the owner-manager in the capitalist firm (Alchian and Demsetz 1972). In the case of the corporation, the central agent is the legal fiction of the separate legal person that serves as a nexus for a set of contracting relations among individuals (Jensen and Meckling 1976).

An enterprise is only worth pursuing if the output value is large enough to cover the costs of managing the firm (Milgrom and Roberts 1992; Ricketts 2002). In any firm involving more than one agent with conflicting interests, management costs arise from the difficulty of correlating efforts and rewards, given that effort is private information that may be costly to detect. Agents realizing that their efforts can be reduced without a proportional income loss have an incentive to shirk and free-ride on others' efforts (Holmström 1982). Significant management costs also arise from the need to elicit specific investments by agents whose commitment needs to be secured in the face of potential expropriation by other agents (Williamson 1985).

Both underinvestment problems may be mitigated by incentive-aligning contractual arrangements. These are designed and policed by the entrepreneur in a sole proprietorship and the owner-manager in the capitalist firm. In a corporation, top management – broadly defined to include directors and officers – acts as if it were the central agent, designing and policing the contracts with employees and other parties. But managers must themselves be incentivized to act on behalf of the corporation's owners, whose delegated powers they exercise. The agency problem associated with the separation of ownership and control, whereby decisions directly impacting the firm's survival are made by agents who bear little or no share of the resulting wealth effects, was noted by Adam Smith and many others since (e.g. Fama 1980; Fama and Jensen 1983).

Where the owners' monitoring costs are high and the adverse consequences of managerial discretion severe, as would be the case if managers were shirking

their duties or diverting corporate resources for personal gain, contracts will tend to include some sort of profit-sharing scheme (recently, this has often involved stock-options). While this reduces the conflict of interest by making managers bear some of the residual risk (Jensen and Murphy 1990), agency costs are never quite zero. Some of the joint output value will necessarily be foregone, at the expense of the corporation's investor-owners, who may use their residual control rights (Hansmann 1988) to terminate the managers' contracts.

Managers can moreover be replaced thanks to the operation of the market for corporate control (Manne 1965). To the extent that the market price of a corporation's shares reflects managerial efficiency, a decline in its price relative to others in the industry signals managerial underperformance, making it an attractive takeover target for investors who believe they can restore efficiency by replacing the incumbent management team. Whether effected through a proxy fight, a direct purchase of shares or a merger, takeovers, and indeed their very threat, can be powerful checks on managerial discretion. By maximizing the benefits of a takeover to investors, the one share-one vote rule further encourages the selection of efficient management teams (Grossman and Hart 1988).

CLASSIC ECONOMICS OF CORPORATE LAW

The theory of the firm outlined above does not explain why most large firms are organized as corporations. The classic answer is that firms in which labor is the primary input are organized as sole proprietorships or partnerships, while firms

needing to raise substantial amounts of capital from large numbers of investors are organized as corporations (Posner 1973). To function as an effective capital-raising device, the corporation offers diversified investors a return that does not require personal oversight of the activities of any one firm in their portfolios, as well as a low-cost exit option. Share tradeability and the delegation of the organization of the corporation's activities to a board of directors are thus desirable implications of the separation of ownership and control.

The efficient separation of managerial and risk-bearing functions is also enhanced by limited investor liability, which distinguishes corporations from traditional (or general) partnerships, in which partners are personally liability for the partnership's debts. This deters risk-averse investors, as do potentially high exit costs (associated for example with the buyout option) and the possibility of the partnership's dissolution in the event of a partner's death. While contractual provisions may mitigate such risks, the transaction costs of negotiating limitations on liability in every partnership contract with creditors, suppliers, and customers will be high. The corporate form resolves these problems: its perpetual existence removes the need for costly negotiated solutions to the problems of exit and dissolution.

Corporate law serves a transaction cost-economizing function by supplying a set of off-the-rack terms specifying the rights and duties of directors, officers, shareholders, and creditors (Easterbrook and Fischel 1991). The fiduciary duties of directors, for example, approximate the bargains that principals and agents would have reached had the bargaining and enforcement costs been sufficiently

low (Easterbrook and Fischel 1993). Corporate law works like a standard-form contract, in which boilerplate, non-negotiated provisions anticipate the parties' needs (Klein 1982; Butler 1989; Macey 1993). It further enables business ventures to adapt to diverse and changing circumstances by allowing for most default terms to be altered, such that firm-specific governance structures may be evolved.

That good corporate law approximates hypothetical bargains while giving effect to express agreements follows from the conception of the corporation as a set of contracts, which also implies that courts should employ the same logic if they are to protect principals from their agents. Given contractual incompleteness, in cases of disputes arising from unforeseen contingencies, courts play a gap-filling role by supplying the wealth-maximizing terms the parties would have agreed to had they addressed them explicitly. Even for foreseeable contingencies, it may be cheaper for courts to draft the contractual terms necessary to deal with them, if and when they arise. This division of labor between contracting parties, legislatures and courts maximizes returns to investors.

Some have objected that it is impossible to opt out of provisions covering a broad range of issues, including director elections, dividend payments, disclosure requirements, derivative litigation, and liquidation (Gordon 1989), and that mandatory rules exist to protect the parties otherwise severely disadvantaged by information or power asymmetries (Eisenberg 1989). Others have countered that corporate law's mandatory rules are trivial, in the sense that they would have been universally adopted by contract had the parties thought about them (Black 1990).

In any event, of course, corporate law rules are to some avoidable, given jurisdictional competition and the possibility of regulatory arbitrage.

Tiebout sorting in the market for corporate law, whereby firms reveal their preference for particular bundles of corporate law rules and complementary public goods, such as judicial expertise and a well-developed body of case law (Winter 1977; Baysinger and Butler 1985), is a significant driver of the evolution of corporate law. This explains why most US state corporate law tends to replicate Delaware's General Corporation Law (Romano 1993; Daines 2001; O'Hara and Ribstein 2009) and may also apply to the convergence debate beyond the US (Hansmann and Kraakman 2001). However, there are good reasons to believe that different initial conditions produce divergent path-dependent trajectories, and that multiple equilibria and persistent divergence are possible and likely (Heine & Kerber 2002; Carbonara and Parisi 2009; von Wangenheim 2018; Gordon 2018).

RECENT FUNCTIONAL APPROACHES

The classic view is that corporate law specifies the rights and duties of directors, officers, shareholders, and creditors in order to obviate the need for costly bargaining between the parties involved. All corporate features could have been achieved by contractual arrangement but only at a greater cost. By contrast, recent research suggests that the pattern of creditor rights associated with the corporate form is rooted in property law and cannot be created by private contract alone (Hansmann and Kraakman 2000; Armour and Whincop 2007). The essential

function of corporate law, and organizational law more generally, is that it partitions assets and liabilities in a manner that enables firms to operate.

A firm can serve effectively as a nexus for contracts with creditors, suppliers, customers, and other parties if its central agent has both the authority to design and police the contracts in question and the ability to bond its contractual and financial commitments (Armour et al. 2017). The central agent must have control over a pool of assets that provides credible security to a fluctuating group of creditors, which implies that the firm must have an asset pool which is distinct from the personal assets of its managers or owners, against which creditors may enforce their claims in court. The firm, in sum, needs to be a separate legal person or legal entity with a capacity for property, contract and litigation (Iacobucci and Triantis 2006; Gindis 2016).

A key dimension of the separation of business from personal assets is the extent to which the former are shielded from the personal creditors of the firm's owners. At the very least, this requires an arrangement where business creditors have priority over personal creditors. To achieve this by contract even in the simplest of firms, an entrepreneur would need to secure the consent of present and future personal creditors to subordinate their claims to those of present and future business creditors, who would need to agree to limit their claims to some specified subset of the entrepreneur's assets. Such a complex set of agreements would likely never be reached, not because of prohibitive transaction costs, but because neither category of creditor has any reason to agree to such terms.

This inability to separate business from personal assets and liabilities makes it difficult to distinguish legally sole proprietorships from natural persons. It also limits the significance of such a firm's contractual and financial commitments. Matters change considerably when an entrepreneur forms and becomes the sole shareholder of a business corporation or a limited liability company. While both legal entities come with a set of default terms, many of which may be waivable, the business creditor priority rule is mandatory and essential. Its purpose is not merely to protect some vulnerable parties, but to create the sort of asset partitioning without which significant firms are unable to operate (Hansmann and Kraakman 2000).

The separation between business and personal assets is a feature of partnerships law, which provides that in the event of the firm's insolvency the claims of the partners' personal creditors are subordinated to those of business creditors. Functionally, this makes the partnership a legal entity, even in jurisdictions (such as the UK) where lawyers point out that partnerships lack legal personality. Partnerships, however, do not enjoy the additional benefit of liquidation protection, which prevents owners of corporations (or limited liability companies) from withdrawing all or part of their equity share and stops their personal creditors from forcing a payout from the corporate assets (Hansmann et al. 2006).

This stronger form of shielding protects the firm's going concern value by barring opportunistic individual owners from threatening to withdraw some corporate assets in order to extract a higher share of the surplus. In turn, this

improves the incentives of employees, suppliers, and other parties that are required to make the long-term, firm-specific investments that maximize the joint surplus value (Blair and Stout 1999; Stout 2005). By delegating control over the assets used in the specialization process to an independent board of directors bound by a duty of loyalty and a duty of care, investors in effect help bring about this result while retaining their low-cost exit option. Historically, this arrangement has served investors well (Blair 2003).

SPECIFIC ISSUES

While the partitioning of assets and liabilities identified in recent functional approaches is undoubtedly important, it is neither entirely complete nor entirely unproblematic. Shareholders, for example, may still be personally liable toward a corporation's creditors where they themselves are involved in harmful activities or the corporate veil is pierced. But shareholders may use complex corporate group structures to reduce their potential vulnerability. As for directors and officers, who may be personally liable for breaches of fiduciary duties, corporate law and court practices limit their exposure in a number of ways.

Limited Liability

The limitation of investors' personal exposure for corporate debts and liabilities to the extent of their equity investment is generally considered to be welfare-

maximizing for society (Halpern et al. 1980; Easterbrook and Fischel 1985; Bainbridge and Henderson 2016). Yet limited liability may impose costs on involuntary creditors, particularly tort victims, who unlike voluntary creditors are unable to undertake ex ante due diligence and negotiate protections. Furthermore, limited liability can externalize the costs of risky behavior onto third parties or the public if a corporation's assets are insufficient to cover them (Alexander 1992; Millon, 2007).

Such moral hazard problems are potentially compounded within the corporate group or parent-subsidary context, in which assets and liabilities may be partitioned such that the parent company holds the bulk of the assets while thinly capitalized subsidiaries undertake risky operations potentially resulting in corporate torts. The limited liability of the parent company incentivizes subsidiaries to underspend on accident-avoiding precautions and overspend on hazardous activities. This has led some to argue that limited liability should not be applied, or should be applied but not with the same force, in the intra-group context (Blumberg 1986; Hansmann and Kraakman 1991; Bainbridge 2001).

It is easier for parent companies to monitor and manage subsidiaries than it is for individual shareholders. Furthermore, allowing creditors to reach the assets of parent companies does not create unlimited liability for investors, with the implication that for them the benefits of diversification, liquidity and monitoring by the capital market would be unaffected if limited liability were abolished for corporate shareholders. The emerging trend to broaden the liability of corporate parents' toward third parties that have suffered tortious loss due to a subsidiary's

conduct suggests that courts seem increasingly inclined to accept this logic (Petrin and Choudhury 2018).

Managerial Liability

Shareholders can bring derivative suits against directors and officers for breach of fiduciary duties. Such private enforcement can serve as an ex ante deterrence and ex post compensation mechanism (Cox 1984), but only if frivolous suits are discouraged without closing the door to legitimate actions. There are good reasons to doubt that such a balance is easy to achieve. Collective action problems, arising from the fact that litigating shareholders bear all the costs but capture only a fraction of the benefits, limit the prospects of legitimate claims, while rent-seeking behavior by investors and their entrepreneurial lawyers increases the chances of frivolous suits (Romano 1991; Winter 1993; Cox and Thomas 2009; Coffee 2015).

For these reasons, corporate law contains various tools that limit, to a greater or lesser extent, managers' personal liability. Particularly strong protections for managers are available under the law of Delaware. Charter provisions that exclude or limit directors' personal liability have become so pronounced and widely implemented that the prospect of a lawsuit for breach of fiduciary breaches has lost much of its deterrent effect, and compensation has become unlikely. Delaware's position rests on the idea that the possibility of (unmitigated) personal liability can cause managers to be more risk-averse than the interest of diversified shareholders justifies.

Delaware courts are likewise reluctant to impose liability that could result in managers failing to take on the appropriate or healthy levels of business risks or overinvest in safety measures. Judges typically apply the business judgment rule, which is to say that they abstain from substituting their own business judgment for that of the more knowledgeable directors whose decisions shareholders have challenged. This respects the board's primacy and preserves its ability to engage in decision-making that ultimately benefits shareholders (Bainbridge 2004). The transplantation of the business judgment rule outside the US has produced notable variations (Guerrea-Martínez 2018).

Takeovers

The limited capacity of shareholder litigation to curb agency costs may lead shareholders to resort to alternative enforcement mechanisms. One such alternative is the hostile (or unsolicited) takeover, which raises the question of whether boards ought to be allowed to employ defensive tactics without explicit shareholder approval (Grossman and Hart 1980; Haddock et al. 1987; Choi et al. 1989). Some argue that managers' ability to do so should be limited or excluded altogether, given the efficiency-restoring properties of the market for corporate control (Gilson 1981; Easterbrook and Fischel 1981). The UK, where boards are generally unable to frustrate takeovers without shareholders' consent, follows this approach.

Delaware courts, by contrast, give boards significant leeway to deploy justifiable antitakeover tactics. For example, poison pill strategies raising takeover

costs and creating other disincentives for potential bidders, for a limited period of time at least, may help boards inform shareholders about the bid and protect them from inadequate, coercive or otherwise unsuitable bids, including offers that undervalue the company or fail to outline a viable long-term strategy. The jury is still out on whether the board's stalling tactics also enhance its bargaining position, maximizing the value of the friendly offers ultimately accepted (Bebchuk 2002; Kahan and Rock 2003; Subramanian 2013).

CONCLUDING COMMENTS

Viewing the corporation as a nexus of contracts draws attention to the voluntary agreements struck by the parties involved and suggests that the role of corporate law is to enable and support private ordering. The classic approach holds that all the characteristics of the corporation and corporate law provisions pertaining to the rights and duties of directors, officers, shareholders, and creditors could and would have been reached by private contract had the bargaining and enforcement costs been sufficiently low. More recent approaches, by contrast, propose that the asset partitioning rules of corporate law (and organizational law more broadly) play an essential role that could not have been established by contract alone.

While the two approaches offer somewhat different answers to such fundamental questions as the nature of the corporation, the functions of corporate law and the mechanisms of its evolution, both strands of the literature draw heavily on developments in relevant areas of applied microeconomics and share a

commitment to the method of comparative institutional analysis. Inevitably, the assessment of the costs and benefits of alternative existing or proposed corporate law rules extends to contiguous areas, such as securities regulation, accounting practices, and corporate governance.

Unlike other subfields of the law and economics genre, much of the literature on the economic analysis of corporate law has appeared in law reviews, without the kind of mathematical formalism typical, for example, of the economic analysis of contract, crime or litigation. Perhaps for this reason, the economic analysis of corporate law has had a particularly profound impact on legal scholarship. It has provoked a genuine paradigm shift among academic corporate lawyers (Cheffins 2004) and has strongly influenced the trajectory of corporate governance regulation around the world.

REFERENCES

- Alchian AA, Demsetz H (1972) Production, Information Costs and Economic Organization. *Am Econ Rev* 62(5): 777-795.
- Alexander JC (1992) Unlimited Shareholder Liability Through a Procedural Lens. *Harvard L Rev* 106(2): 387-445.
- Armour J, Whincop MJ (2007) *The Proprietary Foundations of Corporate Law*. Oxford J Legal Stud 27(3): 429-465.
- Armour J, Hansmann H, Kraakman R, Pargendler M (2017) What Is Corporate Law? In: Kaakman R et al. (Eds) *The Anatomy of Corporate Law: A*

- Comparative and Functional Approach, 3rd ed. Oxford University Press,
New York, pp.1-28.
- Bainbridge SM (2001) Abolishing Veil Piercing. *J Corp Law* 26(3): 479-535.
- Bainbridge SM (2004) The Business Judgment Rule as Abstention Doctrine,
Vand L Rev 57(1): 83-130.
- Bainbridge SM, Henderson MT (2016) *Limited Liability: A Legal and Economic
Analysis*. Edward Elgar, Cheltenham.
- Baysinger BD, Butler HN (1985) The Role of Corporate Law in the Theory of the
Firm. *J Law Econ* 28(1): 179-191.
- Bebchuk LA (2002) The Case against Board Veto in Corporate Takeovers. *U Chi
L Rev* 69(3): 973-1035.
- Black BS (1990) Is Corporate Law Trivial? A Political and Economic Analysis.
Nw U L Rev 84(2): 542-597.
- Blair MM (2003) Locking in Capital: What Corporate Law Achieved for Business
Organizers in the Nineteenth Century, *UCLA L Rev* 51(2): 387-455.
- Blair MM, Stout LA (1999) A Team Production Theory of Corporate Law. *Va L
Rev* 85(2): 247-328.
- Blumberg PI (1986) Limited Liability and Corporate Groups. *J Corp L* 11(4):
574-631.
- Butler HN (1989) The Contractual Theory of the Corporation. *Geo Mason U L
Rev* 11(4): 99-123.
- Carbonara E, Parisi F (2009) Choice of Law and Legal Evolution: Rethinking the
Market for Legal Rules. *Public Choice* 139(3-4): 461-492.
- Cheffins B (2004) The Trajectory of (Corporate Law) Scholarship. *Cam L J*
63(2): 456-506.
- Choi D, Kamma S, Weintrop J (1989) The Delaware Courts, Poison Pills and
Shareholder Value. *J Law Econ Org* 5(2): 375-393.
- Coase RH (1937) The Nature of the Firm, *Economica* 4(16): 386-405.
- Coffee JC (2015) *Entrepreneurial Litigation: Its Rise, Fall and Future*. Cambridge,
MA: Cambridge University Press.

- Cox JD (1984) Compensation, Deterrence and the Market as Boundaries for Derivative Suit Procedures, *Geo Wash L Rev* 52(4-5): 745-788.
- Cox JD, Thomas RS (2009) Curbing Managerial Agency Costs: Private Litigation and Its Substitutes in the US. In: Huang RH, Howson NC (Eds) *Enforcement Corporate and Securities Law*. Cambridge University Press, Cambridge, pp.221-240.
- Daines RD (2001) Does Delaware Law Improve Firm Value? *J Fin Econ* 62(3): 525-558.
- Easterbrook FH, Fischel DR (1981) The Proper Role of a Target's Management in Responding to a Tender Offer. *Harvard L Rev* 94(6): 1161-1204.
- Easterbrook FH, Fischel DR (1985) Limited Liability and the Corporation. *U Chi L Rev* 52(1): 89-117.
- Easterbrook FH, Fischel DR (1991) *The Economic Structure of Corporate Law*. Harvard University Press, Cambridge.
- Easterbrook FH, Fischel DR (1993) Contract and Fiduciary Duty. *J Law Econ* 36(1): 425-446.
- Eisenberg MA (1989) The Structure of Corporate Law. *Colum L Rev* 89(7): 1461-1525.
- Fama EF (1980) Agency Problems and the Theory of the Firm. *J Pol Econ* 88(2): 288-307.
- Fama EF, Jensen MC (1983) Separation of Ownership and Control. *J Law Econ* 26(2): 301-325.
- Gilson RJ (1981) A Structural Approach to Corporations: The Case against Defensive Tactics in Tender Offers. *Stan L Rev* 33(5): 819-891.
- Gindis D (2016) Legal Personhood and the Firm: Avoiding Anthropomorphism and Equivocation. *J Inst Econ* 12(3): 499-513.
- Gordon JN (1989) The Mandatory Structure of Corporate Law. *Colum L Rev* 89(7): 1549-1598.
- Gordon JN (2018) Convergence and Persistence in Corporate Law and Governance. In: Gordon JN, Ringe WG (Eds) *The Oxford Handbook of*

Corporate Law and Governance. Oxford University Press, New York, pp. 28-55.

- Grossman S, Hart OD (1980) Takeover Bids, the Free-Rider Problem and the Theory of the Corporation. *Bell J Econ* 11(1): 42-64.
- Grossman S, Hart OD (1988) One Share-One Vote and the Market for Corporate Control. *J Fin Econ* 20: 175-202.
- Guerrea-Martínez A (2018) Re-Examining the Law and Economics of the Business Judgment Rule: Notes for Its Implementation in Non-US Jurisdictions. *J Corp L Stud* 18(2): 417-438.
- Haddock D, Macey JR, McChesney, FS (1987) Property Rights in Assets and Resistance to Tender Offers, *Va L Rev* 73(4): 701-746.
- Halpern P, Trebilcock M, Turnbull S (1980) An Economic Analysis of Limited Liability in Corporation Law, *U Toronto L J* 30(2): 117-150.
- Hansmann H (1988) Ownership of the Firm. *J Law Econ Org* 4(2): 267-304.
- Hansmann H, Kraakman R (1991) Toward Unlimited Shareholder Liability for Corporate Torts. *Yale L J* 100(7): 1879-1934.
- Hansmann H, Kraakman R (2000) The Essential Role of Organizational Law, *Yale L J* 110(3): 387-440.
- Hansmann H, Kraakman R (2001) The End of History of Corporate Law. *Geo L J* 89(2): 439-468.
- Hansmann H, Kraakman R, Squire R (2006) Law and the Rise of the Firm, *Harvard L Rev* 119(5): 1333-1403.
- Heine K, Kerber W (2002) European Corporate Laws, Regulatory Competition and Path Dependence. *Eur J Law Econ* 13(1): 37-71.
- Holmström B (1982) Moral Hazard in Teams. *Bell J Econ* 13(2): 324-340.
- Iacobucci EM, Triantis GG (2007) Economic and Legal Boundaries of the Firm. *Va L Rev* 93(3): 515-570.
- Jensen MC, Meckling MH (1976) Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure. *J Fin Econ* 3(4): 305-360.
- Jensen MC, Murphy KJ (1990) Performance Pay and Top-Management Incentives. *J Pol Econ* 98(2): 225-264.

- Kahan M, Rock EB (2003) Corporate Constitutionalism: Antitakeover Charter Provisions as Pre-Commitment. *U Pa L Rev* 152(2): 473-522.
- Klein WA (1982) The Modern Business Corporation: Bargaining under Constraints. *Yale L J* 91(8): 1521-1564.
- Macey JR (1993) Corporate Law and Corporate Governance: A Contractual Perspective. *J Corp L* 18(2): 185-211.
- Manne HG (1965) Mergers and the Market for Corporate Control, *J Pol Econ* 73(2): 110-120.
- Manne HG (1967) Our Two Corporate Systems: Law and Economics. *Va L Rev* 53(2): 259-284.
- Milgrom P, Roberts J (1992) *Economics, Organization and Management*. Prentice Hall, Englewood Cliffs, NJ.
- Millon D (2007) Piercing the Corporate Veil, Financial Responsibility and the Limits of Limited Liability. *Emory L J* 56(5): 1305-
- O'Hara EA, Ribstein LE (2009) *The Law Market*. Oxford University Press, New York.
- Petrin M, Choudhury B (2018) Group Company Liability, *Eur Bus Org L Rev* 19(4): 771-796.
- Posner RA (1973) *Economic Analysis of Law*. Little, Brown & Co., Boston.
- Ricketts M (2002) *The Economics of Business Enterprise: An Introduction to Economic Organisation and the Theory of the Firm*. 3rd ed., Edward Elgar, Cheltenham.
- Romano R (1991) The Shareholder Suit: Litigation without Foundation? *J Law Econ Org* 7(1): 55-87.
- Romano R (1993) *The Genius of American Corporate Law*. AEI Press, Washington, DC.
- Stout LA (2005) On the Nature of Corporations, *U Ill L Rev* 2005(1): 253-267.
- Subramanian G (2013) Bargaining in the Shadow of Takeover Defences, *Yale L J* 113(3): 621-686.

- Von Wangenheim G (2018) Evolutionary Law and Economics. In: Parisi F (Ed) *The Oxford Handbook of Law and Economics, Vol 1: Methodology and Concepts*. Oxford University Press, New York, pp.161-180.
- Williamson OE (1985) *Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. Free Press, New York.
- Winter RK (1977) State Law, Shareholder Protection and the Theory of the Corporation. *J Legal Stud* 6(2): 251-292.
- Winter RK (1993) Paying Lawyers, Empowering Prosecutors and Protecting Managers: Raising the Cost of Capital in America. *Duke L J* 42(5): 945-978.