Specific Investment: Explaining Anomalies in Corporate Law

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ABSTRACT ............................................................................................................. 719
I. INTRODUCTION .................................................................................................. 720
II. KUHN AND THE STRUCTURE OF INTELLECTUAL PROGRESS ......................... 721
III. CLARK AND THE STRUCTURE OF CORPORATE LAW .................................... 723
   A. Directors are Not “Agents” ......................................................................... 726
   B. Shareholders Cannot Demand Dividends (and so Cannot be Sole Residual
      Claimants) .................................................................................................. 728
   C. “Legal Personality” is a Key Feature of Corporations .................................. 729
   D. Corporate Law Does Not Require Shareholder Wealth Maximization .......... 731
IV. EXPLAINING ANOMALIES: ON SPECIFIC INVESTMENT, CAPITAL LOCK-IN, AND
   TEAM PRODUCTION ..................................................................................... 732
   A. Directors are Not Agents But “Mediating Hierarchs” Who Protect Specific
      Investment in Corporations and Distribute the Returns from that Investment .. 737
   B. Many Different Groups Make Specific Investments in Corporations and are
      Potential Residual Claimants ........................................................................ 738
   C. The Concept of “Legal Personality” Plays an Important Economic Role in
      Protecting Specific Investment ...................................................................... 739
   D. Corporate Law Leaves Corporate Purpose Open to Protect Directors’ Role
      as Mediating Hierarchs ................................................................................. 740
V. CONCLUSION ...................................................................................................... 742

ABSTRACT

This Article has two goals: to praise Professor Robert Clark as a remarkable corporate scholar, and to explore how his work has helped to advance our understanding of corporations and corporate law. Clark wrote his classic treatise at a time when

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corporate scholarship was dominated by a principal-agent paradigm that viewed shareholders as the principals or sole residual claimants in public corporations and treated directors as shareholders' agents. This view naturally led contemporary scholars to believe that the chief economic problem of interest in corporate law was the "agency cost" problem of getting corporate directors to do what shareholders wanted them to do (presumably, to maximize share value). Clark's treatise in some ways adopted this perspective. It also, however, carefully noted important but anomalous aspects of corporate law that the principal-agent model could not explain, including directors' extensive and *sui generis* legal powers, the fact that directors control dividends, the device of legal personality, and the open-ended rules of corporate purpose.

Today, economic and legal scholars have begun to move beyond agency costs and to focus attention on a second economic problem that arises in public corporations: protecting specific investment. When corporate production requires more than one individual or group to make specific investments, problems of intrafirm opportunism arise as shareholders try to exploit each other and try as well to exploit creditors, employees, customers, and other groups that make specific investments. Board authority, while worsening agency costs, may provide a second-best solution to such intrafirm rent-seeking. This perspective can explain the important corporate law anomalies Clark described.

Because Clark wrote his treatise at a time when the principal-agent paradigm was ascendant, he could not himself easily explain the anomalies he carefully noted. His treatise nevertheless showed both remarkable insight and remarkable honesty in discussing them. As a result, Clark played an important role in drawing scholarly attention to the limitations of the principal-agent model and in spurring theorists to explore alternatives. His treatise remains one of the best available starting points for the reader who wants an accurate portrait of the structure of corporate law.

### I. INTRODUCTION

What is a business corporation? What purposes does and should it serve? These questions have been raised repeatedly by legal scholars, practitioners, and policymakers for at least the last 150 years. Each generation has struggled to find acceptable answers.

Two decades ago, in 1986, Professor Robert Clark published a wonderful book addressing these subjects. Clark's book is as clear and readable as an introductory textbook, as carefully articulated as a technical treatise, and as wide-ranging and observant as an anthology of essays from the most experienced observers in the field. It is also a work of remarkable wisdom and intellectual autonomy.

Professor Clark published his treatise at a time when the "law and economics" movement was washing over the legal landscape, dramatically changing discourse in fields from antitrust to family law, from property to torts. Yet to a notable extent Clark avoided being carried away by the tide. While his book acknowledged and selectively employed certain law and economics tools, Clark clearly positioned himself apart from many of the perspectives that were being adopted and arguments that were being made at the time, perspectives and arguments that came to dominate corporate law scholarship.

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1. **ROBERT CLARK, CORPORATE LAW (1986).**
only a few years after Clark's book was published.

As a result, far from seeming quaint or outdated, today Clark's book seems fresh and new, in many ways more consistent with the most current thinking on corporations than many essays and articles of more recent vintage. In this Article we explore why. We suggest that Clark's treatise offers an object lesson in the nature of intellectual progress and the forces that both impel and obstruct humankind's pursuit of a better understanding of the world. In the process we offer an encomium to Professor Clark himself, as an individual who embodies the attributes that make up what academics call, simply and admiringly, a true scholar.

II. KUHN AND THE STRUCTURE OF INTELLECTUAL PROGRESS

The world is a complicated and confusing place. Each day it bombards us with information that is often puzzling, ambiguous, incomplete, easily misread, and even apparently contradictory. Somehow, we must do our best to find meaning in the barrage of data.

Thomas Kuhn offers a fascinating account of how we do this in his classic and much-cited work The Structure of Scientific Revolutions. According to Kuhn, one of the ways we make sense of the world is to develop mental models about the way it works and theories about how certain causes lead to certain effects. For example, at different times people have believed that infectious disease was caused by witches, night air, and microbes.

Kuhn labeled these mental models or hypotheses "paradigms." According to Kuhn, once a society or culture has embraced a particular paradigm as a way to explain a particular phenomenon, most of the individuals in that society will cling to the paradigm with remarkable tenacity. They will believe the paradigm to be a true and accurate description of the world even in the face of significant "anomalies"—empirical phenomena that cannot be explained by, or that are even inconsistent with, the paradigm. Rather than reconsidering the paradigm, they will overlook, dismiss as unimportant, or attempt to explain away the anomalies.

At some point, however, the anomalies may come to seem so obvious and so troubling that a few individuals take them seriously and begin studying them. These individuals may develop a new theory that explains the anomalies and is an alternative paradigm of the world that does a better job of predicting what we see in it. Often their ideas will be resisted by those who follow the original paradigm. Yet if the new paradigm does a better job than the old one of predicting what we actually observe, it will eventually win hearts and minds and be accepted as correct. The old paradigm will come to be viewed as incomplete and outdated or a partial explanation at best.

During the 16th century, for example, many Europeans believed the sun revolved around the earth. This theory did a nice job of explaining why the sun appeared to rise in the East each morning and set over the western horizon each evening, but it could not explain the movements of the planets in the night sky. The Italian astronomer Galileo advanced an alternative model of a heliocentric universe that predicted not only the sun's movements, but those of the planets as well. Not everyone appreciated Galileo's ideas at

the time—he was investigated by the Inquisition and placed under house arrest for heresy—but today most educated people believe the earth does indeed circle around the sun rather than the other way around.3

Clark published his treatise at a time when corporate law was dominated by a particularly powerful paradigm about the nature and purpose of corporations that is often called the "principal-agent" model. This paradigm teaches that the concept of a corporate personality is not something to be taken seriously. Rather, a corporation is best understood as a "nexus" of private contracts. Chief among these contracts is the contract between the shareholders of the firm (often described as the "principals" or "owners" of the firm) and the directors and executive officers (usually described as the shareholders' "agents"). The principal-agent model envisions this contract as an agreement that the directors and executives will run the firm in a fashion that maximizes the shareholders' wealth.

The principal-agent model maintained a firm grip on corporate law scholarship throughout the 1980s and 1990s, and many influential academics still employ the model today. Writing twenty years ago, however, Professor Clark raised some doubts. In particular, Clark's treatise carefully and correctly noted several fundamental features of corporate law that cannot be adequately explained by the principal-agent approach, and that in some cases seem to contradict it. In Part II of this Article, we explore how Clark's treatise insightfully discussed these "anomalies."

While Clark carefully detailed the many ways in which the principal-agent model failed to describe corporate law, in some respects his treatise tried to incorporate the lessons of the principal-agent framework. For example, while noting that corporate law fails to require corporate directors to maximize shareholder wealth, Clark expressed the view (consistent with the principal-agent model) that shareholder wealth maximization ought to be the desideratum. Clark's uneasy embrace of shareholder wealth maximization as the corporate goal serves as a useful example of another of Kuhn's observations: intellectual progress sometimes must await the arrival of new tools and technologies. The hypothesis that infectious diseases are caused by microbes rather than witches or night air, for example, could not gain traction and widespread acceptance until the invention of the microscope, a technology that confirmed the existence of microbes by allowing scientists to observe them directly. Similarly, in corporate law, until quite recently, scholars lacked the theoretical tools necessary to explain the anomalies so carefully noted in Clark's treatise.

By the 1980s and 1990s, economic theorists had developed a substantial literature analyzing the conflicts of interest that often arise between principals and agents. Because this principal-agent literature was the primary intellectual tool available to business scholars, they naturally tended to apply it liberally interpret or assess many aspects of the corporate form. As the saying goes, when your only tool is a hammer, every problem tends to look like a nail.

More recently, contemporary economic and legal scholars have begun to explore

3. Kuhn's book suggests humankind is a long way from completely understanding the universe, and in this sense all paradigms are to some extent social constructions and none are entirely "correct." Kuhn nevertheless clearly believes some paradigms are better than others at predicting real phenomena. Microbes are a better explanation for disease than witches, and it is more correct to say the earth revolves around the sun than vice versa. Id.
and write on a second economic problem that is important to understanding the corporate form. This is known as the problem of protecting and encouraging what economic theorists call "specific" investments—specialized resources that achieve their highest value only when they are used in a particular process or project. The developing literature on the problem of fostering specific investment has created new theoretical tools that offer fresh insights into some of the old puzzles and anomalies in corporate law, including puzzles and anomalies noted by Clark.

Part IV explores in particular how two of the new ideas being developed on specific investment—work on specific investment in team production and the emerging concept of capital lock-in (ideas we have explored in detail elsewhere, both individually and together)—shed light on many features of corporate law that are inconsistent with the principal-agent model. In the process, we revisit Clark's remarkable work. We also offer answers to several of the important puzzles Clark identified two decades ago, answers that were not available to Clark at the time because he lacked the theories of specific investment needed to construct them. With the tools available today, modern corporate scholarship is poised to take up where Clark of necessity left off, and to develop better paradigms for explaining important features of corporate law and for addressing the question of the proper social and economic role of business corporations.

III. CLARK AND THE STRUCTURE OF CORPORATE LAW

To understand the origins of the principal-agent paradigm of the corporation, we need to go back a full decade before Clark published his book, to a 1976 article authored by finance theorists Michael Jensen and William Meckling.4 In this classic work, entitled Theory of the Firm, Jensen and Meckling argued that a firm should not be characterized as an entity that has its own goals and intentions (e.g., to “maximize profits”). Instead, a firm should be regarded as a “nexus of contracts” through which various human actors—who do have goals and intentions—interact with each other. In particular, Jensen and Meckling said the most important contractual relationship in the firm was that between the primary investors or “owners” of the business and the professional “managers” the owners hire to carry on the business on their behalf. (From its inception, Jensen and Meckling’s analysis failed to reflect at least one reality of the modern corporation. As students who take corporate law learn, the law divides the task of running corporations among not two, but three categories of corporate participants—directors, officers, and shareholders—and each of these groups faces a different set of legal rights and responsibilities.)

The Jensen and Meckling article built on an important literature in economics dealing with the problems that arise when firms are run not by their owners, but by managers the owners hire.5 In particular, Jensen and Meckling suggested that whenever one person (a “principal”) hires another (an “agent”) to act on the principal’s behalf, there will inevitably be “agency costs” that arise from the facts that (1) the agent might not


always make the same choices the principal would, and (2) it is costly for the principal to try to monitor and control the agent to prevent this. The Jensen and Meckling approach highlighted the slippage between the principal’s desires and the agent’s actual choices, and the trade-off principals face between suffering the slippage or trying to control it through costly monitoring or incentive arrangements.

The agency cost model described the structure of certain types of contracts, but not necessarily the structure of firms in general, nor of the unique type of firm called a public corporation. Nevertheless, many corporate scholars embraced the principal-agent approach and, in applying it to corporations, concluded that the shareholders must be the “principals” and the directors and officers must be the shareholders’ “agents.” This idea had enormous appeal for a generation of business scholars who, during the 1970s and 1980s, were confronted with the pressing question of what corporate law should require of executives and directors confronted with the newly-popular practice of unsolicited tender offers.

Economist Robin Marris argued in the early 1960s that, even though in theory corporate “managers” might be tempted to let their personal concerns interfere with shareholder wealth maximization, if managers failed to maximize the value of a firm’s shares in practice, an outside investor could make money by buying up the corporation’s shares at a discount and replacing the managers or compelling them to maximize value. Soon thereafter, legal scholar Henry Manne proposed a similar idea, arguing that corporate managers would be driven to maximize share value by what he called “the market for corporate control.”

This argument, combined with the Jensen and Meckling theoretical framework, was seized upon by other corporate scholars as a rationale for arguing that corporate law should respond to the development of the hostile tender offer with rules prohibiting directors from resisting such offers. Soon, a substantial literature appeared arguing that directors, as “agents” for the corporation’s shareholders, should have a legal duty to manage the corporation in a way that maximizes share value, including acquiescing to any takeover that offers an immediate premium over the current market price of the shares.

6. MARRIS, supra note 5, at 29-40 (analyzing the role played by take-overs and raiders in constraining managerial freedom not to maximize share value).
8. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, The Proper Role of a Target’s Management in Responding to a Tender Offer, 94 HARV. L. REV. 1161, 1164 (1981) (“[W]e propose a rule of managerial passivity that could be applied to control resistance to tender offers . . . .”); Ronald J. Gilson, A Structural Approach to Corporations: The Case Against Defensive Tactics in Tender Offers, 33 STAN. L. REV. 819 (1981) (arguing that in order to resolve conflicts between shareholders and managers during the tender offer process, we must look at the structure of the modern corporation).

The leap from viewing managers and directors as shareholders’ agents to concluding that managers and directors must stand willing to sell out the corporation to a highest bidder requires one more assumption commonly accepted by proponents of law and economics. This additional assumption is that securities markets are both informationally and allocationally efficient, so that the market price of a company’s shares reflects their “fundamental value.” Although during the 1980s the idea of market efficiency enjoyed widespread support, in recent years it has been subject to both theoretical and empirical challenge, and many finance economists no longer accept it. See generally Lynn A. Stout, The Mechanisms of Market Inefficiency: An Introduction to the New Finance, 28 J. CORP. L. 635 (2003) (discussing challenges to and declining influence of ideas of efficient markets).
This example illustrates how enormously appealing the principal-agent model was to corporate scholars during the 1970s and early 1980s, when they were eager to find an approach that would allow them to make definitive policy judgments and recommendations about hostile tender offers. Nevertheless, there was at least one glaring problem with simultaneously arguing that a corporation should be regarded as a "nexus of contracts" and that corporate law should require corporate managers to act on behalf of the shareholders who "owned" the firm. The problem was that the nexus metaphor did not support the notion that the corporation was something that could be "owned."

Legal scholars Easterbrook and Fischel soon fixed that problem. In a series of articles in the early 1980s, these leading advocates of the law and economics movement argued that while it did not make sense to speak of a "nexus" as having an owner, it was still conceptually useful and normatively correct to treat corporate directors and officers as shareholders' agents.9 Easterbrook and Fischel argued that when the various groups that participate in corporate production come together (groups that include, among others, creditors, suppliers, executives, employees, and shareholders) to interact through the nexus of contracts called "the corporation," only one of these groups—the shareholders—contracts to be the firm's residual claimant.10 All participants other than shareholders enter contracts that require them to be paid first, before the common shareholders can be paid. Since shareholders only get paid if the corporation produces a surplus over and above all its contractual obligations (according to the theory), shareholders have a strong incentive to see that this surplus, the "profit" from the enterprise, is maximized. Thus, as the purported holders of both residual claim rights and residual control rights, shareholders play a role similar to that played by the owner of an individual proprietorship, and it is reasonable to refer to shareholders as "owners" even though technically no one can own a nexus.11

The end result was the paradigm we call the principal-agent model of the corporation, an elegant theoretical framework for thinking about what corporate law should look like and what purposes it should serve. Mainstream scholars in the corporate law community quickly adopted this framework, and it was in the context of this framework that Robert Clark wrote the treatise on corporate law that we celebrate today. An outstanding lawyer and legal scholar, as well as a great intellectual, Clark appreciated

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10. Clearly most corporate participants do not actually bargain in this way, so the argument was an "as if" argument of the type legitimized by economist Milton Friedman when he argued that it doesn't matter whether, in fact, economic actors carefully calculate all possible actions to choose the optimizing strategy. It is acceptable, Friedman believed, to argue that economic actors "optimize" if the outcomes of their choices correspond to those that would obtain if, in fact, economic actors had consciously optimized. Milton Friedman, The Methodology of Positive Economics, in ESSAYS IN POSITIVE ECONOMICS 3, 3-16, 30-43 (1966). Even if shareholders do not literally bargain to be residual claimants, the argument goes, if in fact we see shareholders play this role, the result is the same.

11. See EASTERBROOK & FISCHEL, ECONOMIC STRUCTURE, supra note 9, at 36-39, 185-91; see also Easterbrook & Fischel, Voting, supra note 9, at 396 (stating that "shareholders are no more the ‘owners’ of the firm than are bondholders, other creditors, and employees (including managers) who devote specialized resources to the enterprise").
the conceptual beauty of the principal-agent framework. But he also saw clearly that the model did not fit quite right. The rules of corporate law and the practical realities of how corporations operate were at odds, in a number of key respects, with the principal-agent framework.

A. Directors are Not "Agents"

One of the most important things that Clark observed about how corporate law works in practice is that, unlike traditional principals, shareholders in publicly traded corporations have little control over who the directors are, and no direct control over what the directors do. Under the rules of agency, an agent generally owes her principal a "duty of obedience." Directors, however, are not required to follow shareholder mandates in any way. To the extent shareholders exercise any influence at all, it is only through two indirect and very dilute sources of power.

The first source of power is shareholders' very limited voting rights. Corporate law gives shareholders a right to vote on a slate of directors. (Normally the existing directors select that slate; in extraordinary circumstances and at great personal cost, a disgruntled shareholder can propose an alternative slate.) Once directors are elected, they, and not the shareholders, control the corporation and select and control the executive officers who run the firm on a day-to-day basis. Neither directors nor executive officers are required to do what the shareholders request.

The result is that among the vitally important choices reserved to directors and denied to shareholders by corporate law are not only general business strategy but also such key matters as the selection of executives and other employees;\textsuperscript{12} the declaration and distribution of dividends;\textsuperscript{13} the setting of directors' fees and employees' salaries;\textsuperscript{14} and the decision to use corporate assets or earnings to benefit nonshareholder constituencies like creditors, employees, the local community, or even general philanthropic causes.\textsuperscript{15} Nor do the rules of fiduciary duty constrain directors in such matters. Of course, the duty of loyalty precludes directors from expropriating corporate assets for themselves.\textsuperscript{16} As long as directors refrain from using their power to line their own pockets, however, the doctrine known as the business judgment rule protects their decisions from shareholder challenge.\textsuperscript{17}

The second weak and indirect source of power available to shareholders in a public

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\textsuperscript{12} CLARK, supra note 1, at 105-06; see, e.g., Auer v. Dressel, 118 N.E.2d 590, 593 (N.Y. 1954) (holding that directors have no legal obligation to respond to a shareholder resolution demanding reinstatement of a dismissed officer).

\textsuperscript{13} CLARK, supra note 1, at 106, 594.

\textsuperscript{14} CLARK, supra note 1, at 106, 191: see, e.g., In re Walt Disney Co. Derivative Litig., Civ. A. No. 15452, 2005 WL 206651 (Del. Ch. Aug. 9, 2005).

\textsuperscript{15} CLARK, supra note 1, at 105-06, 136-37, 681-82; see, e.g., Credit Lyonnais Bank Nederland, N.V. v. Pathe Commc'ns Corp., Civ. A. No. 12150, 1991 WL 277613 (Del. Ch. Dec. 30, 1991) (upholding board discretion to pursue a strategy that favored creditors' interests over a shareholder's objections); Theodora Holding Corp. v. Henderson, 257 A.2d 398 (Del. Ch. 1969) (upholding director discretion to make philanthropic contributions over a shareholder's objection); Shlensky v. Wrigley, 237 N.E.2d 776 (Ill. App. Ct. 1968) (upholding director discretion to pursue a strategy that favored local community over a shareholder's objections).

\textsuperscript{16} CLARK, supra note 1, at 141-42 (discussing duty of loyalty).

\textsuperscript{17} Id. at 123-29 (discussing business judgment rule).
corporation is their power to sell their shares. Normally, the power to sell shares does not offer shareholders much protection from director incompetence, for the same reason that the power to use emergency exits does not offer much protection to partygoers in a burning nightclub. Neither strategy works well when everyone tries to employ it simultaneously. However, as both Marris and Manne pointed out in the 1960s, when shareholders sell en masse to a single buyer, whether an individual or another corporation, that single buyer can overcome the obstacles to collective action that plague dispersed shareholders in public firms and use voting rights to oust a recalcitrant board. The result (to use Manne’s hopeful phrase) is an active “market for corporate control.”

Clark wrote his treatise in the mid-1980s, in the peak years of the hostile takeover wars. In the decades since, it has become clear that the “market for corporate control,” like shareholder voting rights, offers shareholders only a very weak and indirect source of influence over corporate boards. In particular, the widespread adoption of poison pills, staggered boards, and other antitakeover defenses has made it possible for today’s directors to fend off all but the most determined, wealthy, and patient bidders. Moreover, subsequent to the publication of Clark’s book, case law has affirmed directors’ discretion to adopt these and similar devices in response to hostile takeovers, including their authority to use defenses to protect nonshareholder interests and to protect “long run” corporate strategies (with the directors, of course, in charge of selecting the time frame for carrying out those strategies).

Thus, the bottom line today is just as Clark described it in the mid-1980s: directors’ legal powers and responsibilities do not resemble those of agents, but rather those of trustees. In particular, as Clark discussed in his treatise and articulated more succinctly in another article written around the same time, the authority structure of the corporation is as follows:

1. corporate officers like the president and treasurer are agents of the corporation itself; 
2. the board of directors is the ultimate decision-making body of the corporation (and in a sense is the group most appropriately identified with “the corporation”); 
3. directors are not agents of the corporation but are sui generis; 
4. neither officers nor directors are agents of

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18. See Lynn A. Stout, The Shareholder as Ulysses: Some Empirical Evidence on Why Investors in Public Corporations Tolerate Board Governance, 152 U. PA. L. REV. 667, 694-95 (2003) (discussing the lack of an active market for control); see also Lucian Arvy Bebchuk et al., The Powerful Antitakeover Force of Staggered Boards: Theory, Evidence, and Policy, 54 STAN. L. REV. 887, 890-91 (2002) (study finding that between 1996 and 2000, no hostile bidders succeeded against firms that had adopted a staggered board structure); see generally CLARK, supra note 1, at 22 (“[S]hareholders . . . may elect directors, approve mergers (but only when directors have chosen to submit merger proposals to them), approve a sale of substantially all assets of the corporation (on similar condition), approve voluntary dissolution, and not much else.”) (footnotes omitted).


20. See Paramount Commc’ns, Inc. v. Time, Inc., 571 A.2d 1140, 1151-55 (Del. 1989) (discussing directors’ discretion to choose the best “long-run” strategy). In an earlier case, the Delaware Supreme Court had suggested that in limited circumstances directors might be required to maximize share price. See Revlon v. MacAndres & Forbes Holdings, Inc., 506 A.2d 173, 176 (Del. 1986). Paramount and other subsequent cases make clear that directors can easily avoid being subject to Revlon duties. Stout, supra note 18, at 696.

21. CLARK, supra note 1, at 22 (stating that “the relationship between shareholders and directors is not well described as being between principals and agents”).
the stockholders; but (5) both officers and directors are "fiduciaries" with respect to the corporation and its stockholders.22

Clark forthrightly acknowledged in 1986 what other scholars more firmly wedded to the principal-agent model were glossing over, dismissing as unimportant, or simply refusing to see. The claim that shareholders are "principals" and directors are "agents" contradicts the realities of corporate law.

B. Shareholders Cannot Demand Dividends (and so Cannot be Sole Residual Claimants)

Closely related to the legal fact that corporate law does not give shareholders "residual control" over the corporation is the fact that the law also does not treat the shareholders of a corporation that is not in bankruptcy as the corporation's sole "residual claimants."23 The corporate law rules surrounding dividends reflect this economic reality. One of the most basic rules of corporate law, duly noted by Clark, is that only directors may cause the corporation to declare and pay dividends.24 Moreover, they must do this acting as a body—no individual director has the authority to declare dividends by herself.

This rule seems to strike a fatal blow to the notion that corporate law treats shareholders as sole residual claimants, entitled to every penny of profit left over after the firm's contractual obligations to creditors, suppliers, and employees have been met. To address this obvious point, corporate scholars defending the principal-agent paradigm typically argue that it still makes sense to view shareholders as the firm's sole residual claimants because, even if a corporation does not pay out its profits in dividends, it preserves those profits as retained earnings. Thus (the argument goes) retained profits increase the value of the firm, and with it, the market value of the shareholders' equity interest.25

Clark appears to have accepted this rationalization. While carefully noting that shareholders are not entitled to dividends, Clark's treatise describes shareholders as "residual claimants."26 The power of the principal-agent paradigm led even Clark to overlook the rest of the anomaly: the retained earnings argument does not work, because retained earnings are an accounting concept the directors, and not the shareholders, control.

Even if a corporation is drowning in a flood of money, it remains up to the directors to decide whether and to what extent shareholders will share in the wealth through either dividends or share price appreciation. This is because directors control dividends under the dividend rules and control earnings under the accounting rules. Earnings are nothing more than revenues minus expenses—and it is the directors, and not the shareholders,

23. Nor is it clear shareholders enjoy this status even when the firm is in bankruptcy. Lynn M. LoPucki, The Myth of the Residual Owner, 82 WASH. U. L.Q. 1341, 1343 (2004) (describing an empirical study finding that even in bankruptcy reorganization, "no identifiable, single residual owner class exists").
24. CLARK, supra note 1, at 106, 594.
25. See id. at 594-602 (discussing Modigliani Miller approach to the irrelevance of dividend payouts).
26. Id. at 18 (stating that "it is the shareholders who have the claim on the residual value of the enterprise").
who determine the corporation's expenses. The board of a firm that is earning a surplus can choose to pass that surplus on to the corporation's shareholders. But it could choose instead to use the corporation's increasing wealth to raise employee salaries, buy the CEO an executive jet, build an on-site childcare center, improve customer service, or make donations to charity and the local community. Economic and legal reality simply does not track the principal-agent model. Many different groups are potential "residual claimants" in corporations in the sense that they share in the surplus created by the enterprise (or share in any cutbacks if the firm experiences losses), including not only shareholders but creditors, customers, employees, and the community as well.

C. "Legal Personality" is a Key Feature of Corporations

As noted earlier, the nexus of contracts model of the corporation implies that the notion that the corporation is a legal entity is not only a useless idea, but a misleading one—a corporation is only a web of explicit and implicit agreements among the various groups that participate in "the firm." Clark attributed some merit to the nexus of contracts approach in his treatise by suggesting, for example, that the benefit to be gained from the legal entity status of corporations had to do primarily with reducing transaction costs. At the same time, however, he wisely rejected the nexus metaphor and the attempt to reframe corporate law as if it were a subset of contract law. Observing that legal personality is "often ignored by lawyers," Clark stressed that entity status remains an essential corporate characteristic that distinguished the organizational form from proprietorships and partnerships—at the time, the primary alternatives to incorporation.

As Part IV will discuss in greater detail, the evolving literature on specific investment supports Clark's view that legal personality is important, and not just because it can reduce contracting costs by allowing property to be held and lawsuits brought in the corporate name. Entity status allows corporations to do something neither proprietorships nor partnerships can easily do: shield the property used in the enterprise from the claims of equity investors, their successors (e.g., heirs), and their creditors.

At law, the corporation itself "owns" all assets held in the corporate name. This is more than a mere convenience. It means that an equity investor who needs money cannot raise it by pulling out her pro-rata share of the assets and selling them. This ability to "lock in" corporate capital is vital, because it allows corporations to safely invest in what economists call "specific" assets—infrastructure, machinery, processes, or relationships that are specialized to the enterprise and that would be worth far less if sold on the market.
for cash than they are worth when used in the firm.\textsuperscript{31} Specific investments are often essential to the sorts of long-term, uncertain, and complex economic projects we associate with corporations: building railroads, developing new technologies, creating trusted brand names.

Specific investment is discouraged when individual investors have a legal right to prematurely withdraw their contributions (and with it, the ability to opportunistically threaten to withdraw in order to "hold up" their fellow investors in an attempt to extract a larger share of the surplus generated by corporate activity.\textsuperscript{32} After investors have pooled their money to build a railroad, for example, it would cause enormous trouble if any of the investors were entitled to demand his or her investment back. Legal personality helps solve this problem by saying, in effect, that only directors, not shareholders, may decide when to pull capital out of the enterprise to pay dividends or repurchase shares, or for any other purpose. Thus, individual investors can only get their money back by finding someone else willing to purchase their shares and their interest in the railroad. Clark does not state the point quite this way, but he discusses at some length the fact that a key difference between partnerships and corporations is that in partnerships, each partner has the right at any time to withdraw her share of the assets from the firm, which can lead to "curtailment or termination of business activities."\textsuperscript{33} By contrast, in corporations, neither shareholders nor any other individual participant has this right.

Clark links this legal rule to separate entity status, noting that a corporation may often be worth more as a going concern than it would be worth if it were broken up to liquidate shareholders' individual claims.\textsuperscript{34} Part IV will explore in greater detail how, in making this observation, Clark's treatise anticipates an idea that only recently has begun to command attention from corporate scholars: the idea that the corporation's ability to "lock in" capital through its status as a legal personality is important to explaining the rise of the corporation in the 19th century and the peculiar advantages corporations enjoy in encouraging long-term and complex economic projects.\textsuperscript{35}


\textsuperscript{32} See sources cited infra note 48 (developing this idea).

\textsuperscript{33} CLARK, supra note 1, at 17.

\textsuperscript{34} Id. at 19.

Rarely do common shareholders in public corporations have a right to force the corporation to buy back their shares. Nor are they able, on their own initiative, to force the company to liquidate and thus pay all the shareholders. Consequently, there is no risk, as there is in a general partnership, that the joint exercise of such a right by a number of investors will kill the enterprise. Corporations ... are more likely to preserve the going concern value of large projects. Id.

\textsuperscript{35} See Blair, Lock-In, supra note 31 and sources cited infra note 48.
D. Corporate Law Does Not Require Shareholder Wealth Maximization

Finally, we consider one of the most significant anomalies Clark discusses in his treatise: the rules of corporate purpose. According to the principal-agent model, the purpose of the corporation is clear. It exists only to maximize profits, and with them, the wealth of the shareholders who are said to be the firm's sole residual claimants. There is one obvious and dramatic problem with this claim, however. There is very little in corporate law that supports it and much that cuts against it.

Clark notes this anomaly, contrasting the laws governing corporations with those governing partnerships. As Clark observes, partnerships are defined as associations for the purpose of earning business profits. But corporate law does not define the purpose of the corporation beyond restricting it to "lawful" activities. The result (in Clark's words) is that the corporate purpose remains "extremely varied, inclusive, and open-ended."

Clark doesn't offer an explanation for this feature of corporate law, simply observing that "perhaps surprisingly, the state business corporation statutes under which corporations are chartered generally do not say explicitly that the purpose of the business corporation is to make or maximize profits." Nevertheless, having only the principal-agent paradigm to work with, at the end of the day Clark tried to accommodate that perspective. Even after identifying a number of key ways in which the principal-agent analysis does not fit corporate law, Clark ultimately accepted, with some qualifications, the idea that corporate directors should as a normative matter focus on maximizing value for shareholders. In doing so, he noted the way the principal-agent model dominated the literature. "Although corporation statutes do not answer this question explicitly," he observed, "lawyers, judges, and economists usually assume that the more ultimate purpose of a business corporation is to make profits for its shareholders and... it is the shareholders who have the claim on the residual value of the enterprise."

Here we believe that Clark's positive description of the rules of corporate law, normally so accurate and reliable, was at least slightly colored by the fact that he was forced to view those rules through the lens of the principal-agent model. While conceding that corporate statutes do not state that the purpose of the corporation is to make profits, Clark nevertheless asserts, without significant case support, that "case law formulations of the directors' and officers' duty of care can easily be read to imply profit maximization as the ultimate goal." The main case Clark relies on in making this claim is, of course, the old chestnut Dodge v. Ford—a case now nearly a century old, from a state unimportant to corporate law (Michigan), dealing with the conflicts between shareholders

37. CLARK, supra note 1, at 17.
38. Id. at 678.
39. Id. at 17 (emphasis added).
40. Clark cites three cases for this proposition. Id. at 679 n.3 (citing Bates v. Dresser, 251 U.S. 524 (1920); Barnes v. Andrews, 298 F. 614 (S.D.N.Y. 1924); Selheimer v. Manganese Corp. of Am., 224 A.2d 634 (Pa. 1966)). Although each of these cases discusses the possibility that directors might be found liable for corporate losses due to their own misbehavior, none suggests that directors have a duty to maximize profits. See, e.g., Selheimer, 224 A.2d at 644 (noting that "the directors of a business corporation are not insurers that their actions will result in pecuniary profit").
in a closely held firm to boot.\textsuperscript{41}

Clark is hardly alone in adopting this strategy. Virtually every corporate scholar who has ever tried to defend the “shareholder primacy” view of the corporate purpose has been forced, in the end, to base his or her argument on the dictum of the antiquated 

\textit{Dodge v. Ford}.\textsuperscript{42} Later in his treatise Clark asserts that “[w]ith a possible exception or two, courts have not retreated from the assumption that the primary or residual purpose of a business corporation is to make profits for its shareholders.”\textsuperscript{43} It is both interesting and telling that Clark does not cite any cases supporting the claim that courts “have not retreated” from the idea that corporations exist to make profits for shareholders—but does cite case law supporting the “exceptions.”\textsuperscript{44}

Clark’s treatise thus ultimately gives a nod to an important if (due to the influence of the principal-agent paradigm) often disregarded reality of modern corporate law: not only do corporate statutes fail to restrict the corporate purpose; case law follows this pattern as well. The “exceptions” to shareholder primacy swallow the rule. As Clark discusses elsewhere in his treatise, a substantial body of case law confirms directors’ freedom to divert corporate assets and earnings to creditors, employees, customers, the community, and even general charities.\textsuperscript{45} And corporate law permits directors to require the corporation to obey laws and regulations even when violating the law would be more profitable for shareholders.\textsuperscript{46}

This anomaly can be readily dismissed by those who want to dismiss it, because it is easy for corporate directors to (in Clark’s words) “make the right noises” and claim that actions taken on behalf of nonshareholder constituencies also benefit shareholders “in the long run.”\textsuperscript{47} And if the directors themselves fail to advance this claim, it is also easy for a court, or a scholar, simply to advance the claim for them. Nevertheless, the outcome is clear. Corporate law does not follow the principal-agent paradigm on the question of corporate purpose.

IV. EXPLAINING ANOMALIES: ON SPECIFIC INVESTMENT, CAPITAL LOCK-IN, AND TEAM PRODUCTION

As the previous Part details, Clark was keenly aware of the many ways in which the structure of U.S. corporate law departs from the predictions of the principal-agent model. Although the misfit was obvious and in some cases dramatic, the reasons for the divergence remained unclear to Clark and others who were writing at the time, because

\begin{thebibliography}{99}
\bibitem{41} \textit{Dodge v. Ford Motor Co.}, 170 N.W. 668 (Mich. 1919). Contrary to the notion that corporate officers and directors have an enforceable duty to maximize value for shareholders, liability is very rarely imposed on directors for breach of the duty of care and, curiously, most of the cases in which it has been imposed have been brought on behalf of banks or other financial institutions in cases where directors’ supposed lack of care harmed depositors or other creditors and not shareholders. \textsc{Charles O’Kelley \& Robert Thompson, Corporations and Other Business Associations: Cases and Materials} 233-34 (4th ed. 2003). Apparently it is usually the bankruptcy trustee who pursues these cases.
\bibitem{43} \textsc{Clark, supra} note 1, at 682.
\bibitem{44} \textit{Id.} at 682 n.11.
\bibitem{45} \textit{Id.} at 681-84.
\bibitem{46} \textit{Id.} at 686.
\bibitem{47} \textit{Id.} at 682.
\end{thebibliography}
they relied on a paradigm that treated common shareholders as the sole residual claimants in corporations. This paradigm in turn reflected legal scholars’ enthusiasm for adapting the economic literature on the principal-agent problem to the institution of the public corporation.

In this Part we suggest that a new paradigm is appearing in corporate law scholarship, one that offers to resolve many of the anomalies Clark noted but could not really explain in his treatise. The new paradigm is emerging because corporate scholars have an intellectual tool to work with that they did not have a generation ago: a developing literature on the economic problem of encouraging and protecting specific investment. In several recent papers, economic and legal scholars (including ourselves, working both together and separately) have investigated how specific investment offers insights into a number of peculiar features of corporations that don’t fit the principal-agent model, including their entity status and their director-dominated governance structure. This growing literature suggests that the principal-agent model fails to predict many fundamental aspects of corporate law because it assumes that the only economic problem to solve in corporations is the problem of getting directors and executives to do what shareholders want them to do. Yet corporate law may, to a very


Basic corporate law casebooks also have begun to discuss the importance of specific investment and director governance. See, e.g., ROBERT W. HAMILTON & JONATHAN R. MACEY, CASES AND MATERIALS ON CORPORATIONS 22-25 (9th ed. 2005) (discussing team production model of corporation); O’KELLEY & THOMPSON, supra note 41, at 7 (discussing the problem of team-specific investment). Stephen Bainbridge has also emphasized the importance of director governance for public firms, although for different reasons. See Stephen M. Bainbridge, Director Primacy: The Means and Ends of Corporate Governance, 97 NW. U. L. REV. 547 (2003).

49. See Margaret M. Blair, Human Capital and Theories of the Firm, in EMPLOYEES AND CORPORATE GOVERNANCE 58, 71 (Margaret M. Blair & Mark Roe eds., 1999) (discussing the asymmetry of the canonical principal-agent problem); see also PAUL MILGROM & JOHN ROBERTS, ECONOMICS, ORGANIZATIONS, AND MANAGEMENT 334-35 (1992) (discussing the problem of getting employers to reveal accurate information so that employee incentive contracts can be enforced against them). Legal scholars rarely address the problem of mutual opportunism except in the close corporation context. See, e.g., Edward B. Rock & Michael Wachter, Waiting for the Omelet to Set: Match-Specific Investments and Minority Oppression in Close Corporations, 24 J. CORP. L. 913, 914-15 (1999); Eric Talley, Taking the “I” out of “Team”: Intra-Firm Monitoring and the Content of Fiduciary Duties, 24 J. CORP. L. 1001, 1015-21 (1999).
great extent, be driven by the need to solve a different problem: the problem of encouraging essential specific investments in projects where contracting is incomplete because the project is complex, long-lived, and uncertain.

As noted earlier, corporations tend to be formed to pursue businesses that require large amounts of enterprise-specific assets, meaning assets that cannot be withdrawn from the enterprise without destroying much of their value. Specific assets can take a large variety of forms. For example, "sunk cost" investments—money or time that has been spent in the past in the hope of earning future profits and is now "water over the dam"—are specific. So are specialized machines and equipment that cannot be easily converted for other uses. Executives' and employees' acquisition of knowledge, skills, and relationships uniquely useful to their present firm, and of little value to other potential employers, are investments in firm-specific "human capital." Developing customer loyalty, a trusted brand name, or a unique business process are all examples of specific investment.

Specific investment poses some unique contracting problems. To understand why, consider the case of a group of investors who pool their money and intellectual talents to develop a cancer treatment. Once the money is spent and the research begun, the investors' time and money has been transformed into an intellectual asset that, at least until it is patented and gets Food and Drug Administration approval, is largely specific to the enterprise. Neither the bottles and petrie dishes in the lab, nor the lab notes, nor the records of the biologists and physicians who tested the treatment would have much value if not used by the company to get the patent and FDA approval, and to manufacture and sell the drug. The investors get the greatest value from their investment by keeping their resources together until they can bring the whole project to fruition.

As a result, each of the investors must worry that if the business is formed as a partnership—if there is no entity status and no capital lock-in—all of the investors are vulnerable to the possibility that the group might not hold together long enough to see the project through to completion. Alternatively, and just as threatening, any one investor who provides a critical resource would be in a position to opportunistically threaten to withdraw his or her interest in order to coerce the others into giving up a larger share of any gains that flow from the joint project. Accordingly, co-investors who contribute to projects requiring large amounts of firm-specific investment can find themselves at risk from each other and from each others' successors and creditors. Unless the risks are controlled, the project may not be pursued in the first place.

This is where the new scholarship suggests that the creation of an incorporated legal entity with board governance can be useful.50 If the investors form a corporation, each taking shares of stock in exchange for the individual investor's contribution, the money that financial investors have put up, along with the scientists' work-in-progress and any patents obtained, belong to the corporate entity. The financiers cannot unilaterally

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50. See, e.g., Blair, Lock-In, supra note 31, at 391 ("[T]he creation of a separate legal entity allows business organizers to partition the assets used in the business . . . . [This means] participants and third parties are assured that the pool of assets used in the business will be available to meet the needs of the business first (such as to pay the claims of the business's creditors) before these assets can be distributed to shareholders."); Blair & Stout, Team Production, supra note 48, at 292 ("[T]he firm can hold title to the property, and can thereby function as the repository of all 'residual' income from team production that is not actually paid out to team members.").
withdraw their funding, nor can the entrepreneurs and employees unilaterally extract the
value of their time and efforts (much less their lab notes and intellectual contributions)
unless such a break-up and liquidation of the firm is agreeable to the corporation’s board
of directors. The board, in turn, cannot be controlled by any one of the participants alone.
All of the participants in the venture have, to some degree, “tied their own hands” and
made it harder to withdraw.\footnote{51} This seemingly self-defeating arrangement can in fact be
self-serving if it encourages profitable joint investment in projects that require specific
investments that could not otherwise be protected.

The problem of encouraging specific investment when corporate production requires
different individuals to contribute different types of resources, such as a project that
requires an executive’s time, an entrepreneur’s idea, and an investor’s money, is often
described as one of “team production.” Building on the work of economists Armen
Alchian and Harold Demsetz,\footnote{52} we define “team production” as “production in which 1)
several types of resources are used . . . 2) the product is not a sum of separable outputs of
each cooperating resource . . . [and] 3) not all resources used in team production belong
to one person.”\footnote{53} Team production presents obvious problems of coordination and
shirking, problems addressed by Alchian and Demsetz\footnote{54} and by Holmstrom\footnote{55} in early
work proposing solutions that echo typical solutions to the principal-agent problem.

Then Oliver Hart and others began to write on the question.\footnote{56} Although neither Hart
nor his coauthors used the language of team production, they considered a similar
problem, and added an important additional confounding condition—the team members
must make investments specific to the enterprise, putting them at risk if the enterprise
failed or one team member attempted to hold up the others. Hart’s insight may be vital to
understanding corporations, because corporate production often requires a variety of

\footnote{51. See, e.g., Stout, supra note 18, at 669 (“[F]or some reason, participants in public corporations—
including investors—value director primacy. Just as the legendary Ulysses served his own interests by binding
himself to the mast of his ship, investors may be serving their own interests by binding themselves to boards.”).
Of course, this analysis does not apply to corporations that have a single shareholder. However, most
corporations of any significant size have multiple shareholders, even when those shareholders may be relatively
few in number.

52. See Armen Alchian & Harold Demsetz, Production, Information Costs, and Economic Organization,
62 AM. ECON. REV. 777 (1972). Other scholarly works on this idea include Sanford Grossman & Oliver Hart,
The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration, 94 J. POL. ECON. 691, 693
(1986); Oliver Hart, An Economist’s Perspective on the Theory of the Firm, 89 COLUM. L. REV. 1757 (1989);
Oliver Hart, Incomplete Contracts and the Theory of the Firm, 4 J.L. ECON. & ORG. 119 (1988); Oliver Hart &
John Moore, Property Rights and the Nature of the Firm, 98 J. POL. ECON. 1119 (1990); Bengt Holmstrom,
Moral Hazard in Teams, 13 BELL J. ECON. 324 (1982); Raghuram C. Rajan & Luigi Zingales, Power in Theory

53. Alchian & Demsetz, supra note 52, at 779.

54. Id. at 781.

55. Holmstrom, supra note 52. Holmstrom noted that ex ante agreements about the division of a surplus
from team production would give team members incentives to shirk and free ride on the efforts of fellow team
members, while attempts to divide up the surplus ex post would lead to costly rent-seeking behavior. His
proposed solution involved giving any surplus to an outsider not on the team unless the surplus was large
enough to ensure that no team member had shirked. Such a solution provides perverse incentives to the outsider
to undermine the contract by bribing a team member to shirk. For a more complete discussion of the
development of theoretical work in economics on team production, see Blair & Stout, Team Production, supra
note 48, at 265-79.

56. See sources cited supra note 52.
“stakeholder” groups to make specific investments that cannot be protected by formal contracts and that put them at risk if the business fails or they are forced to sever their relationship with the firm. Consider the executive who works long hours at a start-up company for below-market wages, or the customer who creates an inventory control system that relies on another corporation’s software, or the community that builds roads and schools to serve a company’s factory employees.

Still, the solution proposed by Hart et al. echoed the principal-agent model: at least one team member must have “ownership” or “property rights” over the team’s joint output, meaning a residual right of control. But while such a property right would protect the team member who owned it, assigning the right to only one member of the team left the other members vulnerable. Hart et al. suggested this might be an inevitable difficulty with specific investment in team production, and that the best that could be done would be to assign the property right to the team member whose enterprise-specific investment was most “important” in some sense.\(^\text{57}\)

Rajan and Zingales proposed an alternative solution. They noted that under Hart’s solution, not only would team members who do not “own” a right to the team’s output have reduced incentives to make specific investments, but the owner might sometimes have a stronger incentive to opportunistically sell his control over the contributions of other team members (thereby capturing the value of any specific investments they had made) instead of completing the team and making specific investments himself. Their proposed solution to this problem was that all team members might be better off if they yielded control rights to an outsider.\(^\text{58}\) In a detailed discussion elsewhere, we have expanded upon the Rajan and Zingales solution and suggested it provides a rationale for why people might choose to organize production through a corporation with entity status governed by a board of directors.\(^\text{59}\)

In brief, forming a corporation requires the participants in that corporation to yield decisionmaking power over their ability to earn a return on their specific investments to a board of directors that is not, itself, a residual claimant in the firm.\(^\text{60}\) Corporate participants yield power over their specific investments in the sense that, if they choose to withdraw from the firm, they must leave those investments behind or see their value destroyed. And as long as they stay with the firm, they cannot directly control how their, or other team members’, specific assets are used, nor can they demand that the corporation pay for the value of those specific investments. As a result, the only way corporate participants can profit from specific investment is by continuing their relationship with the corporate “team” and hoping the board allocates to them some

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57. See Hart & Moore, supra note 52, at 1149 ("[A]n agent is more likely to own an asset if his action is sensitive to whether he has access to the asset and is important in the generation of the surplus.").

58. See Rajan & Zingales, supra note 52, at 422.

If all the parties involved in production (i.e., including the entrepreneur) have to make substantial specific investments over time, it may be optimal for a completely unrelated third party to own the assets . . . [T]he third party holds power so that the agents critical to production do not use the power of ownership against each other.

Id.

59. See Blair & Stout, Team Production, supra note 48, at 276-87; see also Blair & Stout, Director Accountability, supra note 48.

60. Blair & Stout, Team Production, supra note 48, at 274–77.
portion of the surplus generated by team production. Since the board is not itself a residual claimant and its members are precluded by fiduciary duties from expropriating the surplus for themselves, at least in their roles as directors, the board has no incentive to opportunistically threaten the value of team members' specific investment. And since the board at a minimum wants the team to stay together and to stay productive, thus assuring the continuation of the members' board positions, the board has some incentive to do this.

Space constraints preclude a full discussion here of how focusing on capital lock-in and specific investment in team production can explain a wide range of important phenomena in the business world, including the development of the corporate form, the nature of directors' fiduciary duties, the proper role of corporate counsel, the rules of derivative suit procedure, the regulation of takeover bids and antitakeover defenses, and even bankruptcy reorganization and the necessity of a corporate-level income tax. Interested readers are invited to explore the large and growing literature on such topics. Here we simply note that these new intellectual tools promise to help us build a paradigm of corporate law that both explains and predicts the important anomalies that troubled Clark a generation ago.

A. Directors are Not Agents But "Mediating Hierarchs" Who Protect Specific Investment in Corporations and Distribute the Returns from that Investment

Viewing corporations through the lens of capital lock-in and team production offers a variety of insights into the basic nature and structure of corporate law. One of the most important of these insights is an answer to the question of why, as Clark observed, corporate law does not treat corporate directors as agents who must do the shareholders' bidding but instead grants boards a remarkably wide range of autonomy and control over corporate assets. Board autonomy worsens the agency cost problem in corporations, because it means shareholders (and other stakeholders for that matter) have less leverage to pressure boards to maximize corporate returns. At the same time, both the capital lock-in approach and the team production model suggest that director authority in public corporations may be a "second-best" solution that provides offsetting economic benefits by encouraging and protecting specific investment in corporate production.

For example, capital lock-in theory predicts that corporate law should not allow any individual shareholder or subgroup of shareholders to exercise direct control over the board for the simple reason that, if this were allowed, a shareholder might (for liquidity reasons, for example) use that control to force the firm to liquidate essential specific assets at a loss in order to buy out the shareholder's interest. Alternatively, and perhaps even more likely, the shareholder might opportunistically threaten to do this in order to try to force the other investors to agree to give the opportunist a larger share of corporate

62. See Blair & Stout, Team Production, supra note 48, at 298-308.
63. See Kostant, supra note 48.
64. See Blair & Stout, Team Production, supra note 48, at 292-97.
65. See Lynn A. Stout, Do Antitakeover Defenses Decrease Shareholder Wealth? The Ex Post/Ex Ante Valuation Problem, 55 STAN. L. REV. 845 (2002) (arguing that antitakeover defenses may increase shareholder wealth ex ante by encouraging specific investment in team production).
66. See LoPucki, supra note 48.
67. See Bank, supra note 48.
earnings. The need to preserve specific assets thus explains why corporate law limits individual shareholders’ power to control directors and demand dividends, share repurchases, or other transactions that would threaten locked-in capital.

Team production analysis produces a similar conclusion for broader reasons, emphasizing how shareholder capital must be locked in and controlled by boards not only to protect shareholder interests, but also to protect the interests of other team members that have made specific investments (e.g., employees, creditors, and customers who may have made past contributions of time and effort, invested in specialized relationships, skills, and loyalties, or acquired knowledge of particular firm processes and products). Shareholders cannot be allowed to directly control corporations because they are only one among the many groups that must yield control rights over the firm’s assets and outputs in order to make credible commitments to other team members that they will not hold up the whole team to extract a larger share of the surplus.

Team production analysis accordingly can explain why, under the rules of corporate law, directors are not “agents” of either subgroups of shareholders or shareholders as a class, nor of any other class of investors. Rather, as we have argued in some detail elsewhere, directors are better described as “mediating hierarchs” who must balance the competing needs and demands of shareholders, creditors, customers, suppliers, executives, rank-and-file employees, and even the local community, in a fashion that protects specific investment in the corporation and keeps the corporation alive, healthy, and growing. In other words, boards of directors, who alone are empowered to make the decision about the distribution of surpluses, should try to ensure every team member gets at least enough of the surplus to make sure all the contributing team members are motivated to stay with the team.

B. Many Different Groups Make Specific Investments in Corporations and are Potential Residual Claimants

Once one acknowledges the legal reality that directors are not shareholders’ agents, one must also accept that a second key component of the principal-agent model—the idea that shareholders are the sole residual claimants in firms—lacks a solid foundation. When corporate directors enjoy any significant discretion to decide how the corporation uses its

68. As this discussion suggests, one can view capital lock-in primarily as a device that protects shareholders from the opportunism of other shareholders. We believe, however, that capital lock-in makes incorporation an attractive way to do business not only because it protects shareholders from each other, but also because it protects the interests of nonshareholder groups that have made specific investments in corporations that cannot be protected by formal contracts. For example, without capital lock-in, shareholders as a class might pressure directors to pay excessive dividends. Similarly, shareholders with diversified portfolios are indifferent to increasing firm leverage, even though increasing risk threatens the interests of creditors, employees, and other corporate participants who cannot diversify their human capital or other specific investments in the company. From an ex ante perspective, shareholders may benefit from yielding power over dividends to directors who owe fiduciary duties to the corporation as a whole, because ceding this power enables the shareholders as a group to make a more credible commitment not to take on excessive risks or strip assets out of the firm prematurely or injudiciously. This yielding of power in turn attracts the important firm-specific investments of nonshareholder groups. This analysis can explain why corporate law grants directors the legal authority to ignore even a unanimous shareholder request for dividends.

69. See Blair & Stout, Director Accountability, supra note 48; Blair & Stout, Team Production, supra note 48.
assets, it becomes grossly inaccurate as a descriptive matter to assert that shareholders of a public corporation are the sole “residual claimants” of that firm.\textsuperscript{70} To the contrary, shareholders are only one of many groups that may act as residual claimants or residual risk bearers in the sense that directors have authority to provide those groups with benefits (and sometimes to saddle them with burdens) above and beyond the benefits and burdens described in their formal contracts with the firm. When a corporation is doing spectacularly well, it is common to see employees receive dental benefits and greater job security, executives get nicer offices and access to a company jet, bondholders enjoy increased protection from insolvency, and the local elementary school get charitable donations of money and equipment. Conversely, these groups suffer along with shareholders when times are bad, as employees get stingier benefits, executives fly coach, debtholders face increased risk, pension funds fail, and the elementary school does without.

In reality, directors simply do not behave the way the principal-agent model predicts. They reward many groups with larger slices of the corporate pie when the pie is growing, and spread the loss among many when the pie is shrinking. Far from providing evidence that directors are doing something wrong by imposing “agency costs” on shareholders, this observation suggests directors may be doing exactly what team production analysis says they should be doing—acting as mediating hierarchs who balance the conflicting interests of the many members who make up a healthy and productive corporate team.

C. The Concept of “Legal Personality” Plays an Important Economic Role in Protecting Specific Investment

One of the greatest weaknesses of the principal-agent model is its characterization of the firm as a nexus of contracts. As noted earlier, this idea is in tension with the claim that shareholders “own” corporations, since it is difficult to envision how one might own a nexus. A second problem, however, is that the nexus metaphor does not give any guidance on where, exactly, the “firm” begins and ends. If an executive who signs an employment agreement with General Motors is “in” the firm, what about the closely held corporation that signs an agreement to supply auto components? Are GM and the closely held supplier one single company? What about the buyer who signs a contract to purchase a GM pickup truck? Is the buyer part of General Motors? Under the nexus approach, it is difficult to see where GM ends and the rest of the world begins.

The capital lock-in approach may not, by itself, tell us what “a firm” is, but it does, at least, provide a way to define what “a corporation” is. In brief, a corporation is a legal entity that can own property and enter into contracts in its own name. This concept has

\textsuperscript{70} See Blair & Stout, Team Production, supra note 48, at 250.

Our analysis rests on the observation—generally accepted even by corporate scholars who adhere to the principal-agent model—that shareholders are not the only group that may provide specialized inputs in to corporate production. Executives, rank-and-file employees, and even creditors or the local community may also make essential contributions and have an interest in the enterprise’s success.

\textit{Id.} (footnotes omitted).
economic as well as legal importance. As noted in the previous Part, entity status allows a corporation to lock in resources and safely convert them to specific assets. Although one might imagine other legal mechanisms for achieving capital lock-in—say, a trust arrangement—an incorporation accomplishes the same result cleanly and simply.

Indeed, team production analysis suggests incorporation does more. By placing ownership of the firm's assets in the hands of the firm itself rather than in the hands of the firm's shareholders, incorporation encourages specific investments from other important groups that participate in corporate production as well, including creditors, executives, customers, and rank-and-file employees. These constiuencies become more willing to invest because they know that control over the corporation—and with it, control over their specific investments—now rests in the hands of a board, and not in the hands of shareholders who might opportunistically threaten to destroy their investment or exclude them from the firm in order to demand a larger share of any surplus. The result is a mutual "hands-tying" arrangement among the various groups that make specific investments in corporations, an arrangement that ultimately works to benefit all. This arrangement would be undermined by allowing any one of the team members to exercise direct control over the firm's assets.

Focusing on the problem of specific investment rather than the problem of agency costs accordingly allows us to see why corporate "personhood" matters so much. Legal personality worsens agency costs. As Clark put it in his treatise, from a shareholder's perspective "a major problem with legal personality as it has been developed for public corporations has been presented by the 'hard to kill' character of the corporation." At the same time, this Frankenstein's monster aspect of incorporation may perform a vital economic function by protecting the value of shareholders' and other team members' specific interests in corporate production. To use Clark's words, legal personality can "safeguard going concern values."

D. Corporate Law Leaves Corporate Purpose Open to Protect Directors' Role as Mediating Hierarchs

What does all this imply for the fourth anomaly noted by Clark and discussed in this Article: the open-ended nature of the legal rules regarding corporate purpose? Interestingly, here capital lock-in and team production analyses give somewhat different, although in some respects complementary, answers.

The capital lock-in function of corporate law helps protect what Clark calls "going concern" value for all corporate participants, not just shareholders. But capital lock-in theory, by itself, does not necessarily preclude a legal stance that emphasizes shareholder value maximization as the appropriate corporate goal. The team production approach, however, offers another and in many ways more intriguing explanation for the anomaly.

71. Joint stock companies used by business people in the 18th and 19th centuries before the corporate form was widely accessible sometimes used complicated trust arrangements to hold the assets used in the enterprise. This approach did not always achieve its intended purpose, as courts tended to treat such arrangements as a species of partnership that would be broken up if a "member" died or wanted out. See Blair, Lock-In, supra note 31, at 421-23 and sources cited therein.

72. CLARK, supra note 1, at 762.

73. Id.
of open-ended corporate purpose. In brief, it suggests that the appropriate normative goal for a board of directors is to build and protect the wealth-creating potential of the entire corporate team—"wealth" that is reflected not only in dividends and share appreciation for shareholders, but also in reduced risk for creditors, better health benefits for employees, promotional opportunities and perks for executives, better product support for customers, and good "corporate citizenship" in the community. To accomplish this, directors must have a wide range of discretion to balance competing interests in a way that keeps the team together and keeps it productive.

Team production analysis consequently warns against defining corporate purpose in a narrow fashion that would allow one or more members of the corporate team to challenge the board’s authority and argue either that the board is pursuing the wrong goal, or that it is pursuing the right goal the wrong way. Once we leave behind the narrow objective of maximizing "share value," it is impossible for an outsider like a court to design an algorithm to measure whether a board is maximizing returns to the corporate team, and dangerous to allow courts to try. Allowing either shareholders or other stakeholders to claim in court that directors who are not violating their loyalty duties by using their corporate powers to enrich themselves are nevertheless acting with an "improper purpose" simply invites corporate participants to try to extract wealth from other team members by waving the stick of personal liability over the directors' heads.

A corollary is that the corporate desideratum associated with the principal-agent model—to "increase share value whether this helps or harms other team members"—is a recipe for inefficiency. The team production approach challenges the principal-agent model's prediction that corporations are governed well when they are governed in a fashion that maximizes share value. Rather, good governance means making sure the corporation survives and thrives as a productive and value creating team, even though this is an approach that is difficult to measure, much less maximize.

It is important to note that the idea that corporate law does not require directors to maximize share value in no way implies that shareholders are worse off under corporate law rules that give directors such open-ended discretion. Team production analysis teaches that equity investors as a class are better off when corporate participants, including equity investors, lenders, employees, and entrepreneurs, have an organizational form available to them that allows them to cede power over corporate assets to the kind of director governance system provided by corporate law. Without director governance, these groups might not be able to overcome the risks of mutual rent-seeking created by complex, uncertain, and long-lived projects, and so might not pursue such projects in the first place.

Past and present business experience support this hypothesis. Nineteenth century American business history is a history of entrepreneurs going to state legislatures in increasing numbers to seek permission to form corporations—corporations in which outside investors purchased shares and to which outside creditors loaned money. The increasing popularity of this practice, even when it was much simpler and less costly to

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74. See, e.g., BLAIR, OWNERSHIP AND CONTROL, supra note 31, at 239 ("Management and boards of directors should understand their jobs to be maximizing the total wealth-creating potential of the enterprises they direct."); Blair & Stout, Team Production, supra note 48, at 271 (arguing that the primary function of a mediating hierarch is to exercise control "in a fashion that maximizes the joint welfare of the team as a whole").
use partnership law to organize businesses, suggests that both the entrepreneurs, and the creditors and equity investors who financed their projects, found the arrangement valuable.  

Today we have even better evidence that incorporation and board governance serves the interests of shareholders and other corporate participants—including important evidence that was unavailable to Clark when he was drafting his treatise. In brief, U.S. corporate law is comprised mostly of “default rules.” This means incorporators can modify the basic rules of corporate law easily by putting customized provisions in the corporate charter before the company “goes public” and sells shares to outside investors. If investors really wanted more power over boards, there is no reason why an enterprising entrepreneur who wanted to appeal to this desire could not add a charter provision that, for example, prohibited the board from adopting a “poison pill” that would allow them to reject a premium takeover bid the shareholders favored. Similarly, if outside investors really believed that requiring boards to pursue share value would make them better off, incorporators could put “shareholder wealth maximization” in the charter as the corporate purpose.

Public corporation charters virtually never contain such provisions. Even more telling, recent empirical studies demonstrate that when promoters do decide to tinker with charter provisions in the pre-IPO stage—exactly the stage in which they most need to appeal to outside investors—they almost always move in the opposite direction, adding provisions like a staggered or classified board structure that insulates directors from shareholder influence even more than the default rules of corporate law already do. Outside investors happily buy shares in these firms. This pattern strongly suggests that director discretion, including the discretion that comes from open-ended rules of corporate purpose, serves the long-run interests of “the investor class” even if it works against the interests of particular shareholders in particular firms at particular times. Capital lock-in and team production help explain why.

V. CONCLUSION

Twenty years ago, Professor Robert Clark published a treatise on corporate law that was clear, insightful, engaging, and remarkably accurate in its positive description of the
way corporate law works. In particular, Clark did not flinch from focusing his attention
on the many ways in which corporate law departs from the predictions of the principal-
agent model. These departures include important features of corporate law such as
director governance, shareholder powerlessness to demand dividends, the importance of
legal personality, and the open-ended rules of corporate purpose.

Clark faithfully noted these "anomalies." His ability to explain them, however, was
limited by the fact that he was writing at a time when corporate theory was dominated by
a single and widely accepted paradigm of the corporation: the principal-agent paradigm.
Interestingly, he came tantalizingly close. Clark's treatise includes an Appendix entitled
A Special Note on Hierarchies that describes several theories Clark thought could explain
the evolution of hierarchy in the public corporation. One of these theories emphasizes
the role hierarchy can play in resolving conflict. As Clark put it, "[h]ierarchical structures
of authority mitigate the wasteful aspects of struggle and rivalry that occur when large
numbers of people live or work together." This idea echoes the capital lock-in and team
production approach to explaining director authority, with its emphasis on the role
directors can play as "mediating hierarchs" who discourage opportunism and rent-seeking
among corporate participants.

Nevertheless, at the end of the day, Clark failed to follow up on this idea, instead
emphasizing how hierarchy facilitated coordination in the firm by channeling
information. That choice reflected the dominance of the principal-agent model, with its
emphasis on agency costs and how director governance creates conflicts of interest
between shareholders and directors, and its attendant blindness to the problem of specific
investment and how director governance may temper potential conflicts between and
among shareholders, executives, creditors, and others who make specific investments in
corporations.

Today the situation has changed dramatically. Although the principal-agent model
still has great influence, corporate scholars are involved in an escalating debate over the
best way to understand the modern public corporation. This debate increasingly
recognizes the legal reality (recognized by Clark a generation ago) that public
corporations are governed by boards and not by shareholders. It also recognizes recent
developments in economic theory that teach that, in addition to the problem of agency
costs, corporate production can raise important problems of encouraging specific
investment.

These insights have inspired contemporary legal and economic scholars to explore
new and different approaches to understanding the rules of corporate law. In this Article,
we have briefly touched upon two of these emerging alternative paradigms: the capital
lock-in approach and the team production model. In exploring these alternatives, we are
not suggesting that the original principal-agent model is always useless and should be
discarded. For some corporate problems (e.g., discouraging employee shirking), the
principal-agent approach is just as useful and is considerably easier to apply.

Similarly, for many problems in physics, Newtonian theory is just as useful as and

79. CLARK, supra note 1, at 802-16.
80. Id. at 801.
81. Id. at 801-16.
82. See, e.g., sources cited supra note 48.
considerably easier to apply than Einstein’s theory of relativity. Nevertheless, there are important phenomena in physics and astrophysics that can only be explained and predicted using Einstein’s approach. And there are likewise important—indeed, fundamental—phenomena in corporate law and practice that the principal-agent model cannot account for. As Kuhn described, such anomalies can be overlooked by observers who are so emotionally attached to the dominant paradigm that they refuse to see where it fails to work. They can also be overlooked by those who simply lack the expertise and experience necessary to recognize the anomalies: someone who doesn’t spend much time looking at the night sky may never note how the planets chart a different course from the sun and the stars.

Clark suffered from neither of these limitations. He was, and is, a true expert on business law and the business world. Just as important, Clark was, and is, a true scholar, ruthlessly honest in his observations of the world, even when those observations failed to match widely held conceptions of the way things ought to work. Rather than trying to minimize or ignore the poor fit between the principal-agent model and the rules of corporate law, Clark forthrightly cataloged the many ways in which the dominant paradigm fell short, drawing scholars’ attention to the weakness of the principal-agent model and inspiring them to develop alternatives.

As a result, Clark’s treatise today still provides an excellent starting point for the student who wants to understand the deep structure of corporate law. But it need not be the ending point. Clark may have lacked the theoretical tools necessary to construct a better model. Today we have those tools. We should follow Professor Clark’s lead and see what we can do with them.